BP '24
Digital Building Permit Conference 2024
18th & 19th April 2024 - Barcelona COAC

Organised by
EUnet4DBP | BDTA (Building Digital Twin Association) | Open Geospatial Consortium | EU BIM Task Group | buildingSMART International | EuroSDR | ECTP-CEU (European Council of Spatial Planners / Conseil européen des urbanistes) | CEBC (Consortium of European Building Control) | isprs (Information from Imagery)

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The conference is a Satellite event of the Festival of the New European Bauhaus
New European Bauhaus | THE FESTIVAL of the New European Bauhaus

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DAY 1 - 18th April 2024

8.30 - 9.00	Welcome and Registration
9.00 - 9.20	Opening by **Francesca Noardo** (Open Geospatial Consortium, Belgium) and **Judith Fauth** (University of Cambridge, United Kingdom)

Legislative System

9.20 - 9.40	Keynote| *Towards a more resilient, green and digital construction ecosystem*
	Michael Flickenschild (Ecorys and EC High Level Construction Forum)
Chair | **Adrian Wildenauer** (University of Applied Sciences Bern, Switzerland)	
9.40 - 10.00	Keynote| *Digital building permits and procedures from a legal perspective - where does Switzerland stand?*
	David Schwaninger (Blum&Grob Attorneys at Law, Switzerland)
10.00 - 10.12	Research Paper (12')| *Building Permit Digitisation in Saudi Arabia*
	Eyad Jalal (University College London, United Kingdom)
10.12 - 10.24	Research Paper (12')| *Requirements analysis and acceleration of approval procedures for federal highways in Germany*
	Niklas Pauls (Schüßler-Plan Digital GmbH, Germany)
10.24 - 10.36	Research Paper (12')| *When DBP meets DBL – Conceptual alignment on process level*
	Pedro Mêda (University of Porto, Portugal)
10.36 - 10.46	Research Paper (12')| *A Theoretical Approach For Adopting Smart Contracts In Granting Building Permits For Individual Houses In Vietnam*
	Quan Nguyen (Hanoi University of Civil Engineering, Vietnam)
10.46 - 10.50	Presentation (10')| *Checking 50yrs: Overview of Requirements on DBP from viewpoint of a public road authority*
	Odilo Schoch (FEDRO, Switzerland)

Technological System - 1

10.50 - 11.00	Sponsor talk (10')|*Beyond BIM and Digitalization in Construction Industry*
	CYPE | Pablo Gilabert
11.00 - 11.30	Coffe Break
Chair | **Christian Schranz** (Technische Universität Wien, Austria)	
11.30 - 11.42	Research Paper (12')| *Geometry level of information needs for digital building permit regulations*
	Siham El Yamani (Delft University of Technology, Netherlands)
11.42 - 11.54	Research Paper (12')| *Code compliance checking approach for elements implicitly contained in building models*
	Simon Fischer (Research Unit Digital Building Process, Technische Universität Wien, Austria)
11.54 - 12.06	Research Paper (12')|*Ils Space*
	Rolf Jonker (Gemeente Rotterdam, Netherlands)
12.06 - 12.18	Research Paper & Sponsor Talk (12')| *Design and development of a digital compliance workbench DBP format*
	Nicholas Nisbet (AEC3 Ltd & University College London)
12.18 - 12.30	Research Paper (12')| *IFC-Based Platform Prototype for Rule Editing and Code Compliance Check*
	Bruno Muniz (University of Minho, Portugal)
12.30 - 12.40	Presentation (10')| *An approach to GeoBIM using 3D City Database and BIMServer*
	Bruno Rienzi (Facultad de Ingenieria, Universidad de la Republica, Uruguay)
12.40 - 12.50	Presentation (10')| *ACABIM: Open Compliance Audit for New Zealand Regulations*
	Robert Amor (University of Auckland, New Zealand)
13.00 - 14.00	Lunch

