BuildingSMART Norway April 2014

- God morgen ....gum-**maw**-ruhn

- Jeg heter....yay-**heh**-tuhr.....Howard Jeffrey

- Jeg jobber for...yay **yohb**-buhr fohr....Skanska UK

- Jeg snakker ikke noe mer norsk

BuildingSMART Norway April 2014

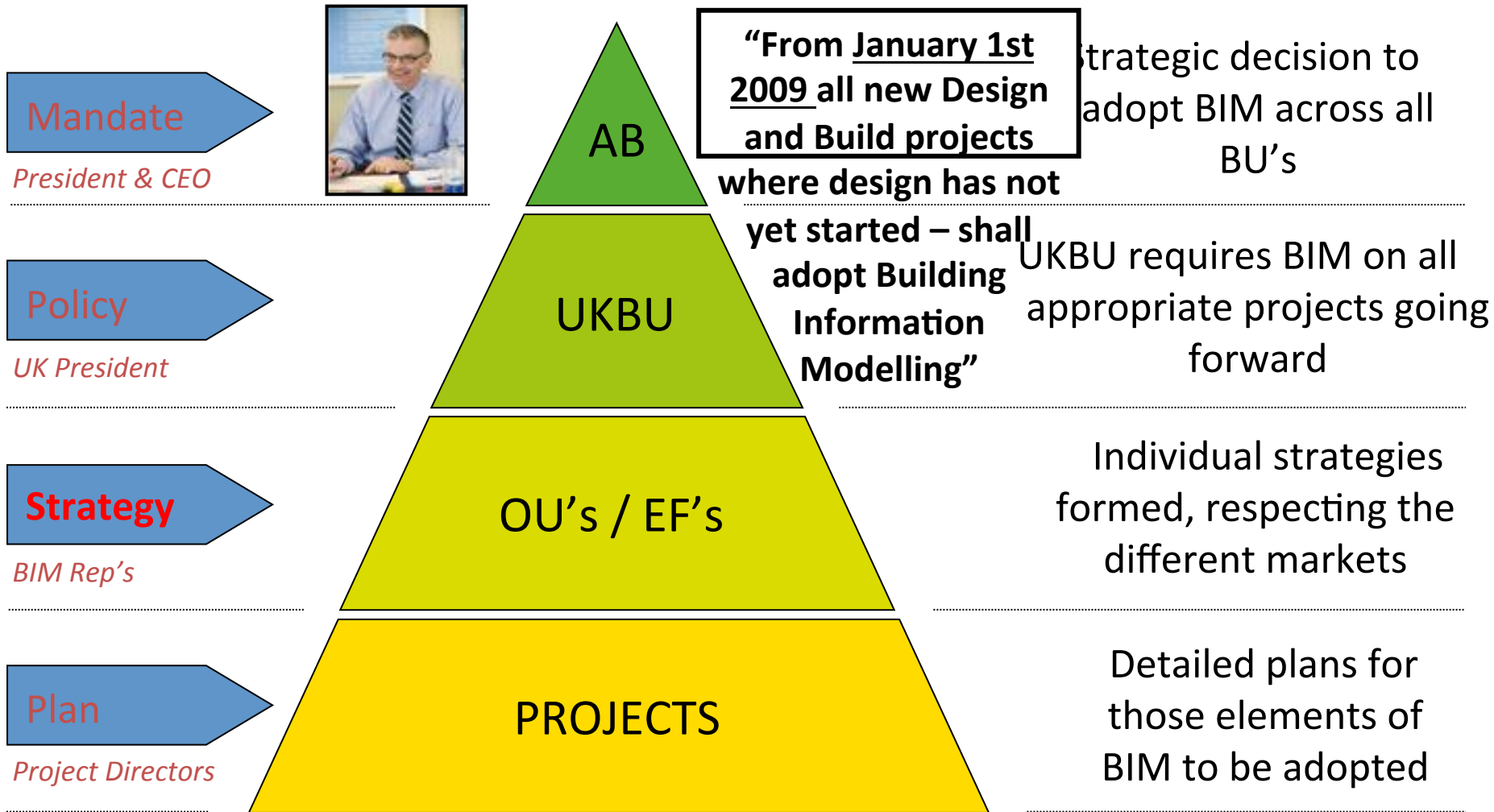# Dr. Howard Jeffrey FCIOB

Senior Innovation Manager Skanska

BIM Support Officer UK BIM Task Group

Subjects covered

- Role within Skanska

- Role with BIM Task Group

- RegBIM Research Project

- RegBIM Current State of development

- RegBIM Route to availability

UK BIM Implementation Structure

Mandate
President & CEO

Policy
UK President

Strategy
BIM Rep's

Plan
Project Directors

AB

UKBU

OU's / EF's

PROJECTS

"From January 1st 2009 all new Design and Build projects where design has not yet started – shall adopt Building Information Modelling"

Strategic decision to adopt BIM across all BU's

UKBU requires BIM on all appropriate projects going forward

Individual strategies formed, respecting the different markets

Detailed plans for those elements of BIM to be adopted

Government Construction Strategy

"This Government's four year strategy for BIM implementation will change the dynamics and behaviours of the construction supply chain, unlocking new, more efficient and collaborative ways of working. This whole sector adoption of BIM will put us at the vanguard of a new digital construction era and position the UK to become the world leaders in BIM."

