

Aspects related to Project Management of the EMERALD

Transnational Project Meeting – PUT Poznan -day 1 -
30th of January 2023

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Technical University of Cluj-Napoca, Romania



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Content

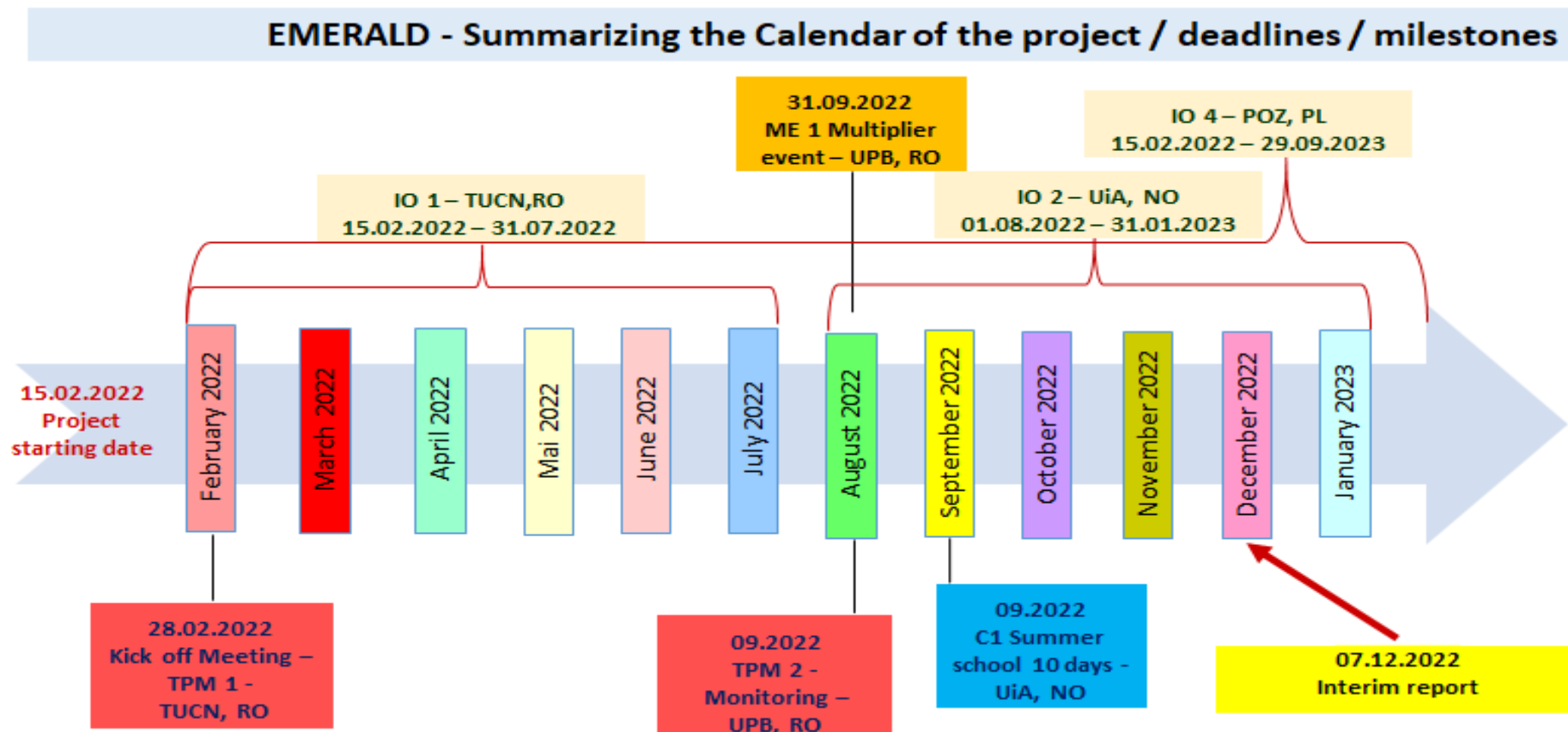
- 1. Summary of midterm project results, setting up and clarifying goals of the meeting**
- 2. Project management**
 - Important aspects related to the interim report preparation and submission
 - Collection of activity reporting by the coordinator: organization and calendar (timesheets, deadlines/milestones)
 - Collection of results of Intellectual Outputs and status of delivery
- 1. Intellectual Outputs – status and summary of currently prepared deliverables**

1. Summary of midterm project results, setting up and clarifying goals of the meeting

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Interim report – deadline for submission is very short – 07 February 2023

- In Poznan we have to clarify urgent in case of consortium as whole, the following aspects:
Intellectual outputs (finalized / on-going)
 - **aspects related to IO1** – e-book – existing / missing courses – we have to post them on the EMERALD drive /website (urgent) in February (deadline was 31.07.2022)!
 - **aspects related to IO2** – toolkit manuals – (deadline of this IO is 31.01.2023 – this is the main aim to be disseminated to ME organized in Cluj-Napoca on 17.02.2023!
 - **aspects related to IO4** – dissemination (publications, dissemination plan, etc,)

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- In Poznan we have to clarify urgent in case of consortium as whole, the following aspects:
reporting documents required to be fulfilled / delivered as the Agency is requiring it

- **financial documents** (timesheets, bills, financial balance, etc.)
- **reporting documents for the organized activities** (lists, certificates, reports posted on the EMERALD project drive/website, press release, minutes of the meetings, etc.
- on 2022 we as the EMERALD consortium have organized –
 - 1 kick off meeting (Cluj) + 1 TPM meeting + 1 ME event (in Bucharest)
 - 1 summer school organized in Norway (in September 2022)

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Interim report – deadline for submission is very short – 07 February 2023

- In Poznan we have to clarify urgent in case of consortium as whole, the following aspects:
Intellectual outputs – on-going in 2023
 - aspects related to IO4** – dissemination (publications, dissemination plan, etc,) – with strong focus of reaching all KPIs stated in the proposal!!!
 - aspects related to IO3** – led by BIZZCOM partners (teaching virtual platform with elements of VR/AR focused on mechatronics / 3D printing / people with amputated arms (elements included must be as stated in the proposal!) (**starting on 01.02.2023**)

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Interim report – deadline for submission is very short – 07 February 2023

- In Poznan we have to clarify urgent in case of consortium as whole, the following aspects:
Activities to be organized in 2023
 - **TPM + ME + Staff for training** activities – all to be organized in Bucany by BIZZCOM (Slovakia)
 - **Summer school to be organized at UiA Norway** – in September 2023

