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Bhaile Átha Cliath  
Dublin City Council

## Appendices

# Building Information Modelling (BIM) Strategy 2026-2030

Strategy Development  
and Preparation

Standardisation  
and Integration

Implementation and  
Best Practices

Full-scale Implementation  
and Optimisation

Continuous  
Improvement



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# Appendix A

## Acronyms & Abbreviations

# Appendix A – Acronyms and Abbreviations

## A.1 Acronyms

<b>AIR</b>	Asset Information Requirements	<b>LOD</b>	Level of Development
<b>AM/FM</b>	Asset Management / Facilities Management	<b>OIR</b>	Organisation Information Requirements
<b>BEP</b>	BIM Execution Plan	<b>PDCA</b>	Plan-Do-Check-Act
<b>BIM</b>	Building Information Modelling	<b>PIR</b>	Project Information Requirements
<b>CAD</b>	Computer-Aided Design	<b>PM</b>	Project Management
<b>CDE</b>	Common Data Environment	<b>QA/QC</b>	Quality Assurance / Quality Control
<b>CPD</b>	Continuing Professional Development	<b>RFP</b>	Request for Proposal
<b>CWMF</b>	Capital Works Management Framework	<b>SAM</b>	Standard Approach Modelling
<b>DCC</b>	Dublin City Council	<b>SME</b>	Subject Matter Expert
<b>DT/LDT</b>	Digital Twin / Local Digital Twin	<b>TOM</b>	Target Operating Model
<b>EIR</b>	Employers Information Requirements	<b>VR/AR</b>	Virtual Reality / Augmented Reality
<b>FM</b>	Facilities Management	<b>WIP</b>	Work In Progress
<b>GenAI</b>	Generative Artificial Intelligence		
<b>GIS</b>	Geographic Information System		
<b>ICMS</b>	International Construction Measurement Standards		
<b>ICT</b>	Information and Communications Technology		
<b>IFC</b>	Industry Foundation Classes		
<b>IoT</b>	Internet of Things		
<b>ISO</b>	International Organisation for Standardisation		

# Appendix A – Acronyms and Abbreviations

## A.2 Abbreviations

AIR	Asset Information Requirements – defines the information needed to operate and maintain a built asset.
AM/FM	Asset Management / Facilities Management – systems and processes for managing physical assets.
BEP	BIM Execution Plan – outlines how the BIM deliverables will be produced and managed.
BIM	Building Information Modelling – a process for creating and managing digital information across the lifecycle of a built asset.
CDE	Common Data Environment – a centralised digital space for storing, managing, and sharing project information.
CPD	Continuing Professional Development – structured learning to maintain and enhance professional skills.
CWMP	Capital Works Management Framework – the Irish Government’s framework for public sector construction procurement.
EIR	Employers Information Requirements – specifies the information DCC expects from the delivery team.
FM	Facilities Management – the maintenance and management of buildings and infrastructure.
GIS	Geographic Information System – a system for capturing, storing, and analysing spatial and geographic data.
ICMS	International Construction Measurement Standards – a global standard for construction cost classification.
ICT	Information and Communications Technology – systems and tools for digital communication and data handling.
IFC	Industry Foundation Classes – an open file format used to facilitate interoperability in BIM.

IoT	Internet of Things – interconnected devices that collect and exchange data.
ISO	International Organisation for Standardisation – develops and publishes international standards.
LOD	Level of Development – defines the level of detail and reliability of BIM elements at different stages.
OIR	Organisation Information Requirements – high-level information needed to support DCC’s strategic objectives.
PDCA	Plan-Do-Check-Act – a continuous improvement cycle used in quality management.
PIR	Project Information Requirements – project-specific information needed to meet strategic goals.
PM	Project Management – planning, organising and managing resources to achieve specific goals
QA/QC	Quality Assurance / Quality Control – processes to ensure quality in project delivery.
RFP	Request for Proposal – a document issued to solicit proposals from suppliers or service providers
SAM	Standard Approach Modelling – a structured method for consistent BIM modelling.
SME	Subject Matter Expert – an individual with deep expertise in a specific area.
VR/AR	Virtual Reality / Augmented Reality – technologies that simulate or enhance real-world environments digitally
EDMS	Electronic Document Management System – Software used to store, manage, and track electronic documents.
ML	Machine Learning – a subset of AI that enables systems to learn and improve from data without being explicitly programmed.



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## Appendix B DCC's Digital Transformation Strategy and Corporate Plan

# Appendix B - DCC's Digital Transformation Strategy

## BIM is one of the priority actions for Year 1 digital transformation roadmap

DCC's digital transformation strategy positioned BIM as a core operational tool to improve data quality. However, the value of BIM extends far beyond data alone. By developing a robust BIM and information management framework, the strategy can unlock broader benefits across the organisation.



Clear, structure policies and guidelines that mandate how BIM should be implemented and used within DCC



Streamlined, efficient workflows and processes that optimise the use of BIM across all stages of the project lifecycle



The right people with the right skills are in place to implement, manage, and use BIM effectively



The appropriate technology that support BIM workflows and enhance the project delivery process

### Digitally enable the city and communities

Digital Twins and Local Digital Twins (LDTs) are key enablers of Dublin City Council's broader ambition to create a smarter, more sustainable city. BIM's structured data and modelling capabilities will support the development and integration of these twins, enhancing urban planning, resource management, and community engagement across the city.

### Get Better With Data

BIM fosters a centralised data management solution by organising all project and asset data in a Common Data Environment (CDE), enabling seamless collaboration and efficient data access. Robust data management protocols ensure accuracy and integrity across all projects.

### Deliver New Digital Services

BIM supports the creation of digital services by structuring and integrating data for easy access and management, driving the transition to digital-first service delivery.

### Empowering DCC staff with the tools to succeed

BIM enables the selection and use of essential digital tools for efficient project delivery, data management, and collaboration, enhancing staff capabilities and ensuring successful outcomes.

# Appendix B - DCC's Corporate Plan

## Vision for Dublin

The Dublin City Council Corporate Plan 2025–2029 outlines the organisation’s vision for Dublin as a thriving city for all, shaped through extensive consultation with the public, elected members, and staff. The Plan sets the strategic direction for the next five years defining what the Council will deliver, the impact it aims to have, and how progress will be measured. It responds to major challenges such as climate change, inequality, sustainable growth, and the need for strong public services. The Plan is organised around five goals for the city and four enabling goals that will guide implementation, collaboration, and performance across all service areas.

### Strategic Objectives

Housing & Communities	Thriving Neighbourhoods & Villages	Sustainable Economic Growth & Regeneration	Clean, Green, Healthy, Well-Connected City	Climate Leadership & Resilience
<ul style="list-style-type: none"> <li>Accelerate delivery of high-quality social and affordable homes.</li> <li>Reduce homelessness and improve supports for those at risk.</li> <li>Maintain and manage existing housing to support inclusive communities.</li> </ul>	<ul style="list-style-type: none"> <li>Expand community, cultural, sports, parks and recreational facilities.</li> <li>Protect biodiversity through local and regional partnerships.</li> <li>Promote social inclusion, intercultural integration, and Irish language initiatives.</li> <li>Celebrate Dublin’s diverse identities to strengthen community pride.</li> </ul>	<ul style="list-style-type: none"> <li>Guide spatial development to enhance quality of life, competitiveness, and heritage.</li> <li>Build a smart, green, innovation-driven city-region economy with partners.</li> <li>Regenerate underused land and buildings to revitalise urban areas.</li> <li>Lead a renewed vision for a safe, vibrant, accessible city centre.</li> </ul>	<ul style="list-style-type: none"> <li>Achieve one of Europe’s cleanest cities through strong waste and environmental action.</li> <li>Maintain and enhance public realm for safety, mobility, and accessible public space.</li> <li>Create a low-traffic, public-transport- and active-travel-oriented city.</li> <li>Deliver an Active Travel Network to support walking, wheeling, and cycling.</li> <li>Support the transition of water services to Uisce Éireann.</li> </ul>	<ul style="list-style-type: none"> <li>Drive behaviour change and collective climate action.</li> <li>Reduce citywide and organisational greenhouse gas emissions.</li> <li>Strengthen Dublin’s resilience to climate impacts.</li> <li>Manage surface water and improve air quality.</li> <li>Maintain emergency preparedness and public safety.</li> </ul>

# Appendix B - DCC's Corporate Plan

## Vision for Dublin

### Enabling Goals (How the Council Will Deliver)

- Strengthen organisational effectiveness and service delivery.
- Develop people, workplaces, technology, and governance to be future-ready.
- Build trust through transparency, communication, and citizen engagement.
- Provide a sustainable funding base and secure, modern ICT environment.

### Role of BIM

BIM is critical to the Corporate Plan's objectives and enablers because it directly supports the Council's ambition to deliver high-quality housing, modern infrastructure, and efficient public services by enabling smarter design, coordination and delivery of capital projects. BIM strengthens organisational effectiveness by improving data accuracy, reducing project risk, and enhancing collaboration across departments and with external partners. It underpins keyenablers such as digital transformation, value-for-money, sustainability, and transparency by providing real-time information for decision-making, lifecycle asset management, and performance monitoring. As the Council accelerates strategic projects and embraces innovation in service delivery, BIM becomes an essential tool to ensure that Dublin's built environment is planned, delivered and maintained to the highest standards supporting a cleaner, greener, safer, and more resilient city.

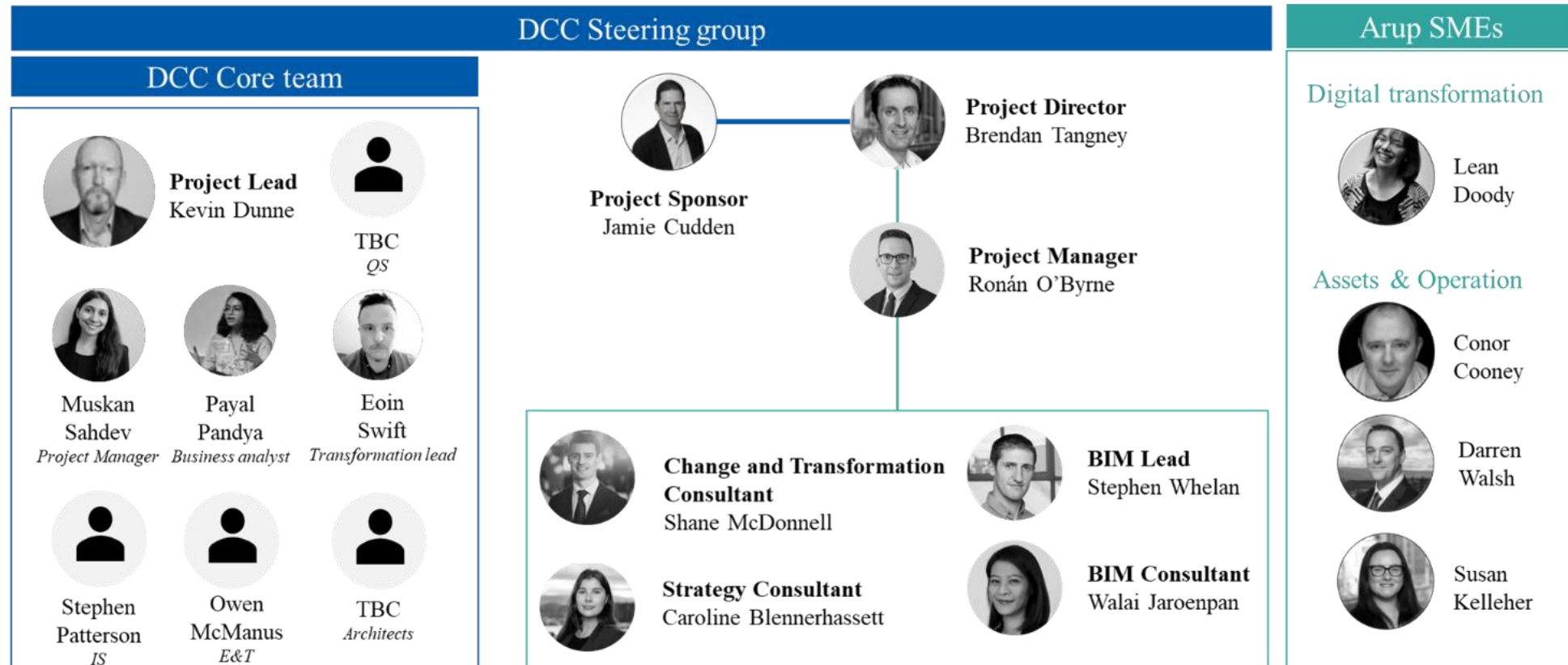


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## Appendix C BIM Steering Group

# Appendix C – BIM Steering Group

The BIM Steering Group consists of dedicated professionals who drive operational execution, implementing solutions and ensuring seamless collaboration across teams. Given the combination of DCC and Arup expertise, this group plays a hands-on role in the project’s success. The team brings a mix of digital, transformation and project management skills which will be essential in delivering the strategy within tight timelines. The DCC also brings deep connections within DCC which will help fast-track the setup of stakeholder interviews and workshops.