Organisational System

Chair | **Silvia Mastrolembo Ventura** (University of Brescia, Italy)	
14.00 - 14.30	Keynote| *Enriching building permit process from social science perspective*
	Hannele Kerosuo (University of Helsinki, Finland)
14.30 - 14.42	Research Paper (12')| *Adaptability Of Digital Permits For Building-As-A-Service Asset*
	Adrian Wildenauer (University of Applied Sciences Bern, Switzerland)
14.42 - 14.54	Research Paper (12')| *Starting With Why: Shaping The Future Generation Of Planners By Empowerment Of Necessary Competences At Universities To Enable Integral Digital Construction*
	Matias Penrroz (University of Applied Sciences Bern, Switzerland)

14.54 - 15.06 Research Paper (12')| *Enhance the digitalization of Building Permit Processing with Recognition-Primed Decision Making*
Peter Nørkjær Gade (University College of Northern Denmark)

15.06 - 15.18 Research Paper (12')| *Towards automated building lifecycle assessment calculation*
Petr Hradil (Sova3D Oy Ltd., Finland)

15.18 - 15.30 Research Paper (12')| *A Maturity Model for Digital Building Permit: a path towards the digital transition*
Mariana Ataide (Fraunhofer Italia Research)

15.30 - 15.40 Presentation (10')| *Digitalizing the built environment – leading people through change with the power of experimental culture. Is a cultural revolution necessary for the digitalization of the built environment?*
Tiina Talvitie (City of Helsinki, Finland)

15.40 - 15.50 Presentation (10')| *Digital Built Environment - Support public authorities in digitalising their building permit systems*
Miguel Pereira and Giulio Milanesi (PwC Luxembourg)

15.50 - 16.00 Presentation (10')| *e-Delivery report by CEBC*
Sasa Galonja (Consortium of European Building Control)

16.00 - 16.10 Sponsor talk (10')| Why wait? Let's start with BIM-based permitting now!
Future Insight | Jaan Saar

16.10 - 16.30 Coffe Break

Country-specific experiences

Chair | **Jaan Saar** (Future Insight, Netherlands)

16.30 - 16.40 Country specific (10')| *Germany's Digital Building Application as a Trailblazing Guarantee for Accelerated Planning and Implementation of Nationwide Construction Projects*
Christoph Vollmer and Eckhard Riege (Ministry of the Interior, Building and Digitalisation, Germany)

16.40 - 16.50 Country specific (10')| *"One-for-All" – experiences and perspectives of the digital building permit in Germany*
Ronny Weinkauf and Andreas Fiedler (Merseburg University of Applied Sciences, Germany)

16.50 - 17.00 Country specific (10')| *Implementing a digital building permit system in Slovenia – current status and aspirations for the future*
Jernej Tekavec (University of Ljubljana, Slovenia)

17.00 - 17.10 Country specific (10')| *Developing automated building permitting in Finland*
Antero Hirvensalo (Tampere University, Finland)

17.10 - 17.20 Country specific (10')| *Automatic Legislation/GIS/IFC Integration in Brazil*
Paulo Sergio Teixeira (Torch Engenharia, Brazil)

17.20 - 17.30 Country specific (10')| *LandLogic: Determining Applicable Law Agencies for Digital Building Permitting in Ontario, Canada*
Saeid Emamgholian (AECO Innovation Lab, Canada)

17.30 - 17.40 Country specific (10')| *Information Model based Urban Planning prototype in Estonia*
Christopher-Robin Raitviir (City of Tallinn, Estonia)

17.40 - 17.50 Country specific (10')| *Transformative Journey: Dubai Municipality's BIM Adoption for Building Permitting and Regulatory Compliance*
Nasser ALshaibani (Dubai Municipality)

17.50 - 18.00 Country specific (10')| *From paper to NOPaper: A 10-year journey of digital transformation for building permits in Vila Nova de Gaia*
Carla Pires (Gaiurb EM, Portugal)

18.00 - 18.20 Keynote| *ECTP and Built4People Partnership: perspectives on future digitalisation of Construction value chains*
Alain Zarli (European Construction Technology Platform, ECTP)