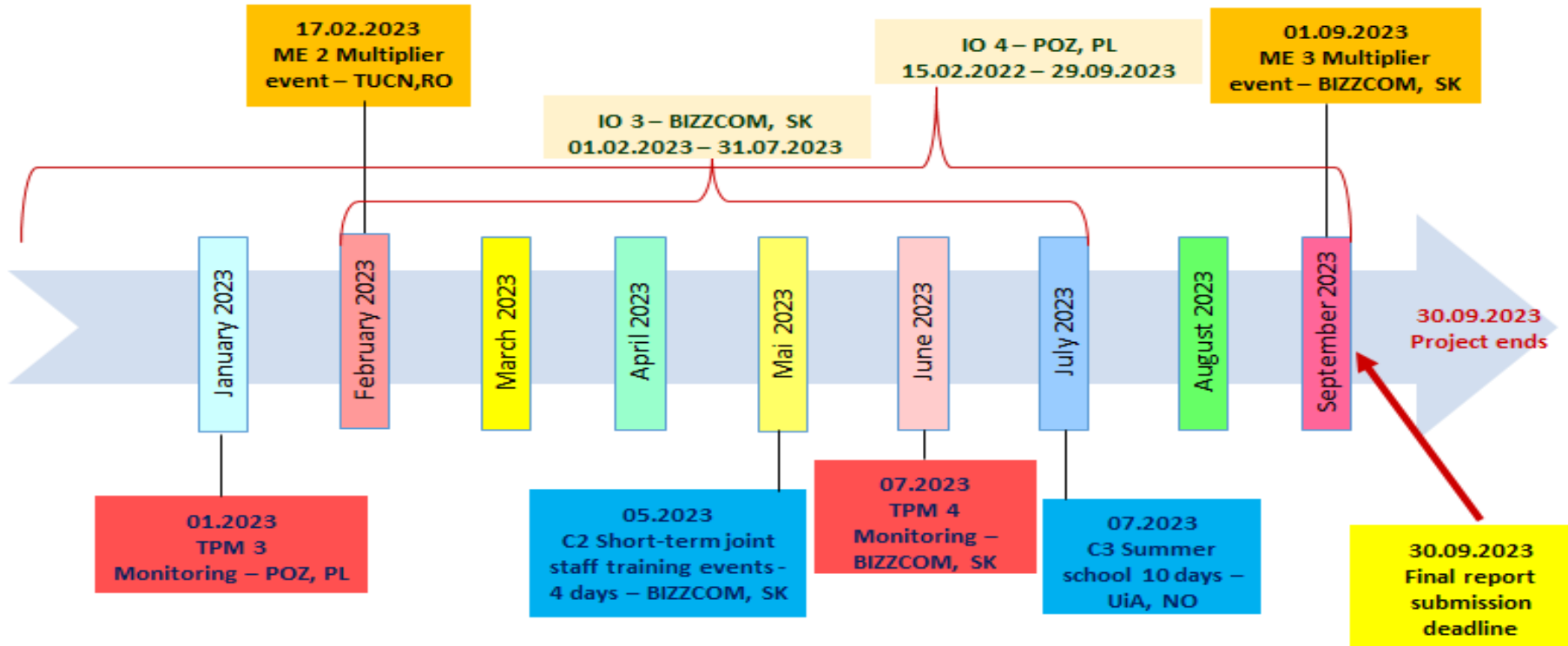
Project is ending in September 2023 – final report is expected to be delivered at the end of November 2023 (max) with all submitted documents ready and prepared for the audit

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EMERALD - Summarizing the Calendar of the project / deadlines / milestones



**This is the diagram
with planned activities
as stated in the proposal**

-Some changes were
discussed in Bucharest
like organizing Summer
school in Norway in
September 2023 (not July)

-**Constrains** – ME activity
must be organized after
IO is ending / with the aim of
disseminating the results!

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Most important expected results (KPIs) of the project



104 - EMERALD e-case studies for project based learning method used in developing, testing and manufacturing of new biomimetic mechatronic systems by 3D printing technologies

RESULTS (KPIs):

- ✓ 4 case study reports
- ✓ 1 open access book
- ✓ 1 open access toolkit manual
- ✓ 4 academic / scientific papers (ISI with Impact factor) are expected to be delivered at the end and shared via a-platform of EMERALD project as good practice use for dissemination
- ✓ e-learning platform conceived by the EMERALD consortium is intended to be used finally as one powerful tool for attracting the major stakeholders in the field of bio-mechatronics /3D printing domains) to scale up the solutions to build one active and representative network for 3D printing of biomimetic mechatronic systems in Europe (EMERALD network)

DISSEMINATION:

1. **Chapters that might be used by students for BSc projects / reports** that emphasize the case studies and use of EMERALD resources in developing, producing or testing new types of biomimetic mechatronic systems by 3D printing (reports will be shared via the e-learning platform of EMERALD project in open-access mode in order to emphasize how EMERALD resources were used in sorting out real issues in close correlation with the persons with special needs I adapted for these case studies);
2. **Case studies developed, tested and made at this level** will provide important feedbacks regarding the EMERALD resources and regarding the new biomimetic mechatronic systems developed for people with special needs.
3. Since topic of the EMERALD project and content is in the interest of SMEs and Medical Institutions, **transfer of know-how from the universities engaged in the EMERALD consortium to stakeholders**, as well as building strategic partnerships and **applying for new EU projects** is highly foreseen to be reached at dissemination level in the future as well.
4. **patenting process of the solutions developed by the EMERALD consortium** (patent submitting application)
5. **Advertising is not for dissemination**, but is needed for promoting of the consortium and events (logo of the project, advertising, web page, newspapers) etc.

Observation on behalf of the Agency – not individual publications / interactions between partners / in connection with Norway (how we bring support to UiA partner) and vice versa (how UiA brings support to all of us!)

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Realizing of the synergy with the ARMIN project which is needed to be provided in our project (**UPB**)

Input
needed
on behalf
of UPB

Role of the leaders of Intellectual Outputs. Important aspects that must
be considered (as the Agency is specifically requiring it)



Input
needed
on behalf
of UPB

ARM NEUROPROSTHESIS EQUIPED WITH ARTIFICIAL SKIN AND SENSORIAL FEEDBACK - ARMIN

Partners: UPB, National Institute of Microtechnology, Clinical Hospital of Floreasca, Medical Science Academy, Areus Technology, University of South-Eastern Norway, budget approx. 1.510.000 euro

The main objective of the project was to design and fabricate the command and control system of a neuroprosthesis that integrates the motion algorithms with the command and sensory signals. The sensorial feedback system is re-establishing the sensorial function of amputated arms and is able to achieve high precision movements when handling objects with the neuroprosthesis. To design and fabricate a set of regenerative neural bio-interfaces for selecting and stimulating (from ulnar and median nerves), the sensory axons considered being in charge with the transmission of tactile sensations from palm and fingers, before amputation has been developed. These bio-interfaces allow the tactile signals from the fingers and palms of the neuroprosthesis to be transmitted through these sensory axons. In this way the patient actually feels tactile feedback sensations when handling objects with neuroprosthesis. To mount a fully functional neuroprosthesis on the patient stump, it was needed to be connected to the peripheral nervous system of the patient. For delivering the arm neuroprosthesis prototype (implanted in the patient stump and WiFi connected to the prosthesis hand), most of last arm and hand functions were achieved by 3D printing.



