# Aspects related to Project Management of the EMERALD

# Transnational Project Meeting – PUT Poznan -day 2 - 31st of January 2023

Associate Prof.dr.eng. Razvan Pacurar

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

# Content

**1. To DO – main conclusions after yesterday meeting / discussions**

**2.Setting of details related to the next following activities to be organized on the EMERALD project in 2023**

**3. Financial, administration and reporting documents**
**- contracts, timesheets, reporting documents,                    Google drive, website**

# 1. TO DO – main conclusions after yesterday meeting / discussions

## TO DO – main conclusions after yesterday meeting / discussions

**Interim report** – time of submission – 07.02.2023 – Razvan (TUCN)

**Financial balance** – expenses in the period 15.02.2023 – 07.12.2023 (bank account extras / budget spent on categories) – these are **annexes** to be uploaded together with the report  For the interim report – time limit – **20.02.2023** – IO1 course missing – 3D printing (PUT),

Bio-mechatronics (UiA), Computer programming (Bizzcom)

For IO2 – toolkits – UiA – provided links + short description of the toolkit (instructions)

**March 2023 – pdf ready – to be uploaded on drive / website**

- Materials selection (Diana – UPB + PUT – Justyna / Filip)
- AR (based on the webinar – in written form) – Bizzcom / PUT (Filip)
- Assembling and testing – PUT (Filip)

**Multiplier event – Cluj – 17.02.2023 –** attending / presentations to be relied on IO2 toolkits

Filippo – 5 minutes – recording/presenting of robotic arm (summer school)

**TO DO – main conclusions after yesterday meeting / discussions  IO3- Bizzcom –**

360 photos + Kuula + monitoring / organizing of virtual platform

- we will rely on the platform that we have already / with 360 photos / Kuula  application / focus on teaching methods (webinars / AR / VR /games / pdf / etc.)  promoting of institutions is also one result that is coming out of it

**IO4** – dissemination plan / needed from Filip / indicators – papers published with UiA

- other articles are considered results of the project / disseminating activities are  needed / case studies / e-book / e-toolkit /patent? / monitoring activities /  responsibilities / organizing for reaching all KPIs
- Modern Power Systems – IEEE conference organized in Cluj in 21-23 June 2023 – Filippo / TUCN – chair of one section?

**UPB** – short report about ARMIN project / how we are relying on it

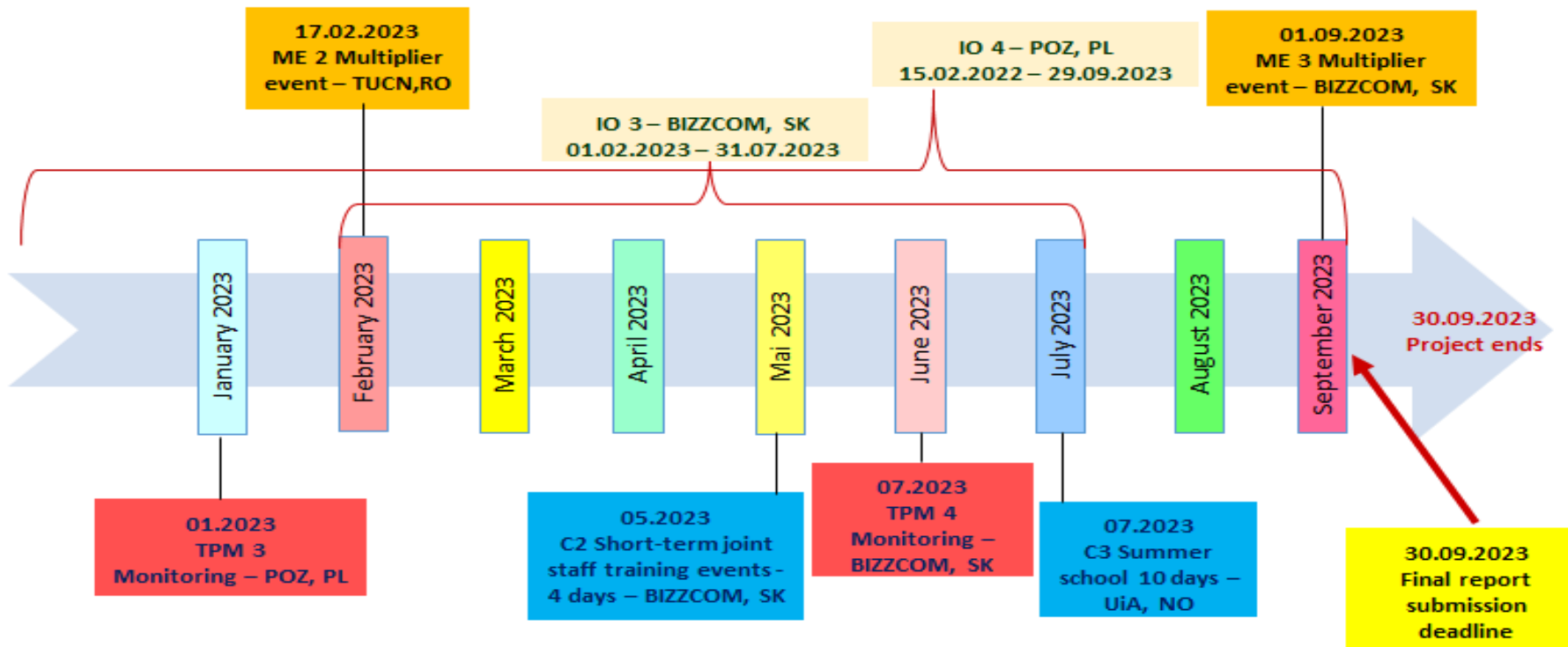# 2. Setting of details related to the next following activities to be organized on the EMERALD project in 2023

# European Network For 3D Printing Of Biomimetic Mechatronic Systems

**Working together for a green, competitive and inclusive Europe**

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



17.02.2023
ME 2 Multiplier event – TUCN, RO

IO 4 – POZ, PL
15.02.2022 – 29.09.2023

01.09.2023
ME 3 Multiplier event – BIZZCOM, SK

IO 3 – BIZZCOM, SK
01.02.2023 – 31.07.2023

January 2023 | February 2023 | March 2023 | April 2023 | Mai 2023 | June 2023 | July 2023 | August 2023 | September 2023

30.09.2023
Project ends

01.2023
TPM 3
Monitoring – POZ, PL

05.2023
C2 Short-term joint staff training events – 4 days – BIZZCOM, SK

07.2023
TPM 4
Monitoring – BIZZCOM, SK

07.2023
C3 Summer school 10 days – UiA, NO

30.09.2023
Final report submission deadline

**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!

# European Network For 3D Printing Of Biomimetic Mechatronic Systems

**Iceland Liechtenstein Norway** grants

## LTT activities

### Intensive Programmes for higher education / Short-term joint staff training events

**Do we have all documents related to Summer school organized by UiA uploaded on drive?**

| | ORGANIZING INSTITUTION | PERIOD / NUMBER OF DAYS | SENDING ORGANISATION | STUDENTS | PROFESSORS | INVITED STAFF | |
|---|---|---|---|---|---|---|---|
| C 1 | University of Agder, NO | SEPTEMBER 2022 / 10 DAYS | Technical University of Cluj-Napoca | 5 | 4 | - | UiA – 5 extra participants TOTAL : 30 participants |
| | ✅ | | University Politehnica Bucharest | 5 | 2 | - | |
| | | | University of Agder | - | - | - | |
| | | | Bizzcom s.r.o. | - | - | 2 | |
| | | | Poznan University of Technology | 5 | 2 | - | |
| C 2 | Bizzcom s.r.o., SK | MAY 2023 / 4 DAYS ⚠️ | Technical University of Cluj-Napoca | - | 4 | - | Bizzcom s.r.o. – 4 extra participants TOTAL:20 participants |
| | | | University Politehnica Bucharest | - | 4 | - | |
| | | | University of Agder | - | 4 | - | |
| | | | Bizzcom s.r.o. | - | - | - | |
| | | | Poznan University of Technology | - | 4 | - | |
| C 3 | University of Agder, NO | JULY 2023 / 10 DAYS ⚠️ | Technical University of Cluj-Napoca | 5 | 4 | - | UiA – 5 extra participants TOTAL : 30 participants |
| | | | University Politehnica Bucharest | 5 | 2 | - | |
| | | | University of Agder | - | - | - | |
| | | | Bizzcom s.r.o. | - | - | 2 | |
| | | | Poznan University of Technology | 5 | 2 | - | |

