

# GEOSPATIAL-BIM- INDOOR: ROOM FOR INTEGRATION

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# Ordnance Survey



We have been mapping Great Britain since 1791

Our data underpins £100 billion of Great Britain's economy

We help Great Britain generate £400 million in new revenues every year

10,000 mapping updates every day

Over 3,500 Public Sector organisations using our data

Who we are

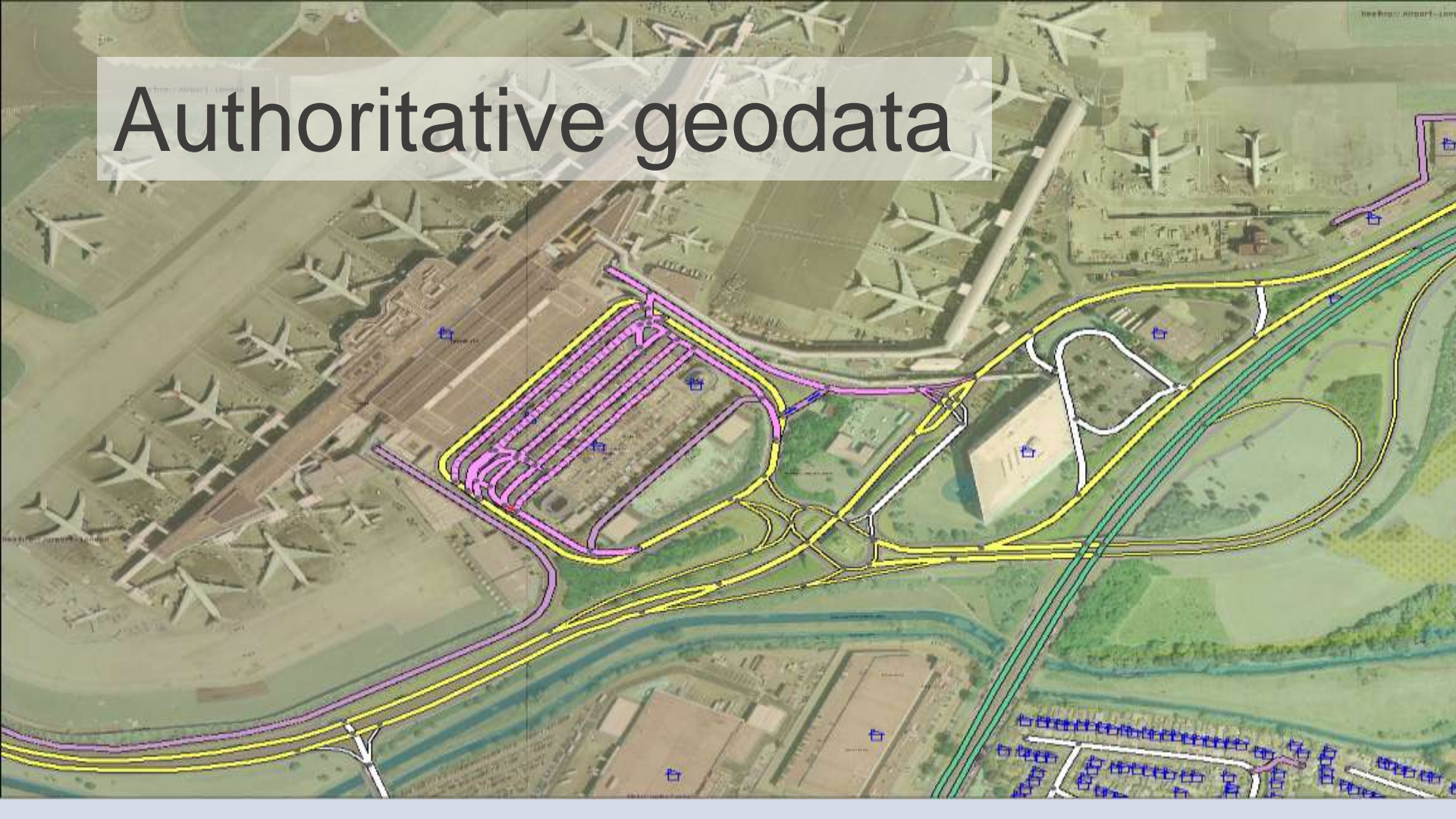




**Data and 3D  
Standards and interoperability  
CityGML and what you can do with it  
Geospatial/BIM/indoor  
or is it BIM/indoor/Geospatial (BiG)?**