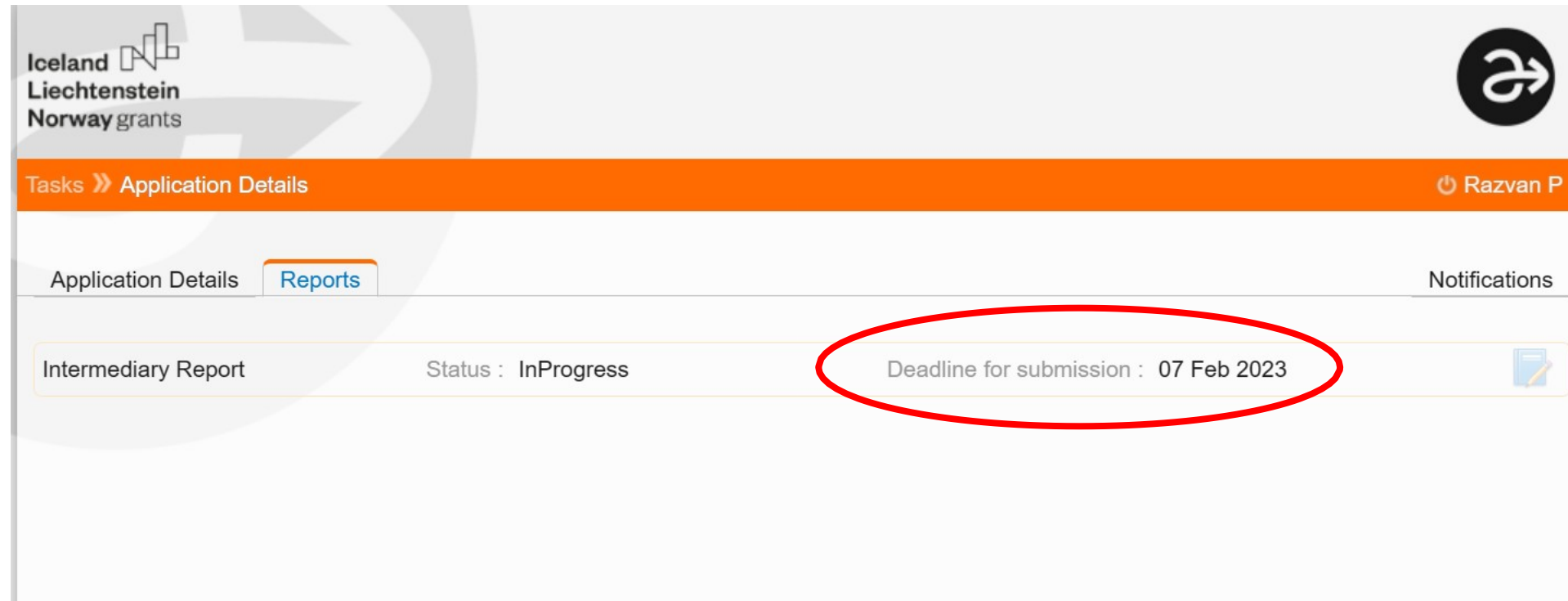
**Observation on behalf of the Agency – synergy with the project on which we have relied our application in the proposal
1 short report regarding synergy to this project to be prepared by UPB!**

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2. Project management

- **Important aspects related to the interim report preparation and submission**

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Iceland
Liechtenstein
Norway grants

Tasks » Application Details

Razvan P

Application Details Reports Notifications

Intermediary Report	Status : InProgress	Deadline for submission : 07 Feb 2023	
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General Information

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1. General information

The purpose of the Interim Report is to present the progress of the activities planned by the Project Promoter in the approved application. Before completing the report please refer to the provisions set out in the Applicant Guide and further information. All questions in this interim report are mandatory.

This report form consists of the following main sections:

- Project identification
- Project management and implementation
- Transnational project meetings
- Intellectual outputs
- Transnational learning, teaching, training activities
- Dissemination of Project Results
- Budget
- Annexes
- Declaration of honour

Project Start / End Date

Start date : 15/02/2022 End date: 29/09/2023

Reporting Period

Start date : 15/02/2022 End date: 07/12/2022

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Tasks » 21-COP-0019 » Intermediary Report One

🔌 Razvan P

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2. Project management and implementation

2.1 Please provide an overall state of play of your project: what are the achievements of the project at this stage? Have the initial project activities been carried out ?

2.2 Please describe further in details the project activities supported through the grant for Project Management and Implementation that have been carried out until now.

2.3 How is the monitoring of the project being carried out so far and by whom ?

2.4 How did the project partners contribute to the project so far? Has the distribution of tasks been adjusted since the application stage ?

2.5 If relevant, please describe any difficulties you have encountered until now in managing the implementation of the project and how you and your partners handled them.

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3. Transnational project meetings

Please describe the Transnational Project Meetings organized within your project.

[add meeting](#)

Note : For each meeting please describe into the dedicated meeting description field :

- What was the purpose of the transnational project meeting and who participated ?
- Please elaborate on how this meeting served the purpose of project coordination and implementation
- In case there is a difference between what was planned and what was implemented, please explain why

4. Intellectual outputs

If you have included Intellectual Outputs in your project, please describe what you have achieved so far.

Are these Intellectual Outputs being realised in line with the initial expectations and plans? If not, please describe why and what you will do to achieve your goals.

If relevant, please attach any supporting documents (work plans, charts, etc.) to illustrate in detail the progress made in the realisation of the Intellectual Outputs so far.

[add intellectual output](#)

Note : For each output please describe into the dedicated description field :

- Intellectual output realisation status
- Activities carried out
- Total number of working hours realised so far

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5. Multiplier Events

If you have organized Multiplier Events in your project, please identify and describe them, also making the connection with the relevant Intellectual Outputs mentioned above.

[add multiplier event](#)

Note : For each multiplier event please mention:

- Event code
- Organization date
- Location
- The objectives and results achieved

6. Transnational learning, teaching or training activities

If you have organised learning, teaching or training activities in your project, please describe in which phase are these activities (organisational planning, programme planning, participant selection, implementation, follow-up, etc.) Are the activities in line with your plans? If not, please describe why.

[add activity](#)

7. Dissemination of Project results

Which activities have you planned in order to disseminate the project results in the future ?

If your project has already achieved some of the expected results, have you started disseminating these results ? If so, in what way ?

