

Building Information Modelling (BIM)

Seminar Session

📅 Tuesday 22 May 2018 📍 Auditorium 🕒 9.30 - 12.30



Driven by legislation as well as current and emerging technologies, the BIM revolution is advancing across the construction industry, with the UK a world exemplar. The session will examine the key role of geospatial in creating effective and deliverable information models that reduce risk and inform the asset lifecycle for all stakeholders. Presentations include how BIM has been delivered on real world projects.

Seminar Session Programme

9:30

KEYNOTE:

The role of geospatial in enabling digital transformation across the built environment - and why BIM is a key part in that journey

Dr Anne Kemp, Chair UK BIM Alliance & Director at Atkins, BIM Strategy and Development



9:55

Bridging the gap between BIM and Survey

Andrej Mocicka, Sales & Business Development Manager, LISTECH Pty Ltd

The presentation will outline what BIM is and how, where, when and why it is used. Explaining how cost, time and project complexity are well recognised as being major components of a construction project, with accurate spatial location also being fundamental. As spatial data professionals, the role of surveyors will be explained, detailing how they work and interact with other professions in the BIM lifecycle. The presentation will outline how this can be achieved using LISTECH NEO to seamlessly transfer information to and from GIS (ESRI, MapInfo), BIM (IFC/IFCzip), AutoCAD, MicroStation, Google Earth, field surveying instruments, XML, LISCAD and other systems.



10:20

BIM: Through a surveyors' lens

Dipaneeta Das, CAD Technology/BIM Manager, Warner Surveys

Rob Hamilton, Business Development Manager, Warner Surveys

BIM is gradually transforming and ushering in a digital revolution in the construction sector, increasing efficiency and reducing risk. The process generates information models that can be used throughout the asset's lifecycle. The onus is on the whole supply chain to develop information models. It implies that standardised processes and agreed methods are to be followed in a collaborative working environment. Hence awareness and understanding of BIM by the supply chain is critical for project success. A key member of the supply chain is the surveyors. They address topographical and positional challenges in construction projects, capturing existing scenarios to provide data rich/intelligent 3D models. This presentation from Warner Surveys highlights the role of surveyors and asks will their role change?



Continued →

10:45 **Survey4BIM: It's all about Space and Time**



[Andy Evans, Product Manager, Topcon](#)

Survey4BIM has highlighted several key geospatial elements that could derail adoption and implementation of levels 2 and 3 BIM. The presentation will focus on the collective's work, the Digital Plan of Work for Survey, the Accuracy issue and the proposed future work programme (Interoperability). Many have dismissed BIM as being all noise and no substance. This is not so: BIM has become an essential part of wide area asset management throughout the whole project lifecycle. This presentation will boil it down to the base elements and talk to the right stakeholders at the right time.

11:10 **Scanning and modelling of huge and detailed projects
- A Sydney mall and the Royal Sydney Golf Club**



[Andy Jackson, Director, Scan and Model](#)

The presentation will feature case studies on two very different Scan-to-BIM projects. The first, a huge shopping centre in Sydney, Australia, covering a floor area of 475,000m2 needed over 4700 scans to complete. The second involves the Royal Sydney Golf Club, which hosts the Australian Open. Laser Scanning, GPS, and aerial drone photography were used to deliver a highly detailed model and visualisations. The presentation will include the hardware and software used, as well as discussing the methods to overcome hurdles, such as improving surveying and office work flows, and working with large datasets.

11:35 **The 4th industrial revolution, where monitoring data meet BIM**



[Marco Di Mauro, Segment Manager, Leica Geosystems](#)

Modern monitoring systems are good examples of the 'Internet of Things' where sensors are smart and able to communicate with each other and share results over the web to present computed and filtered data as information for decision makers. This optimisation of risk management is part of the proven effectiveness of adopting BIM, a solution with the aim of reducing the risks of delivering a project not being on time or on budget through implementing a more connected data strategy. This presentation will show where monitoring data can fit into the BIM process through possible and future integration.

12:00 **How Digital Built Environment can help to deliver better homes**



[Paul Surin, Head of Digital Built Environment, Wienerberger](#)

[Adrian Burgess, Technical Director, PCSG, Wienerberger](#)

The Digital Built Environment approach considers the social, resource and commercial viability of a development and automates this process by pulling together localised planning, environmental and economic considerations with user requirements and preferences. It also directly links digital manufacturing and supply chain optimisation with the delivery of social outcomes; it enables the right homes in the right place at an affordable price. This presentation demonstrates, through a simple interface, how the combination of Geo-information, point cloud data, multiple (BIM) models combine in a Common Data Environment to help make better, quicker and cost effective decisions at all of the RIBA Digital Plan of Work Stages. The combination of building information correctly geo-located opens up a new world of possibilities.



