



**CBIM - European Training Network**

**Cloud-based Building Information Modelling**

# Project Kick-off Meeting

20 July 2020



# Marie Skłodowska-Curie Actions (MSCA) Innovative Training Networks (ITN) H2020-MSCA-ITN-2019



This project will receive funding from the European Union's Horizon 2020 research and innovation programme under the Marie Skłodowska-Curie grant agreement No 860555.

For more information see [CBIM on CORDIS](#)

# Meeting Schedule

13:00 – 13:15	<b>Welcome and project overview</b> Research and Training Goals - <i>Rafael Sacks</i> Management structure and team – <i>Anat Avital</i>
13:15 – 13:35	<b>Short introductions</b> - Beneficiaries, Partners, Academic Supervisors, Advisory Board members
13:35 – 14:00	<b>Short introductions</b> - ESRs
<b>14:00 – 14:15</b>	<b>Break</b>
14:15 – 14:45	<b>Training</b> – <i>Dimitrios Rovas</i>
14:45 – 15:00	<b>Dissemination</b> – <i>Timo Hartman</i>
15:00 – 15:15	<b>TE1, Cambridge, December 2020</b> – <i>Ioannis Brilakis</i>
<b>15:15 – 15:45</b>	<b>Break</b>

15:45 – 16:45

The meeting will continue in two Zoom ‘rooms’:

### **Room 1: ESRs meeting**

- Roles of Beneficiaries and of Partners
- Expectations from ESRs
- Q&A and discussion
- Assignment to CBIM committees

*Rafael Sacks, Dimitrios Rovas, Ilka May, Silvana Bruno & ESRs*

### **Room 2: Beneficiaries & Partners meeting**

- Role of Beneficiaries
- Role of Partners: benefits, contributions
- Secondments: why, whom, when and where
- Set up Supervisor-Partner meetings

*Ioannis Brilakis, beneficiaries and partners*



# What is the problem ?

Building Information Modelling (BIM) as a product and process enables stakeholders across the built environment sector to create digital versions of real-world assets (such as buildings, bridges and tunnels).

The digital versions are commonly called 'digital twins'. When placed on the cloud, the digital twins can serve as a resilient and integrated repository of all asset data throughout their lifecycle.

However, the full potential of BIM is currently exploited only in a fairly narrow range of applications. This is mainly due to the lack of trained scientific personnel capable of understanding the value of BIM and creating the link between digital twins and possible applications.

# How can we contribute ?

**CBIM aims to educate researchers** in the development of a set of novel and disruptive BIM technologies that will

- automate the generation and enrichment of digital twins,
- improve the management, security and resilience of BIM-enabled processes,
- boost the industrial uptake of BIM across sectors and disciplines by training these researchers to valorise and exploit their work.

# Early Stage Researchers (ESRs)

This new generation of researchers can play a key role in the widespread implementation of BIM products and processes dedicated to digitising our built infrastructure and managing our assets better to yield massive gains in sustainability, productivity and safety.

# Objectives

A blue-outlined cloud shape containing the word 'Research' in white text.

**Research**

A blue-outlined cloud shape containing the word 'Training' in white text.

**Training**

A blue-outlined cloud shape containing the words 'Societal Benefits' in white text.

**Societal  
Benefits**



# Objectives

## # 1 Research

To develop a joint **research programme** towards delivering the vision of the 'Digital Twin' for representing buildings and infrastructure.

- overcome current knowledge and innovation gaps in the areas of generating, enriching, and updating Digital Twins of existing assets.
- digital twins for process modelling and simulation through concepts and showcase applications.

# Objectives

## # 2 Training

To offer original and advanced **training** to a group of Early Stage Researchers in all the multi-disciplinary aspects of CBIM

- skills for capturing, enriching, and using digital twins to identify new application areas of CBIM and propose new CBIM products and processes,
- experience in the non-academic sector,
- transferable skills training in developing business concepts and entrepreneurship,

# Objectives

## # 3 Societal Benefits

To demonstrate the societal benefits

- disseminate to specialists
- outreach to the wider public

(industrial and societal acceptance of the capabilities of CBIM in infrastructure, optimise asset performance, provide for the efficient use of resources, advance our understanding of complex problems in many engineering disciplines.