**LTT event to be organized in May 2023 in Bucany (4 days**
- **excluding**
- **traveling days)**

**Summer school event to be organized in Sept. 2023 in Grimstad (8 days**
- **excluding**
- **traveling days)**

TECHNICAL UNIVERSITY OF CLUJ-NAPOCA ROMANIA

POLITEHNICA UNIVERSITATEA DIN BUCURESTI 1818

POLITECHNIKA POZNANSKA POZNAN UNIVERSITY OF TECHNOLOGY

UiA University of Agder

bizzcom

# European Network For 3D Printing Of Biomimetic Mechatronic Systems

**Working together for a green, competitive and inclusive Europe**

## LTT activities

**C2 : Short-term joint staff training events – 3D printing and bio-mechatronics**

Duration : 4 day(s)    Country of Venue : Slovakia    Total number of Participants : 20

Date: May 2023    The International summer school organized by the BIZZCOM company

Participating Organizations : University Politehnica Bucharest, Technical University of Cluj-Napoca, University of Agder, Bizzcom s.r.o., Poznan University of Technology

**Activity :** ➤ is focused on **the use and testing the functionality of e-virtual laboratory** (e-learning) platform developed by the EMERALD consortium for teaching activities related to the manufacturing of biomimetic mechatronic systems by 3D printing

**The target groups:** ➤ professors    ➤ other people / institutions (stakeholders) involved in research activities related to the developing, manufacturing and testing of new biomimetic mechatronic systems made by 3D printing, for people with special needs

Testing the functionality of virtual laboratory platform developed within IO3 related to: different scenarios in VR / AR / Mixed Reality applications for people with special needs

IMPORTANT  FEEDBACKS    Content?

Report?    Certificates ?

**LTT event to be organized in May 2023 in Bucany (4 days**
- **excluding**
- **traveling days)**

**AR / VR logistics for training?**

**Robotic arm To be tested at Bizzcom?**

**VR platform Must be ready in one draft variant prior to our departure in Bucany**

**AR / VR programming can be planned By Bizzcom/ UiA/ Poznan while we will be there**

TECHNICAL UNIVERSITY OF CLUJ-NAPOCA ROMANIA    POLITEHNICA DIN BUCUREȘTI 1818    POZNAN UNIVERSITY OF TECHNOLOGY    UiA University of Agder    bizzcom

**Working together for a green, competitive and inclusive Europe**

**Transnational Project Meetings**

| | MEETING LOCATION | SENDING ORGANISATION | PARTICIPANTS |
|---|---|---|---|
| TPM 1 | Cluj-Napoca, RO ✅ | University Politehnica Bucharest | 2 |
| | | Technical University of Cluj-Napoca | 2 |
| | | University of Agder | 2 |
| | | Bizzcom s.r.o. | 2 |
| | | Poznan University of Technology | 2 |
| TPM 2 | Bucharest, RO ✅ | University Politehnica Bucharest | 2 |
| | | Technical University of Cluj-Napoca | 2 |
| | | University of Agder | 2 |
| | | Bizzcom s.r.o. | 2 |
| | | Poznan University of Technology | 2 |
| TPM 3 | Poznan, PL ✅ | University Politehnica Bucharest | 2 |
| | | Technical University of Cluj-Napoca | 2 |
| | | University of Agder | 2 |
| | | Bizzcom s.r.o. | 2 |
| | | Poznan University of Technology | 2 |
| TPM 4 | Bucany, SK ⚠️ | University Politehnica Bucharest | 2 |
| | | Technical University of Cluj-Napoca | 2 |
| | | University of Agder | 2 |
| | | Bizzcom s.r.o. | 2 |
| | | Poznan University of Technology | 2 |

## EMERALD – Monitoring Transnational Meeting - TPM 4 - June 2023 - BIZZCOM company, SK

The event will be organized at the **BIZZCOM company (SK)** together with the Executive team (1 representative of each institution that is involved in the consortium) + 1 representative of the Technical Team,

with **the main goals**:

> to discuss about the finalizing of virtual laboratory platform that is expected to be finalized at the end of July 2023 within IO3

> to discuss about the case study reports that have to be finished until September 2023

> to monitor and discuss the status of open access book / toolkit manual / patent submission / diploma projects / academic papers that are expected to be made with the support of the medical institutions and mentors / co-mentors of the EMERALD consortium.

> aspects related to final scientific / dissemination / financial report will be discussed prior to this meeting as well, so as all planning about final delivery reports will be made in due time prior in advance ( 1 and half months before) for preliminary checking

Iceland
Liechtenstein
Norway grants

**Working together for a green, competitive and inclusive Europe**

## Multiplier events

**ME3 - EMERALD personalized and project learning methods for Higher education**
**Start Date : 01 Sep 2023** **End Date : 01 Sep 2023**
**Country of Venue : BIZZCOM company ,Slovakia**

**The ME is organized by BIZZCOM company, SK on 1st of September 2023**

Participating Organizations : University Politehnica Bucharest, Technical University of C/uj-Napoca, University of Agder, Bizzcom s.r.o., Poznan University of Technology

**Event Description** : to present and share the results reached in intellectual output 3, e-learning virtual laboratory (e-learning platform) & and intellectual output 4 related to e-case studies
**Organized free of charge ! one day !** and the participants are required to register in the preamble. Expected number of attendees is about 40 people.

**The target groups:** ➤ are colleagues, teaching staff, students, other people involved in Higher education in their respective organizations
Intellectual Outputs Covered : IO3 and IO4

**The aims of ME3 are:**
-personalized and project learning methods can be used for teaching in higher education using the EMERALD virtual laboratory platform
-presenting and experiencing of the virtual laboratory / AR / mixing AR applications developed by EMERALD consortium
-conclusions, future perspectives of implementing and transferring of the results, publications, dissemination, new project proposals
- future activities/perspectives of EMERALD consortium in digital learning & teaching, implementing & transferring of the results

**Virtual platform has to be ready functional so as people could test it and provide excellent feedbacks to us**

**Companies from SK to be invited + STU students**

| PROPOSED AGENDA | |
|---|---|
| 9:00 - Registration of the participants. 9:30 - Welcome to the multiplier event at at BIZZCOM company (Slovakia) | 12:00 EMERALD project perspectives in implementing, disseminating and transferring of the results |
| 10:00 Presenting on how personalized and project teaching methods can be used in teaching in higher education (using the EMERALD resources) | 12:30 Round table, Q & A, final conclusions |
| 10:30 Overall presentation about e-virtual laboratory I e-learning platform developed by the EMERALD consortium | 14:00 Live experiencing of the EMERALD VR/ AR e-learning platform |
| 11 :30 Presenting of EMERALD consortium opportunities (case studies developed based on project base learning methods for people with special needs (practical using of | |

**Agenda + objective of the event has to be related to dissemination of the results reached in IO3 (virtual laboratory platfom) on EMERALD – prepared report + the agenda must reflect that!!!**