Francis Maude
Minister for the Cabinet Office
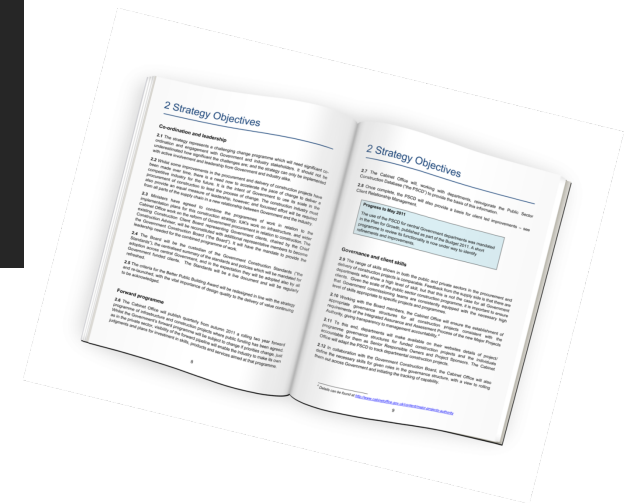
15-20% cost and carbon reduction on all centrally procured government construction projects **within the current parliament**

2.32 **Government will require fully collaborative 3D BIM** (with all project and asset information, documentation and data being electronic) **as a minimum by 2016**

BIM Driver

35%

Construction industry Waste at

- Lack of Clear Communication of Client Needs
- Incorrect Assumptions or Miscommunication within the Supply Chain
- Rework / Recreation of Data
- Inability for Project Participants to 'Speak the Same Language'
- Poor or No Information Management
- Limited Reuse or Standardisation

What is BIM

Building a consistent, collaborative industry, with clear and open communication

Information of high-quality is procured to support business outcomes

Modelling the design increases efficiency, enabling simulation & analysis

> **"A collection of value-creating best practices, underpinned by a culture of collaboration and the exchange of structured asset data"**

BIM Abroad

European Parliament votes
to Modernise European public
works projects and Encourage
the use of BIM

USA, Far East and beyond

Departmental engagement

Nuclear

High Speed 2 (HS2)