# Network Coordinator & Management Team



Prof. Rafael Sacks  
Coordinator



Anat Avital  
Administrative  
Coordinator



Dr. Silvana Bruno  
Research Associate

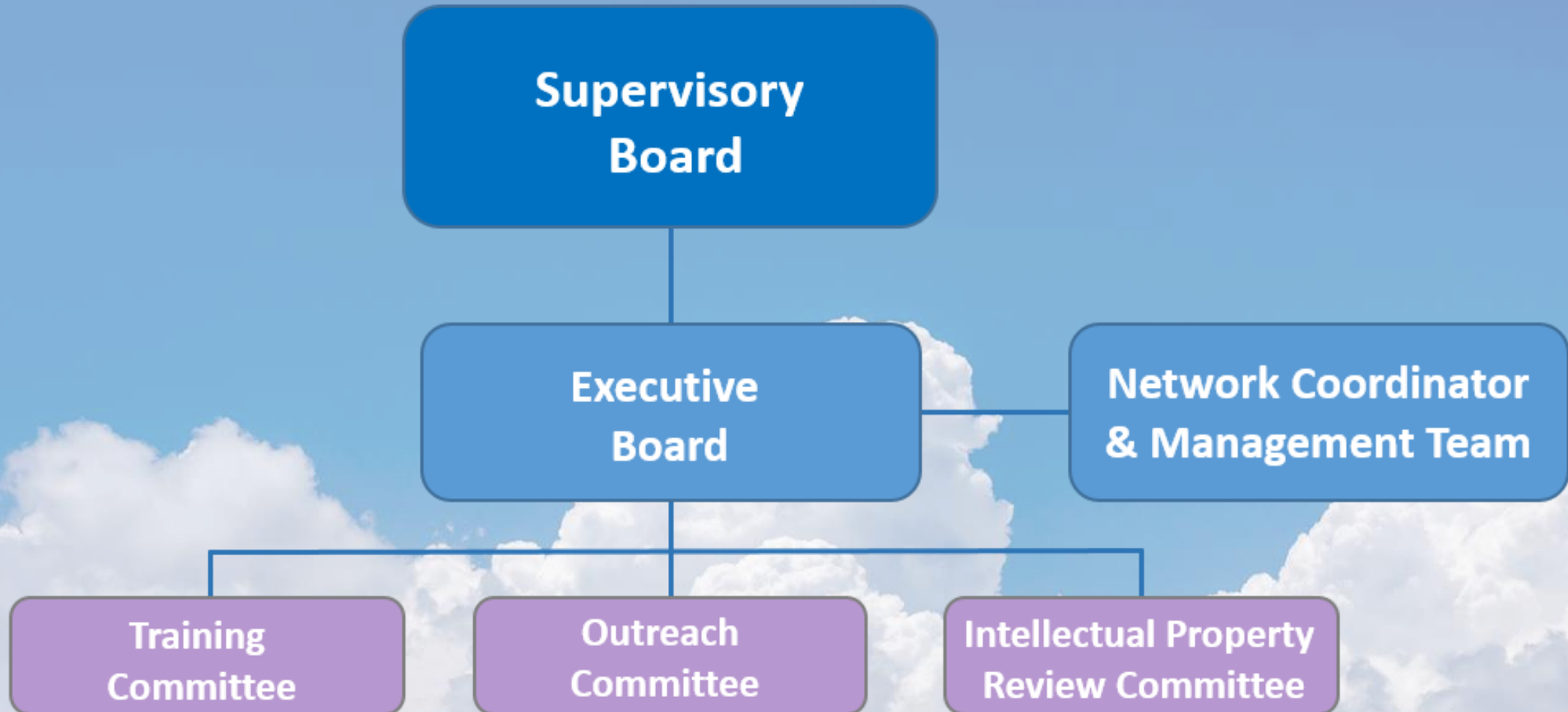


Katia Datsenko  
Finance Officer



Meital Gotfried  
Web site Manager

# Organizational Structure





# Supervisory Board (SB)



Name	Position	Organization
<b>Prof. Rafael Sacks</b>	EB member	TRDF (Technion)
<b>Dr. Ioannis Brilakis</b>	EB member	UCAM
<b>Mrs. Anat Avital</b>	EB member	TRDF (Technion)
<b>Dr. James O'Donnell</b>	EB member	UCD
<b>Dr. Dimitrios Rovas</b>	EB member	UCL
<b>Dr. Ilka May</b>	EB member	LocLab
<b>Prof. Timo Hartmann</b>	EB member	TUB
<b>Ms. Susana Martín</b>	EB member	CARTIF
<b>Mr. Kim Nyberg</b>	Beneficiary representative	Trimble
<b>Dr. Thomas Liebich</b>	Partner representative	AEC3 Deutschland
<b>Prof. Leonidas J. Guibas</b>	Partner representative	Stanford University
<b>Ms. Katja Günther</b>	Partner representative	Deutsche Bahn
<b>Dr. Mark Bew</b>	Partner representative	PCSG
<b>Mr. Frank Lehmann</b>	Partner representative	DLR
<b>Mr. Paul Brennan</b>	Partner representative	BAM
<b>Mr. David Robertson</b>	Partner representative	Bentley
<b>Mr. Frank Walter</b>	Partner representative	Arcadis
<b>Mr. Adam Locke</b>	Partner representative	Laing O'Rourke
<b>Dr. Lucien Ungureanu</b>	Partner representative	Contecht
<b>TBD*</b>	ESR Representative	?
<b>TBD*</b>	ESR Representative	?