TECHNICAL UNIVERSITY OF CLUJ-NAPOCA ROMANIA

UNIVERSITATEA POLITEHNICA DIN BUCUREȘTI 1818

POLITECHNIKA POZNAŃSKA POZNAN UNIVERSITY OF TECHNOLOGY

CII UiA University of Agder

bizzcom

# European Network For 3D Printing Of Biomimetic Mechatronic Systems

**Working together for a green, competitive and inclusive Europe**

## LTT activities

**Summer School - UiA September 2023**

**8 days (not 10 days) – excluding traveling days**

**VR / AR platform**

**Robot arm programming**

**Logistics**

**Accommodation at Bia apartments?**

**C3 : Intensive Programmes for higher education students - 3D printing and bio-mechatronics**

**Duration : 10 day(s)**    **Country of Venue : Norway**    **Total number of Participants : 30**

**Date: July 2023**    **The 2nd International summer school organized by the University of Agder.**

Participating Organizations : University Politehnica Bucharest, Technical University of Cluj-Napoca, University of Agder, Bizzcom s.r.o., Poznan University of Technology

**The target groups:** ➤ **professors** (from EMERALD consortium and engaged in technical activities) & **students**
Organized free of charge ! the participants are required to REGISTER in the preamble.

**Aims**: to familiarize the attendees with the personalized and project based teaching methods used in Higher education and the efficiency of these methods in using the EMERALD project resources, especially e-virtual laboratory (e-learning platform) AR / VR / mixed reality applications **for getting knowledge and practical skills** in developing of new biomimetic mechatronic systems by 3D printing technologies and specific applications related to the **programming of biomimetic mechatronic systems** AR / VR applications.

**Students** will be able first to understand the **basic principles** that are related to CAD/CAE, manufacturing, programming and testing of biomimetic systems using e-virtual laboratory (e-learning) platform.
**Professors** will present on a course the basics of **different case study** that is being prepared, with the particularities involved in the case when biomimetic mechatronic systems are required to be materialized for people with special needs, emphasizing the facilities of the virtual laboratory (e-learning platform / AR / VR applications).
In this way the easiness in using the a-learning platform of the EMERALD consortium will be checked based on the feedbacks provided by students.

**Testing and experiencing the virtual laboratory platform developed within IO3 related to:**
different scenarios in VR / AR / Mixed Reality applications for people with special needs

**IMPORTANT FEEDBACKS**    **Certificates ?**    **Report?**

Main results reached during the EMERALD summer school organized at the University of Agder in July 2023 will be presented in September 2023 at the Multiplier event organized in Slovakia by BIZZCOM

# 3. Financial, administration and reporting documents

**Do we have inter-institutional copies of contracts + annexes uploaded on Google drive? We need also one original copy of it!**

Număr contract: 21-COP-0019

F-SEE-026/06.2021

Nr. 3144/3.02.2022

Iceland Liechtenstein Norway grants — Erasmus+ — CORPUL EUROPEAN DE SOLIDARITATE | anpcdefp

Înregistrări A.N.P.C.D.E.F.P.
Intrare: Nr.............../...............
Ieşire: Nr.............../...............

Iceland Liechtenstein Norway grants

Annex V

**THE EDUCATION, SCHOLARSHIPS, APPRENTICESHIPS AND YOUTH ENTREPRENEURSHIP PROGRAMME (ESAYEP), 2014-2021**

**PARTNERSHIP AGREEMENT**
for Cooperation Projects in the Higher Education area

**CONTRACT DE FINANȚARE**
**pentru Proiecte de Cooperare**
**în învățământul universitar**

**Programul de Educație, Burse, Ucenicie și Antreprenoriatul Tinerilor**
**în România**
**finanțat prin Granturile SEE - Mecanismul Financiar 2014-2021**

**Contract numărul: 21-COP-0019**

Prezentul contract (denumit în continuare 'Contractul') este încheiat între următoarele părți:

| between | |
|---|---|
| Name and address of the Project Promoter | Technical University of Cluj-Napoca str. Memorandumului nr. 28, 400114, Cluj-Napoca, Romania |
| Tax ID number | Tax ID: 4288306 |
| Represented by Ms./Mr. | Rector, Prof.dr.eng. Vasile ȚOPA |
| and | |
| Name and address of the Partner Institution | University of Agder (UiA) Postboks 422 4604 Kristiansand, Norway Organization number: 970 546 200 |
| Tax ID number | |
| Represented by Ms./Mr. | Rector, Prof. Sunniva Whittaker |

TECHNICAL UNIVERSITY OF CLUJ-NAPOCA ROMANIA — POLITEHNICA DIN BUCUREŞTI — POLITECHNIKA POZNAŃSKA POZNAN UNIVERSITY OF TECHNOLOGY — UiA University of Agder — bizzcom

## List with all personnel involved in the EMERALD project

| UTCN | Position in university | Position in project |
|------|------------------------|---------------------|
| Razvan Pacurar | Assoc. Prof. | Project manager |
| ... | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

**4 MAIN TEAMS**

the executive team

financial team

technical team

communication team
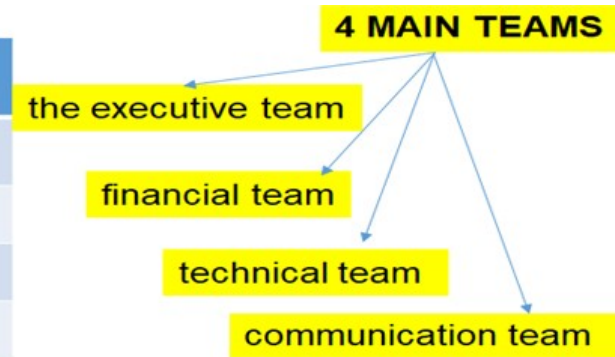
???? who will be part of these teams in each institution of the consortium in close relation to the EMERALD project??????

UPDATES ON THE LISTS MUST BE MADE IF NEEDED

> Contracts for the period of hiring persons in the project (registered, signed, stamped, etc!!!! Working hours – to be calculated on legal basis (e.g. one person cannot work more than 12 hours/day)!
> Additional annexes, statements – signed by the Rector / Vice rector (authorized person!)/ director!!!!

**Do we have all hiring contracts of all persons involved in the project / covering the time period declared on the timesheets + declaration of Staff costs for Intellectual outputs – uploaded on drive?**

**Timesheets are all clear for the period February 2022 – December 2022 on Google drive in case of each partner?**

**Intellectual output results (courses, toolkits, etc ) for IO1, IO2, IO4 – to be uploaded on Google drive, too!**

## Intellectual outputs (quick overview)

**Intellectual Output: I01 - 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

☑️ **ended**

**Intellectual Output: I02 - 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

☑️ **ended**

**Intellectual Output: : I03 - EMERALD e-Jearning VR / AR platform for programming and using biomimetic mechatronic systems**

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

Responsible: Bizzcom company

⚠️ **in progress**

**Intellectual Output: : I04 - EMERALD a-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

⚠️ **in progress**

**Be careful about the declared activities in the timesheets + dealdines+ to declare Integer numbers in the timesheets**

**Check all activities declared with the allocated budget for each IO**

TECHNICAL UNIVERSITY OF CLUJ-NAPOCA ROMANIA    POLITEHNICA DIN BUCURESTI 1818    POLITECHNIKA POZNANSKA POZNAN UNIVERSITY OF TECHNOLOGY    Cll UiA University of Agder    bizzcom

## Project management and implementation

**Supporting documents:**

Proof of activities undertaken and outputs produced will be provided in the form of a description of these activities and outputs in the final report. In addition, outputs produced must be uploaded by the coordinator in the EEA Platform and/or, depending on their nature, available for checks and audits at the premises of the beneficiaries.

