

INTELLECTUAL OUTPUT 2

TASK 02/A5 REPORT ON THE RESULTS OF THE WORKSHOP IN BUCHAREST (ROMANIA)



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CONTENT

| | |
|---|----|
| INTRODUCTION..... | 3 |
| AGENDA | 4 |
| 1. Presentation of the objectives and results of the BIMstone project [RoGBC] . | 9 |
| 2. Presentation of New interactive BIM-learning methods applied to stone products [CTM]..... | 9 |
| 3. Presentation of Implementation of BIM technology in stone sector [DNV] ... | 10 |
| 4. Presentation of BIM and construction sector [BIMTECH Association]..... | 10 |
| 5. Round table | 11 |
| 6. Conclusions..... | 12 |

INTRODUCTION

This Workshop has been used as the second presentation of the BIMStone project to professionals in Romania and as an official presentation of the first task of the IO2 corresponding to the “*BIMStone Multimedia Materials. New interactive BIM-learning methods*” of the project, BIMStone Multimedia Cards and a beta version draft of the OER (“O3. *BIMStone Open Educational Resource*”).

The purpose of this workshop is to collect information from the event attendees and participants, who are experts in the different fields of stone, BIM, sustainability or construction sector. After the research in the project is performed, the different collecting placing systems was analysed and discussed, highlighting the strong and weak points of each of the systems used in every country, as well as their adaptation to the current situation and needs of the demand of stone products market and BIM technologies.

The feedback from experts has been used to make a methodology to be applied for coming courses and contents. A special focus has been done in the discussion of the different stone placing systems, deal during the round tables organised covering different topics. Experts in sustainable construction sector and representatives of leading companies involved in green building services, technologies and projects attended this event and participated in the round tables.

At the end of the interventions scheduled in the agenda, Daniel N. Armenciu (RoGBC) moderated a round table discussion with the consortium members and the professionals who are experts in stone, architecture and BIM in the fields related to the project.

In these round tables, Reiner Krug and David Caparrós (representatives of DNV and CTM, respectively) had a special participation in these round tables, where the assistants could contribute with their comments and doubts about the BIMStone project and its products.

AGENDA

Workshop in Bucharest (Romania) on new interactive BIM-learning methods applied to sector of stone products

Tuesday, 7
November 2019

Arrival of participants

Workshop place; Asociația Romania Green Building Council's
headquarter. Argentina Street, no. 43, Bucharest (Romania)

- 15.45 Registration
- 16.00 - 16.15 Welcome to attendees and presentation of RoGBC research activity [RoGBC
- Eng. Dorin Beu]
- 16.15 - 16.30 Objectives and results of the BIMstone project [RoGBC - Arch. Daniel N.
Armenciu]
- 16.30 - 17.00 New interactive BIM-learning methods applied to stone products [CTM -
Arch. David Caparros]
- 17.00 - 17.15 Coffee break
- 17.15 - 18.00 Implementation of BIM technology in stone sector:
Eng. Reiner Krug, Deutscher Naturwerkstein-Verband (DNV).
Arch. Ștefan Constantinescu, BIM Expert (BIMTECH Association)
- 18.00 - 18.30 Round table
Moderator: Arch. Daniel N. Armenciu
- 18.30 Closure of the Workshop

According to the agenda of the Workshop, the following interventions were made:

1. Welcome participants by host organisation and presentation of RoGBC research activity. It was carried out by Mr. Dorin Beu, President of Asociatia Romania Green Building Council.
2. Presentation of the objectives and results of the BIMstone project. Mr. Daniel N. Armenciu was in charge of this presentation as architect of the Asociatia Romania Green Building Council (RoGBC).
3. Presentation of the New learning methods applied to stone products by Mr. David Caparrós, Project Manager of Marble, Stone and Material Technological Centre (CTM).
4. Presentation of the current implementation of BIM technologies in stone sector. It was carried out by Mr. Reiner Krug, the coordinator of the project and the contact person of the German Association of Natural Stone Industry (DNV).

The seminar also was attended by professionals of recognised prestige who were part of a Table of Experts, where they first told about their experiences in relation to BIM technologies applied to sustainable construction:

- Presentation of Sustainability and BIM by Mr. Stefan Constantinescu. BIMTECH Association.

All the presentations and interventions of the BIMstone project in this Workshop will be posted on the project website in the OER section, available in English.

To make the event more widely known, the organizing association, RoGBC, designed and printed posters, brochures, sent newsletters and made news on its website.