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## Appendix D Exemplar Projects

# BIM Learning in DCC through Exemplar Projects

Exemplar projects across DCC are a selected range of projects used to explore and apply BIM in practice. These are not flagship projects, but a mix of projects of different types and scales, chosen to test concepts, develop workflows, and build experience. They provide an opportunity to learn and refine approaches, helping to embed the principles set out in the BIM Strategy across the organisation.

	Grow College Green	Suffolk Street	Dolphin 1C	Fairview Tearooms
Description	 <p>A major public realm project to revitalise the historic heart of Dublin, creating a pedestrian-priority space from Trinity College to the George's Street junction and transforming College Green into an attractive, high-quality public destination.</p>	 <p>An in-house Road Design scheme to upgrade Suffolk Street with high-quality public realm improvements, including upgraded surfaces, greening, seating and cycle parking, supporting a pedestrian-focused city centre environment.</p>	 <p>A DCC housing-led project used to assess current BIM maturity and information management practices at early design stage, identifying strengths, gaps and priority risks ahead of detailed design, tender and construction.</p>	 <p>An early-stage civic project delivering a new library and tea rooms within Fairview Park, involving both refurbishment and new-build elements in a live public park setting. The project is being progressed through an architect-led integrated design team.</p>
BIM Use	<p>Used to review and refine BIM protocols, CDE setup and information management processes. The project provides an opportunity to test asset information capture, improve document control and QA, and inform the development of DCC corporate BIM templates and standards for wider rollout.</p>	<p>DCC's first in-house BIM project, used to test and develop BIM processes, information management, QA and CDE setup. Learning from the project will inform reusable templates and guidance for organisation-wide BIM adoption across DCC.</p>	<p>Used to test and benchmark DCC's BIM maturity through a structured gap analysis, focusing on information requirements, CDE governance, QA, information exchange and asset information, to inform clearer client requirements and scalable BIM practices for future projects.</p>	<p>Used to pilot early BIM mobilisation for civic buildings, focusing on managing existing and survey information, clarifying roles and responsibilities, and establishing appropriate CDE, information and asset requirements before detailed design. Learning will help shape scalable BIM approaches for future DCC civic projects.</p>

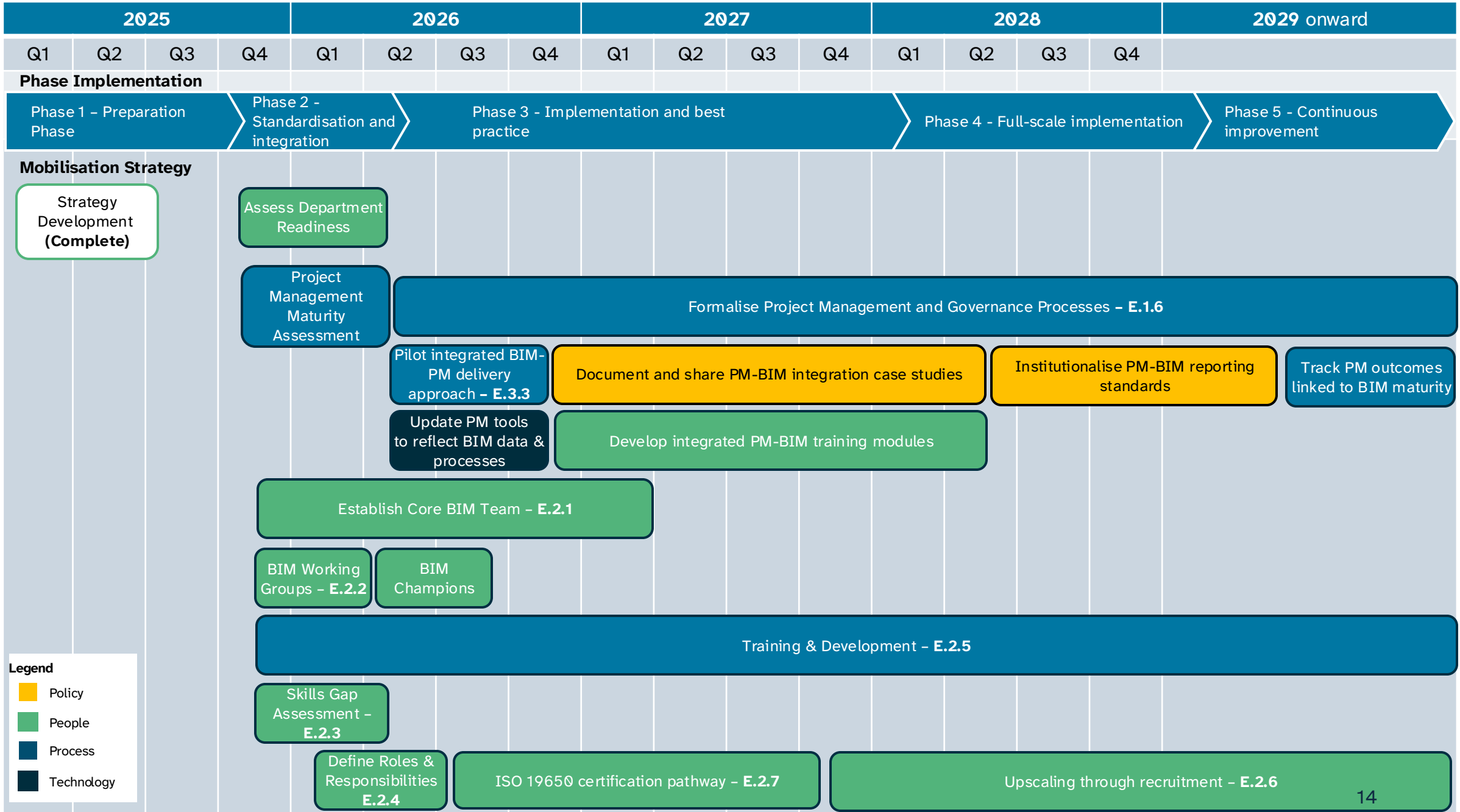


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# Appendix E

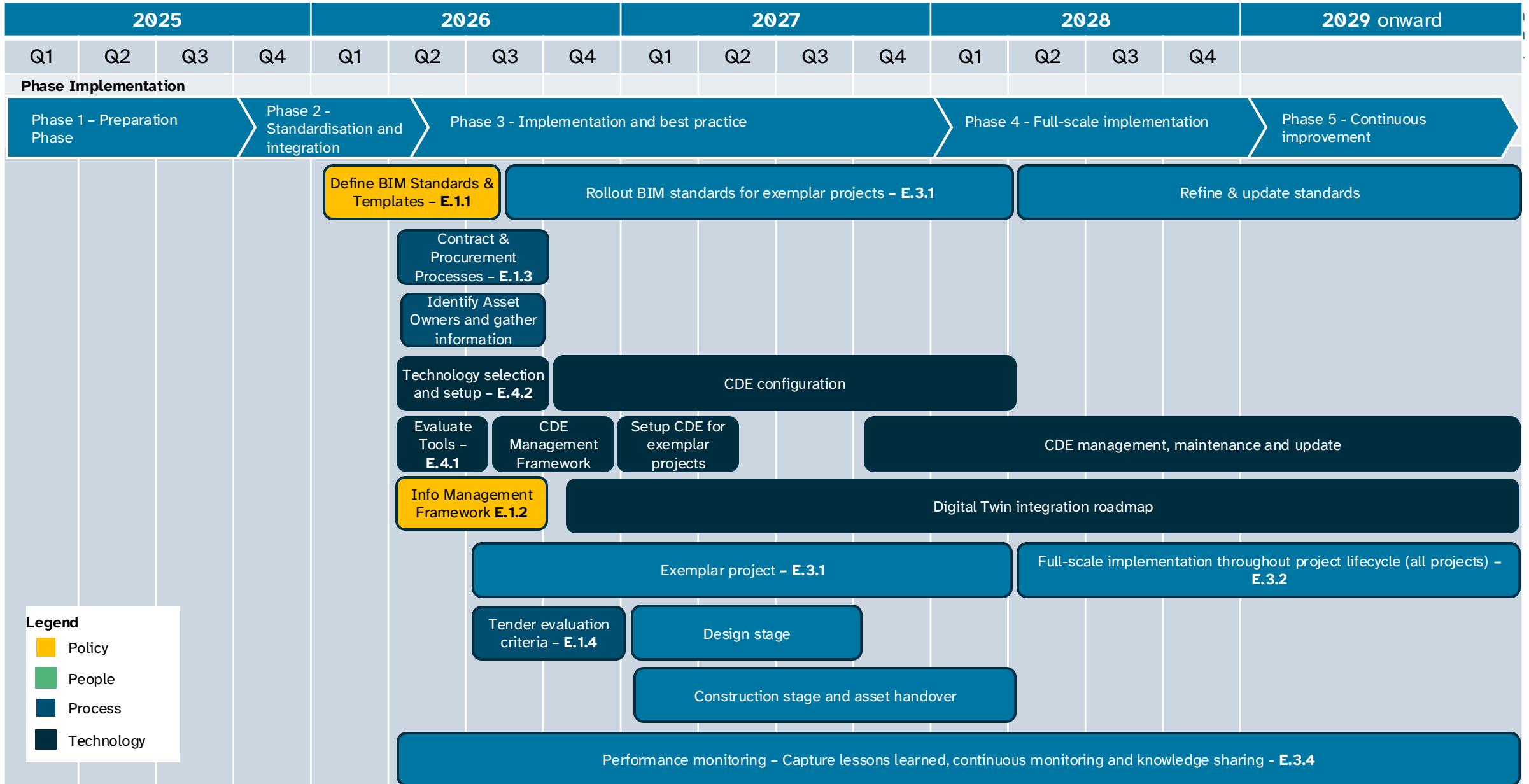
## Mobilisation Strategy

<b>E.1 Policy</b>	<ul style="list-style-type: none"><li>E.1.1 Define BIM Standards and Protocols</li><li>E.1.2 Information Management Framework</li><li>E.1.3 Contract and Procurement Processes</li><li>E.1.4 Tender Evaluation Criteria</li><li>E.1.5 Career Pathways</li><li>E.1.6 Formalise Governance Processes</li></ul>
<b>E.2 People</b>	<ul style="list-style-type: none"><li>E.2.1 Establish Dedicated Core BIM Team</li><li>E.2.2 Establish Subgroups</li><li>E.2.3 Skills Gap Assessment</li><li>E.2.4 Define BIM Roles and Responsibilities</li><li>E.2.5 Training and Development</li><li>E.2.6 Staff Recruitment</li></ul>
<b>E.3 Process</b>	<ul style="list-style-type: none"><li>E.3.1 Exemplar Projects</li><li>E.3.2 Full-scale Implementation</li><li>E.3.3 Develop a Project Mobilisation Plan and Project Setup Process</li><li>E.3.4 Formalise PDCA Cycle</li></ul>
<b>E.4 Technology</b>	<ul style="list-style-type: none"><li>E.4.1 Evaluate Existing Tools</li><li>E.4.2 Technology Selection and Setup</li><li>E.4.3 Centralised BIM Resource Hub</li></ul>



**Legend**

- Policy
- People
- Process
- Technology



**Legend**

- Policy
- People
- Process
- Technology

# Appendix E – Mobilisation Strategy

## BIM Implementation Mobilisation Plan

The BIM implementation mobilisation plan is a critical foundation for embedding BIM across DCC’s operations. As outlined, “successful BIM adoption relies on a clear roadmap of strategic steps and targeted actions to ensure seamless integration and deliver long-term value”. The plan serves to address the key focus areas that form the backbone of DCC BIM adoption. Guiding the transition to more efficient, collaborative, and data-driven project delivery and operations. It outlines the high-level organisational roadmap while providing guidance for sector-specific roadmaps, ensuring every department or sector within DCC takes ownership of its specific BIM initiatives.