Beside these, timesheets can be provided (similar to the ones used for Intellectual output reporting) – activities reported in the timesheets will be managerial activities

Bills and invoices in which it is clearly stated that the declared expenses were made from the EMERALD 21-COP-0019 project are also needed / all other documents stated in the contract (in case of acquisition of different equipment items) – these are very important since they will be needed for the final audit of the EMERALD project

**Bills / timesheets – with statement that "the expenses were supported from the EMERALD COOP-0019 project" – if it is the case? do we have them uploaded on drive?**

## Quick overview of the EMERALD project activities organized in 2022 / to be organized in 2023

| TPM | Transnational project meetings |
|-----|--------------------------------|
| IO | Intellectual Outputs |
| ME | Multiplier Events |
| C | Intensive Programmes for higher education / Short-term joint staff training events |
| | EMERALD - Summarizing the Calendar of the project / deadlines / milestones |

## TPM reporting documents

**Supporting documents:**

- Travel: **Proof of attendance of the activity** in the form of an **attendance list or individual attendance certificates signed by the receiving organization;**

- **Proof of attendance of the transnational project meeting** in the form of a **participants list** signed by the participants and the receiving organization;

- **Detailed agenda and any documents used or distributed at the transnational project meeting (report of the organized event / press release – to be posted on the website)**

- **Accommodation + traveling bills + accounting**

## TPM reporting documents

Iceland Liechtenstein Norway grants

**The Education, Scholarships, Apprenticeships and Youth Entrepreneurship**
Project No:
Project title:
Event host organization:
Event title:
Date and Place:

Insert the logo of the organization
F-SEE-116/12.2018

### PARTICIPANTS LIST
### Transnational project meeting

| No. | Name and surname | Sending organization | Sending organization's address | Signature |
|---|---|---|---|---|
| 1 | | | | |
| 2 | | | | |
| 3 | | | | |
| 4 | | | | |
| 5 | | | | |
| 6 | | | | |
| 7 | | | | |
| 8 | | | | |
| 9 | | | | |
| 10 | | | | |
| | | | | |
| | | | | |

| Host organization | |
|---|---|
| Name of the legal representative | |
| Signature of the legal representative | |

Iceland Liechtenstein Norway grants

F-SEE-113/12.2018

**The Education, Scholarships, Apprenticeships and Youth Entrepreneurship Programme – EEA Grants 2014-2021**
Project No:
.................................. (to be completed)
**Project Title:**
.................................. (to be completed)

**Certificate of attendance**
**Transnational Project Meeting**

I undersigned.............................................................................

position.......................................................................................

representing the host organisation:

(complete name)..........................................................................

address:.......................................................................................

city:...................................................country...............................

certify that the following persons:                staff        student

M........................................................................... □ □
M........................................................................... □ □
M........................................................................... □ □
M........................................................................... □ □
M........................................................................... □ □
M........................................................................... □ □
M........................................................................... □ □
M........................................................................... □ □

representing the sending organisation:

complete name:...........................................................................
.......................................................................................
address:.......................................................................................
city:...................................................country...............................
were present from..............................to.......................................
attended the TPM meeting organised in......................(city):

Place...........................date..........................................
The host organisation:
(signature of the legal representative&stamp if applicable)

**+ report of the organized event / press release – to be posted on the website**

TECHNICAL UNIVERSITY OF CLUJ-NAPOCA ROMANIA

POLITEHNICA DIN BUCURESTI 1818

POLITECHNIKA POZNANSKA POZNAN UNIVERSITY OF TECHNOLOGY

UiA University of Agder

bizzcom

**Working together for a green, competitive and inclusive Europe**

## Transnational Project Meetings

| | MEETING LOCATION | SENDING ORGANISATION | PARTICIPANTS |
|---|---|---|---|
| TPM 1 | Cluj-Napoca, RO ✅ | University Politehnica Bucharest | 2 |
| | | Technical University of Cluj-Napoca | 2 |
| | | University of Agder | 2 |
| | | Bizzcom s.r.o. | 2 |
| | | Poznan University of Technology | 2 |
| TPM 2 | Bucharest, RO ✅ | University Politehnica Bucharest | 2 |
| | | Technical University of Cluj-Napoca | 2 |
| | | University of Agder | 2 |
| | | Bizzcom s.r.o. | 2 |
| | | Poznan University of Technology | 2 |
| TPM 3 | Poznan, PL ✅ | University Politehnica Bucharest | 2 |
| | | Technical University of Cluj-Napoca | 2 |
| | | University of Agder | 2 |
| | | Bizzcom s.r.o. | 2 |
| | | Poznan University of Technology | 2 |
| TPM 4 | Bucany, SK ⚠️ | University Politehnica Bucharest | 2 |
| | | Technical University of Cluj-Napoca | 2 |
| | | University of Agder | 2 |
| | | Bizzcom s.r.o. | 2 |
| | | Poznan University of Technology | 2 |

**Working together for a green, competitive and inclusive Europe**

## EMERALD – Monitoring Transnational Meeting - TPM 4 - June 2023 - BIZZCOM company, SK

The event will be organized at the **BIZZCOM company (SK)** together with the Executive team (1 representative of each institution that is involved in the consortium) + 1 representative of the Technical Team,

with **the main goals**:

> to discuss about the finalizing of virtual laboratory platform that is expected to be finalized at the end of July 2023 within IO3

> to discuss about the case study reports that have to be finished until September 2023

> to monitor and discuss the status of open access book / toolkit manual / patent submission / diploma projects / academic papers that are expected to be made with the support of the medical institutions and mentors / co-mentors of the EMERALD consortium.

> aspects related to final scientific / dissemination / financial report will be discussed prior to this meeting as well, so as all planning about final delivery reports will be made in due time prior in advance ( 1 and half months before) for preliminary checking

## Quick overview of the EMERALD project activities

| TPM | Transnational project meetings |
|-----|--------------------------------|
| IO | Intellectual Outputs |
| ME | Multiplier Events |
| C | Intensive Programmes for higher education / Short-term joint staff training events |
| | EMERALD - Summarizing the Calendar of the project / deadlines / milestones |

## Multiplier events reporting documents

**Reporting:**

- On behalf of the Project as a whole, it must be reported
  - ✓ the description of the multiplier event,
  - ✓ the intellectual outputs covered,
  - ✓ the leading and participating organizations,
  - ✓ the venue of the meeting
  - ✓ the numbers of local and international participants / statistics
  - ✓ Feedbacks on behalf of participants

**+ report of the organized event / press release – to be posted on the website**

Iceland
Liechtenstein
Norway grants
The Education, Scholarships, Apprenticeships and Youth Entrepreneurship

Insert the logo of the organization
F-SEE-117/12.2018

Project No:
Project title:
Event host organization:
Event title:
Date and Place:

**PARTICIPANTS LIST**
**Multiplier event**

| No. | Name and surname | Sending organization | Sending organization's address | City of the organization | Country of the organization | Signature |
|---|---|---|---|---|---|---|
| 1 | | | | | | |
| 2 | | | | | | |
| 3 | | | | | | |
| 4 | | | | | | |
| 5 | | | | | | |
| 6 | | | | | | |
| 7 | | | | | | |
| 8 | | | | | | |
| 9 | | | | | | |
| 10 | | | | | | |

| Host organization | | | |
|---|---|---|---|
| Name of the legal representative | | | |
| Signature of the legal representative | | | |

27

## Multiplier events reporting documents

**Supporting documents:**

- **Proof of attendance of the multiplier event in the form of a participants list signed by the participants and the receiving organisation;**

- **Detailed agenda and any documents used or distributed at the multiplier event (report of the organized**