Highways Agency (HA

BIM4LG

Environment Agency (EA)
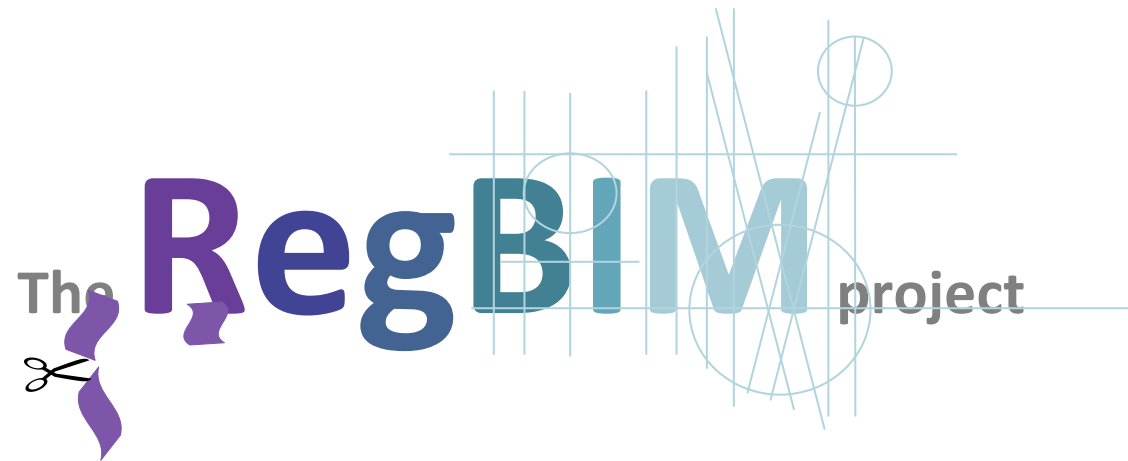
RegBIM

A collaboration between AEC3, Bentley Systems, BRE, Cardiff University, LABC, RIBA and Skanska,
with funding from the Technology Strategy Board.

RegBIM Aspiration

The aspiration is to create a software application that links to the BIM models and identify the compliance, non- compliance and areas for resolution in relation to:

- The Building Regs (Proof of concept limited to Part s F (vent) M (access) L (egy con)

- BREEAM

- Code for Sustainable Homes

# Potential challenges for RegBIM

Some Challenges

- Beyond the research itself will be the addressing the 'degrees of compliance' where applicable,

- Identifying what information is missing, where compromises have been made in the decision process

- Catering for information that becomes available later

- Scope is currently very wide.

- Defining the commercial reward structure and auditing in the future

Potential benefits of RegBIM

- **Potential Generic Benefits**

- Transfer from form-filling to software

- Make assessment quicker and more compatible with BRE methodology

- Increased confidence in the achievement of the required compliance

- RegBIM identifies to end users where compliance is achieved and where further deliberations and decisions are required more quickly

- Speed of the process will give quick feedback on the impact of optioneering and other design and construction changes