# Authoritative geodata



# ORDNANCE SURVEY'S CURRENT 3D OFFERING FOR AEC



Digital Elevation Models



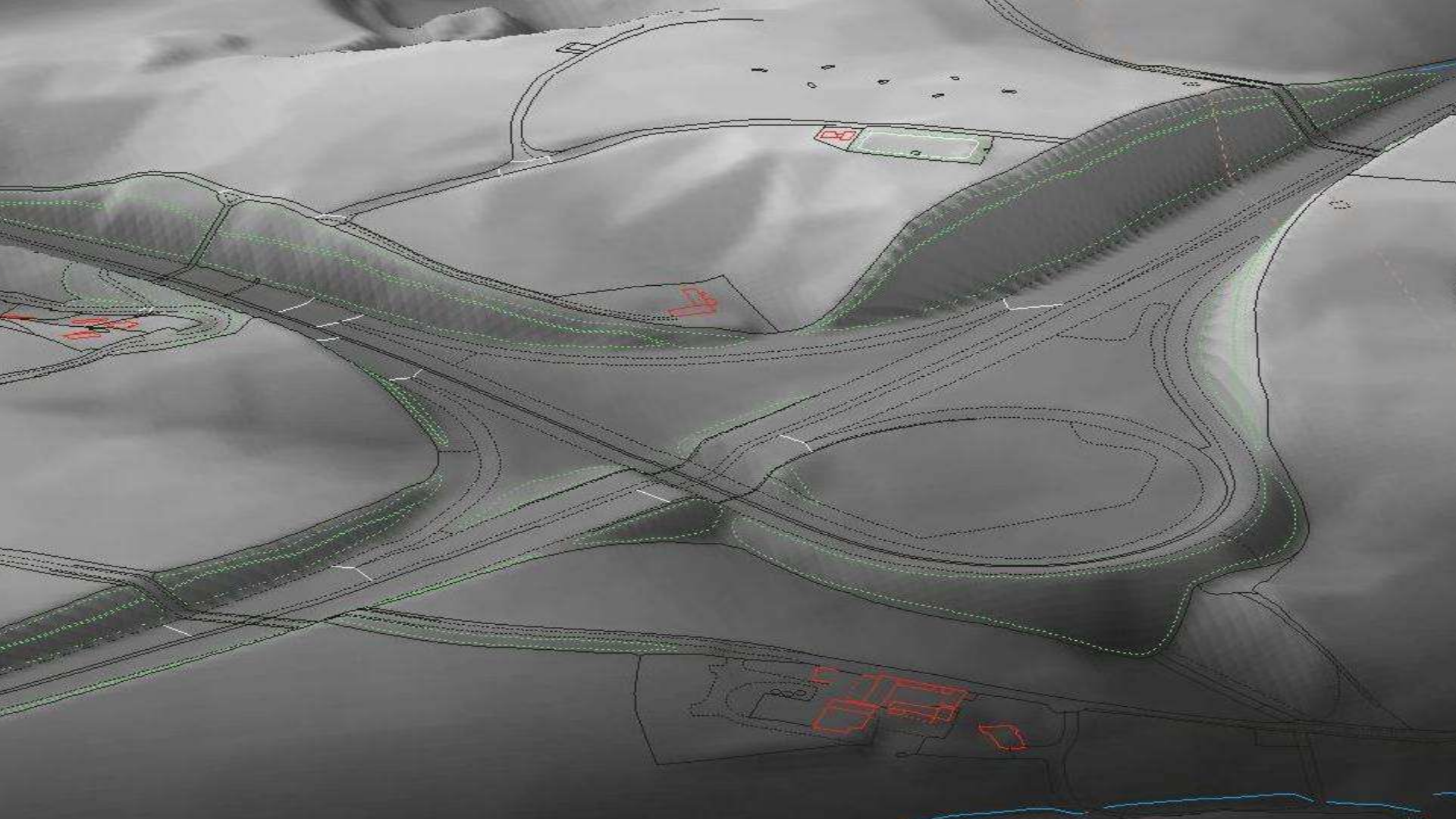
Heighted surface features



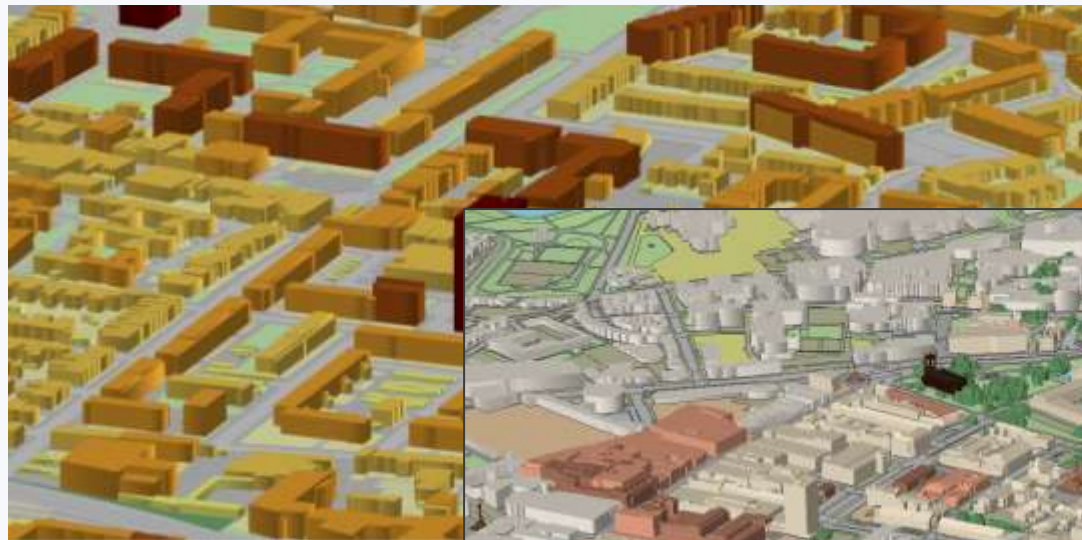
3D elevated features







# 3D BUILDINGS





# Real world model



# Virtual





# OPEN STANDARDS

# OGGC<sup>®</sup>

Making location count.

The screenshot shows the DATA.GOV website with a navigation bar including HOME, DATA, APPS, COMMUNITY, METRICS, OPEN DATA SITES, and GALLERY. The main content area features a large banner for 'ENVIRONMENTAL COMPLIANCE AND ENFORCEMENT DATA' with the ECHO logo. Below the banner, there is a text block describing the Enforcement & Compliance History Online (ECHO) and a small map of the United States. A 'Next slide' button is visible at the bottom right of the banner.

The screenshot shows the data.gov.uk website with the tagline 'Opening up government'. The navigation bar includes Data, Apps, Ideas, Forum, Blogs, and Consultation. The main content area features an article titled 'Crime Spy UK' by William Alexander on 24/04/2011, with 0 comments and a 5-star rating. The article includes an 'Overview' section and a small image of a mobile application interface.



The screenshot shows the KENYA openData website. It features a header with the KENYA openData logo. Below the header, there is a section titled 'Open Data: The bigger picture' with a paragraph of text and a link 'Read more about this site here'. Below this is a section titled 'Counties' with a sub-header 'Select a county to learn more about that county:' and a map of Kenya with its counties highlighted in various colors.