  **event / press release – to be posted on the website)**

**For reporting / financing / organizers / members of the consortium are not eligible / separate lists will be needed!!!!**
**For traveling / accommodation members of the consortium can use – budget from PMI category can be used (but only from PMI, not other category (bills/ accommodation, etc are needed!)**

## Multiplier events reporting documents

**Reporting:**

- **In the case that the beneficiaries do not develop the intellectual outputs applied for and approved by the National Agency, the related Multiplier events will not be considered eligible for grant support either. (Multiplier event is for disseminating the IO results, not for promoting companies / presentations /etc. (ME is not a conference!!!)**

- **If the National Agency awarded support for the development of several intellectual outputs but only some of them are ultimately realized, the National Agency must determine to which extent each of the related Multiplier events is eligible for grant support.**

**Working together for a green, competitive and inclusive Europe**

## Multiplier events

**The ME is organized by BIZZCOM company, SK on 1st of September 2023**

**Companies from SK to be invited + STU students**

**Virtual platform has to be ready functional so as people could test it and provide excellent feedbacks**

### ME 1 - EMERALD research base learning method for teaching
**Start Date : 2 Sept 2022      End Date : 2 Sept2022**
**Country of Venue : University Politehnica Bucharest, Romania**

Participating Organizations : University Politehnica Bucharest, Technical University of Cluj-Napoca, University of Agder, Bizzcom s.r.o., Poznan University of Technology

Event Description : 1st Multiplier event EMERALD project is the event organized in order to share the 1st intellectual result of a project with a larger audience. Organized free of charge ! one day ! and the participants are required to register in the preamble. Expected number of attendees is about 40 people.

The target groups: ➤ colleagues involved in teaching Computer Aided Design, Computer Aided Engineering, Computer Programming, Virtual Reality / Augmented Reality, Sensors and Electronics, Bio-Mechatronics, 30 printing and Rapid Tooling, Intelligent (smart) materials
➤ teaching staff, students , other partners, other people involved in in Higher education teaching in their respective organizations, that are interested about developing, producing and testing of biomimetic mechatronic systems for people with special needs.

Intellectual Outputs Covered : I01 - EMERALD e-book for developing of biomimetic mechatronic systems
The aims of ME1 are:
-To present the project in its conception, research approach, technological outputs and e-book (the results of I01)
-To share the technological tools developed on the level of the EMERALD consortium.

| PROPOSED AGENDA | |
| --- | --- |
| 9:00 - Registration of the participants. | 12:00 - Interactive feedback: a short survey to collect first impressions and reactions. |
| 9:30 - EMERALD coordinator's welcome / Introduction to the activities. | 13:00 - Presentation of 1st Intellectual Output: I01 - EMERALD e-book for developing of biomimetic mechatronic systems |
| 10:00 - Presentation of EMERALD Consortium | 14:30 - Interactive feedback: a quiz to collect first impressions and reactions on I01. Q&A time. |
| 10:30 - Presentation of EMERALD project: a round table on WHAT WE MEANT; WHAT WE HAVE ACHIEVED; WHAT WE HAVE LEARNED; | |

**Agenda + objective of the event has to be related to dissemination of the results reached in IO1 (courses) on EMERALD – prepared report + the agenda is reflecting that?**

**Multiplier events**

EMERALD project - European Network for 3D printing of Biomimetic Mechatronic Systems

EMERALD Multiplier Event on:

## Research base learning method for teaching in bio-mechatronics

2 SEPTEMBER 2022

WHO can apply
Students (BSc / MSc / PhD)
Professors / Researchers
Companies / R&D Institutes

SPECIALIZATIONS:
Manufacturing Engineering
Bio-Mechatronics & Robotics
Mechanical & Bio-Mechanical Engineering
Computer Science & Automatics
Science of Materials

More details
www.project-emerald.eu

Registration until 30th of August 2022

Organized by the Politehnica University of Bucharest, Romania in cooperation with the EMERALD project consortium partners

---

EMERALD: European network for 3D printing of biomimetic mechatronic systems
EEA & Norway Grant - Contract No. 21-COP-0019

MULTIPLIER EVENT ON RESEARCH BASE LEARNING METHOD FOR TEACHING IN BIO-MECHATRONICS

POLITEHNICA University of Bucharest, Romania

Program

Date: 02.09.2022, between 9.00-14.00, UPB Central Library, Hall 2.2

| Hour | Activity |
|---|---|
| 9:00 | Participants registration |
| 9:15 | Event opening Prof. Nicolae Ionescu (Politehnica University of Bucharest) / Prof. Tom Savu (Politehnica University of Bucharest) – Dep TCM |
| 9:30 | EMERALD Project Presentation Assoc. Prof. Diana Băilă (Politehnica University of Bucharest) |
| 9:45 | ANPCDEFP – Radu Stoika – EEA Norway grants – aims, particularities and opportunities |
| 10:00 | EMERALD Project – Main Aims, Actions and Activities of the project Assoc.Prof. Răzvan Păcurar (Technical University of Cluj-Napoca, Romania) |
| 10:15 | University of Agder Norway – Presentation Prof. Filippo Sanfilippo |
| 10:30 | Poznan University of Technology – Presentation Prof. Filip Gorski |
| 10:45 | LEYCOM Company – Presentation (Additive manufacturing of prostheses: SLM, SLA, SLS, FRESH 3D Printing, etc) |

| | |
|---|---|
| 11:00 | Coffee Break |
| 11:15 | Intelligent (Smart) Materials Prof. Zaharia Cătălin (Politehnica University of Bucharest) |
| 11:45 | ADMASYS Company – Presentation NUTECHNOLOGIES Company – Presentation |
| 12:15 | BIZZCOM Company - Slovakia Director Eng. Branislav Rabara |
| 12:30 | « Ilie Murgulescu » Institute of Physical – Chemistry – Romanian Academy - Bucharest Oxide nanomaterials used for sensors CS3 Eng. Oana Cătălina Mocioiu |
| 13:00 | Round table discussions about future potential collaboration in the bio-mechatronics / 3D printing domain - Assoc. Prof. Diana Băilă (Politehnica University of Bucharest) |
| 13:30 | Final conclusions |
| 14:00 | Lunch time |

EMERALD project consortium partners:

## Multiplier events

**ME2 - Applied research teaching methods for Higher education**
**Start Date : 17 Feb 2023          End Date : 17 Feb 2023**
**Country of Venue : Technical University of Cluj-Napoca, Romania**

Participating Organizations : University Politehnica Bucharest, Technical University of Cluj-Napoca, University of Agder, Bizzcom s.r.o., Poznan University of Technology

**Event Description** : to present and share the results reached in intellectual output 2, related to the e-toolkit manual .
**Organized free of charge ! one day !** and the participants are required to register in the preamble. Expected number of attendees is about **48 people.**
**The target groups:** ➤ are colleagues, teaching staff, students, other people involved in Higher education in their respective organizations
Intellectual Outputs Covered : I02 - EMERALD e-toolkit manual for digital learning in producing biomimetic mechatronic systems

**The aims of ME2 are:**
- research base learning for teaching methods that can be used in higher education in the EMERALD project
- presenting of overall objectives of EMERALD project / presenting of the overall approach
- presenting of e-toolkit manual
- future activities/perspectives of EMERALD consortium in digital learning & teaching, implementing & transferring of the results