- Will permit regular and rapid re-assessments with the potential to create a rolling set of compliance 'gateways' and highlighting 'exceptions.
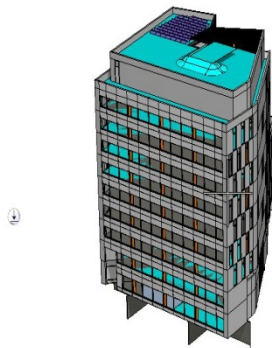
What does RegBIM look like?
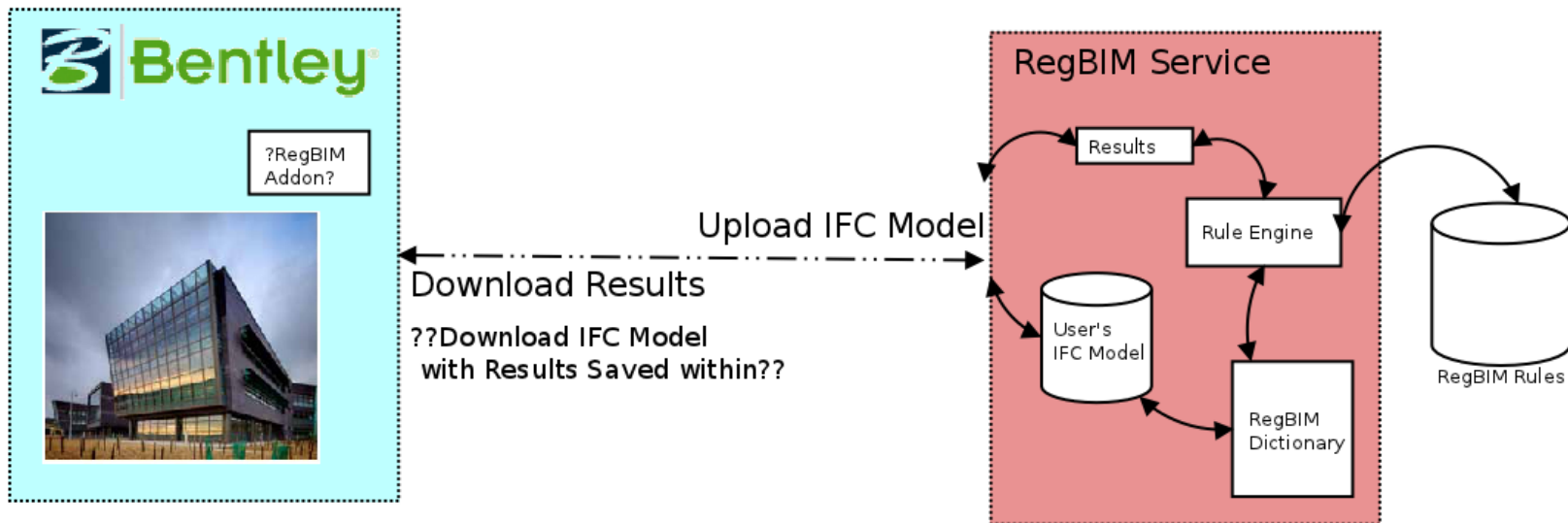
User Engagement

- Engage with practitioners

- Identify areas of risk

- Identify time consuming areas
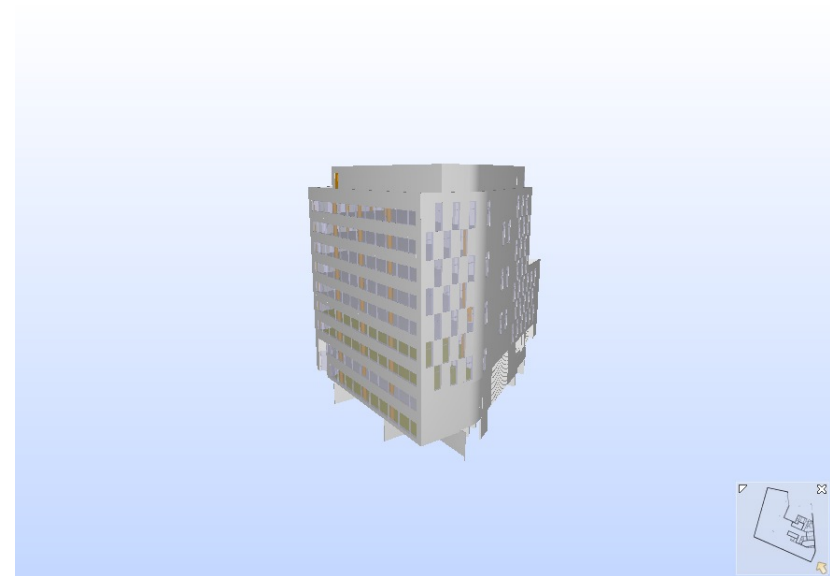
- Trialling on live project