Assessment and planning	Conduct a thorough assessment of DCC's current state to confirm asset management requirements and systems, identify gaps, opportunities and the resources needed for successful BIM adoption.
Development of BIM standards and protocols	Establish clear BIM standards with a focus on open formats, interoperability, and structured data to support DCC’s long-term informatics strategy.
Technology selection and setup	Choose the right tools and technologies to support BIM processes across DCC’s projects
Training and development	Equip staff with the skills and knowledge to effectively utilise BIM tools and processes
Exemplar projects	Test and refine BIM processes and workflows through real-world projects
Full-scale implementation	Expand BIM across DCC, aligning with the organisation’s goal to use DTs, up to city-scale LDTs, as the basis for future planning and management of the city.
Performance monitoring and improvement	Continuously evaluate the effectiveness of BIM processes and optimise them for better results
Support and maintenance including change management	Ensure that BIM processes remain sustainable and adaptable to future changes

# Appendix E – Mobilisation Strategy

## E.1 Policy

The Policy pillar focuses on establishing the formal structures, standards, and governance needed to embed BIM consistently across DCC. These activities ensure that BIM is not treated as an isolated technical function, but as a mandated, organisation-wide approach supported by clear protocols, procurement alignment, and compliance mechanisms. Some of the activities listed are detailed under the other pillars.

	Months 0 - 6	Year 1-2	Year 3	Year 4 ++
Mobilisation	Standardisation and integration	Implementation and best practices	Full-scale implementation	Continuous improvement
<b>Governance structure</b>	<ul style="list-style-type: none"> <li>Establish BIM working group with key decision maker from all departments for immediate oversight and responsibility for driving BIM adoption across the organisation - <b>E.2.1, E.2.2</b></li> <li>Develop clear roles and responsibilities within the governance structure for organisation, department, and project levels - <b>E.1.6</b></li> </ul>	<ul style="list-style-type: none"> <li>Formalise governance processes that guide BIM operations and ensure adherence to organisational objectives - <b>E.1.6</b></li> <li>Align governance with digital transformation and smart city strategies, including integration with DTs, LDTs and GIS</li> </ul>	<ul style="list-style-type: none"> <li>Operate a sustainable and adaptable governance model that supports BIM in all new capital projects</li> <li>Embed governance checkpoints into projects and handover reviews - <b>E.1.6</b></li> </ul>	<ul style="list-style-type: none"> <li>Review and refresh the governance model based on feedback, audits and lessons learned</li> <li>Benchmark governance performance against peer organisations and public sector best practices - <b>E.3.4</b></li> <li>Refine governance to accommodate new technologies (e.g. digital twins, AI) - <b>E.1.6</b></li> </ul>
<b>BIM protocol and standards</b>	<ul style="list-style-type: none"> <li>Formalise BIM Policy and endorse BIM mandate in upcoming projects</li> <li>Set out asset information and requirements specific to user groups</li> <li>Develop BIM standard documents and associated templates (e.g. OIR, AIR, PIR, EIR, BEP) - <b>E.1.1</b></li> </ul>	<ul style="list-style-type: none"> <li>Roll out the core BIM protocols and standards across exemplar projects with change management support - <b>E.1.1</b></li> <li>Promote consistent adoption of standards by internal team and supply chain, ensuring alignment with Open Data principles, formats, and standards to support Smart cities, DAU, and the wider organisation</li> <li>Deliver targeted training on standards and protocols - <b>E.2.5</b></li> </ul>	<ul style="list-style-type: none"> <li>Establish a formal process for regular protocol review and updates based on emerging standards (e.g. ISO 19650 updates) - <b>E.1.1, E.1.6</b></li> </ul>	<ul style="list-style-type: none"> <li>Institutionalise an annual protocol refresh cycle - <b>E.1.1</b></li> <li>Evaluate compliance rates and quality metrics from BIM audits - <b>E.3.4</b></li> <li>Introduce smart automation to check and enforce protocol adherence - <b>E.3.4</b></li> </ul>
<b>Procurement and contract alignment</b>	<ul style="list-style-type: none"> <li>Work with the legal and procurement teams to introduce BIM clauses in all new infrastructure contracts - <b>E.1.3</b></li> <li>Define tender assessment criteria related to BIM competency and delivery capabilities</li> <li>Develop a BIM supplier capability scoring matrix - <b>E.1.4</b></li> </ul>	<ul style="list-style-type: none"> <li>Finalise guidelines to integrate BIM requirements into tendering and vendor selection process - <b>E.1.4</b></li> <li>Pilot use of BIM requirements in vendor scoring and evaluation - <b>E.1.4</b></li> </ul>	<ul style="list-style-type: none"> <li>Fully integrate BIM-specific clauses into all procurement and contract documents, clearly defining deliverables, expectations, and responsibilities for BIM use - <b>E.1.3</b></li> <li>Provide supplier briefings to explain expectations and obligations - <b>E.1.4</b></li> </ul>	<ul style="list-style-type: none"> <li>Periodically update contract clauses to reflect evolving use cases and technologies (e.g. digital twins, open data integration) - <b>E.1.3</b></li> <li>Review supplier performance and refine scoring systems - <b>E.1.4</b></li> <li>Share procurement best practices and contract templates with other councils and partner organisations.</li> </ul>
<b>Change management</b>	<ul style="list-style-type: none"> <li>Develop an internal change support system, including resource hub, FAQs and early adopter engagement - <b>E.2.5</b></li> <li>Create a career path map for BIM related roles and digital upskilling - <b>E.4.3</b></li> </ul>	<ul style="list-style-type: none"> <li>Launch a formal BIM change management program, including stakeholder mapping and communications plan - <b>E.2.5</b></li> <li>Train internal change champions to support teams through transition - <b>E.2.2</b></li> <li>Begin capturing feedback and resistance points from teams</li> </ul>	<ul style="list-style-type: none"> <li>Embed change management into all BIM-enabled project rollouts - <b>E.2.5</b></li> <li>Support line managers with toolkits to manage change in their teams</li> </ul>	<ul style="list-style-type: none"> <li>Continuously evolve the change approach through staff surveys and digital maturity assessments - <b>E.2.5</b></li> <li>Recognise and celebrate change stories to reinforce cultural shift - <b>E.2.6</b></li> <li>Integrate BIM change readiness into broader digital transformation planning</li> </ul>

# Appendix E – Mobilisation Strategy

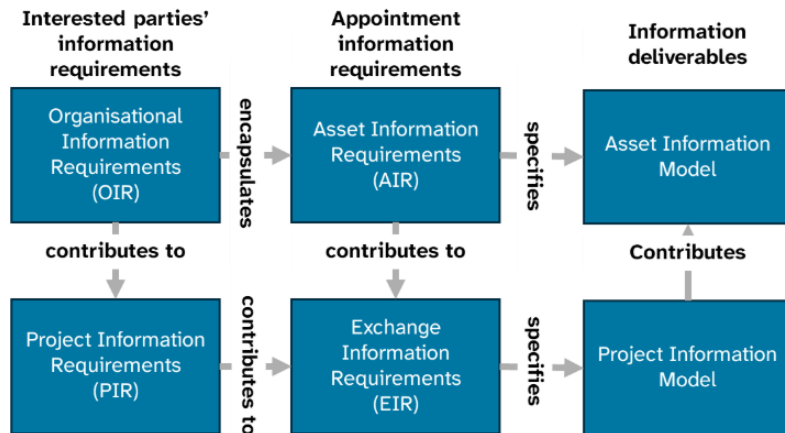
## E.1 Policy

### E.1.1 Define BIM Standards and Protocols

DCC must actively leverage the existing BIM templates, tools, and protocols already developed across departments. A significant amount of foundational work has been completed, such as the templates developed by ArcDox. A dedicated subgroup should review and consolidate these, alongside the legacy CAD standards from the former Central GIS/CAD Unit, which were implemented via configured MicroStation workspaces and libraries (e.g. E: OSMAPS and I: CADLIB AD drives).

The success of BIM adoption at DCC relies on creating a robust framework of standardised documents and protocols that guide every aspect of information management. These documents are essential for ensuring consistency, reducing errors, and enhancing collaboration across all project stages.

Asset managers need to be engaged early to ensure future-proof data structures. By aligning DCC’s BIM standards with the internationally recognised ISO 19650 framework, the organisation ensures that its processes are not only compliant with industry best practices but also scalable, transparent, and future-proof.



The BIM standards and protocols establish a structured and standardised approach DCC BIM adoption that facilitates the exchange, sharing, and management of information across the asset lifecycle, ensuring consistency, interoperability and data integrity across all projects.

#### Organisation Information Requirement (OIR)

- The OIR define the information needed to support **high-level strategic objectives** of DCC, driven by factors such as operations, asset management, portfolio planning, regulatory compliance, and policy development

#### Asset Information Requirement (AIR)

- The AIR sets out managerial, commercial and technical aspects of **producing asset information**.
- The contents of the AIR will define the **information required to operate and maintain a built asset** in-line with DCC’s asset management system

#### Project Information Requirement (PIR)

- The PIR details **the specific information needed for individual projects**.
- It guides DCC’s strategic objectives and is tailored to **each project and its specific stage**.

#### Exchange Information Requirement (EIR)

- The EIR outlines the **information that DCC expects from the delivery team** throughout the project lifecycle.
- It specifies **how detailed the information should be** at each project stage, aligning with DCC’s overall OIR and AIR requirements.

#### BIM Execution Plan (BEP)

The BEP is created based on the EIR. It **outlines how the delivery team will manage and deliver** the required digital information, ensuring that all BIM data meets DCC’s expectations at every project stage.

# Appendix E – Mobilisation Strategy

## E.1 Policy

### E.1.2 Information Management Framework

For a comprehensive information management framework to be effective, it must support the development of a **structured data schema** that defines how information is classified, organised, stored, and exchanged while accommodating interoperability.

**Data Schema** refers to the way in which information is structured and categorised within the information management framework. It defines how project data is organised, ensuring that the right data is available at the right time, in the right format, and for the right users.

Key principles of data schema includes:

- **Consistency** -Structure and file naming conventions remain uniform across all lifecycle stages (WIP, Shared, Published, Archived).
- **Classification** - Use of standard classification systems such as Uniclass, ICMS, and COBie. These promote clarity and ensure assets, tasks, and elements can be grouped, tracked, and managed across disciplines.
- **Open Standards** – Align with internationally recognised open data standards (e.g. IFC, ISO 19650, COBie) to ensure platform-agnostic interoperability, long-term accessibility, and resilience against vendor lock-in.
- **Metadata/Attributes** - Each data element should have clear, structured metadata (e.g. version, owner, status, location) to support traceability and automation.



ICMS Hierarchy

### Defining Data Schema: Steps and Consideration

#### Data Classification and Open Standards

- Use of Uniclass, ICMS, IFC and COBie to categorise assets and processes
- Enables cross-disciplinary understanding and structured handover
- Supports compliance with ISO 19650 and future adoption of digital twins

#### Defining Information Structure

- Organised information according to the project lifecycle and its various stages (WIP, Shared, Published, Archived)
- Document naming and version control
- Standardised metadata/attributes

#### Information Flow and Access Control

- Stage-specific requirements – structured and fit the intended use of data
- Access control rules that specify who can edit, review, or approve data at each stage

#### Information Delivery Plan

- The specific data that needs to be delivered, at which stage, in which format, and to whom

#### Ensuring Usability for End-users

- Ease of access
- Data integrity
- Interoperability and consistency across platform

# Appendix E – Mobilisation Strategy

## E.1 Policy

### E.1.3 Contract and Procurement Processes

BIM adoption brings significant benefits in terms of efficiency and collaboration, but it also introduces unique legal considerations that must be addressed within the **procurement and contract documents**. These documents ensure that all stakeholders understand their roles, responsibilities, and rights regarding the creation, management, and use of BIM data.



# Appendix E – Mobilisation Strategy

## E.1 Policy

### E.1.3 Contract and Procurement Processes

To embed BIM as a standard practice within DCC, it is essential to formalise BIM requirements across both new and existing procurement frameworks and public works contracts. This includes mandating digital deliverables, BIM Execution Plans (BEPs) and promoting collaborative, model-based workflows.