### PROPOSED AGENDA

| | |
|---|---|
| 9:00 - Registration of the participants.<br>9:30 - Welcome to the multiplier event at the Technical University of Cluj-Napoca | 13:30 Presenting of e-toolkit manual for developing of new biomimetic mechatronic systems (aspects related to Bio-mechatronics) |
| 10:00 Presenting on how research base learning for teaching mechatronics and 3D printing methods can be used in higher education (EMERALD project) | 14:00 Presenting of a-toolkit manual for developing of new biomimetic mechatronic systems (aspects related to 3D printing and Smart materials) |
| 10:30 Presenting of overall support e-courses / e-resources developed by the EMERALD consortium | 14:30 Conclusions, future activities of EMERALD consortium |
| 11 :30 Presenting of a-toolkit manual for developing of new biomimetic mechatronic systems (aspects related to CAD/ CAE) | 14:45 Round table<br>Q & A- EMERALD project perspectives in implementing and transferring of the results. |
| 12:00 Presenting of e-toolkit manual for developing of new biomimetic mechatronic systems (aspects related to Computer programming) | |

**Agenda + objective of the event has to be related to dissemination of the results reached in IO2 (toolkit manual) on EMERALD – prepared report + the agenda is reflecting that?**

Iceland
Liechtenstein
Norway grants

## Multiplier events

EMERALD project - European Network for 3D printing of Biomimetic Mechatronic Systems

EMERALD Multiplier Event on:

### Research base learning method for teaching in bio-mechatronics

2 SEPTEMBER 2022

**WHO can apply**
Students (BSc / MSc / PhD)
Professors / Researchers
Companies / R&D Institutes

**SPECIALIZATIONS:**
Manufacturing Engineering
Bio-Mechatronics & Robotics
Mechanical & Bio-Mechanical Engineering
Computer Science & Automatics
Science of Materials

More details
www.project-emerald.eu

Registration until 30th of August 2022

Organized by the Politehnica University of Bucharest, Romania
in cooperation with the EMERALD project consortium partners

---

EMERALD: European network for 3D printing of biomimetic mechatronic systems
EEA & Norway Grant - Contract No. 21-COP-0019

MULTIPLIER EVENT on Applied Research Teaching Methods for 3D printing in Bio-Mechatronics

(organized by the Technical University of Cluj-Napoca, Romania)
– draft preliminary agenda
17th of February 2023

| Session 1 - Higher Education institutions session | |
|---|---|
| 8:30 | Registration of participants to the Multiplier Event / Press conference (to be confirmed) |
| 9:00 | Opening and Welcome ceremony: Rector prof. dr.eng. Vasile Topa (Technical University of Cluj-Napoca) (to be confirmed), Vice rector prof. dr.eng. Dan Mândru (Technical University of Cluj-Napoca, Romania) + Dean of the Faculty of Industrial Engineering, Robotics and Production Engineering – Prof. Corina Bîrleanu + Head of manufacturing Engineering Department, Associate Prof. Adrian Trif (to be confirmed) + Mayors' institute of Cluj-Napoca (to be confirmed) |
| 9:20 | 25 years of success in the field of Additive Manufacturing for Medical Applications in Romania – prof. dr.eng. Nicolae Bâlc and prof. dr.eng. Petru Berce (Technical University of Cluj-Napoca) |
| 9:30 | EMERALD project overall presentation – progress, actions, KPIs, perspectives / details about the event – Associate Prof. Răzvan Păcurar (Technical University of Cluj-Napoca, Romania) |
| 9:40 | EMERALD– Applied Research Teaching Methods for 3D printing in Bio-Mechatronics -e-toolkits for supporting people with amputated arms (Prof. Filippo Sanfilippo – University of Agder (Norway) – recorded presentation |
| 9:45 | EMERALD– Applied Research Teaching Methods for 3D printing in Bio-Mechatronics -e-toolkits for supporting people with amputated arms (Prof. Filip Gorski – Poznan University of Technology (Poland) |
| 9:55 | EMERALD– Applied Research Teaching Methods for 3D printing in Bio-Mechatronics - e-toolkits for supporting people with amputated arms (Associate Prof. Diana Bâila – Politehnica University of Bucharest (Romania) |
| 10:05 | EMERALD– Applied Research Teaching Methods for 3D printing in Bio-Mechatronics - e-toolkits for supporting people with amputated arms (Branislav Rabara – BIZZCOM Slovakia |
| 10:15 | Coffee break |
| 10:30 | Trends and opportunities of 3D printing / bioprinting methods University of Cartagena – Roca Joaquin – Lola – Isidro – presentation |
| 10:45 | Trends and opportunities of 3D printing / bioprinting methods Medical doctors' presentations – Dr. Daniel Ostas – UMF - to be confirmed |

| 11:00 | Biomaterials trends and challenges – prof. Popa Cătălin (UTCN) |
|---|---|
| 11:15 | Innovations in Medical Robotics - prof. Doina Pîslă (TUCN) |
| 11:30 | Coffee break |
| | **Session 2 – companies session – from evolution to revolution** |
| 11:50 | Admasys company (Ro) - presentation |
| 12:00 | Nu Technologies (Ro) – company presentation |
| 12:10 | CAD Works (Ro) - company presentation |
| 12:20 | Leykom - company presentation |
| 12:30 | symme 3D - company presentation |
| 12:40 | DMG Mori – company presentation |
| 12:50 | Pro4D Form – company presentation |
| 13:00 | Lunch break / press conference |
| | **Session 3 – demo room / companies exhibition / TUCN laboratories visit** |
| 14:00 | Visiting of TUCN laboratories - Demo room / companies exhibition – main hall, B-dul Muncii - National Centre of Innovative Manufacturing - Robotics and Mechatronics laboratories - CESTER |
| | **Session 4 – project opportunities /constituting of the EMERALD Network / clusters / NGO / institutional / research / developing agencies session** |
| 15:00 | Premises of constituting the new EMERALD network for 3D printing in mechatronics Răzvan Păcurar (Technical University of Cluj-Napoca, Romania) |
| 15:10 | Vice rector Popescu Daniela – TUCN – opportunities of projects to be developed with companies – to be confirmed |
| 15:20 | HORIZON EUROPE calls – prof. Ovidiu Nemeș / Florin-Ioan ONIGA (vice rector TUCN) – to be confirmed |
| 15:40 | ERASMUS institutional projects, EuT+ and Norwegian grants – Ludmila Lutencu (TUCN) |
| 15:50 | Bianca Muntean – Transylvania IT Cluster - opportunities related to "Health" project calls |
| 16:10 | Oana Buzatu + Mirela Botezan – CREIC + new project calls and perspectives (Mayors' city institute) - to be confirmed |
| 16:20 | North West Regional Development Agency – Laviniu Chiș and Cristi Otgon, INNO Platform Department and Cristian Otgon (Intelligent specialization Department) |
| 16:40 | Q&A with partners comments and discussions on the possibility of joining different projects / consortium / EU Networks |
| 17:00 | Closing words / ending of Multiplier Event |

## Multiplier events

**ME3 - EMERALD personalized and project learning methods for Higher education**
**Start Date : 01 Sep 2023          End Date : 01 Sep 2023**
**Country of Venue : BIZZCOM company ,Slovakia**

Participating Organizations : University Politehnica Bucharest, Technical University of C/uj-Napoca, University of Agder, Bizzcom s.r.o., Poznan University of Technology

**Event Description** : to present and share the results reached in intellectual output 3, e-learning virtual laboratory (e-learning platform) & and intellectual output 4 related to e-case studies
**Organized free of charge ! one day !** and the participants are required to register in the preamble. Expected number of attendees is about 40 people.