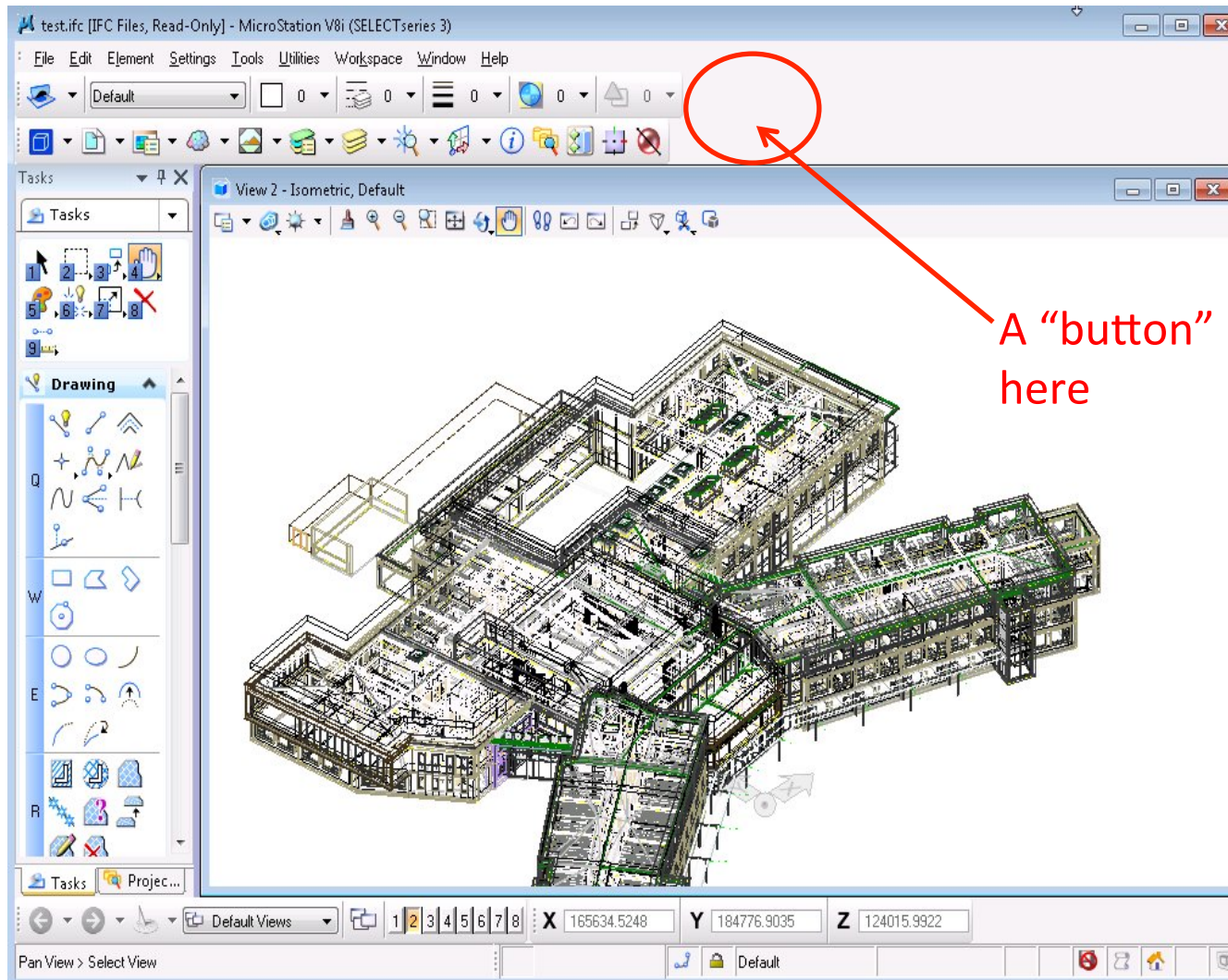# Pilot project

Artist impression
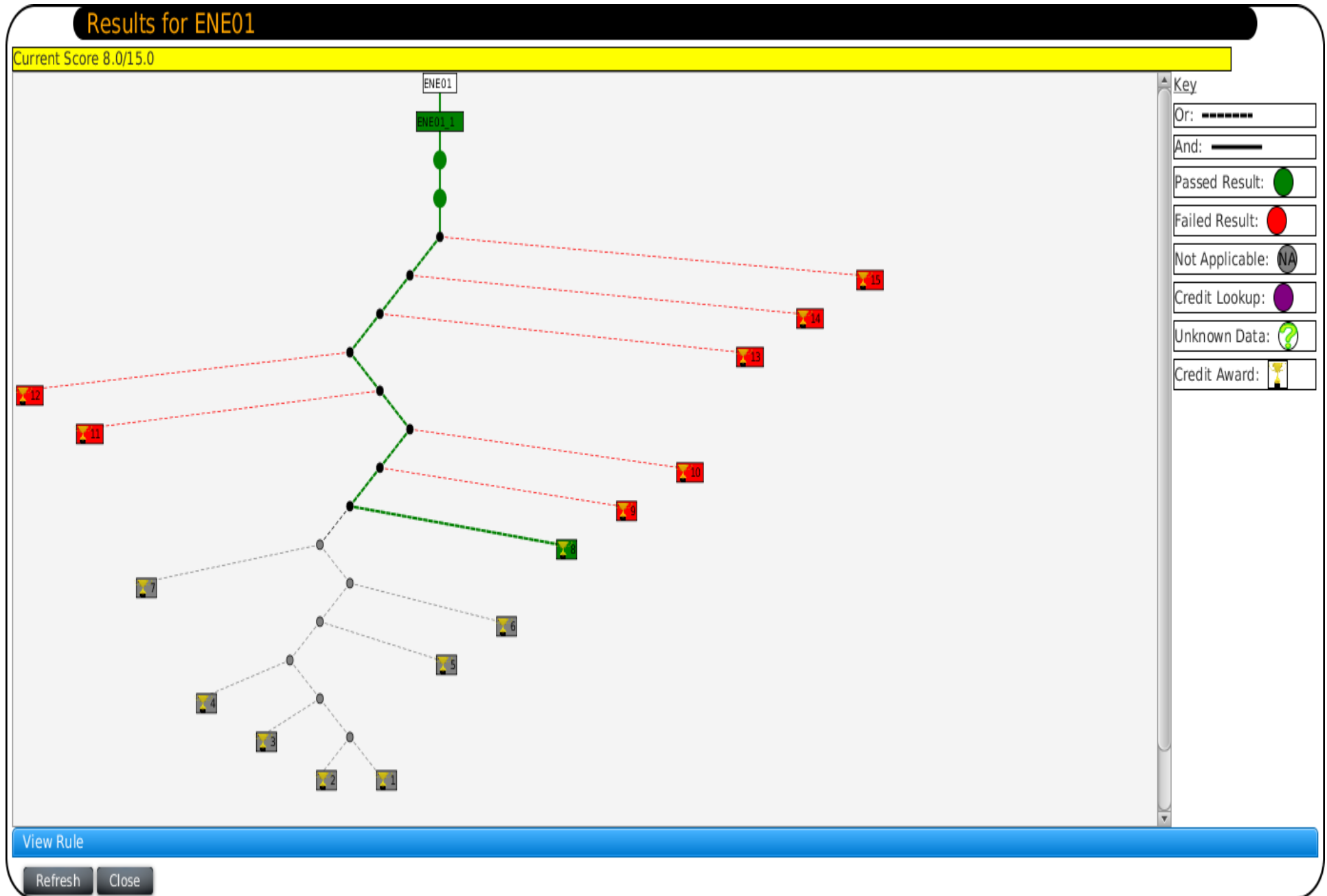11-19 Monument Street London

Bentley Model

IFC File

Opening the software

A "button" here

The RegBIM User Interface will be able to be launched from your BIM authoring software via an integrated "button"…

Sample screenshot Compliance paths

RegBIM future availability

- Proof of concept established
- Potential for time and risk reduction confirmed
- Practical challenges between software and IFC's identified
- RegBIM will provide focus for requirements for the evolving BIM process
- RegBIM can help practical advice on standards for IFC
- BRE perhaps need to 'adjust' BREEAM to accommodate what and how RegBIM delivers
- RegBIM could be used as a mechanism to focus the supply chain into providing the information required to get the green guide rating and verify responsible sourcing
- Much of the required detail comes from M&E design
- The 'level of BIM maturity' across the industry appears to be too underdeveloped to make immediate use
- BRE likely to continue development to a commercial proposition that can be 'certified'

Q&A

Takk

Thank you for your attention

Any Questions?