Where formal updates to procurement frameworks are not immediately possible, BIM principles and guidance can still be integrated through supplementary materials, shared expectations, and standardised clauses. These resources should be made available to both internal teams and external partners to promote consistency and clarity across all procurement activity.



### E.1.4 Tender evaluation criteria

To support the successful implementation of BIM across its projects, DCC should **revise its standard tender documentation** to incorporate clear and consistent BIM requirements. These should include details such as expected model deliverables, data formats, coordination milestones, quality assurance checks, and collaboration protocols. By embedding these elements into the procurement process, DCC can ensure that all parties have a shared understanding of BIM expectations from the outset, reducing the risk of misalignment or non-compliance during project delivery.

In addition, the updated tender documents should **introduce evaluation criteria that assess bidders' BIM maturity and their ability to meet DCC's digital delivery standards**. This will enable more informed contractor selection and establish stronger accountability throughout the supply chain. All templates and requirements should be aligned with recognised frameworks such as ISO 19650, covering both design and construction stages. Making BIM deliverables contractually enforceable will drive consistency across projects, support quality outcomes, and accelerate the broader cultural shift toward digital construction practices.

Importantly, **procurement teams and third-party advisors who support the procurement process must be trained** to assess supplier BIM capability and compliance. This will enable more informed decision-making and ensure alignment with DCC's broader digital strategy. Sharing practical BIM evaluation tools, maturity criteria, and support materials with those involved in procurement will help reinforce strategic priorities and contractually embed BIM expectations. In doing so, DCC can drive behaviour change, raise digital maturity across the supply chain, and strengthen the connection between procurement policy and project delivery outcomes.

# Appendix E - Mobilisation Strategy

## E.1 Policy

### E.1.5 Career Pathways

Establishing a clear and progressive career path structure from Graduate to Assistant, Executive, Senior Executive, and Senior/Chief will be a key enabler in building and retaining BIM capability within DCC. This structured pathway provides a transparent development framework for individuals entering the organisation, particularly those in early career stages, and helps ensure that internal talent can grow into more senior roles over time. By formalising this progression, DCC can attract motivated graduates with an interest in digital construction and provide them with a roadmap for long-term development.

At the entry level, Graduate BIM roles will focus on foundational skills such as standards compliance and supporting project teams under close supervision.

As individuals gain experience and training, they can progress to BIM Analyst roles, typically aligned with Executive or Senior Executive grades, where they take on more responsibility including technical support, strategy implementation, and departmental engagement on project delivery. Analysts also contribute to quality assurance, data management, and process improvement, acting as a vital link between project teams and strategic objectives.

With sufficient experience and demonstrated leadership, staff can progress to BIM Manager roles, typically aligned with Senior or Chief grades, where they take ownership of the BIM programme at a strategic level. BIM Managers lead multidisciplinary teams, engage with senior stakeholders, and ensure BIM processes align with wider organisational goals.

This progression model supports individual growth and contributes to the sustainability of the BIM function within DCC by creating a pipeline of skilled professionals who understand both the technical and strategic dimensions of digital delivery.

0–2 yrs

#### Graduate BIM Role:

Focus: Learning foundational BIM tools, standards, and project support.

2–5 yrs

#### BIM Analyst:

Focus: Technical delivery, project coordination, data management, and cross-departmental support.

5+ yrs

#### BIM Manager:

Focus: Strategic leadership, team management, process governance, and stakeholder engagement.

# Appendix E – Mobilisation Strategy

## E.1 Policy

### E.1.6 Formalise Governance Processes

Formalising governance processes is essential to ensuring that BIM implementation at DCC is consistent, accountable, and aligned with organisational priorities. Currently, the absence of a unified governance structure has contributed to fragmented practices, unclear responsibilities, and inconsistent application of BIM standards across departments. A formal governance framework will provide the necessary oversight to guide decision-making, monitor progress, and ensure that BIM is embedded as a core function rather than a peripheral activity. Governance authority sits with the Lead / Principal Information Manager, with escalation through Senior Information Managers.

#### Driving Consistency and Compliance

With the introduction of national BIM mandates and increasing complexity in project delivery, DCC must ensure that its internal processes are robust and enforceable. Governance structures will define roles, responsibilities, and escalation pathways, helping to reduce ambiguity and duplication of effort. They will also support compliance with ISO 19650 and the Capital Works Management Framework by embedding BIM requirements into procurement, contracts, and project workflows. This consistency is critical for managing risk, improving quality, and ensuring that digital deliverables are reliable and fit for purpose.

#### Enabling Long-Term Transformation

Beyond operational control, formal governance is a strategic enabler of cultural change. It reinforces the message that BIM is not just a technical tool, but a new way of working that requires leadership, collaboration, and continuous improvement. By establishing a BIM Steering Group and defining governance protocols early in the mobilisation phase, DCC can build momentum, foster cross-departmental alignment, and create a foundation for scaling BIM across all capital projects. This approach ensures that governance evolves alongside maturity, supporting both immediate implementation and long-term transformation.

#### Operating Model

The next page introduces DCC's operating model, which formalises the governance processes required to embed BIM consistently across the organisation. This model defines how people, processes, technology, and policy come together to support BIM implementation not as a standalone initiative, but as a core part of how DCC delivers and manages its built environment.



# Appendix E – Mobilisation Strategy

## E.1 Policy

### E.1.6 Formalise Governance Processes

By establishing clear structures, roles, and responsibilities, the TOM ensures that BIM is governed with accountability and aligned with DCC’s strategic goals. It provides a framework for decision-making, oversight, and continuous improvement, enabling departments to move from fragmented efforts to a coordinated, organisation-wide approach to digital delivery.

<b>DCC’s Information Management (BIM)</b>  1. Articulate DCC needs  2. Communicate Information requirements  3. Establish set of standards and information management framework  4. Improve quality assurance and performance check  5. Stimulate collaborative behaviours  6. Promote use of best practice information management	<b>Mandated Policy</b> Clear, structure policies and guidelines that mandate how BIM should be implemented and used within DCC	<b>Compliance with National and Industry Mandates</b> The organisation’s BIM policy must align with Irish Government BIM mandate and relevant industry standards.	<b>Standardisation of Practices</b> that defines the processes, procedures, and protocols for BIM usages which applied consistently across all departments and projects.	<b>Data Governance and Security</b> Clear rules for data ownership, data retention, and access control are essential to prevent misuse or authorisation access.	<b>Change Management and Adaptation</b> Policies should facilitate continuous improvement by incorporating feedback and evolving industry standards.
	<b>Efficient Processes</b> Streamlined, efficient workflows and processes that optimise the use of BIM across all stages of the project lifecycle	<b>Procurement and Contract Alignment</b> ensures that contracts specify the roles, responsibilities, and deliverables related to BIM.	<b>Project Setup and Delivery Plan</b> Establish clear project setup procedures and define data drop milestones to ensure timely and organized information exchange.	<b>Standardised Workflow Across Stages</b> to be implemented throughout project lifecycle.  <b>Data verification processes</b> and procedures ensure data quality	<b>Exemplar project(s)</b> allow project teams to evaluate how the tools, standards, and workflows work in practice to ensure the final BIM processes are practical and effective across all projects.
	<b>Competent People</b> The right people with the right skills are in place to implement, manage, and use BIM effectively	<b>Senior Leadership and Dedicated BIM Champion</b> must be fully committed to BIM adoption, providing necessary support and resources embedding BIM into the organisation’s culture.	<b>BIM Expertise and Training</b> through role-based training, certifications, and professional development programs, ensuring that employees at all levels—from senior leadership to technical staff—have the required knowledge.	<b>Cross-disciplinary Collaboration</b> Competent people also means fostering collaboration between different teams and disciplines (e.g., architecture, engineering, construction, and facilities management)	<b>Knowledge Sharing</b> Encouraging knowledge sharing between teams, departments, and external collaborators helps build a culture of learning and continuous improvement.
	<b>Appropriate Technology</b> The appropriate technology that support BIM workflows and enhance the project delivery process	<b>Common Data Environment</b> is critical to the success of BIM implementation, serving as the central hub for storing, sharing, and collaborating on project data.	<b>Cloud-based Collaboration</b> ensuring that project teams can collaborate in timely manner, regardless of location.	<b>Scalable and Interoperability Tools</b> that are suitable for the size and complexity of the projects being undertaken.	<b>Data Integration</b> The technology should support the integration of various tools used across the project lifecycle, enabling seamless data flow.

# Appendix E - Mobilisation Strategy

## E.2 People

The People pillar focuses on building the internal capability and leadership needed to drive BIM adoption across DCC. Activities under this stream aim to define clear roles, assess skills, and equip staff with the training and support required to embed BIM into everyday practice.

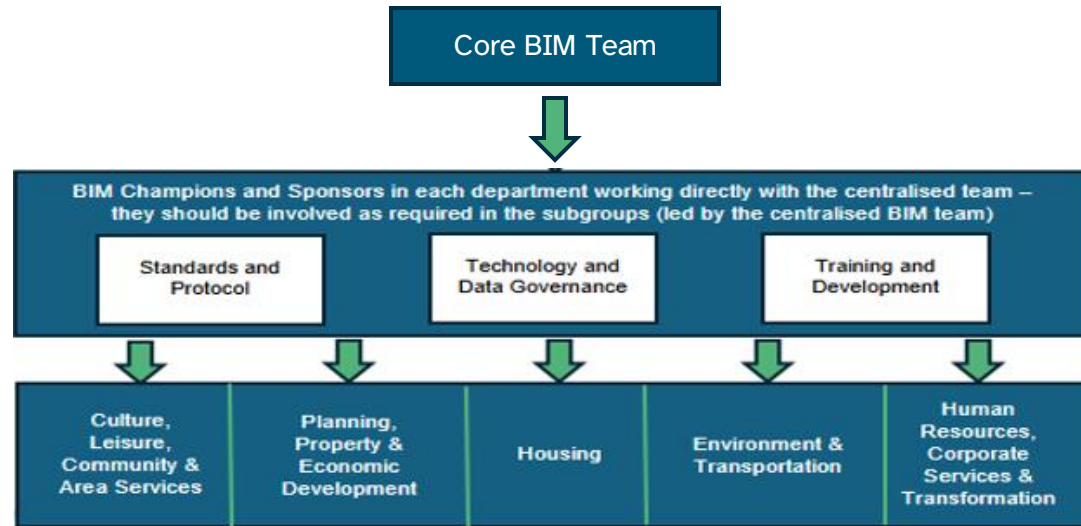
	Months 0 - 6	Year 1-2	Year 3	Year 4 ++
Mobilisation	Standardisation and integration	Implementation and best practices	Full-scale implementation	Continuous improvement
BIM roles and responsibilities	<ul style="list-style-type: none"> <li>Define core BIM roles (e.g. BIM Manager, BIM Analyst, BIM Graduate) – <a href="#">E.2.4</a></li> <li>Create a BIM responsibility matrix for internal departments</li> <li>Identify initial BIM champions across departments – <a href="#">E.2.1</a></li> </ul>	<ul style="list-style-type: none"> <li>Formalise BIM roles within project teams and job descriptions – <a href="#">E.2.4</a></li> <li>Provide onboarding guidance for BIM roles and responsibilities</li> <li>Align supply chain roles to client-side expectations – <a href="#">E.2.5</a></li> </ul>	<ul style="list-style-type: none"> <li>Embed BIM responsibilities into project governance frameworks</li> <li>Mandate BIM role definitions in all project contracts – <a href="#">E.2.4</a></li> <li>Monitor role execution and clarify overlaps or gaps – <a href="#">E.1.3</a></li> </ul>	<ul style="list-style-type: none"> <li>Review and refine roles in line with evolving standards (e.g. ISO 19650) – <a href="#">E.2.4</a></li> <li>Offer career development pathways for BIM professionals</li> <li>Create succession plans for key leadership roles – <a href="#">E.2.6</a></li> </ul>
Upskilling and training	<ul style="list-style-type: none"> <li>Assess current BIM skills across teams – <a href="#">E.2.3</a></li> <li>Develop BIM competency framework</li> <li>Conduct introductory BIM training and awareness sessions – <a href="#">E.2.5</a></li> </ul>	<ul style="list-style-type: none"> <li>Partner with academia for training delivery and CPD – <a href="#">E.2.3</a></li> <li>Roll out foundational and role-based BIM training programs</li> <li>Launch e-learning modules/workshops on CDE, ISO standards etc. – <a href="#">E.2.5</a></li> </ul>	<ul style="list-style-type: none"> <li>Expand training to include advanced topics (e.g. digital twins) – <a href="#">E.2.5</a></li> <li>Require minimum training levels for project participation</li> </ul>	<ul style="list-style-type: none"> <li>Evaluate training impact and update content accordingly – <a href="#">E.2.5</a></li> <li>Provide refresher courses aligned with technology updates</li> <li>Establish BIM learning community – <a href="#">E.4.3</a></li> </ul>
Leadership and Core BIM Team	<ul style="list-style-type: none"> <li>Appoint interim BIM leadership (e.g. BIM Implementation Lead, Org Change Lead) – <a href="#">E.2.1</a></li> <li>Form cross-department Core BIM Team to guide mobilisation – <a href="#">E.1.6</a></li> </ul>	<ul style="list-style-type: none"> <li>Define governance model for BIM oversight and decision making – <a href="#">E.2.1</a></li> <li>Establish regular Core BIM Team meetings and reporting mechanisms – <a href="#">E.1.6</a></li> <li>Empower Core BIM team to make policy and tool recommendations</li> </ul>	<ul style="list-style-type: none"> <li>Align BIM governance with broader digital transformation and IT leadership – <a href="#">E.1.6</a>, <a href="#">E.2.1</a></li> </ul>	<ul style="list-style-type: none"> <li>Conduct annual reviews of governance effectiveness – <a href="#">E.1.6</a></li> <li>Involve leadership in digital innovation pilots</li> <li>Mentor future leaders in BIM and digital delivery – <a href="#">E.2.6</a></li> </ul>
Engagement and culture	<ul style="list-style-type: none"> <li>Include BIM discussions in staff briefing and town halls – <a href="#">E.2.5</a></li> <li>Launch internal awareness campaign on BIM vision and benefits – <a href="#">E.2.5</a></li> </ul>	<ul style="list-style-type: none"> <li>Develop BIM engagement plan per department – <a href="#">E.2.5</a></li> <li>Celebrate early success stories from exemplar projects</li> <li>Provide two-way communication channels for feedback – <a href="#">E.2.5</a></li> </ul>	<ul style="list-style-type: none"> <li>Embed BIM objectives into team KPIs and appraisal systems – <a href="#">E.2.5</a></li> <li>Conduct staff surveys on BIM adoption and challenges</li> <li>Host internal BIM showcase events – <a href="#">E.2.2</a></li> </ul>	<ul style="list-style-type: none"> <li>Sustain engagement through recognition programs and internal awards – <a href="#">E.2.5</a></li> <li>Build a culture of innovation and learning around digital delivery – <a href="#">E.4.3</a></li> </ul>