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Tasks » 21-COP-0019 » Intermediary Report One 🔔 Razvan P

General Information Project Implementation **Financial Statement** Submission Preview

8. Financial Statement

Please download, complete and upload the excel file attached:

	Cost (euro)
ONLY For Preparatory Visits : Travel	<input type="text" value="0.00"/>
ONLY For Preparatory Visits : Subsistence	<input type="text" value="0.00"/>
ONLY For Mobility Projects : Total Costs	<input type="text" value="0.00"/>
ONLY For Cooperation Projects : Total Costs	<input type="text" value="0.00"/>
Total Costs	<input type="text" value="0.00"/>
Advance Payment	<input type="text" value="0.00"/>
Payment Request	<input type="text" value="0.00"/>
Total Contracted	198810.00

 attach file(s)

Note : Annexing the Budget Details

- Download the [budget details](#)
- Fill in the required information and upload in the section above

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Norway grants								
The Education, Scholarships, Apprenticeships and Youth Entrepreneurship Programme EEA Grants 2014-2021	Intermediary Report Declaration of expenditure Summary	Cooperation Projects in Higher Education						
Before completing this report please read carefully the financial regulations mentioned in the grant agreement								
Project implementation period (dd/mm/yyyy -dd/mm/yyyy) Project duration (months) - according to the grant agreement Project prolongation (months) - according to the agreement amendment -if it is the case Agreement no Project title								
Project Promoter Project Partners	<table border="1"> <thead> <tr> <th>Country</th> </tr> </thead> <tbody> <tr><td></td></tr> <tr><td></td></tr> <tr><td></td></tr> <tr><td></td></tr> <tr><td></td></tr> </tbody> </table>	Country						
Country								

[Budget summary](#)
[1. Management&implementation](#)
[2. Transnational Mobility](#)
[3. Intellectual outputs](#)
[4. Multiplier events](#)
[5. Special needs](#)
[6. 1](#)

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The Education, Scholarships,
Apprenticeships and Youth
Entrepreneurship Programme
EEA Grants 2014-2021

Intermediary Report Declaration of expenditure

Project management and implementation (PMI)





Cooperation Projects in Higher Education

No.	Institution name						To be completed only by PO		
		Cost/ month	Project duration (months)	Transfer from PMI to other budget headings	Total EEA grant adjusted (Euro)	Total EEA grant spent (Euro)	Grant approved by PO (Euro)	Ineligible grant (Euro)	Comments (regarding ineligible grant)
1	2	3	4	5	6	7	8	9	10
1	0		0	0	0	0.00			
2	0		0	0	0	0.00			
3	0		0	0	0	0.00			
4	0		0	0	0	0.00			
5	0		0	0	0	0.00			
6	0		0	0	0	0.00			
Total:						0	0.00	0.00	

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The Education, Scholarships, Apprenticeships and Youth Entrepreneurship Programme EEA Grants 2014-2021										Intermediary Report Declaration of expenditure 0 Short Term Transnational Mobility activities			Cooperation Projects in Higher Education							
																			To be completed only by PO	
Participant name and surname	Type of mobility	SM/ST	Destination country	Place destination country	Sending country	Place sending institution	Distance band	Travel grant	Mobility start date (dd-mm-yyyy)	Mobility end date (dd-mm-yyyy)	Activity duration (days)	Travel days	Total duration (incl. travel days)	Total individual support	Special needs support*	EEA grant adjusted (Euro)	Total EEA grant spent (Euro)	Grant approved by PO (Euro)	Ineligible grant (Euro)	Comments (regarding ineligible grant)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
								0					0	0	0	0.00	0.00			
								0					0	0	0	0.00	0.00			
								0					0	0	0	0.00	0.00			
								0					0	0	0	0.00	0.00			
								0					0	0	0	0.00	0.00			

TPM

Bucharest

**TU Cluj – 1 pers
instead of 2**

Confirmations / changes in between categories of budget expenses – to be discussed with each individual partner during this meeting – we need this info for the report

Important change – we have declared 12 days for Summer School in Norway (2022) instead of 10 / 8 days will be declared in 2023 (instead of 10) – excluding traveling days

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The Education, Scholarships, Apprenticeships and Youth Entrepreneurship Programme EEA Grants 2014-2021	Intermediary Report Declaration of expenditure 0 Intellectual outputs	Cooperation Projects in Higher Education
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No.	Institution Name	Country code	Intellectual Output Code (O1, O2,...)	Intellectual Output Title											To be completed only by PO		
					Manager (days)	Grant/day (Euro)	Teacher/trainer (days)	Grant/day (Euro)	Technical staff (Days)	Grant/day (Euro)	Administrative staff (Days)	Grant/day (Euro)	Total grant adjusted (Euro)	Total EEA grant spent (Euro)	Grant approved by PO (Euro)	Ineligible grant (Euro)	Comments (regarding ineligible grant)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1														FALSE			
2														FALSE			
3														FALSE			
4														FALSE			

Confirmations / changes in between categories of budget expenses – to be discussed with each individual partner during this meeting – we need this info for the report

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<div> The Education, Scholarships, Apprenticeships and Youth Entrepreneurship Programme EEA Grants 2014-2021 </div>			<div> Intermediary Report Declaration of expenditure 0 Multiplier Events </div>				<div> Cooperation Projects in Higher Education </div>				To be completed only by PO		
Institution name (event organiser)	Event Title	Event code (M1, M2, ...)	Country of venue	No of local participants	Grant per local participant	No. of foreign participants	Grant per foreign participant	Total grant adjusted (Euro)	Total EEA grant spent (Euro)	Grant approved by PO (Euro)	Ineligible grant (Euro)	Comments (regarding ineligible grant)	
0	1	2	3	4	5	6	7	8	9	10	11	12	
					0		0		0.00				
					0		0		0.00				
					0		0		0.00				
					0		0		0.00				
					0		0		0.00				





Confirmations / changes in between categories of budget expenses – to be discussed with each individual partner during this meeting – we need this info for the report

Important change – Multiplier event – UPB – 17 participants less than what was stated in the proposal (40 local participants)

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<div style="display: flex; justify-content: space-around; align-items: center;">     </div>										
The Education, Scholarships, Apprenticeships and Youth Entrepreneurship Programme EEA Grants 2014-2021				Intermediary Report				Cooperation Projects in Higher Education		
				Declaration of expenditure						
				0 Exceptional costs						
Institution name	Acquisition title	Description	Acquisition procedure*	No of units	Cost per unit	Justifying document (invoice no/date,etc)	Total EEA grant spent (Euro)	Grant approved by PO (Euro)	Ineligible grant (Euro)	Comments (regarding ineligible grant)
0	1	2	3	4	5	6	7	8	9	10
							0.00			
							0.00			
							0.00			

Confirmations / changes in between categories of budget expenses – to be discussed with each individual partner during this meeting – we need this info for the report

We do not have allocated Exceptional costs in the proposal / acquisitions of equipment cannot be made / it cannot be created new category of budget if it was not initially created in the proposal

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9. Annexes

Please note that all documents mentioned below need to be attached here before you submit your form online.