The following images show some of these dissemination actions:







Co-funded by the Erasmus+ Programme of the European Union



PROGRAM

15:45
Participants registration

16:00
Welcome and presentation of RoGBC research activity
PhD. Prof. Eng. Dorin Beu (RoGBC)

16:15
Objectives and results of the BIMStone project
PhD. Lect. Arch. Daniel N. Armenciu (RoGBC)

16:30
New interactive BIM-learning methods applied to stone products
PhD. Arch. David Caparros (CTM, Spain)

17:00 Coffe break

17:15
Implementation of BIM technology and LCA in stone sector
Eng. Reiner Krug, Deutscher Naturwerkstein-Verband (DNV, Germany)
Arch. Ștefan Constantinescu, BIM Expert, (BIMTECH, Romania)

18:00
Round table
Moderator: PhD. Lect. Arch. Daniel N. Armenciu

18:30
Closure of the Workshop

BIM & LCA

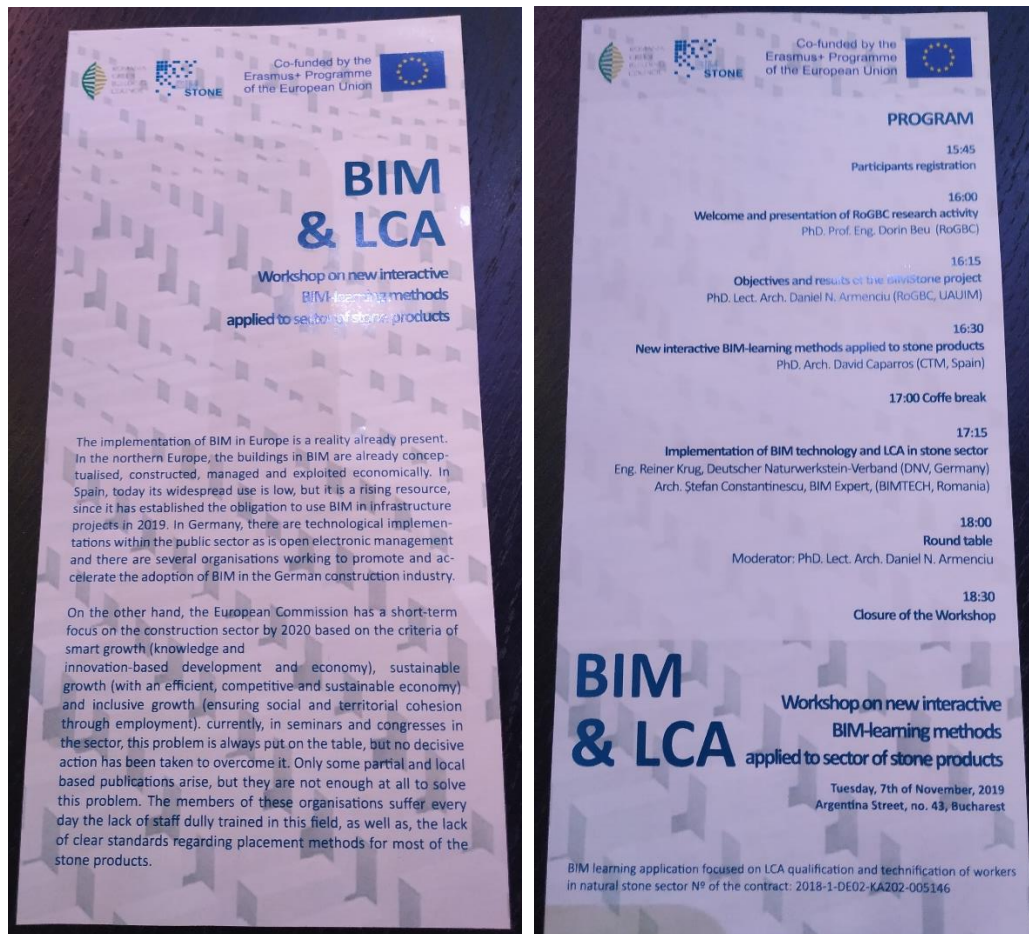
Workshop on new interactive BIM-learning methods applied to sector of stone products

Tuesday, 7th of November, 2019
Argentina Street, no. 43, Bucharest

BIM learning application focused on LCA qualification and technification of workers in natural stone sector
Nº of the contract: 2018-1-DE02-KA202-005146


Poster of First Workshop of BIMstone project in Bucharest.

TASK 02.A5. RESULTS OF THE WORKSHOP IN BUCHAREST (ROMANIA).



Brochure of First Workshop of BIMstone project in Bucharest.

TASK 02.A5. RESULTS OF THE WORKSHOP IN BUCHAREST (ROMANIA).



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Workshop on new interactive BIM-learning methods applied to sector of stone products

Location : RoGBC Office, Argentina 43, Bucharest
From: Thursday 07 November 2019, 16:00
To: Thursday 07 November 2019, 18:30

As part of the Erasmus + project entitled "BIMStone - BIM learning application focused on LCA qualification and technification of workers in natural stone sector", RoGBC is organizing an event that aims to discuss the environmental impact of construction products. New design methods, tools based on the BIM (Building Information Modeling) philosophy, have the ability to reconsider classic options, in favor of a complex assessment that has emerged from Life Cycle Thinking concepts. Thus, specialists in the fields of design and construction materials meet in a round table, in order to generate a debate on these topics that are gaining more and more ground.

Those interested to know more about BIM applied to low impact buildings using LCA principles can apply to sign up for this event by sending an email to info@RoGBC.org

News about First Workshop of BIMstone project in Bucharest in RoGBC website.