# BRIDGING THE WORLDS

BIM (IFC, proprietary)



Survey (Land-/Infra-/IFC)



GIS ([City]GML, proprietary)

## Importance of standards

Integrated Digital Build Environment Working Group



# CITYGML—LEVEL OF DETAIL



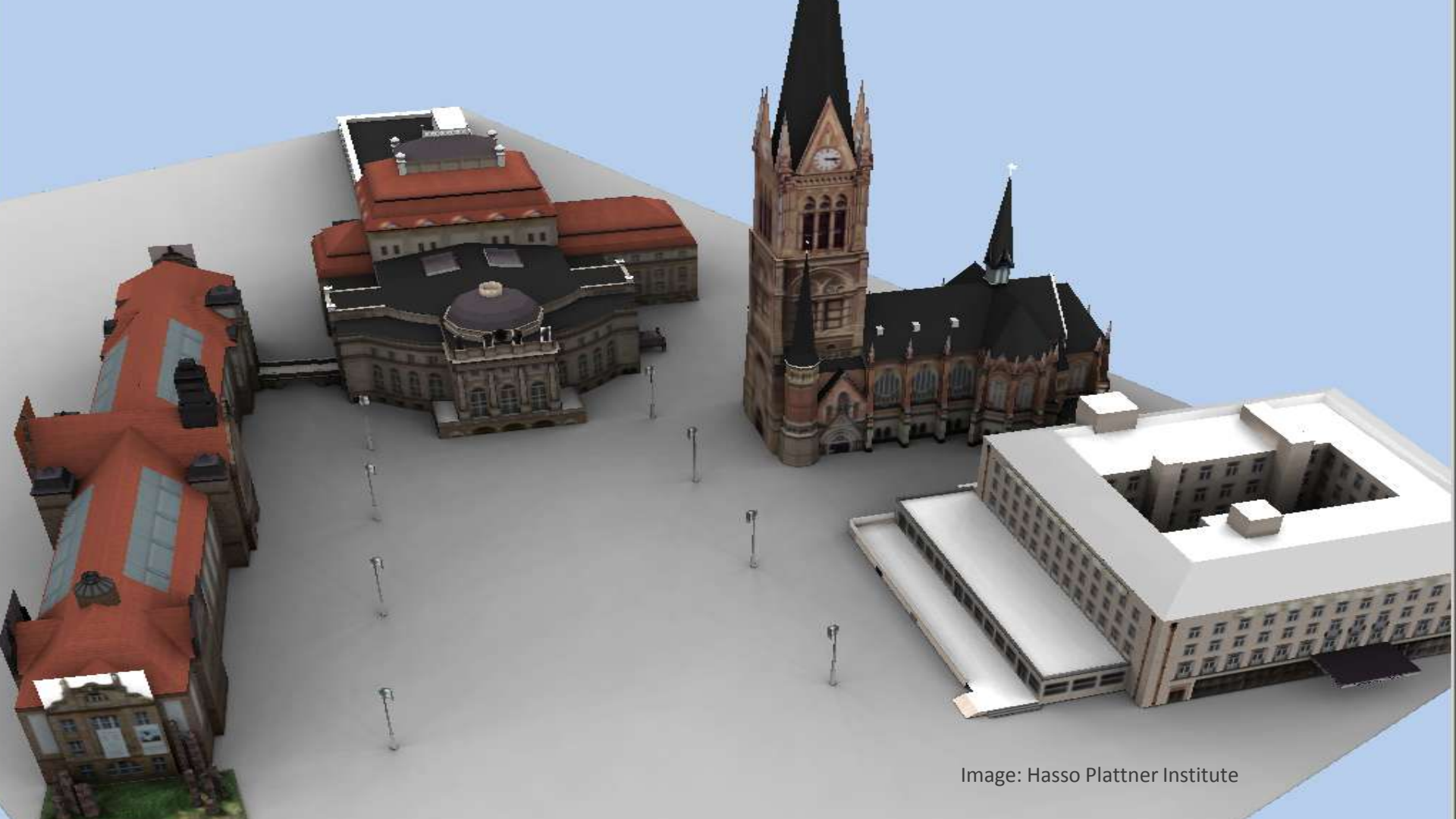
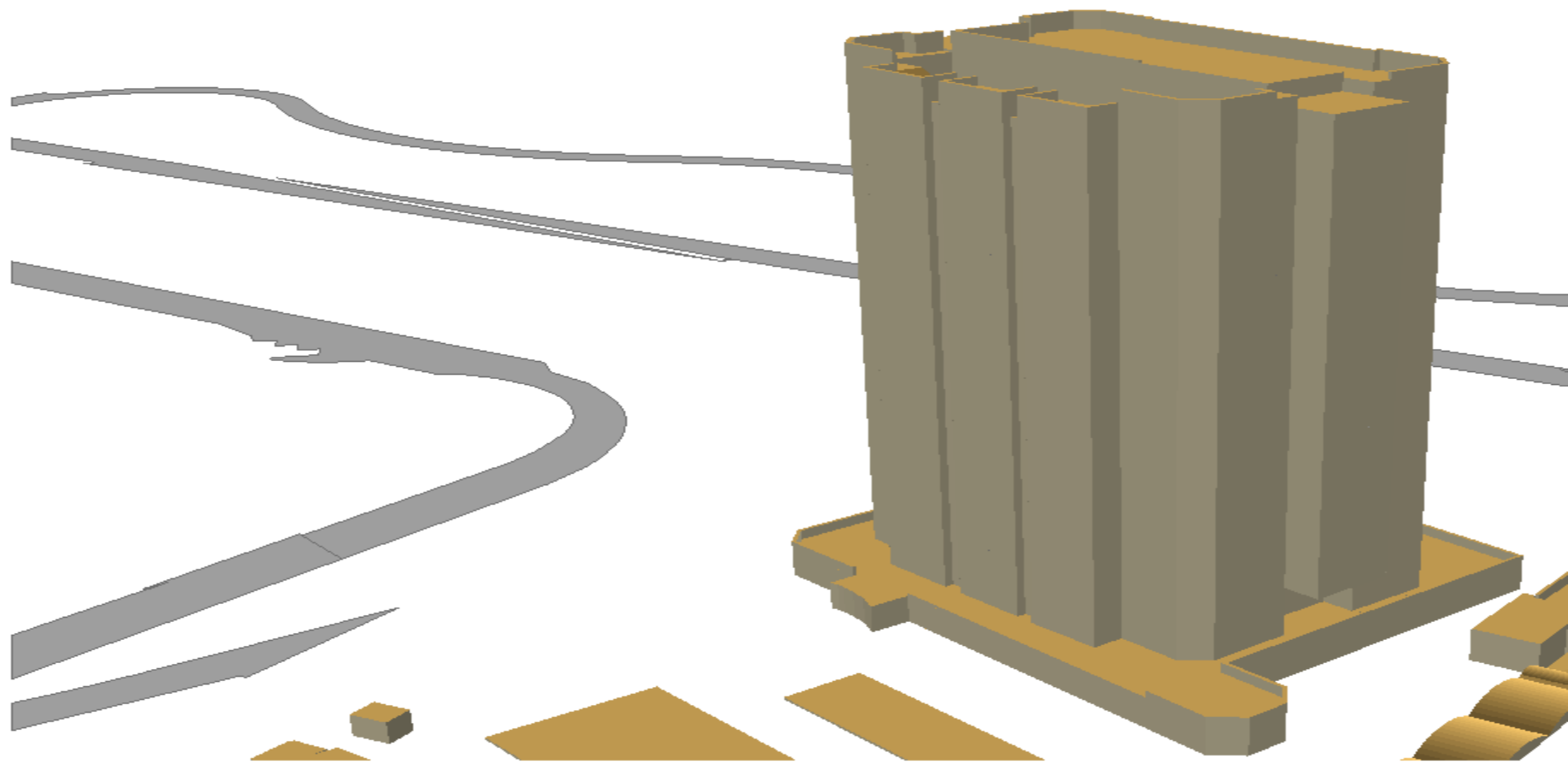
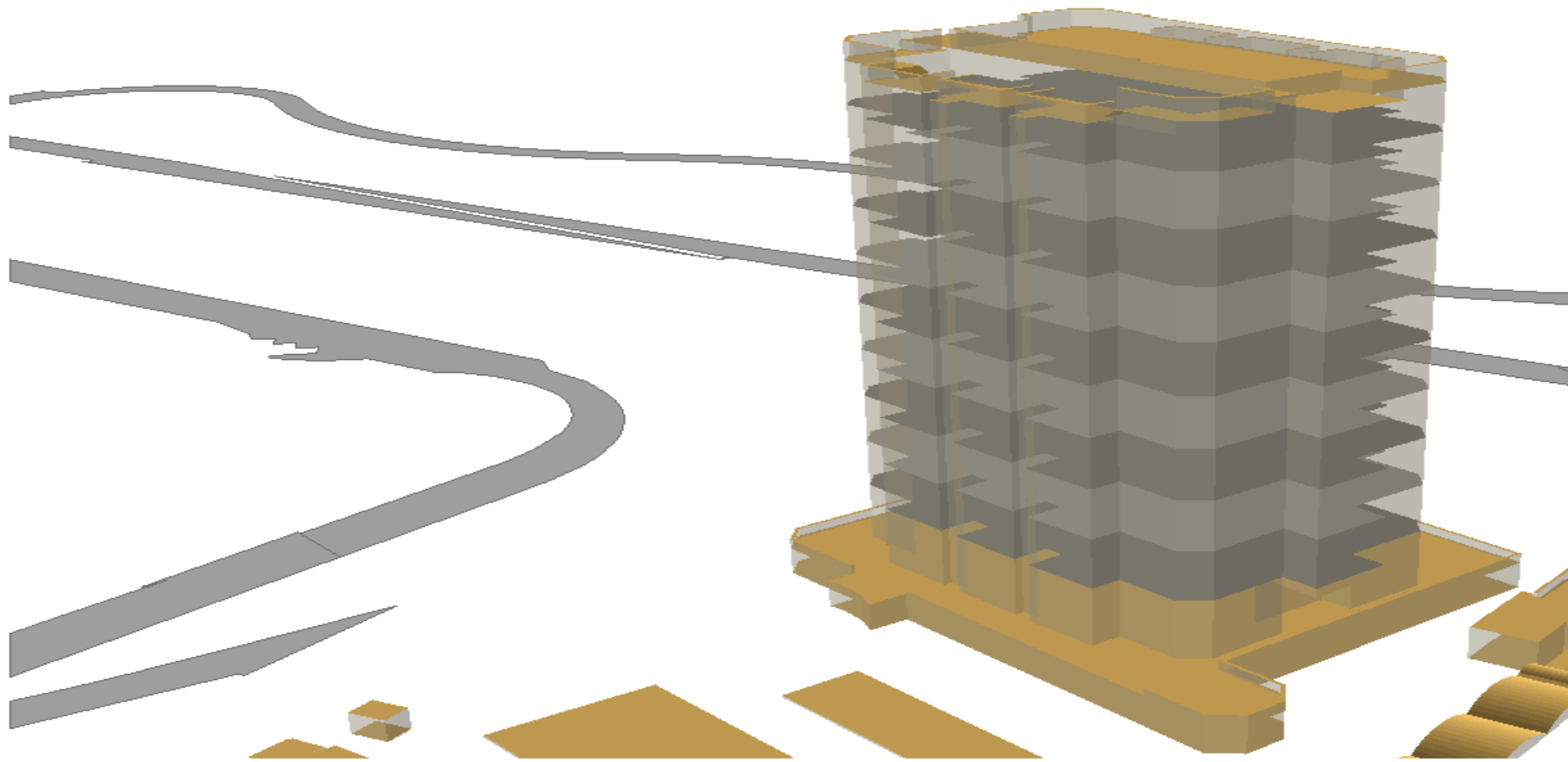