Before submitting your report to the Programme Operator please check that:

- The Declaration of Honour is signed by the legal representative of the Project Promoter, scanned and attached to the interim report
- All necessary information on your project have been encoded in the Budget file uploaded in this report
- The report form has been completed in English

 attach file(s)

10. Declaration of honour

To be signed by the person legally authorised to enter into legally binding commitments on behalf of the applicant organisation.

I, the undersigned, certify that the information contained in this report form and its annexes is accurate and in accordance with the facts.
In particular the financial data provided corresponds with the activities actually realised and to the funds actually paid.

 attach file(s)

Note : Annexing a Declaration of Honour

- Download the [declaration of honour](#)
- **Print it**, complete it and **have it signed** by the legal representative of your organisation
- Once signed, **scan it** and upload in the section above

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3. Intellectual Outputs – status and summary of currently prepared deliverables

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Quick overview of the Intellectual outputs related to the EMERALD project

IO1 - EMERALD e-book for developing of biomimetic mechatronic systems

Start Date : 15 Feb 2022

End Date : 31 Jul 2022

Responsible: Technical University of Cluj-Napoca

The main aim of the IO1 is to provide the proposed CURRICULUM for increasing the application of research results in regenerative medicine, human-machine interfaces, advanced robotics, new paradigms in biomimetic mechatronic systems, etc. The curriculum comprise 8 MODULES.

Languages : English

Open
access
on the
platform?

Content?

Template?

Report?

MODULES		RESPONSIBLES
1. Computer Aided Design (CAD)	✓	PUT
2. Computer Aided Engineering (CAE)	✓	TUCN
3. Computer Programming	✗	UiA
4. Virtual Reality / Augmented Reality	✓	PUT & BIZZCOM
5. Sensors and Electronics	✓	UPB
6. Bio-Mechatronics	✗	UiA
7. 3D printing and Rapid Tooling methods	✗	TUCN
8. Intelligent (smart) materials	✓	UPB

Starting:
15.02.2022

Deadline:
31.07.2022

For each module according to the skills and competences of the EMERALD partners consortium, from the Technical team there will be nominated 1-2 responsible persons which will be in charge with one module and will need to provide course support for the particular module courses necessary for **producing biomechatronic / biomimetic systems**.

UiA

+

TUCN

3 out of 8
courses
are missing

we need them
for the interim
report!!!

Contribution of
BIZZCOM in IO1?

UiA

+

TUCN

to be urgently
prepared and
sent to be
uploaded
on drive/
website

Contribution of
BIZZCOM in IO1?

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European Network For 3D Printing Of Biomimetic Mechatronic Systems

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Input related
to IO2
is needed
for ME
organized
at TUCN
on 17.02.2023

Contribution
of BIZZCOM
in IO2?

IO2 - EMERALD e-toolkit manual for digital learning in producing biomimetic mechatronic systems		
Start Date : 01 Aug 2022 End Date : 31 Jan 2023 Responsible: University of Agder		
The aims of the IO2 : > to provide e-toolkit for teaching purposes > to provide the basics knowledge about the realizing of biomimetic mechatronic systems by 3D printing. > to provide the other preliminary and post processing steps that are required to be followed in terms of CAD modeling > diploma project themes		
Open access on the platform?	Conceiving the concepts of biomimetic mechatronic systems / bio-mechatronic domain ?????	RESPONSIBLES UiA
	Providing details related to the designing solutions used for conceiving the biomimetic mechatronic systems done by PUT ✓	PUT & TUCN
	Validation of the biomimetic mechatronic systems (solutions designed by CAD systems based on CAE analyses) done by TUCN ✓	TUCN
Content?	Solutions related to the materials to be used for the realizing of the new developed biomimetic mechatronic systems ?????	UPB
	3D printing and rapid tooling methods for the components to be realized for the new biomimetic mechatronic done by UPB ✓	TUCN & UPB & PUT
Template?	Description of assembling and programming of the systems will be prepared by PUT	UiA
Report?	Aspects related to the set-up/functionality of the presented solutions/repeatability of the process /troubleshoot and control; inputs regarding the methods of testing of these new biomimetic mechatronic systems by AR / VR - solutions of conceiving, realizing and materializing of different scenarios in AR/VR where the biomimetic mechatronic systems will be connected and used for therapeutically purposes by the persons with special needs	BIZZCOM
For each module according to the skills and competences of the EMERALD partners consortium, from the Technical team there will be nominated 1-2 responsible persons which will be in charge with the module and will need to provide the module for the e-toolkit manual.		

Starting:
01.08.2022

Deadline:
31.01.2023

Draft variants
of IO2
needed to be
uploaded
on drive
/ EMERALD
website
at the end of
February

Contribution of
BIZZCOM in IO2 –
AR / VR toolkit?
Testing?

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Quick overview of the Intellectual outputs related to the EMERALD project

I03 - EMERALD e-learning VR / AR platform for programming and using biomimetic mechatronic systems

Start Date : 01 Feb 2023 End Date : 31 Jul 2023

Responsible: BIZZCOM company

The aims of the I03 : ➤ the realization of a Virtual laboratory (e-learning) platform, that integrates VR / AR applications which can be accessed by professors and students

➤ Programming and realizing of different scenarios in VR / AR / Mixed Reality, conceiving of different applications that can be connected with AR / VR (applications that can be downloaded at home)

➤ Applications developed by professors and students will be uploaded on the EMERALD platform

		RESPONSIBLES
Open access on the platform?	Designing of different scenarios, the programming of the biomimetic mechatronic systems	BIZZCOM Company
	Preparing the e-library of the developed e-learning platform & aspects that are required to be followed by professors & students	TUCN & PUT & UPB
	Hints & tips about regulations in modeling, selecting of the adequate materials, manufacturing solutions & assembling of such biomimetic mechatronic systems	
Content?	The project themes that are required for people with special needs & particularities of these types of topics	UiA / all partners
	Logistics in terms of materials selecting, CAD, CAE, manufacturing & assembling of the new developed systems	TUCN & PUT & UPB
	Potential stakeholders that are interested by the solutions developed by the EMERALD consortium	BIZZCOM
Report?	Feedbacks and recommendations	BIZZCOM/ all partners

For each room according to the skills and competences of the EMERALD partners consortium, from the **Technical team** there will be nominated 1-2 responsible persons which will be in charge with the virtual room and will need to provide the informations for the virtual room of the virtual laboratory.