20.00 Dinner | HOTEL 1898, La Rambla 109 - 08002 Barcelona

DAY 2 - 19th April 2024

Procedural System

9.00 - 9.20 Keynote|Development and process of the BIM building permit in the State of Geneva
Ophélie Vincendon (Etat de Genève, Switzerland)

Chair | **Judith Fauth** (University of Cambridge, United Kingdom)

9.20 - 9.32 Research Paper (12')| *BIM-based building permit process: Finland's implementation path*
Anna-Riitta Kallinen (ARK Consulting, Finland)

9.32 - 9.44 Research Paper (12')| *Stakeholder attitudes and process readiness towards digital building permit processes in five European countries*
Rita Lavikka (VTT Technical Research Centre of Finland)

9.44 - 9.56 Research Paper (12')| *Investigation And Comparison Of Building Permit Processes In Different Sized Municipalities At National Level: The Italian Case*
Kavita Raj (University of Brescia, Italy)

9.56 - 10.08 Research Paper (12')| *Process Analysis and Comparative Evaluation of Building Permitting – PACE-BP*
Tanya Bloch (Technion Israel Institute of Techology)

10.08 - 10.20 Research Paper (12')| *Analyzing Building Permit Processes Across Europe*
Peter Nørkjær Gade (University College of Northern Denmark)

10.20 - 10.32 Research Paper (12')| *Automated Regulatory Compliance: Insights from a Design Research*
Joao Soliman-Junior (University of Huddersfield, United Kingdom)

10.32 - 10.42 Presentation (10')| *Designers as Catalysts for Change Towards Digital Building Permitting (DBP)*
Borja Martinez (SIA.Architects, Luxembourg)

10.42 - 10.45 Short Pitch (3')| *Building Permit Process Digitalization : A Municipal Implementation Process Map*
Orjola Braholli (Fraunhofer Italia Research)

10.45 - 10.48 Short Pitch (3')| *Building Standards Compliance for SMEs: A Case study of Scotland*
Michael Tong (Glasgow Caledonian University, United Kingdom)

10.48 - 10.51 Short Pitch (3')| *A conceptual framework for managing the building permitting process in Brazilian municipalities*
Douglas Malheiro de Brito (Federal University of Bahia, Brazil)

10.51 - 11.00 Q&A (10')

11.00 - 11.30 Coffe Break

Chair | **Harald Urban** (Technische Universität Wien, Austria)

11.30 - 11.33 Short Pitch (3')| *Transformer-based Semantic Parsing of Building Regulations: Towards Supporting Regulators in Drafting Machine-Readable Rules*
Robert Amor (University of Auckland, New Zealand)

11.33 - 11.36 Short Pitch (3')| *The IDS As A Means Of Exchanging Information Requirements In Public Administrations: The Use Case Of The Digital Building Permit*
Giancarlo de Marco (Fraunhofer Italia Research)

11.36 - 11.39 Short Pitch (3')| *A Concept for Leveraging Road Digital Twins for Enhanced Planning and Building Permit Processes*
Judith Fauth (University of Cambridge, United Kingdom)

11.39 - 11.42 Short Pitch (3')| *Aligning BIM, DBP, and Sustainability: Insights from a Venn Diagram Analysis*
Stefanie Brigitte Deac Kaiser (The Polytechnic University of Timisoara, Romania)

11.42 - 11.45 Short Pitch (3')| *Methodology to analyse privacy and IPR problems in digital building permits: BPMN processes taxonomy and simulations*
Pablo Vicente Legazpi (Building Digital Twin Association, Belgium)

11.45 - 11.48 Short Pitch (3')| *Definition Of BIM And 3DCitymodel Information Requirements For Digital Building Permits*
Sara Comai (University of Brescia, Italy)

11.48 - 11.50 Short Pitch (3')| *BIM models and 3D City Model as part of the building permit in Finland*
Petri Kokko (Sova3D Oy, Finland)

11.50 - 12.00 Q&A (10')