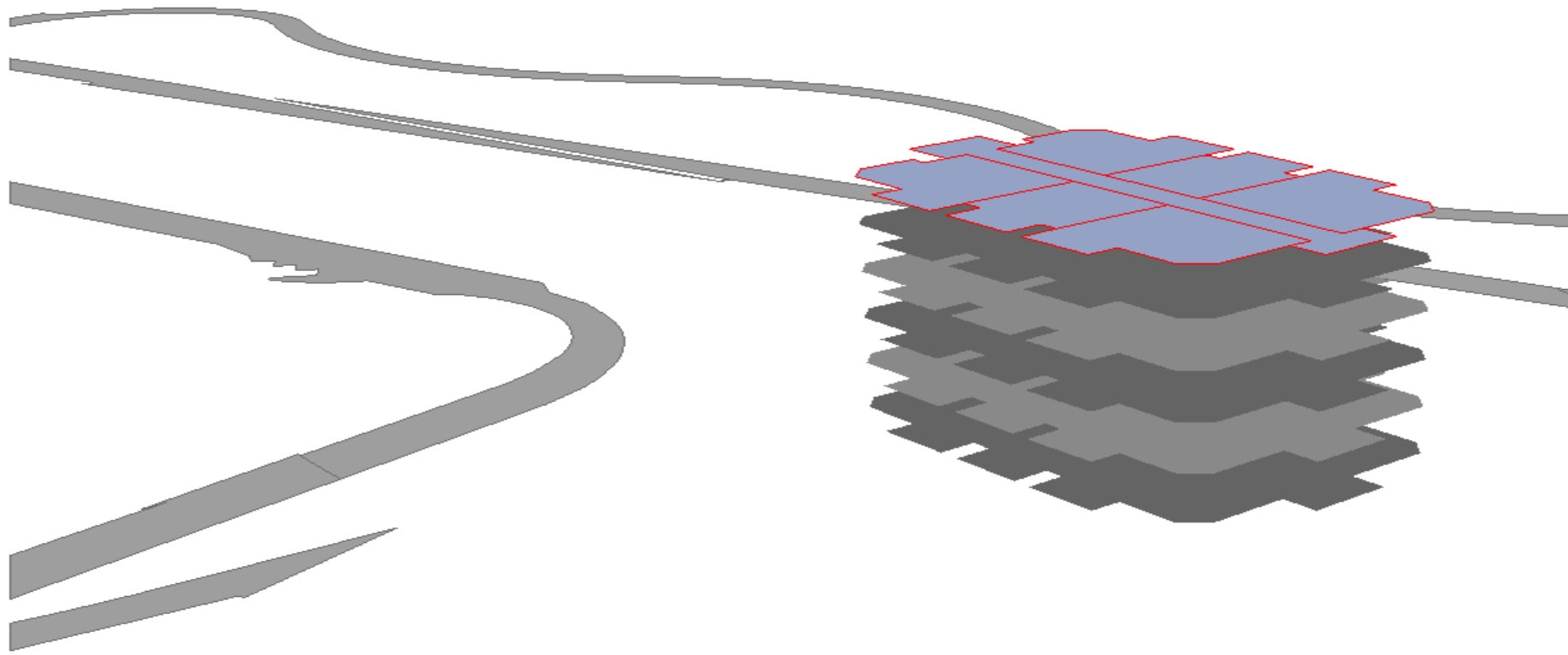
Image: Hasso Plattner Institute

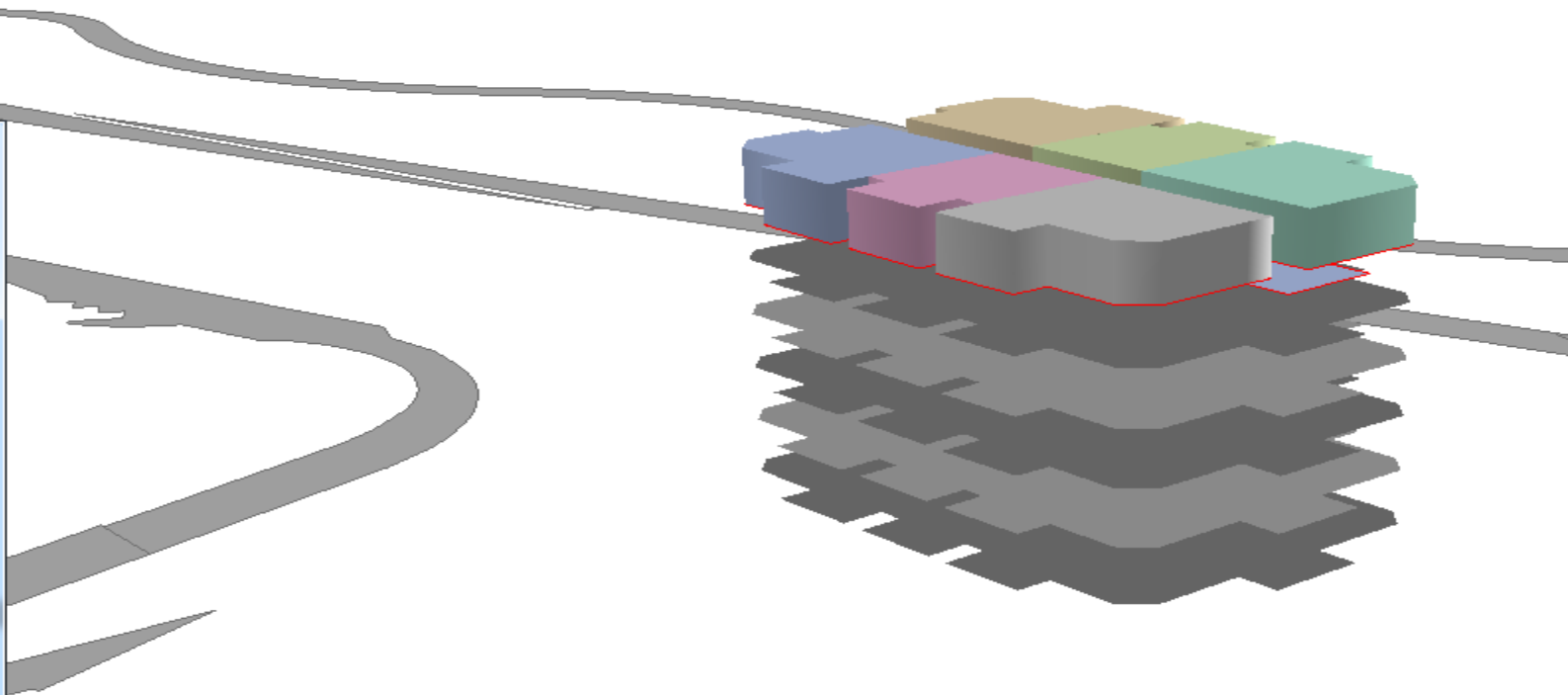
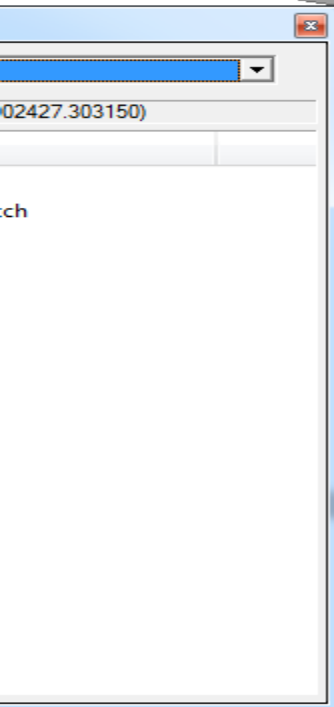












# LOOKING FOR COMMONALITIES

Where are **Geo** and **BIM** on this map?



# OGC SMART CITIES PILOT

- In collaboration with building SMART international
- Ordnance Survey as seed sponsor
- Looking for more sponsors/participants (by 15 October 2015)
  
- Help cities around the world benefit from modern standards for geospatial technologies
- Use diverse, interoperating spatial technologies to deliver improved quality of life, civic initiatives and resilience
- Demonstrate how geospatial data can make things smarter





From command and control to  
**Connect and collaborate**

**We'll achieve**

- empowerment/engagement
- integration/interoperability
- cost savings/efficiencies
- Better/safer environment