<b>Prof. Andre Borrmann</b>	External academia representative	TUM
<b>Dr. Frank Weiss</b>	External industry representative	Oracle
<b>Dr. Bhargav Dave</b>	External industry representative	Visilean

# Executive Board (EB)



Name	Position	Organization
<b>Prof. Rafael Sacks</b>	Coordinator	TRDF (Technion)
<b>Dr. Ioannis Brilakis</b>	Deputy Coordinator	UCAM
<b>Ms. Anat Avital</b>	Administrative Coordinator	TRDF (Technion)
<b>Dr. James O'Donnell</b>		UCD
<b>Dr. Dimitrios Rovas</b>	Training Coordinator	UCL
<b>Dr. Ilka May</b>	Recruitment & Equal Opportunities Coordinator	LocLab
<b>Prof. Timo Hartmann</b>	Communications and Outreach Coordinator	TUB
<b>Ms. Susana Martín</b>	Science and Relations with Industry Coordinator	CARTIF

# Training Committee (TC)

Name	Position	Organization
<b>Dr. Dimitrios Rovas</b>	Training Committee Chair	UCL
<b>Dr. Ajith Parlikad</b>	Member	UCAM
<b>Ms. Susana Martín</b>	Industrial partner	CARTIF
<b>Dr. Ilka May</b>	Industrial partner	Loclab
<b>TBD*</b>	ESR representative	TUB
<b>TBD*</b>	ESR representative	Technion

# Outreach Committee (OC)

Name	Position	Organization
<b>Prof. Timo Hartmann</b>	Outreach Committee Chair	TUB
<b>Dr. Eleni Papadonikolaki</b>	Member	UCL
<b>Mr. Kim Nyberg</b>	Industrial partner	Trimble
<b>Dr. James O'Donnell</b>	Member	UCD
<b>TBD*</b>	ESR representative	Technion
<b>TBD*</b>	ESR representative	UCAM
<b>TBD*</b>	Outreach support office	CARTIF
<b>TBD*</b>	Outreach support office	Loclab