# Appendix E - Mobilisation Strategy

## E.2 People

### E.2.1 Establish dedicated Core BIM Team

Securing budget approval, and HR alignment is essential to successfully implement the proposed governance model and associated recommendations.



To deliver the BIM strategy effectively, a hybrid implementation model is recommended - combining a centralised BIM team ("the Core BIM Team") with embedded BIM champions across departments. This approach ensures strong central leadership and governance while enabling departments to take ownership of BIM adoption in their specific contexts. BIM champions will work directly with the Core BIM Team to maintain alignment, share feedback, and support consistent application of processes and standards across DCC.

The Core BIM Team will provide strategic direction, monitor compliance with BIM protocols, review implementation progress, and resolve escalated issues. The staffing requirements for the centralised team will need to evolve over time in response to the increasing complexity and diversity of projects across DCC.

As more projects adopt BIM, the demands on the central team will grow, requiring a broader mix of skills and potentially additional resourcing. The strategy allows for flexibility in scaling the team and sourcing specialist expertise as required - whether through internal development, recruitment, or consultancy support. A phased resourcing approach aligned to the roadmap milestones will ensure the team remains fit-for-purpose throughout implementation.

The BIM champions embedded in departments will be selected from existing staff where possible, with appropriate training and support provided. These individuals will serve as local BIM leads, facilitating adoption within their teams while maintaining strong links with the central unit.

External supports providing services such as project management, BIM expertise, organisational change, and information systems capability should be embedded within DCC from the outset of the BIM journey. These skillsets are essential to ensure that the strategy is not only technically sound but also effectively delivered, culturally adopted, and supported by the right digital infrastructure.

# Appendix E - Mobilisation Strategy

## E.2 People

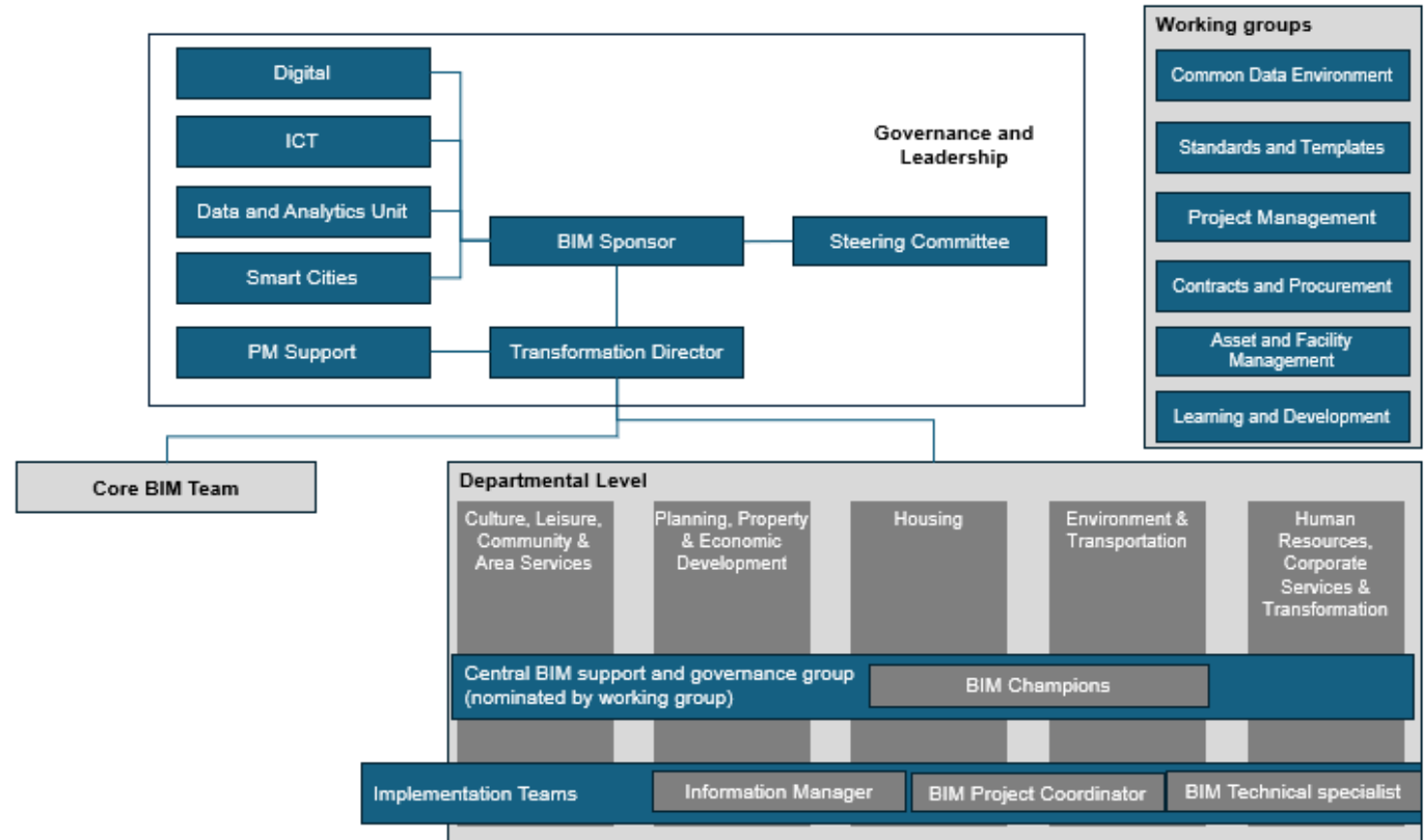
### E.2.1 Establish dedicated Core Information Management Team

Defining how DCC will resource and structure its BIM implementation is central to establishing a dedicated Core Information Management Team. Rather than relying solely on isolated technical roles, it sets out a blended, multidisciplinary team model that brings together BIM expertise, project delivery roles, governance capability, and change leadership. This approach is a direct response to DCC's current fragmented landscape, it provides a cohesive framework to bridge these silos, embed shared ownership, and deliver BIM as a coordinated, organisation-wide function not a niche technical task.

By aligning people, roles, and responsibilities, this model helps bridge existing siloes and promotes a more corporate, coordinated approach to BIM. It ensures that BIM is embedded into day-to-day operations and supported by the right skills and capacity at every level of the organisation.

It is crucial that the skills and expertise within the BIM working group/core Information Management team cover the skills listed in **Appendix E.2.3**.

Roles and responsibilities are detailed in **Appendix E.2.4**. These outline both core team functions and departmental roles, ensuring clarity and accountability across all levels of DCC.



# Appendix E - Mobilisation Strategy

## E.2 People

### E.2.2 Establish Working Groups and Subgroups

To support the successful delivery of the BIM strategy, a set of working groups and technical sub-groups will be established to provide specialised input, drive coordination, and ensure consistency across departments.

These working groups will be sponsored by the Governance and Leadership team and coordinated by the Core BIM Team. Each group will include relevant departmental representatives and subject matter experts.

#### Common Data Environment Workstream

The purpose of the CDE workstream is to understand how DCC currently manages, stores, and shares project information across departments and suppliers. It identifies gaps, inconsistencies, and pain points in current practices and workflows. Its ultimate goal is to define and deliver a clear, organisation-wide CDE specification that supports consistent, secure, and integrated information management.

#### Standards and Templates Workstream

This workstream reviews the current use of BIM templates and processes to understand existing levels of standardisation across DCC. It identifies inconsistencies or gaps that hinder quality, efficiency, or ISO 19650 alignment. Its purpose is to create a unified suite of BIM standards, templates, and QA/QC procedures for consistent project delivery.

#### Procurement and Contracts Workstream

The purpose of this workstream is to review how BIM requirements are currently embedded in DCC contracts and tender documentation. It identifies lessons learned from past projects and gaps in contractual clarity or consistency. Its goal is to define clear BIM requirements, clauses, and evaluation criteria to ensure suppliers deliver

compliant information from the outset.

#### Learning and Development Workstream

This workstream aims to understand current BIM skills, roles, and capability levels across DCC. It identifies the training, recruitment, and development needs required for successful BIM adoption. Its purpose is to build a structured, organisation-wide learning pathway and upskilling programme aligned to roles and project needs.

#### Project Management Integration Workstream

The purpose of this workstream is to understand how BIM currently fits within DCC's project lifecycle and project management practices. It identifies gaps, inconsistencies, and opportunities to embed BIM more effectively into PM tools, templates, and processes. Ultimately, it ensures BIM becomes a core, integrated component of DCC's end-to-end project management approach.

#### Asset and Facilities Management Workstream

This workstream seeks to understand the current state of asset data requirements, handover processes, and FM system integration. It identifies what asset information is needed to support operations and where current practices fall short. Its goal is to define clear AIRs, standards, and workflows so BIM data effectively supports long-term asset management and decision-making.

These structured groups form an integrated support model for the BIM strategy, enabling DCC to deliver projects more efficiently, upskill its workforce, embed consistent standards and unlock the full benefits of digital transformation.

# Appendix E - Mobilisation Strategy

## E.2 People

### E.2.3 Skills Gap Assessment

To successfully implement BIM across DCC, skills must be developed across the Information Manager role family, from Assistant to Lead level, spanning technical, delivery, governance, and strategic capabilities.

