Exploring the legal and institutional implications of Australian public policy perspectives towards leveraging BIM-GIS dynamics

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Research intent

1. Look at Australian public policy related to BIM-GIS
2. Proposal to facilitate realignment of institutional roles/scope for BIM-GIS via data orientated propositions
3. Attribute to overcoming institutional implications for strategic policy development
Why look at policy?

• Proposed definition for *Next Generation Spatial Knowledge Infrastructure*

A network of data, analytics, systems, expertise and **policies** that assist people, whether individually or in collaboration, to integrate in real-time spatial knowledge into everyday decision-making and problem solving.

• Need to look at “technology, policy, governance frameworks”

CRCSI, Towards a Spatial Knowledge Infrastructure, White Paper (2017)
Australian public policy perspectives

But also relevant Standing Committee inquiries:

1. **Australian Government Role in Development of Cities (2017)**
2. **Role of Smart ICT in Design and Planning of Infrastructure (2016)**
Other policy perspectives

• National industry/research led examples
But wait....there’s more

• State examples
“Policy interoperability”? 

• Mixed messages?
• Harmonisation
  • An ideal?
  • Degrees?
  • Not even WHS
• Multiple dimensions of fragmentation, friction within “network”
• But really - nothing new to see here
  • The art of policy making
  • "All talk” v implementation
  • Business as usual .....or symptom of larger, systematic problem?
Not on the same page...or maybe...kind of?

- What is the end game?
  - Collective action
  - Moving feast
- Building blocks?
- Where does BIM-GIS matter?

Knowledge, innovation

Data

Unit resources?

Derived from data...link to smart/intelligent elements

Digital built environment

BIM-GIS?

Derived from connectivity/data

Outcomes, performance

Smart Cities
Big picture perspectives for BIM-GIS....

• One option in tool box
• May be part of solution, but not the solution
• Transition in narrative?
  • Shift/point where less about how, focus on what
• From “BIM-GIS” to DATA
The relevance of data for institutions

• Data creators/custodians/users but also....data infrastructure?
• Do Governments “do data”?
  • Administrator
    • Legacies, resources gaps, expectations
  • Regulator.....and incubator?
    • Between people, but not between tech?
    • Points of intervention
• “The Public”
  • Data subjects, holders of rights (privacy, IP)
  • Power in the collective/numbers
• Private sector
  • Role of organisation, managing risk/scope
  • Public purposes via procurement
Data policy challenges

• Difficulty attributing value measurement & taxation
• Exploitation at points of control & competition
• Potential barriers re: free data flow, role of digital infrastructure
• Interoperability & standards

Example

• Land administration/title registration, 3D cadastre

• Mapping data?
  • Where is data/model coming from?
    • Construction industry as data source...others?
    • Ties to supply chain? Procurement implications
    • Only select data?
  • But also where else could data go (ie further reuse)
    • Insurance, supply chain issues (cladding), local government planning
    • Including additional risks

• Issue of IP/copyright
  • “Rules” for use/copy > Legislation?
  • Opportunities - investment, recovery of costs (“royalties”)?
  • Collection houses/agencies, automated processes
  • But also evolving IP law
Proposed role for Public Procurement

• “Big Procurement”
  • for Big Data?
  • Linkages with “Little Procurement”

• Value propositions predicated upon
  • Data as state for potential information
  • But to also consider
    • Data orientated dynamics/transactions
    • Creating conditions/scenarios to invoke “information”
Summary

• Degrees of policy interoperability
• Underlying structure relative to BIM-GIS
• Data orientated policy directions
  • Relative to institutions
  • Not just content, data infrastructure & transactions
• Scope for “Big Procurement”
• ...and beyond
  • Is the “where” in policy making? (AGI, 2015)
  • Embedding policy in other ways
Questions