# Intellectual Property Review Committee (IPR)



Name	Position	Organization
<b>Ms. Susana Martín</b>	IPR Chair	CARTIF
<b>Dr. Ilka May</b>	Industrial partner	Loclab
<b>Mr. Kim Nyberg</b>	Industrial partner	Trimble
<b>Prof. Rafael Sacks</b>	Member	TRDF (Technion)
<b>Dr. Ioannis Brilakis</b>	Member	UCAM
<b>Dr. James O'Donnell</b>	Member	UCD
<b>Dr. Eleni Papadonikolaki</b>	Member	UCL
<b>Prof. Timo Hartmann</b>	Member	TUB
<b>TBD</b>	ESR representative	WP1
<b>TBD</b>	ESR representative	WP2
<b>TBD</b>	ESR representative	WP3
<b>TBD</b>	ESR representative	WP4



# ESR and PhD Supervisors

ESR	Name	Host	PhD Enrolment	PhD Supervisor
1	Victor Drobnyi	UCAM	UCAM	Ioannis Brilakis
2	Duygu Utkucu	Technion	Technion	Rafael Sacks
3	Zhiqi Hu	UCAM	UCAM	Ioannis Brilakis
4	Zijian Wang	Technion	Technion	Rafael Sacks
5	Flavia De Andrade	CARTIF	UCD	James O'Donnell
6	Conor Shaw	UCD	UCD	James O'Donnell
7	Dimitris Mavrokapnidis	UCL	UCL	Dimitrios Rovas
8	Klaudia Jaskula	UCL	UCL	Eleni Papadonikolaki
9	Janet Chang	UCAM	UCAM	Ajith Kumar Parlikad
10	Nihan Sena Diren	TUB	TUB	Timo Hartmann
11	Tawakalitu Odubiyi	TUB	TUB	Timo Hartmann
12	Jialei Ding	Loclab	UCAM	Ioannis Brilakis
13	Cristian Lepore	Trimble	Technion	Rafael Sacks
14	Eyosias Dawit Guyo	Trimble	TUB	Timo Hartmann

# Today

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CBIM PhD Schools
CBIM Conferences
Interaction between ESRs during secondments
Supervisory board meetings
ESR Training Period

Legend:

S = Secondment

K = Kick-off meeting and Recruitment workshop

E = End of project

### Work Packages

WP1: Advanced techniques for Generating & Updating CBIM geometry;

WP2: New Methods and Tools for CBIM enrichment:

WP3: CBIM Data & Process management:

WP4: CBIM Applications and Technology Transfer

### Training Events

TE1: PhD School on BIM fundamentals and BIM Research Methods;

TE2: PhD School on Sensing and Data Collection;

TE3: PhD School on Linked Data, Data Integration and Collaborative Working;

TE4: PhD School on BIM Applications:

**Mod1: Module on Product Modelling and Management:**

**Mod2: Module on Entrepreneurship Management:**

HT: CBIM App Development Hackathon:

C1: Workshop on CBIM Data Models and Semantic Enrichment;  
C2: Conference on advances in BIM and its applications through

CBIM

### Milestones

**Mi1: Project Setup Complete:**

**Mi2: Start of CBIM Training:**

**Mi3:** Mid-term check:

**Mi4: ESR Training, Year 1 Completed:**

MI5: Literature Review Complete:

**Mi6:** Business concepts for Academic Entrepreneurship defined:

MI7: ESR Training, Year 2 Completed:

Mi8: Prototype development complete; Ready for Technology Transfer (TT);

Mi9: ESR Trail

**Mi10:** Exploitation strategy de

Mi11: CBIM Project End

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# Topics discussed in ESR Breakout Room



- Q&A for ESRs
  - Secondments
  - Timing of PhD start with respect to COVID 19
- ESR representatives for committees
  - Dissemination and Outreach Committee (Technion - Duygu, UCAM - Viktor, Zhiqi, Janet, CARTIF - Flavia, Loclab – Jialei, TUB - Nihan)
  - Training Committee (TUB - Tawakalitu, Technion - Zijiang)
  - IPR Committee (WP1 - Viktor, WP2 - Dimitris, WP3 - Nihan, WP4 - Cristian)
  - Supervisory Board (Conor, Klaudia)
- Communications
  - File and content sharing
  - Informal communication
  - Zotero