#### Skills aligned to Information Manager role progression

##### Lead / Principal Information Manager (BIM) – Strategy and Transformation

- Information management strategy and governance
- Digital transformation and organisational change
- Data governance, digital twin, and enterprise integration

##### Senior Information Manager (BIM) – Assurance and Governance

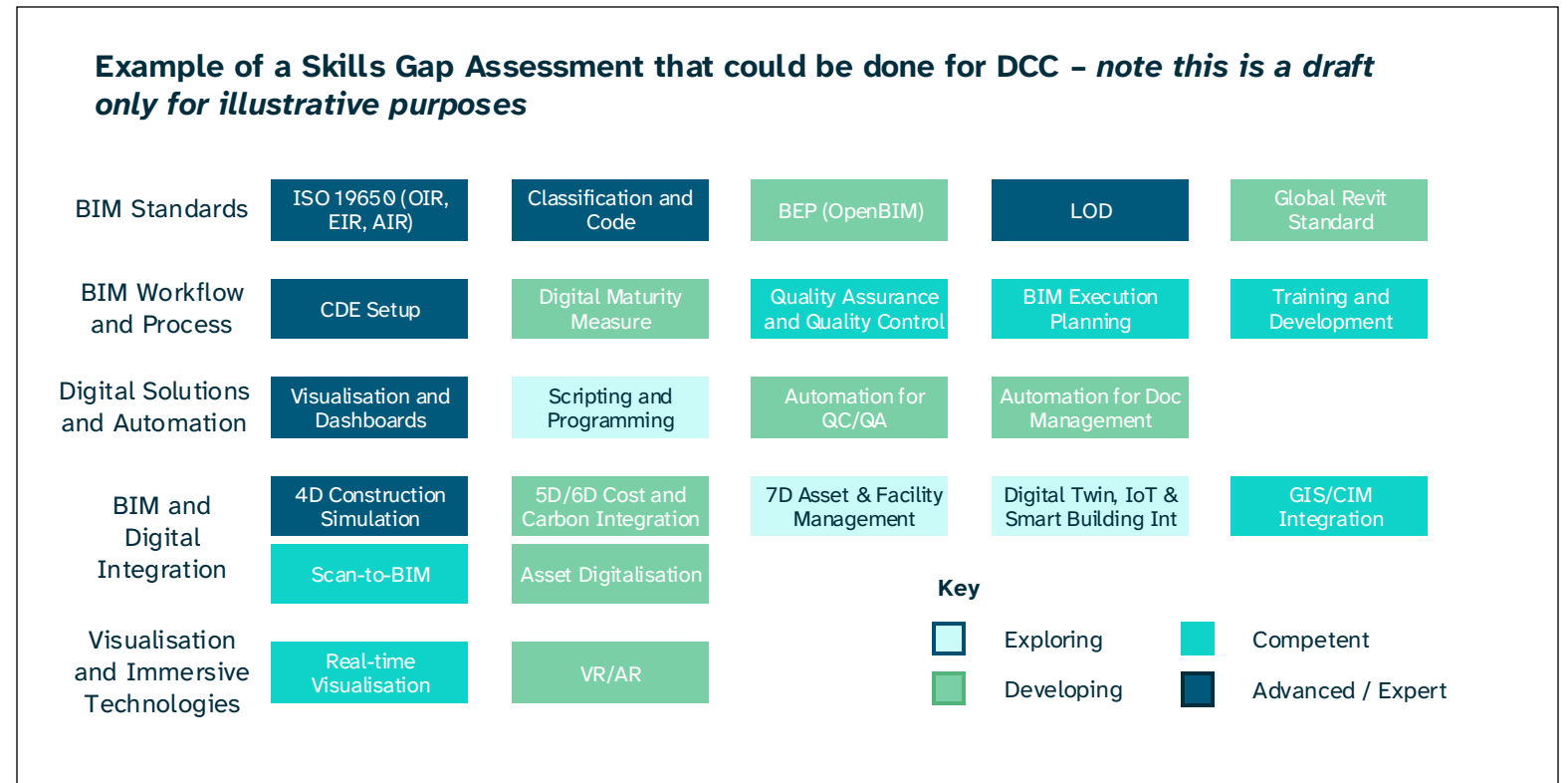
- Quality assurance and quality control
- Procurement and contract alignment
- Asset information requirements and lifecycle integration

##### Information Manager (BIM) – Delivery and Coordination

- Information management in accordance with ISO 19650
- BIM execution planning and coordination
- Project delivery and stakeholder coordination

##### Assistant Information Manager (BIM) – Tools and Foundations

- CDE setup and administration
- BIM standards and workflows
- Model coordination support and data management



# Appendix E - Mobilisation Strategy

## E.2 People

### E.2.3 Skills Gap Assessment

To successfully implement BIM across DCC, a diverse set of skills is required (examples listed below) that spans technical, strategic, and operational domains..

- Information Management in accordance with ISO 19650
- Data classification experts and/or quantity surveyors (ICMS, Uniclass, IFC)
- Procurement and legal
- Project Management
- Asset operation and management
- Project delivery teams (e.g. designer, surveyors, etc.)
- Sustainability development, carbon reduction, green materials, circular economy, etc.
- IT specialists (tools, CDE, and cyber security policy)
- Learning development and hiring manager
- Additional specialist (e.g. GIS, fire life & safety, digital twin, etc.)
- Organisational change specialist

# Appendix E - Mobilisation Strategy

## E.2 People

### E.2.4 Define Information Management Roles and Responsibilities

Information Management is a defined function under ISO 19650, which may be delivered through dedicated roles or assigned responsibilities depending on project scale and complexity.

Defining clear Information Management roles and responsibilities is a critical step in embedding BIM into DCC's day-to-day operations. It ensures accountability, reduces duplication, and enables staff at all levels to contribute effectively to a coordinated, organisation-wide approach to digital delivery. Examples of potential roles and responsibilities are presented below.

	Role	Description
Core Information Management Team	Lead / Principal Information Manager (BIM)	Defines and oversees DCC's organisation-wide information management strategy, governance, and assurance framework, ensuring compliance with ISO 19650, the CWMF and lifecycle asset information requirements. <i>(Authority: Organisation-wide)</i>
	Senior Information Manager (BIM)	Leads and oversees information management on complex or high-risk projects or across portfolios, ensuring quality assurance, governance compliance, and alignment with organisational and asset information requirements. <i>(Authority: Programme / Portfolio level)</i>
	Information Manager (BIM)	Leads the planning, management, and assurance of information production and exchange at project level, including implementation of the Information Management Plan, CDE management and validation of information exchanges. <i>(Authority: Project level)</i>
	Assistant Information Manager (BIM)	Supports the delivery of information management processes, including CDE administration, information coordination, and validation activities, ensuring compliance with ISO 19650 and project requirements under supervision. <i>(Authority: Support role)</i>

# Appendix E - Mobilisation Strategy

## E.2 People

### E.2.4 Define Information Management Roles and Responsibilities (continued)

Supporting roles enable delivery but do not hold governance accountability for information management.

	Role	Description
<b>Supporting roles (non-governance)</b>	Admin Support	<p>Provide administrative support to the BIM Steering Group and project teams as needed. This includes but not limited to</p> <ul style="list-style-type: none"> <li>• Maintain and manage the digital document repository and ensure proper version control for project documents</li> <li>• Support the Information Manager in ensuring data is correctly classified and accessible</li> <li>• Supports Information Managers in document control, coordination and compliance processes.</li> <li>• Assist with the coordination of project document reviews and approvals, ensuring compliance with BIM protocols</li> </ul>
	Stakeholder Engagement Specialist	Engages internal and external stakeholders to align them with align them with information management standards and BIM initiatives. Facilitates communication on BIM standards, system integration, and changes, ensuring stakeholder buy-in and feedback throughout the process.
	Organisational Change Specialist	Drives cultural adoption of information management and BIM by managing change initiatives, training, and behavioural support across departments.
	IT Systems Administrator	<p>Manage and maintain IT infrastructure required for BIM, ensuring system integration and compatibility with other digital platforms (e.g. project management tools, CDE, modelling software).</p> <p>Supports Information Managers by ensuring BIM systems and the CDE are functioning correctly, secure, and properly integrated.</p>

# Appendix E - Mobilisation Strategy

## E.2 People

### E.2.5 Training and Development

The success of BIM adoption relies not only on the implementation of tools and standards but also having a skilled workforce capable of implementing BIM effectively.

This can be achieved through upskilling existing staff and upscaling the team through targeted training programs and recruitment efforts. Key components of Training and development includes:

#### Assess skill gaps

Each department will be evaluated separately to determine the specific skills need for that area and for specific role.

#### Define BIM roles and responsibilities

Clear BIM roles and responsibilities will be defined at DCC to ensure that each team member understands their contribution to BIM projects.

#### Targeted BIM training programmes

To address identified skill gaps, training will be customised according to the specific needs of each role and level, ensuring that employees acquire the knowledge and skills most relevant to their daily tasks and project responsibilities. Partnerships with universities and training providers will support curriculum development, offer access to research and innovation and help ensure DCC's training programmes reflect the latest industry standards and technologies.

#### Leadership support for career path paving

DCC will establish a clear career development framework for BIM roles, guiding employees how they can advance in the organisation by acquiring new skills, certifications, and experience. Training pathways will be aligned to the Information Manager role progression (Assistant → Lead) to support structured capability development across DCC.

#### Upskilling Existing Staff

Clear BIM roles and responsibilities will be defined at DCC to ensure that each team member understands their contribution to BIM projects.

- **Upskilling through exemplar projects and knowledge transfer** - DCC will select a small group of exemplar projects to kickstart its upskilling program. The exemplar projects will serve as controlled environments for applying BIM skills in real-world project delivery
- **Organisational awareness and knowledge sharing** - To ensure that BIM awareness is raised across DCC, a series of knowledge-sharing sessions will be held to provide a basic understanding of BIM, its benefits, and its role in DCC's project delivery and asset management processes.
- **Upskilling through role-specific training** - Once the basic BIM understanding is established, DCC will offer role-specific training programs that focus on building deeper expertise in areas

#### Project management: A Foundational Enabler for BIM

It is recommended that a focused engagement (in-depth interviews/PM maturity assessment survey/workshop to identify enablers for adoption) is carried out with experienced project managers across key departments to assess their current level of BIM understanding and project delivery maturity.

This engagement will inform how BIM workflows can best be integrated with DCC's evolving project management practices, and where support is needed to accelerate capability building.

# Appendix E - Mobilisation Strategy

## E.2 People

### E.2.6 Staff Recruitment

To bridge skill gaps and ensure the successful delivery of BIM across DCC, it is essential to recruit a balanced mix of early-career professionals and experienced specialists. Bringing in BIM graduates will help build a future-ready workforce, while hiring seasoned experts such as BIM managers and digital leads will provide the strategic oversight and technical depth needed to guide implementation and support project teams.

Each role should be clearly scoped and benchmarked against industry standards to ensure alignment with market expectations for responsibilities and compensation. Special attention should be given to determining which roles should be centrally embedded, such as a BIM Strategy Lead or BIM Manager, and which should be distributed across departments, such as BIM Coordinators or Project BIM Leads. This structure will help maintain strategic coherence while enabling localised support and responsiveness.

Collaboration with HR is critical to ensure that new roles are integrated into DCC's grading system and recruitment processes. Role descriptions should reflect the digital competencies required for BIM-enabled delivery, and interim measures such as secondments or engaging external consultants may be necessary to fill immediate gaps. Given the organisational implications, this will likely be a sensitive discussion involving multiple stakeholders and should be approached collaboratively to ensure alignment and long-term success.

To supplement internal training efforts, hiring BIM talent will help fill skill gaps and bring specialised expertise into the organisation

- **Recruiting BIM talent** - Key positions will be prioritised to ensure that the team has the capabilities to implement and manage BIM processes effectively.
- **Collaborations with educational institutions** - DCC will collaborate with universities and technical institutions to attract fresh talent specialising in BIM-related fields. This will include offering internships, apprenticeships, and graduate opportunities to bring young, innovative talent into the organisation.

# Appendix E - Mobilisation Strategy

## E.2 People

### E.2.7 - ISO 19650 certification pathway

Developing an ISO 19650 certification pathway for DCC staff is essential to building a consistent, organisation-wide capability in information management. While BIM tools and processes form the technical foundation, staff competency is the true determinant of successful adoption. A structured certification pathway will ensure that staff understand not only the principles of ISO 19650 but also how they apply within DCC's project lifecycle, procurement processes, and governance structures. This approach will move the organisation from isolated knowledge to a shared and standardised proficiency that underpins all BIM-enabled activities.