**The target groups:** ➤ are colleagues, teaching staff, students, other people involved in Higher education in their respective organizations
Intellectual Outputs Covered : I03 and IO4

**The aims of ME3 are:**
-personalized and project learning methods can be used for teaching in higher education using the EMERALD virtual laboratory platform
-presenting and experiencing of the virtual laboratory / AR / mixing AR applications developed by EMERALD consortium
-conclusions, future perspectives of implementing and transferring of the results, publications, dissemination, new project proposals
-    future activities/perspectives of EMERALD consortium in digital learning & teaching, implementing & transferring of the results

| PROPOSED AGENDA | |
| --- | --- |
| 9:00 - Registration of the participants.<br>9:30 - Welcome to the multiplier event at at BIZZCOM company (Slovakia) | 12:00 EMERALD project perspectives in implementing, disseminating and transferring of the results |
| 10:00 Presenting on how personalized and project teaching methods can be used in teaching in higher education (using the EMERALD resources) | 12:30 Round table, Q & A, final conclusions |
| 10:30 Overall presentation about e-virtual laboratory I e-learning platform developed by the EMERALD consortium | 14:00 Live experiencing of the EMERALD VR/ AR e-learning platform |
| 11 :30 Presenting of EMERALD consortium opportunities (case studies developed based on project base learning methods for people with special needs /practical using of | |

**The ME is organized by BIZZCOM company, SK on 1st of September 2023**

**Companies from SK to be invited + STU students**

**Virtual platform has to be ready functional so as people could test it and provide excellent feedbacks to us**

**Agenda + objective of the event has to be related to dissemination of the results reached in IO3 (virtual laboratory platfom) on EMERALD – prepared report + the agenda must reflect that!!!**

## Quick overview of the EMERALD project activities and expected results

| | |
|---|---|
| TPM | Transnational project meetings |
| IO | Intellectual Outputs |
| ME | Multiplier Events |
| C | Intensive Programmes for higher education / Short-term joint staff training events |
| | EMERALD - Summarizing the Calendar of the project / deadlines / milestones |

## LTT events activities

**Intensive Programmes for higher education  / Short-term joint staff training events**

The grant amount = unit contribution towards the travel, individual support and linguistic support.

The beneficiaries must be able to demonstrate the formal link with the persons participating in Transnational training, teaching or learning activities, whether they are involved in the Project as staff (either on a professional or a voluntary basis) or as learners

## LTT reporting documents

**Supporting documents:**

- **Proof of attendance of the activity in the form of an attendance list or individual attendance certificates signed by the receiving organisation;**

  **(report of the organized event / press release – to be posted on the website)**

- **Accommodation + traveling bills + accounting**

**Reporting:**

There must be reported details on the venue of all learning, teaching and training activities, the date and the number of participants + details about the organized activities.

## LTT reporting documents

**Certificate of attendance**
Short term transnational mobility activities

**PARTICIPANTS LIST**
Short term transnational mobility activities

**Declaration for Staff Costs**
Short term transnational mobility activities

**+ report of the organized event / press release – to be posted on the website**

## LTT activities

**Intensive Programmes for higher education / Short-term joint staff training events**

**Do we have all documents related to Summer school organized by UiA uploaded on drive?**

| | ORGANIZING INSTITUTION | PERIOD / NUMBER OF DAYS | SENDING ORGANISATION | STUDENTS | PROFESSORS | INVITED STAFF | |
|---|---|---|---|---|---|---|---|
| C 1 | University of Agder, NO | SEPTEMBER 2022 / 10 DAYS | Technical University of Cluj-Napoca | 5 | 4 | - | UiA – 5 extra participants TOTAL : 30 participants |
| | ✅ | | University Politehnica Bucharest | 5 | 2 | - | |
| | | | University of Agder | - | - | - | |
| | | | Bizzcom s.r.o. | - | - | 2 | |
| | | | Poznan University of Technology | 5 | 2 | - | |
| C 2 | Bizzcom s.r.o., SK | MAY 2023 / 4 DAYS ⚠️ | Technical University of Cluj-Napoca | - | 4 | - | Bizzcom s.r.o. – 4 extra participants TOTAL:20 participants |
| | | | University Politehnica Bucharest | - | 4 | - | |
| | | | University of Agder | - | 4 | - | |
| | | | Bizzcom s.r.o. | - | - | - | |
| | | | Poznan University of Technology | - | 4 | - | |
| C 3 | University of Agder, NO | JULY 2023 / 10 DAYS ⚠️ | Technical University of Cluj-Napoca | 5 | 4 | - | UiA – 5 extra participants TOTAL : 30 participants |
| | | | University Politehnica Bucharest | 5 | 2 | - | |
| | | | University of Agder | - | - | - | |
| | | | Bizzcom s.r.o. | - | - | 2 | |
| | | | Poznan University of Technology | 5 | 2 | - | |

**LTT event to be organized in May 2023 in Bucany (4 days**
- **excluding**
- **traveling days)**

**Summer school event to be organized in Sept. 2023 in Grimstad (8 days**
- **excluding**
- **traveling days)**

**Working together for a green, competitive and inclusive Europe**

## LTT activities

**LTT event to be organized in May 2023 in Bucany (4 days**
- **excluding**
- **traveling days)**

**AR / VR logistics for training?**

**Robotic arm To be tested at Bizzcom?**

**C2 : Short-term joint staff training events – 3D printing and bio-mechatronics**

Duration : 4 day(s)    Country of Venue : Slovakia    Total number of Participants : 20

Date: May 2023    The International summer school organized by the BIZZCOM company

Participating Organizations : University Politehnica Bucharest, Technical University of Cluj-Napoca, University of Agder, Bizzcom s.r.o., Poznan University of Technology

**Activity :** ➤ is focused on **the use and testing the functionality of e-virtual laboratory** (e-learning) platform developed by the EMERALD consortium for teaching activities related to the manufacturing of biomimetic mechatronic systems by 3D printing

**The target groups:** ➤ professors    ➤ other people / institutions (stakeholders) involved in research activities related to the developing, manufacturing and testing of new biomimetic mechatronic systems made by 3D printing, for people with special needs

Testing the functionality of virtual laboratory platform developed within IO3 related to: different scenarios in VR / AR / Mixed Reality applications for people with special needs

IMPORTANT FEEDBACKS    Content?

Report?    Certificates ?

**VR platform Must be ready in one draft variant prior to our departure in Bucany**

**AR / VR programming can be planned By Bizzcom/ UiA/ Poznan while we will be there**

**Working together for a green, competitive and inclusive Europe**

## LTT activities

**VR / AR platform**

**Summer School - UiA September 2023**

C3 : Intensive Programmes for higher education students - 3D printing and bio-mechatronics

Duration : 10 day(s)    Country of Venue : Norway    Total number of Participants : 30

Date: July 2023    The 2nd International summer school organized by the University of Agder.

**Robot arm programming**

Participating Organizations : University Politehnica Bucharest, Technical University of Cluj-Napoca, University of Agder, Bizzcom s.r.o., Poznan University of Technology

The target groups: ➤ professors (from EMERALD consortium and engaged in technical activities) & students
Organized free of charge ! the participants are required to REGISTER in the preamble.

**8 days (not 10 days) – excluding traveling days**

Aims: to familiarize the attendees with the personalized and project based teaching methods used in Higher education and the efficiency of these methods in using the EMERALD project resources, especially e-virtual laboratory (e-learning platform) AR / VR / mixed reality applications for getting knowledge and practical skills in developing of new biomimetic mechatronic systems by 3D printing technologies and specific applications related to the programming of biomimetic mechatronic systems AR / VR applications.

**Logistics**

Students will be able first to understand the basic principles that are related to CAD/CAE, manufacturing, programming and testing of biomimetic systems using e-virtual laboratory (e-learning) platform.
Professors will present on a course the basics of different case study that is being prepared, with the particularities involved in the case when biomimetic mechatronic systems are required to be materialized for people with special needs, emphasizing the facilities of the virtual laboratory (e-learning platform / AR / VR applications).
In this way the easiness in using the a-learning platform of the EMERALD consortium will be checked based on the feedbacks provided by students.

**Accommodation at Bia apartments?**

Testing and experiencing the virtual laboratory platform developed within IO3 related to:
different scenarios in VR / AR / Mixed Reality applications for people with special needs

IMPORTANT FEEDBACKS    Certificates ?    Report?