This is one tool for teaching in 3D printing /bio-mechatronics, not promoting of institutions

Platform must be ready to be tested by ME participants in Slovakia + participants of summer school in Norway

Starting:
01.02.2023

Deadline:
31.07.2023

Aspects stated in the proposal must be addressed

Plans / timelines / responsibilities / to be prepared by BIZZCOM

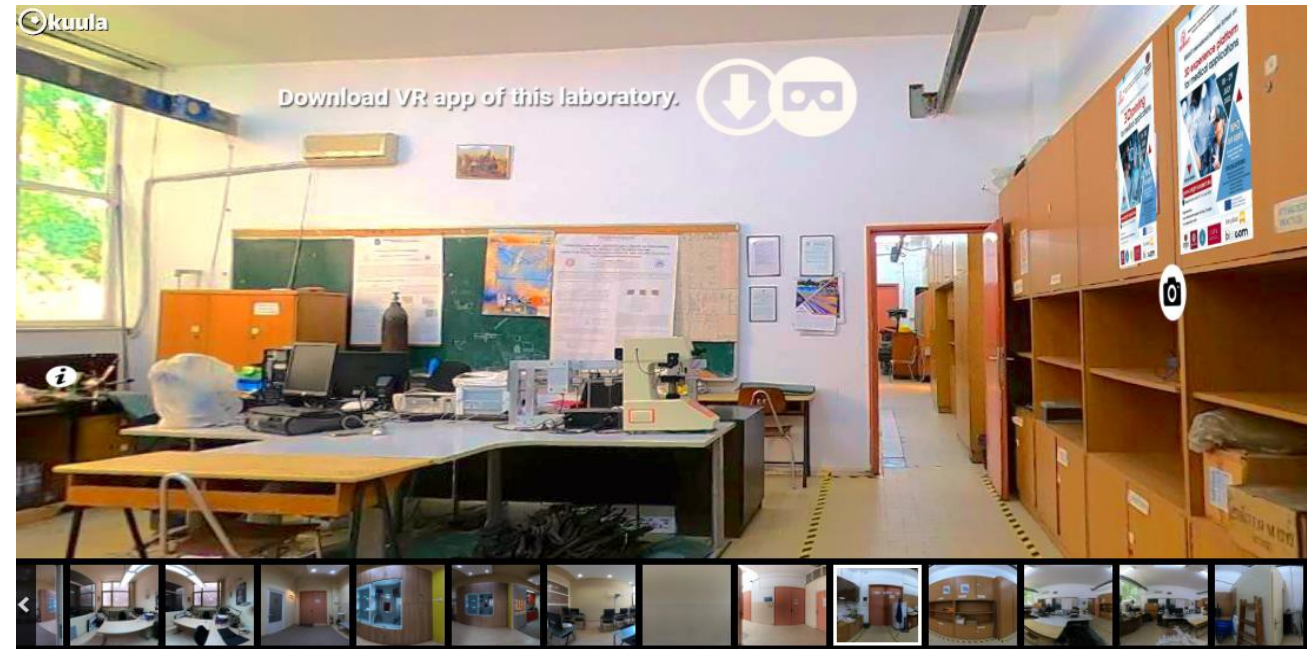
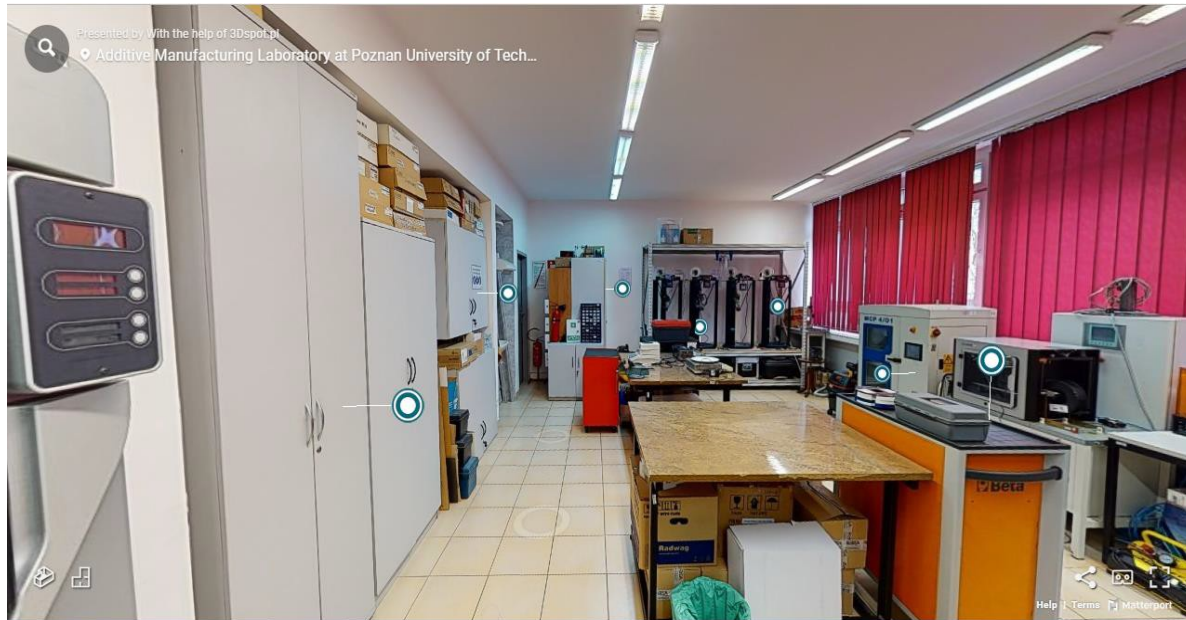
Each partner role has to be clearly Identified / stated
Monitoring

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**Virtual platform (realized in a similar project) –
rooms will be focused on 360 degrees presentations of each institution with AR/ VR elements integrated in it**