Creating this pathway will also support cultural change by embedding clear expectations for BIM capability at all levels of the organisation. Certification provides staff with a recognised, industry-aligned credential that increases confidence, reduces ambiguity, and supports the transition from traditional working methods to digital, information-led delivery. By aligning training content with DCC-specific roles such as project management, procurement, asset management, and technical design the certification pathway becomes relevant, accessible, and directly applicable to day-to-day responsibilities.

The ISO 19650 pathway will deliver tangible operational benefits. With certified staff across departments, DCC will be better positioned to specify BIM requirements accurately, evaluate supplier capability, manage information delivery plans, and ensure full compliance with national BIM mandates. This will reduce rework, strengthen quality assurance, and increase delivery confidence across the capital programme. A consistent baseline of competency will also support smoother cross-departmental collaboration and accelerate the adoption of interoperable processes, templates, and standards.

Finally, investing in ISO 19650 certification creates long-term organisational value. It supports workforce development, strengthens internal capability, and reduces reliance on external consultants over time. Certification forms the backbone of a sustainable information management culture, ensuring that DCC's staff are equipped to manage digital assets throughout their lifecycle and to support the evolution toward digital twins and smart city platforms. By formalising a clear, structured pathway, DCC positions itself as a national leader in digital public works and ensures that the benefits of BIM are embedded, measurable, and enduring.

# Appendix E - Mobilisation Strategy

## A.3 Process

The Process pillar focuses on standardising how BIM is applied across DCC projects - from planning and design to construction and handover. Activities in this stream aim to define consistent workflows, quality assurance mechanisms, and project setup procedures that ensure BIM is embedded into delivery from the outset.

	Months 0 - 6	Year 1-2	Year 3	Year 4 ++
Mobilisation	Standardisation and integration	Implementation and best practices	Full-scale implementation	Continuous improvement
Project setup and delivery milestones	<ul style="list-style-type: none"> <li>Define BIM project setup protocols (e.g. BEP templates) – <b>E.3.3</b></li> <li>Establish standard project delivery workflows with BIM milestones</li> <li>Develop criteria for selecting exemplar projects</li> </ul>	<ul style="list-style-type: none"> <li>Apply BIM setup templates to exemplar projects – <b>E.3.1</b></li> <li>Integrate BIM delivery milestones into project schedules and governance – <b>E.3.3</b></li> <li>Capture lessons learned from exemplar implementation</li> </ul>	<ul style="list-style-type: none"> <li>Mandate BIM setup protocols for all capital projects – <b>E.3.2</b></li> <li>Embed BIM planning into program management systems</li> <li>Align BIM milestones with funding approvals and design stages – <b>E.3.3</b></li> </ul>	<ul style="list-style-type: none"> <li>Refine BIM setup protocols based on project feedback – <b>E.3.4</b></li> <li>Introduce KPIs for BIM-enabled delivery performance – <b>E.3.3</b></li> <li>Benchmark delivery processes against industry leaders</li> </ul>
Lifecycle integration	<ul style="list-style-type: none"> <li>Identify key lifecycle stages for BIM data exchange (design, construction, handover, operation) – <b>E.3.3</b></li> <li>Define data handover requirements for AIM – <b>E.3.3</b></li> </ul>	<ul style="list-style-type: none"> <li>Run AIM workshop covering handover and use in FM/AM</li> <li>Trial data handover on exemplar projects with FM/AM teams – <b>E.3.3</b></li> </ul>	<ul style="list-style-type: none"> <li>Integrate BIM outputs into asset management systems – <b>E.3.2</b></li> <li>Ensure lifecycle data flows are supported across all departments</li> <li>Enforce consistent AIM delivery from contractors and design teams – <b>E.3.3</b></li> </ul>	<ul style="list-style-type: none"> <li>Leverage AIM to enhance predictive maintenance and capital planning – <b>E.3.3</b></li> <li>Refine asset lifecycle workflows – <b>E.3.3</b></li> <li>Monitor lifecycle integration effectiveness and adjust strategies</li> </ul>
Data validation and QA/QC	<ul style="list-style-type: none"> <li>Define minimum data quality standards and BIM deliverables – <b>E.3.4</b></li> <li>Establish QA/QC roles and approval processes in project teams – <b>E.3.3</b></li> </ul>	<ul style="list-style-type: none"> <li>Pilot data validation tools and workflows on exemplar projects – <b>E.3.3</b></li> <li>Build staff capabilities in model checking and data audits – <b>E.4.3</b></li> </ul>	<ul style="list-style-type: none"> <li>Enforce structured model reviews at key delivery stages – <b>E.3.4</b></li> <li>Standardise digital QA/QC checkpoints in all project plans</li> <li>Create centralised repository for validated project data – <b>E.3.4</b></li> </ul>	<ul style="list-style-type: none"> <li>Continue to enhance validation rules and tools – <b>E.4.3</b></li> <li>Benchmark model quality against industry datasets – <b>E.3.4</b></li> </ul>
Continuous improvement	<ul style="list-style-type: none"> <li>Establish feedback mechanisms for BIM process evaluation – <b>E.3.4</b></li> <li>Launch an internal BIM knowledge hub – <b>E.4.3</b></li> </ul>	<ul style="list-style-type: none"> <li>Capture feedback from exemplar projects and refine standards – <b>E.3.4</b></li> <li>Launch BIM user group to share experiences and identify improvements – <b>E.3.4</b></li> </ul>	<ul style="list-style-type: none"> <li>Embed continuous improvement cycle into BIM governance structure – <b>E.3.4</b></li> <li>Publish annual BIM performance and improvement reports – <b>E.3.4</b></li> <li>Host internal BIM forums and lessons learned sessions</li> </ul>	<ul style="list-style-type: none"> <li>Establish long-term R&amp;D roadmap for digital innovation in infrastructure – <b>E.3.4</b></li> <li>Collaborate with academia on emerging practices – <b>E.2.5</b></li> <li>Evolve BIM strategy in line with new technologies and city objectives</li> </ul>

# Appendix E - Mobilisation Strategy

## E.3 Process

### E.3.1 Exemplar Projects

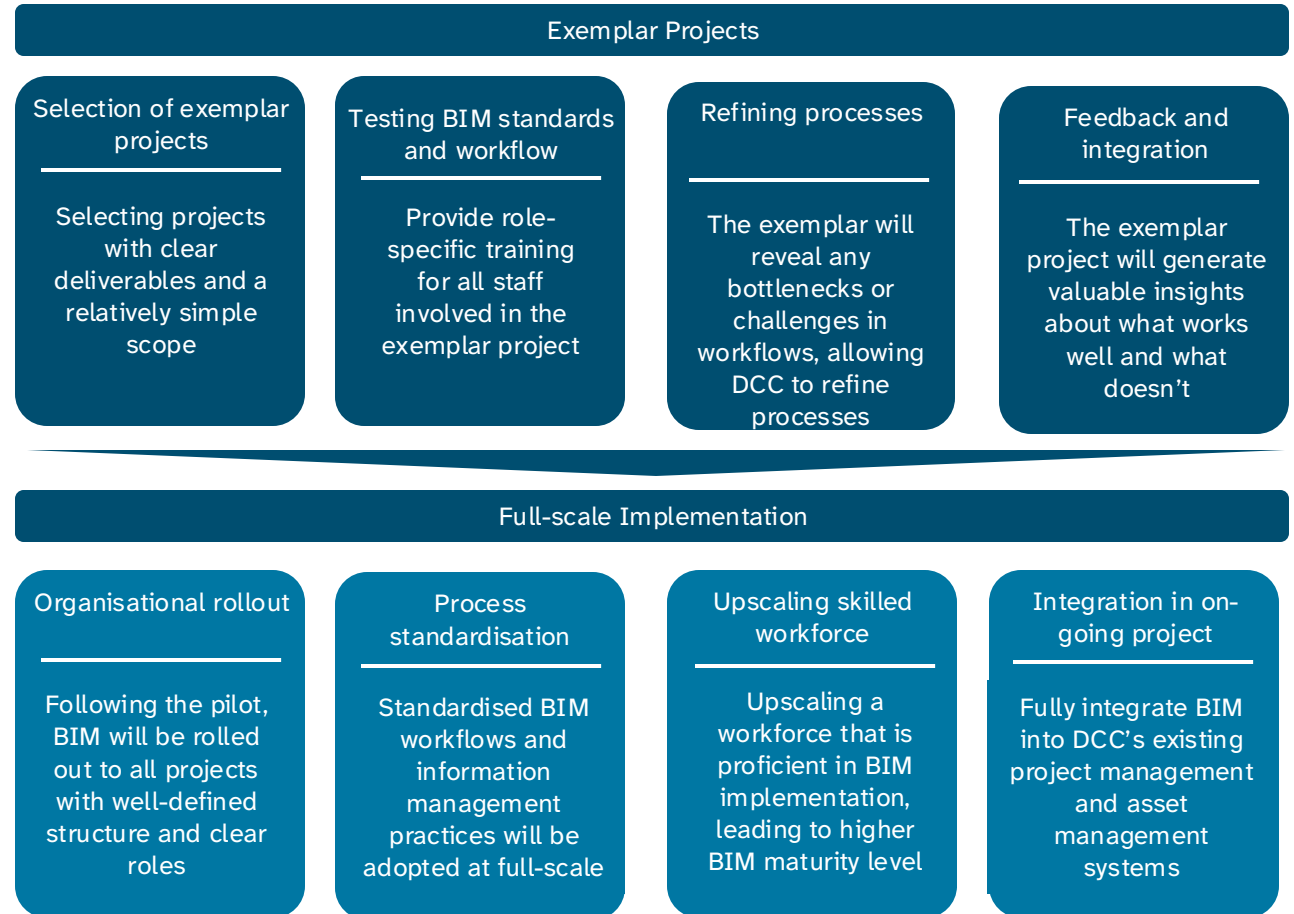
Exemplar projects serve as an essential first step in testing and refining DCC’s BIM implementation. They provide a controlled environment where BIM tools, processes, and collaboration methods can be trialled before being scaled across the organisation. These initial trials provide hands-on experience, gather feedback, and fine-tune strategies before widespread adoption.

### E.3.2 Full-scale Implementation

The goal of full-scale implementation is to expand the successful BIM practices from the exemplar projects across all projects and departments at DCC.

At this stage, BIM will be embedded into daily operations, with teams trained and aligned, so that BIM becomes the standard way of working.

- **Scalable and sustainable best practice** - BIM processes that work across all projects and can grow with DCC’s needs.
- **Enhance organisational alignment and accountability** - Clear roles and responsibility, ensuring everyone is on the same page.
- **Improved collaboration and communication** - Teams communicate better, share data more easily, and work together more efficiently
- **Increased efficiency and reduced redundant work** - Less wasted time, reduced errors, and streamlined workflows across departments

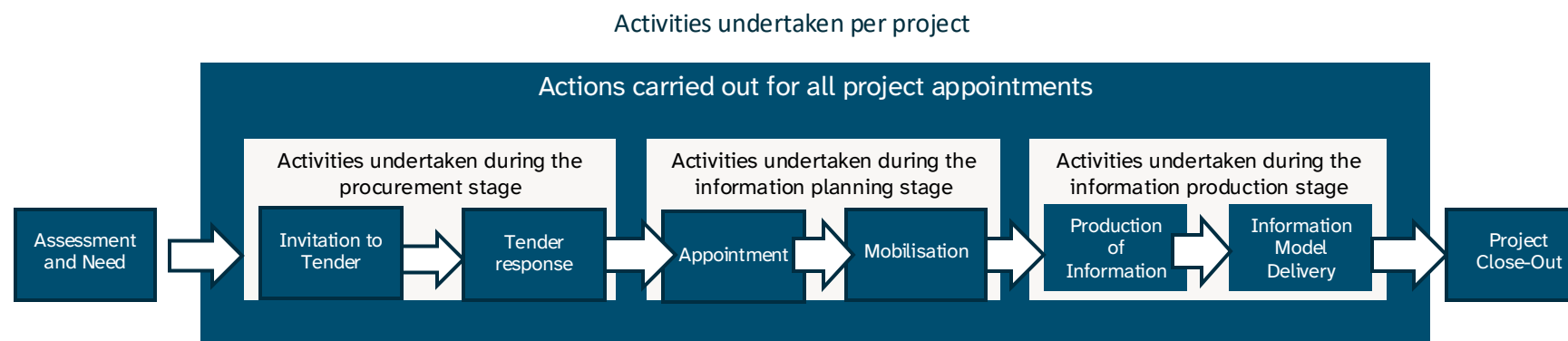


# Appendix E - Mobilisation Strategy

## E.3 Process

### E.3.3 Develop a project mobilisation plan and project setup process

Developing a structured project mobilisation plan and setup process is essential to ensuring that BIM is implemented consistently across all DCC projects. Currently, BIM practices vary widely by department and project, often lacking clear expectations or standardised procedures. A formal mobilisation plan will provide a repeatable framework for initiating projects, aligning teams, and embedding BIM requirements from the outset helping to reduce confusion, improve coordination, and ensure that digital delivery becomes the norm rather than the exception.