Main results reached during the EMERALD summer school organized at the University of Agder in July 2023 will be presented in September 2023 at the Multiplier event organized in Slovakia by BIZZCOM

41

**Budget reallocation in between categories if needed**

# 5 budget lines with unit costs

1. **Project management and implementation**
2. Transnational project meetings
3. Intellectual outputs
4. Multiplier events
5. Learning, teaching, training activities

**Agency requirement:**
Communication to be done not in direct contact with the Agency, but through the Leading partner / answer will come back in the same way!

Logo of EMERALD not be used on website / promoting materials!

**NB: 20% flexibility between the lines except for line 1 which can not be increased**

**Reallocation is done not at the level of individual partner, but whole consortium with clear explanations / justifications – why the expense was not made like in the proposal / which is the added value for the new category where budget is re-allocated (what was made extra than described in the proposal!**

**3.1** Finanţarea va fi în **sumă maximă de 198810 EUR**, respectiv 983373.90LEI[2]. 85% din acest buget (168988.50 Euro, respectiv 835867.82LEI) reprezintă grant SEE iar 15 % (adica 29821.50 Euro, respectiv 147506.08 LEI ) reprezintă cofinanţarea din bugetul naţional.

| Capitole bugetare | Suma alocată (EURO) |
|---|---|
| Managementul şi implementarea proiectului | 29250 |
| Mobilitati transnaţionale de scurtă durată | 80420 |
| Produse intelectuale | 75540 |
| Evenimente de multiplicare | 13600 |
| Sprijin pentru nevoi speciale | 0 |
| Costuri excepţionale | 0 |
| TOTAL | 198810 |

[2] Conform curs InforEuro: 1Eur= 4.9463 Lei

**3.4** Fără a deroga de la Articolul 12, de la baremele menţionate pentru fiecare categorie bugetară în Anexa II şi cu condiţia ca Proiectul să fie implementat conform prevederilor din Anexa I, exista posibilitatea de a ajusta bugetul prezentat in art.3.1, prin transferuri între diferite categorii bugetare, fără ca această ajustare să fie considerată o modificare a Contractului, în sensul Articolului 12, cu condiţia ca următoarele reguli să fie respectate:

a) se pot transfera până la 50% din fondurile alocate următoarelor categorii bugetare: Managementul şi implementarea proiectului, Rezultate intelectuale, Evenimente de multiplicare, Activităţi de mobilitate de scurta durata şi Costuri excepţionale către oricare altă categorie bugetară, cu excepţia categoriilor bugetare Managementul şi implementarea proiectului şi Costuri excepţionale. Aceste transferuri nu implica transmiterea unei notificari catre OP.

b) conform celor de mai sus, orice transfer care depaseste 50% din capitolul bugetar din care se va efectua transferul implica transmiterea de catre PP a unei notificari[3] catre OP prin care se solicita aprobarea efectuarii modificarii bugetare.

**3.6** Pentru a fi considerată eligibilă, orice cheltuială trebuie să fie efectuată în perioada contractuală menţionată în art. 2, să fie mentionată în propunerea bugetară din Anexa I, să fie proporţională şi necesară pentru implementarea proiectului, să folosească scopului proiectului, să fie identificabilă şi verficabilă în sistemul contabil al PP respectând legislaţia naţională în domeniu.

**3.7** În cadrul Mecanismului Financiar al Spațiului Economic European 2014-2021, Proiecte de Cooperare în învățământul universitar nu sunt eligibile costurile indirecte.

## 4.1 Plăți pe durata contractului

OP trebuie să efectueze următoarele plăți către PP:

- Prima tranșă de avans (prefinanțare)

- A doua tranșă de avans (în baza cererii specificate în raportul intermediar, potrivit Art. 4.3)

## 4.2 Prima tranșă de avans (prefinanțare)

OP va plăti Promotorului Proiectului, în termen de 30 de zile de la data intrării în vigoare a Contractului, o primă tranșă de avans în valoare de **119286.00 EUR** corespunzător unui procent de 60% din suma maximă a grantului specificată în Articolul 3.1.

### 4.3 Rapoarte intermediare și tranșe ulterioare de avans

Până la **07.02.2023**, Promotorul de Proiect trebuie să completeze un raport intermediar privind implementarea Proiectului prin intermediul platformei http://app.eea4edu.ro/, care acoperă perioada de raportare de la începutul implementării Proiectului, menționată la Articolul 2.2, până la 07.12.2022 (jumatatea perioadei de implementare a proiectului).

Raportul intermediar va consta in:
- Raportul narativ
- Declaratia de cheltuieli (toate costurile vor fi exprimate în Euro)
- Declaratia de onoare completata de reprezentantul legal al PP
In cazul in care declaratia de cheltuieli atesta utilizarea a cel putin 70% din prima transa de avans, PP va atasa raportului intermediar si urmatoarele documente scanate:
- Extrase de cont care atesta cheltuirea sumelor din declaratia de cheltuieli.

În măsura în care raportul intermediar demonstrează că Promotorul de Proiect a utilizat cel puțin 70% din avans, raportul intermediar va fi considerat ca fiind cererea pentru un avans ulterior și va specifica suma solicitată, de maximum **79524.00 EUR** corespunzător cu maximum 40% din suma alocată.

În cazul în care raportul intermediar arată faptul că un procent mai mic de 70% din avansul plătit anterior a fost folosit pentru a acoperi costurile Proiectului, Promotorul de Proiect trebuie să transmită un raport intermediar suplimentar la momentul la care a fost folosit un procent de cel puțin 70% din primul avans, raport care va fi considerat drept cerere pentru tranșa ulterioară de avans și va specifica suma solicitată, în limita a maximum **79524.00 EUR** corespunzătoare cu cel mult 40% din suma alocată.

44

OP va evalua raportul intermediar şi plăti (daca este cazul) Promotorului Proiectului următorul avans în termen de 60 de zile calendaristice de la data primirii raportului intermediar.

Această perioadă poate fi prelungită în cazul în care OP solicită documente sau informaţii suplimentare de la Promotorul de Proiect. În acest caz, Promotorul de Proiect va avea la dispoziţie maximum 15 zile pentru a trimite informaţiile şi documentele solicitate.

### 4.4 Raportul final şi cererea de stabilire a grantului final

Pana la data de **30.11.2023**, Promotorul de Proiect trebuie să completeze prin intermediul platformei http://apr.eea4edu.ro/ raportul final de implementare a Proiectului. Acest raport trebuie să conţină informaţiile necesare pentru a justifica suma cerută pe baza contribuţiilor pe unitate, în cazul în care grantul ia forma contribuţiilor bazate pe număr de unităţi sau a costurilor eligibile suportate efectiv, în conformitate cu prevederile din Anexa III.

In conformitate cu prevederile Regulamentului aplicabil Granturilor SEE 2014-2021, Promotorul de proiect va inregistra în contabilitate cheltuielile efectuate în cadrul proiectului, pe conturi analitice distincte.

Raportul final va fi considerat ca fiind cererea Promotorului Proiectului de stabilire a grantului final.
Raportul final (Anexa IV a Contractului) va consta în următoarele documente:
- **Raportul Narativ**
- **Declaraţia de cheltuieli (toate costurile vor fi exprimate in Euro)**
- **Declaratia de onoare completată de reprezentantul legal al Promotorului Proiectului**
- **Balanţa contabilă şi fişele de cont aferente proiectului;**
- **Extrase de cont care atesta platile efectuate** (către partenerii de proiect /participantii la mobilitati)

Toate documentele care atesta o plată (contracte, facturi, documente de plata, etc) vor purta mentiunea "**Decontat din contractul nr. 21-COP-0019, finanţat din Granturile SEE 2014-2021**".