1. Presentation of the objectives and results of the BIMstone project [RoGBC]

Mr. Arch. Daniel N. Armenciu gave a brief presentation of the project and the consortium, as well as the objectives, tasks and expected results of the project, emphasizing that this project is of educational scope for training purposes for students and professionals in the sector of natural stone and related. Mr. Armenciu described each of the deliverables of the project in detail.

On the other hand, Mr. Armenciu stressed the importance of this project and the need to digitize all building materials and, of course, natural stone products in order to have greater prescription capacity by experts and professionals in the construction sector and to reach a Green Buildings with sustainable materials and resources available to everyone.

Presentation available in “*APENDIX I. Presentation of Mr. Daniel N. Armenciu*”.

2. Presentation of New interactive BIM-learning methods applied to stone products [CTM]

Mr. David Caparrós presented the second task of the Intellectual Output 2: “O2.A2. Interactive BIM Tool” for BIMstone project. Mr. Caparrós gave a detail description of the contents and the structure of the interactive tool, analysing and explaining why each section and the information that the BIMstone project wanted to introduce in the natural stone materials in BIM were so necessary.

In his presentation, Mr. Caparrós explained how the contents and information had been planned and what the process was to be able to access all the information related to LCA for each product developed in the project.

Each of the materials selected to analyse your LCA data in the project are included within the different BIM families (walls, roofs and floors). In this interactive tool there will be a direct link to the BIMstone project website and to the animations of each of the products. These animations will also be available on YouTube in the coming months, after the technical and pedagogical modifications that will be considered from the comments and feedback provided by the attendees and participants of this workshop.

Presentation available in “*APENDIX II. Presentation of Mr. David Caparrós*”.

3. Presentation of Implementation of BIM technology in stone sector [DNV]

Mr. Reiner Krug presented some of the natural stone products and materials available in BIM format by the moment in Germany, analysing the importance of these new technologies for the construction sector as well as for the manufacturers of building materials and professionals in charge of the design and calculation of quantity of materials needed and environmental impact.

For that reason, Mr. Krug pointed out that the use of BIM and facilitate the natural stone market as it is a digital product and material, making the technical information of these products and materials more accessible and be more eye-catching for possible future clients or professionals (architects, engineers, designers, specifiers, interior designers...).

4. Presentation of BIM and construction sector [BIMTECH Association]

Mr. Ștefan Constantinescu is BIM expert, President and Co-founder of BIMTECH Association for the research, development and implementation of Building Technologies.

Mr. Constantinescu talked about the growing number of architects, engineers and contractors that are using BIM as an intelligent method of designing, building and operating of the built environment that involves generating and managing virtual digital representations of the physical and functional properties of a building.

He pointed out that adopting the BIM standard in Romania (and the rest of Europe), the relationship between design, architecture and construction companies with state representatives would be much better that it is nowadays.

Mr. Constantinescu also presented at the workshop the pilot project for the modernisation of a landmark building in Romania, one of the first commercial spaces built in the country. It is the Bucur Obor Commercial Center, from 1975. BIMTECH is working in the complexity of the works that will require prior digitisation and complementing with information dating back over 40 years. They are using some modern surveys techniques including laser-scanning for digitisation and, thanks to the BIM model, the necessary permits were obtained, and the project is now in the construction phase.



Mr. Constantinescu during his presentation.

5. Round table

As it was foreseen in the agenda of the Workshop, once all presentations had been finished, there was a round table where the assistants could ask questions and contribute with their comments to the project objectives and presentations of the experts participating in the day: Mr. David Caparrós, Mr. Reiner Krug and Mr. Ștefan Constantinescu.

In the following picture, the three experts can be seen during the round table.



Experts in the round table.

6. Conclusions

The most relevant issues raised at the round table, which were mainly addressed to the invited architects and professors of the invited universities, for their contribution of real experiences in projects whose ultimate objective is the implementation of BIM in the universities. The main questions raised were:

- Implementation of BIM in the business and educational network.
- Use of BIM at professional level in different fields.
- BIM in projects at various levels: public and private.
- Sustainability considerations in BIM projects.

NUMBER OF ATTENDEES

The total attendance at the First Workshop of the BIMstone project was 38 external people and 4 RoGBC workers, in addition to the project participants:

Deutscher Naturwerkstein-Verband E.V (DNV)

- Joachim Grüter.
- Reiner Krug.

Colegio Oficial de Arquitectos de la Región de Murcia (COAMU)

- María José Peñalver Sánchez.
- Pedro Gabriel Moreno Moreno.

Asociación Empresarial de Investigación Centro Tecnológico del Mármol, Piedra y Materiales (CTM)

- David Caparrós Pérez.
- Laura Robles Martínez.

KLESARSKA SKOLA Pucisca (KLESARSKA)

- Tamara Plastić.
- Jakov Babarović.

Asociatia Romania Green Building Council (RoGBC)

- Daniel Nicolae Armenciu.

Due to the Data Protection Law, “*APENDIX III. Attendees list*” is not available for public use.



BIM learning application focused on LCA
qualification and technification of workers
in natural stone sector.

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