Technological System - 2

Chair | **Rita Lavikka** (VTT Technical Research Centre of Finland)

12.00 - 12.10 Sponsor talk (10')| *Stay ahead shaping the future of the Building Digital Twin Industry*
BDTA - Eduard Loscos

12.10 - 12.22 Research Paper (12')| *Breaking the boundaries of Automated Code Checking through Semantic Enrichment and Graph Neural Networks*
Tanya Bloch (Technion Israel Institute of Techology)

12.22 - 12.34 Research Paper (12')| *Formalization of building codes and regulations in knowledge graphs*
Gonçal Costa (Ramon Llull University, Spain)

12.34 - 12.44 Research Paper (12')| *Achieving Extensibility within a Standards-based Platform for the Digital Building Permit in Montevideo*
Laura González (Facultad de Ingenieria, Universidad de la Republica, Uruguay)

12.44- 12.54 Presentation (10')| *Enhancing Smart Cities through Semantic Planning Law Data – The ACCORD-project and the Use-Case Berlin TXL*
Stefan Höffken (Tegel Projekt gmbH, Germany)

12.54 - 13.04 Presentation (10')| *Checking of Urban Planning Regulations with GeoSPARQL and BIM SPARQL*
Vladimir Alexiev (Ontotext AD, Bulgaria)

13.05 - 14.00 Lunch

Technological System - 3

Chair | **Gonçal Costa** (Ramon Llull University, Spain)

14.00 - 14.30 Keynote| *AI thinks your building is compliant!*
Robert Amor (University of Auckland, New Zealand)

14.30 - 14.40 Presentation (10')| *Building Permits Management Data Space*
Francisco Javier Diez (Tekniker, Research and Technology Centre, Spain)

14.40 - 14.50 Presentation (10')| *CHEK technology architecture: achieving interoperability for a modular approach*
Ane Ferreiro (CYPE, Spain)

14.50 - 15.00 Presentation & Sponsor Talk (10') |Enabling BIM in Building Permitting: The Critical Role of the Permitting Platform
Illkka Mattila (Cloudpermit, Finland)

15.00 - 15.03 Short Pitch (3')| *AI-supported, automatic document checking for digital submission and processing of building applications in Germany*
Lisa Lenz (Building Information Cloud GLWG GmbH, Germany)

15.03 - 15.06 Short Pitch (3')| *AI Assisted compliance in the built environment*
Max van Riel (Struck, Netherlands)

15.06 - 15.09 Short Pitch (3')| *Advancing Automated Compliance Checking Through Visual Programming in the Context of Australian Building Codes*
Nikoo Mirhosseini (University of Melbourne, Australia)

15.09 - 15.12 Short Pitch (3')| *3D Cartographic Generalization of Indoor Spaces using Corpora of Geospatial Natural Language with Parsimony of Description*
Daniel Dos Santos (Military Institute of Engineering, Brazil)

15.12 - 15.22 Q&A (10')

15.30 - 16.00 Coffe Break

Technological System - 4

Chair | **Eduard Loscos** (Building Digital Twin Association, Belgium)

16.00 - 16.12 Research Paper (12')| *Optimisation of the fire safety certificate process in the digital and model-based building permit procedure*
Janna Walter (THM - University of Applied Sciences, Germany)

16.12 - 16.24 Research Paper (12')| *Automatic verification of requirements in BIM models for building permit*
Filippo Chiappini (University of Brescia, Italy)

16.24 - 16.36 Research Paper (12')| *Mapping the processes and developing the rule sets for automated compliance checking of health and safety regulations*
Zijing Zhang (University College London, Aston University, Arcadis Consulting, United Kingdom)

16.36 - 16.48 Research Paper (12')| *DMN as a visual interface for building constraint creation*
Emma Nuyts (Ghent University, Belgium)

16.48 - 16.58 Presentation (10')| *Use of augmented reality in the openBIM building authority process*
Harald Urban (Technische Universität Wien, Austria)

17.00 Closing remarks