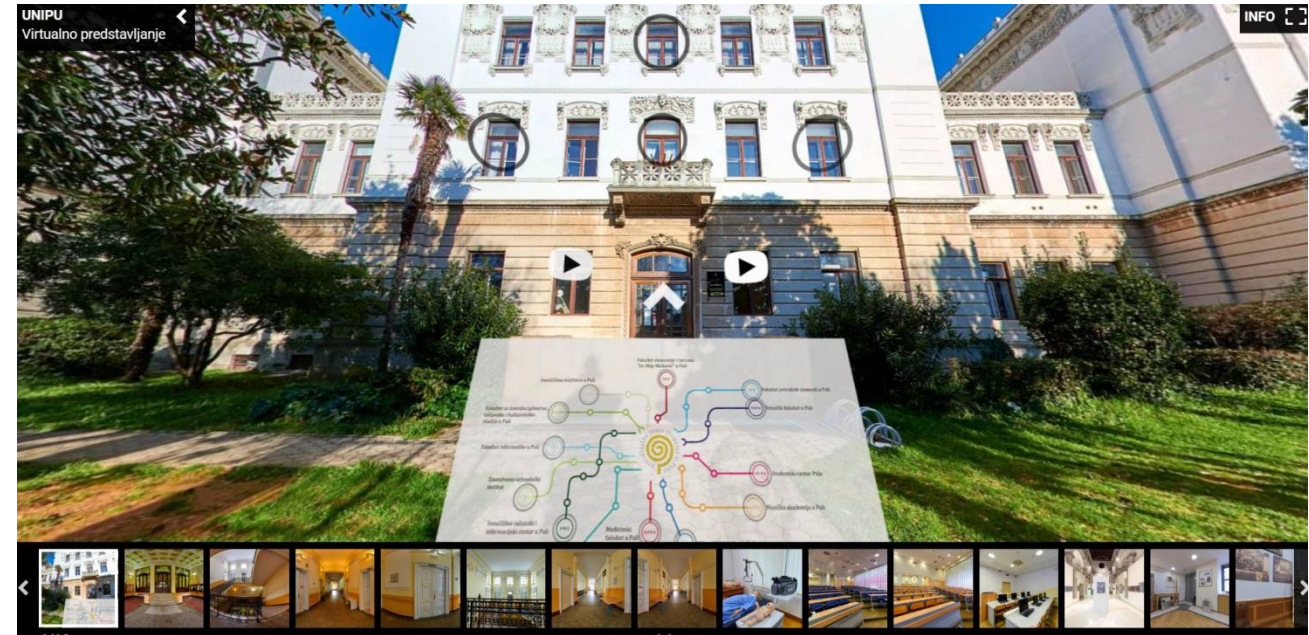
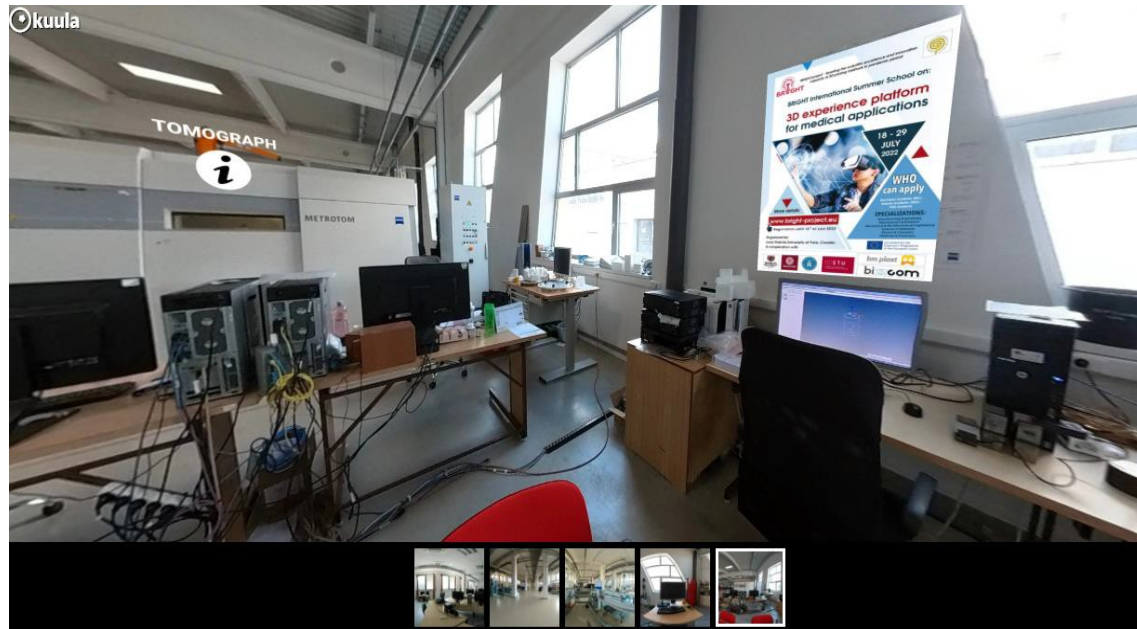


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**Virtual platform (realized in a similar project) –
rooms will be focused on 360 degrees presentations of each institution with AR/ VR elements integrated in it**



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Aspects stated
in the proposal
must be addressed

Dissemination plan
clearly defined
with integrating
of all partners +
responsibilities +
monitoring + risk
measuring is needed

I04 - EMERALD e-case studies for project based learning method used in developing, testing and manufacturing of new biomimetic mechatronic systems by 3D printing technologies
Start Date : 15 Feb 2022 End Date : 29 Sep 2023
Responsible: Poznan University of Technology

The main aim of the I04 : ➤ the implementation of the communication and dissemination strategy for increasing awareness, understanding and engagement with users and target groups
➤ **4 CASE STUDIES** of biomimetic mechatronic systems made by 3D printing for people with special needs.

	RESPONSIBLES
Designating of one person from each technical team of the EMERALD consortium as MENTOR for the students which will work on these topics.	UiA & TUCN & UPB & PUT
Selection of the 4 case studies	PUT / all partners
3 different TEAMS comprising 5-7 students from different countries of the consortium will start to work on the topic, starting from the CAD & CAE methods	all partners
Validation of the solutions proposed by the students	all partners
Selection of the material and 3D printing process by the students	UPB & TUCN & PUT
Programming tests & procedures	UiA & BIZZCOM
Final feedback	UiA

For each case study according to the skills and competences of the EMERALD partners consortium, from the **Technical team there will be nominated 1-2 responsible persons. 3 different teams comprising 5-7 students** from different countries of the consortium will start to work on the topic. Validation of the solutions proposed by the students will be made with the help of their mentor (responsible professor of the EMERALD consortium) .

All these
have to be considered
together with
all KPIs

Local workshops
organized with
students /
events / meetings with
visiting
professors / all
kind actions are good
(photos + mini reports
are needed with links
for interim / final report)

Starting:
15.02.2022

Deadline:
29.09.2023

European Network For 3D Printing Of Biomimetic Mechatronic Systems

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Most important expected results (KPIs) of the project needed to be reached until end of September 2023



104 - EMERALD e-case studies for project based learning method used in developing, testing and manufacturing of new biomimetic mechatronic systems by 3D printing technologies

RESULTS (KPIs):

- ✓ 4 case study reports
- ✓ 1 open access book
- ✓ 1 open access toolkit manual
- ✓ 4 academic / scientific papers (ISI with Impact factor) are expected to be delivered at the end and shared via a-platform of EMERALD project as good practice use for dissemination
- ✓ e-learning platform conceived by the EMERALD consortium is intended to be used finally as one powerful tool for attracting the major stakeholders in the field of bio-mechatronics /3D printing domains) to scale up the solutions to build one active and representative network for 3D printing of biomimetic mechatronic systems in Europe (EMERALD network)

DISSEMINATION:

1. **Chapters that might be used by students for BSc projects / reports** that emphasize the case studies and use of EMERALD resources in developing, producing or testing new types of biomimetic mechatronic systems by 3D printing (reports will be shared via the e-learning platform of EMERALD project in open-access mode in order to emphasize how EMERALD resources were used in sorting out real issues in close correlation with the persons with special needs I adapted for these case studies);
2. **Case studies developed, tested and made at this level** will provide important feedbacks regarding the EMERALD resources and regarding the new biomimetic mechatronic systems developed for people with special needs.
3. Since topic of the EMERALD project and content is in the interest of SMEs and Medical Institutions, **transfer of know-how from the universities engaged in the EMERALD consortium to stakeholders**, as well as building strategic partnerships and **applying for new EU projects** is highly foreseen to be reached at dissemination level in the future as well.
4. **patenting process of the solutions developed by the EMERALD consortium** (patent submitting application)
5. **Advertising is not for dissemination**, but is needed for promoting of the consortium and events (logo of the project, advertising, web page, newspapers) etc.