12:20 **BIM Seminar Summary**

[Anne Kemp, Director of Atkins, BIM Strategy and Development](#)

Continued →

Related Seminar Presentations



Talks in **other seminar sessions** that include content relevant to Building Information Modelling (BIM):

Tuesday 22

Using UAV and mobile LiDAR surveys to drive efficiencies in flood defence management on the Thames

Dan Culli, GIS Consultant,
Critigen/TEAM2100



Floods Seminar Session
13.50 | Tue 22 | Theatre 2

Laser scanning – an essential part of the digital construction tool kit

Mark Taylor, Digital Construction
Manager, BAM Construction



Laser Scanning Seminar Session
14.05 | Tue 22 | Auditorium

Survey to BIM – is it BIM or 3D representation, are we doing it right?

Enzo Labroschiano, Head of BIM,
Murphy Surveys



Laser Scanning Seminar Session
14.35 | Tue 22 | Auditorium

Wednesday 23

Continuous As-built – the truth about Construction Validation

Andrew Evans, Product Manager,
Topcon



Architecture, Engineering and
Construction Seminar Session
9.30 | Wed 23 | Theatre 1

Mobile Mapping, a 21st Century tool for the construction industry

Mark Reid, VP Product Management,
GeoSlam



Architecture, Engineering and
Construction Seminar Session
9.50 | Wed 23 | Theatre 1

Urban Virtual Design Construction – the beginning of VDC and integrating project delivery

Peter Bo Olsen, Technical Director, MT
Højgaard



Architecture, Engineering and
Construction Seminar Session
10.10 | Wed 23 | Theatre 1

Practical applications of digital technologies in the conservation and asset management fields by Scotland's national heritage body

Joann Russell, Head of Estates, Historic
Environment Scotland



Heritage Seminar Session
10.20 | Wed 23 | Room B

Every 3D detail matters; Big point clouds tamed

Steven Ramsey, HDS Technical
Manager, Leica Geosystems



Architecture, Engineering and
Construction Seminar Session
10.30 | Wed 23 | Theatre 1

Use of Unmanned Aerial Vehicle (UAV) Technology to aid terrestrial scanning for Reality Capture & BIM

Keith Wakeley, Drone Survey
Instructor, Drone Pilot Academy



Architecture, Engineering and
Construction Seminar Session
10.50 | Wed 23 | Theatre 1

Related Commercial Workshops



Workshops hosted by exhibiting companies that include content relevant to Building Information Modelling (BIM):

Tuesday 22

Launch of the Vercator Toolkit for the automatic registration of Point Clouds

Correvate

Tue 22 | 10:15 - 10:45 | Room C

Next generation software cyclone, JetStream and Cloudworx

Leica Geosystems

Tue 22 | 10:15 - 10:45 | Room E

3D online platform for point cloud models

3dusernet

Tue 22 | 10:15 - 10:45 | Room F

River modelling preparation software - GeoRiver

Storm Geomatics

Tue 22 | 11:45 - 12:15 | Theatre 3

Marine asset integrity and structural monitoring surveys

Bibby HydroMap

Tue 22 | 12:30 - 13:00 | Theatre 3

Key features of UKBuildings detailed UK property database

Verisk

Tue 22 | 13:15 - 13:45 | Room C

Mago3D - Brand new web based open source GeoBIM platform

Gaia3D

Tue 22 | 14:00 - 14:30 | Room C

Survey services and data capture

L&M Survey Services

Tue 22 | 14:00 - 14:30 | Room E

Ultra wide band ground penetrating radar - new applications

Catsurveys

Tue 22 | 14:00 - 14:30 | Room H

Surveying to create BIM data of solid objects

Adtollo

Tue 22 | 14:45 - 15:15 | Room C

LupoScan- Efficient workflows for powerful point cloud analysis

Lupos3D

Tue 22 | 14:45 - 15:15 | Room E

BIM Solutions for infrastructure design

Sierrasoft

Tue 22 | 15:30 - 16:00 | Room C

Undet4Revit - Make your Revit point cloud friendly. Learn efficient Scan2BIM workflows.

UNDET Point Cloud Software

Wed 23 | 12:30 - 13:00 | Room E

Desktop and mobile software solutions

MicroSurvey Software

Wed 23 | 12:30 - 13:00 | Room H

Drone captured data, its applications and the law

Drones on Demand

Wed 23 | 13:15 - 13:45 | Room F

Planning and visualisation web application for geospatial professionals

Maptasks

Wed 23 | 14:00 - 14:30 | Room C

Fast. Flexible. Foolproof. Making indoor mobile mapping simple

GeoSLAM

Wed 23 | 14:00 - 14:30 | Room E

Innovative software solutions for the surveying, civil engineering and geospatial industries

LISTECH

Wed 23 | 14:45 - 15:15 | Theatre 3

Industrial scale mobile mapping that revolutionises AEC, BIM and FM workflows

NavVis

Wed 23 | 14:45 - 15:15 | Room E

Wednesday 23

Latest advances in drone surveying integrating UAV technology within current workflow

COPTRZ

Wed 23 | 11:00 - 11:30 | Room F

Ultracam aerial camera and Ultramap software

Vexcel Imaging

Wed 23 | 11:45 - 12:15 | Room H

Advances in 3D Reality Capture making it an everyday technology

Kaarta

Wed 23 | 12:30 - 13:00 | Theatre 3