1 ISI paper with IF published by UPB in 2022

Do we have other papers published?

**Open book?
Open toolkit?**

Events?

Observation on behalf of the Agency – not individual publications / interactions between partners / in connection with Norway (how we bring support to UiA partner) and vice versa (how UiA brings support to all of us)!

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Most important expected results (KPIs) of the project needed to be reached until end of September 2023

Special Issue "Smart Materials, Intelligent Structures and Innovative Applications of 3D Printing and Bio- Printing Methods"



materials



- [Special Issue Editors](#)
- [Special Issue Information](#)
- [Keywords](#)
- [Published Papers](#)

A special issue of *Materials* (ISSN 1996-1944). This special issue belongs to the section "Manufacturing Processes and Systems".



materials



Special Issue Editors

Dr. Razvan Ioan Pacurar [E-Mail](#) [Website](#) [SciProfiles](#)

Guest Editor

Department of Manufacturing Engineering, Faculty of Industrial Engineering, Robotics and Production Management, Technical University of Cluj-Napoca, 400114 Cluj-Napoca, Romania

Interests: additive manufacturing; 3D printing; bio-printing; rapid tooling; hybrid manufacturing; topological optimization; computer aided design; computer aided engineering



Dr. Filip Górski [E-Mail](#) [Website](#) [SciProfiles](#)

Guest Editor

Faculty of Mechanical Engineering and Management, Poznan University of Technology, 60-965 Poznań, Poland

Interests: CAD/CAM/CAE systems; reverse engineering; 3D printing; virtual reality

Special Issues, Collections and Topics in MDPI journals



TUCN / UPT -Guest editors to MDPI Materials ISI journal – Q1 – ISI journal with IF 3.748

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Most important expected results (KPIs) of the project needed to be reached until end of September 2023

SUBMISSION PREPARATION CHECKLIST

As part of the submission process, authors are required to check off their submission's compliance with all of the following items, and submissions may be returned to authors that do not adhere to these guidelines.

1. The submission has not been previously published, nor is it before another journal for consideration (or an explanation has been provided in Comments to the Editor).
2. The submission file is in Microsoft Word, or PDF document file format.
3. Where available, URLs for the references have been provided.
4. The paper has to be written in English. Its contents should be structured in the following way: problem description, application field, research stages, methods used, results, further research, conclusions, and references like in this **template**. The paper has to offer the answers for the following questions: description of the problem, what is done by other people, what the authors did, what is new, what is my contribution?
5. The text adheres to the stylistic and bibliographic requirements outlined in the **Author Guidelines**, which is found in About the Journal.
6. If submitting to a peer-reviewed section of the journal, the instructions in **Ensuring a Blind Review** have been followed.

JOURNAL INDEXED IN :

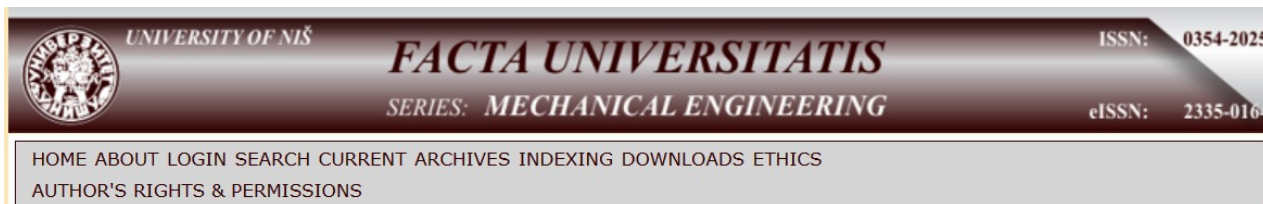


Possibilities to publish ISI indexed papers in Acta Technica Napocensis journal (edited by TUCN)

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Most important expected results (KPIs) of the project needed to be reached until end of September 2023



Home > **Vol 20, No 3 (2022)**

Facta Universitatis, Series: Mechanical Engineering

Facta Universitatis, Series: Mechanical Engineering (FU Mech Eng) is an open access peer-reviewed international journal published by the University of Niš (Republic of Serbia). High quality, refereed papers are published three times a year. Papers reporting original theoretical and/or practice oriented research or extended versions of the already published conference papers are all welcome. The scope of the journal covers the whole spectrum of Mechanical Engineering. Papers for publication are selected through peer reviewing to ensure originality, relevance, and readability. In doing that, the objective is not only to keep the high quality of published papers, but also to provide a timely, thorough and balanced review process.
Editor-in-Chief: Dragan Marinković

In order to create/register an account for submitting a paper, *first time authors* are to contact the Computer Support at mile@ni.ac.rs stating your *first name*, *last name*, *affiliation with the link*, and your *email*. We will then send you back an email with your login parameters. Once you receive your parameters from us you will then be able to log in and begin article submission.



Journal's Metrics

Impact Factor: **4.622**

Journal Citation Reports (Clarivate, 2022):
26/137 (ENGINEERING, MECHANICAL)

Journal Citation Reports Quartile: **Q1**

SCOPUS CiteScore: **6.1**

Web of Science™

Possibilities to publish ISI indexed papers in Facta Universitatis – Mechanical Engineering journal (edited by the University of Nis, Serbia)

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Most important expected results (KPIs) of the project needed to be reached until end of September 2023

Main TOPICS

Authors from Universities, Research Institutes and Companies are invited to submit their contributions on the preferential topics (not limited):

- Transmission Systems Operation, Control and Development
- Distribution Systems and Dispersed Generation
- Renewable energy
- Smart Grids
- Overhead lines, Insulated Cables and Substations
- Protection and Automation
- Modelling, Simulation and Optimal Design in Power Systems
- Electromagnetics
- Electromagnetic Compatibility, Power Quality and Environmental Impacts
- HVDC and Power Electronics
- Electric Machines and Drives
- High Voltage Equipment and Materials
- Informatics and Telecommunications in Power Systems
- Electricity Markets and Regulation
- Education in Electrical and Power Engineering



IEEE PES ROMANIA



CIGRE ROMANIAN
NATIONAL COMMITTEE

ORGANIZERS



Faculty of Electrical Engineering



Electricity Distribution Romania



Romanian Power Grid Company
TRANSELECTRICA SA

Organized IEEE conference at Faculty of Electrical Engineering -TUCN – 21-23 June 2023 – Cluj-Napoca / chairing of one section??

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