### Aligning Scope with Deliverables

The mobilisation plan must be closely aligned with a breakdown of the BIM scope of work and expected deliverables at each project stage. This includes defining what information is required, when it is needed, and who is responsible for producing it—across design, construction, handover, and asset management phases. By establishing clear protocols for project setup, including the use of templates, naming conventions, and CDE configurations, DCC can ensure that all stakeholders are working from a shared understanding and that project data is structured, accessible, and fit for purpose.

### Enabling Scalable and Measurable Implementation

A well-defined setup process also enables DCC to scale BIM implementation across its capital programme while maintaining quality and compliance. It supports early alignment with procurement and contract requirements, facilitates onboarding of internal and external teams, and provides a foundation for quality assurance and performance monitoring. Ultimately, this approach will help DCC move from fragmented, ad hoc BIM efforts to a mature, standardised delivery model that supports better outcomes for projects, assets, and the communities they serve.

# Appendix E - Mobilisation Strategy

## E.3 Process

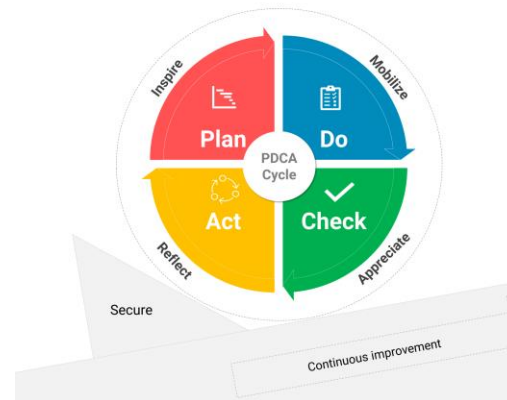
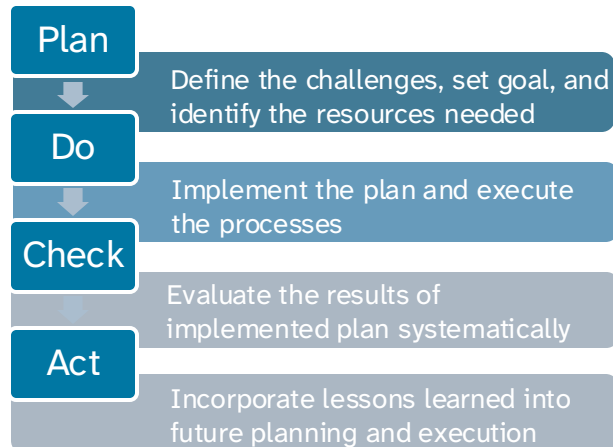
### E.3.4 Formalise PDCA Cycle

To ensure the long-term success of BIM at DCC, it is essential to implement a system for **monitoring performance**, identifying challenges, and continuously refining BIM workflows. This will drive sustained improvements and ensure that BIM adoption consistently delivers value.

Aligned with the **BIM maturity assessment**, a clear performance matrix has been established as part of the organisation's evaluation criteria. These metrics will be regularly assessed during DCC's BIM rollout through consistent **BIM audits** and **reviews**. To ensure continuous improvement, the following key actions will be taken:

- Periodic assessment
- Collect stakeholder feedback
- Continuous process improvement

The PDCA (Plan-Do-Check-Act) cycle is adopted to ensure engagement at all levels of DCC. It fosters a sense of ownership and engagement among stakeholders.



To ensure the long-term success of BIM implementation, DCC must provide ongoing support, maintain systems, and manage changes effectively. This ensures that BIM remains adaptable and integrated within the organisation over time. Key actions to achieve this include:

- **Form a dedicated BIM team** to ensure that BIM processes remain efficient, up-to-date, and aligned with the organisation objectives
- Continuously provide **training programs and career opportunities** for staff to learn about best practices. This ensures that all teams remain proficient in BIM and adapt to changes in workflows and processes.
- **Documentation and knowledge management** to centralised knowledge base improves consistency in BIM practices, enables faster problem-solving, and ensures that best practices are easily accessible across departments
- **Change management strategy** to communicate a structured approach to change management ensures smooth transitions when adopting new tools, workflows, or standards, minimises disruption, and maximises user adoption

#### Improved alignment with DCC's goals

A well-maintained systems ensures all processes remain aligned with DCC's strategic objectives

#### Minimised disruption and sustain BIM performance

On-going support ensure that BIM can be implemented consistently with minimal disruption

#### Skilled and adaptable workforce

Continuous training and knowledge sharing foster a workforce that proficient and adaptable

#### Smooth transitions

Clearly defined planning, training, and support during transition period maximise the effectiveness of changes

# Appendix E - Mobilisation Strategy

## A.4 Technology

The Technology pillar focuses on selecting, configuring, and integrating the digital tools and systems that enable effective BIM delivery across DCC. Activities in this stream aim to ensure that platforms such as the CDE are interoperable, secure, and aligned with both project needs and long-term organisational goals.

	Months 0 - 6	Year 1-2	Year 3	Year 4 ++
Mobilisation	Standardisation and integration	Implementation and best practices	Full-scale implementation	Continuous improvement
CDE standards and protocols	<ul style="list-style-type: none"> <li>Define CDE requirements aligned with ISO 19650 – <b>E.4.1</b></li> <li>Identify and assess existing CDE platforms in use</li> <li>Draft organisation-wide CDE standards and naming conventions</li> </ul>	<ul style="list-style-type: none"> <li>Implement CDE standards across pilot projects – <b>E.4.1</b></li> <li>Establish CDE governance framework for roles and responsibilities</li> <li>Deliver CDE training sessions for relevant staff – <b>E.2.5</b></li> </ul>	<ul style="list-style-type: none"> <li>Enforce CDE usage across exemplar projects – <b>E.1.3</b></li> <li>Integrate CDE workflows into procurement documentation and contracts – <b>E.4.1</b></li> <li>Monitor CDE compliance and refine protocols</li> </ul>	<ul style="list-style-type: none"> <li>Review and upgrade CDE platform based on feedback and project learnings – <b>E.4.1</b></li> <li>Benchmark against other public sector CDE practices</li> <li>Evolve CDE standards to support digital twins and lifecycle data needs, ensuring compatibility with open data formats and standards. – <b>E.3.3</b></li> </ul>
System integration	<ul style="list-style-type: none"> <li>Map existing systems used for managing projects and asset management (GIS, AM/FM, document control, finance) – <b>E.4.2</b></li> <li>Identify integration points and interoperability issues – <b>E.4.2</b></li> </ul>	<ul style="list-style-type: none"> <li>Develop integration roadmap for key systems (e.g. BIM-GIS linkage with Digital Twins strategy) – <b>E.4.2</b></li> <li>Launch data standardisation for spatial and asset data sets</li> <li>Conduct system pilot integrations (e.g. BIM with GIS or CAFM) – <b>E.4.2</b></li> </ul>	<ul style="list-style-type: none"> <li>Scale up integration across departments and platforms – <b>E.3.3</b></li> <li>Establish central data dashboard for project oversight – <b>E.4.2</b></li> </ul>	<ul style="list-style-type: none"> <li>Optimise data flows through automated workflows – <b>E.4.2</b></li> <li>Explore integration with emerging technologies (e.g. AI) – <b>E.4.2</b></li> <li>Institutionalise feedback loops for system upgrades</li> </ul>
Information security and access control	<ul style="list-style-type: none"> <li>Conduct BIM related data risk assessment – <b>E.4.1, E.4.2</b></li> <li>Define user roles, permissions and access levels within CDE</li> </ul>	<ul style="list-style-type: none"> <li>Train staff on data security policies and information handling</li> <li>Implement role-based access control with CDE and related platforms – <b>E.4.2</b></li> <li>Develop incident response protocol for data breaches – <b>E.4.2</b></li> </ul>	<ul style="list-style-type: none"> <li>Perform security audits and update controls based on usage – <b>E.4.2</b></li> <li>Align BIM data handling with national and EU data protection regulations – <b>E.4.2</b></li> </ul>	<ul style="list-style-type: none"> <li>Continuously monitor and test vulnerabilities</li> <li>Integrate cybersecurity updates into BIM governance cycles</li> <li>Certify compliance with international information security standards (e.g. ISO 27001) – <b>E.4.2</b></li> </ul>
Usability and interoperability	<ul style="list-style-type: none"> <li>Assess existing BIM tools and user interface challenges – <b>E.4.3</b></li> <li>Define interoperability requirements for digital systems and supply chain</li> </ul>	<ul style="list-style-type: none"> <li>Select tools with open standards and support for Open Data exchange – <b>E.4.3</b></li> <li>Develop user guidance and support channels for selected software</li> <li>Run training to improve digital fluency and tool navigation – <b>E.2.5</b></li> </ul>	<ul style="list-style-type: none"> <li>Streamline user experience across departments – <b>E.4.3</b></li> <li>Collect and act on user feedback to improve tool adoptions and workflow efficiency – <b>E.4.3</b></li> </ul>	<ul style="list-style-type: none"> <li>Upgrade platforms to improve performance and interoperability</li> <li>Promote participation in industry working groups on digital standards and Open Data frameworks – <b>E.4.3</b></li> <li>Evaluate long-term usability through surveys and performance metrics</li> </ul>

# Appendix E - Mobilisation Strategy

## E.4 Technology

### E.4.1 Evaluate Existing Tools

Before introducing new systems or investing in additional software, it is essential for DCC to evaluate the tools already in use across departments. Currently, the digital environment is fragmented, with teams relying on a mix of legacy platforms, disconnected file storage systems, and varying modelling tools. This lack of standardisation contributes to inefficiencies, duplicated effort, and inconsistent data quality. A comprehensive evaluation will help identify which tools are fit for purpose, which require upgrades, and where gaps exist in supporting BIM workflows.

#### Assessing Functionality and Interoperability

The assessment should focus on each tool’s ability to support core BIM functions—such as model creation, data exchange, collaboration, and integration with a CDE. It should also consider usability, scalability, and alignment with ISO 19650 standards. Evaluating interoperability is particularly important, as DCC must ensure that tools can communicate effectively across departments and with external partners. This process will inform decisions about tool consolidation, procurement, and training needs, ensuring that the digital ecosystem is cohesive and future-ready.

#### Enabling Informed Investment and Adoption

By assessing existing tools early in the mobilisation phase, DCC can avoid unnecessary duplication, reduce costs, and accelerate adoption. The findings will guide the selection of preferred platforms for exemplar projects and help define technical requirements for procurement and contract documentation. Ultimately, this action supports a more strategic, evidence-based approach to digital transformation ensuring that technology investments are aligned with organisational goals and capable of supporting long-term BIM maturity.

Assessment Area	Key Questions	Scoring Considerations
<b>Functionality</b>	Does the tool support core BIM tasks (e.g. modelling, coordination, data export)?	Range of features, alignment with ISO 19650 workflows, support for 3D/4D/5D BIM
<b>Interoperability</b>	Can the tool integrate with other systems (e.g. CDE, GIS, FM, procurement)?	Open standards support (e.g. IFC, COBie), API availability, compatibility with existing tools
<b>Usability</b>	Is the tool user-friendly and accessible to staff with varying skill levels?	Interface design, learning curve, language support, accessibility for field and office use
<b>Scalability</b>	Can the tool scale across departments and project sizes?	Licensing model, cloud/on-premise options, performance with large datasets
<b>Compliance &amp; Security</b>	Does the tool meet DCC’s data governance and security requirements?	ISO 19650 alignment, audit trails, access control, GDPR compliance, digital signing, encryption, metadata management, geo-coordination

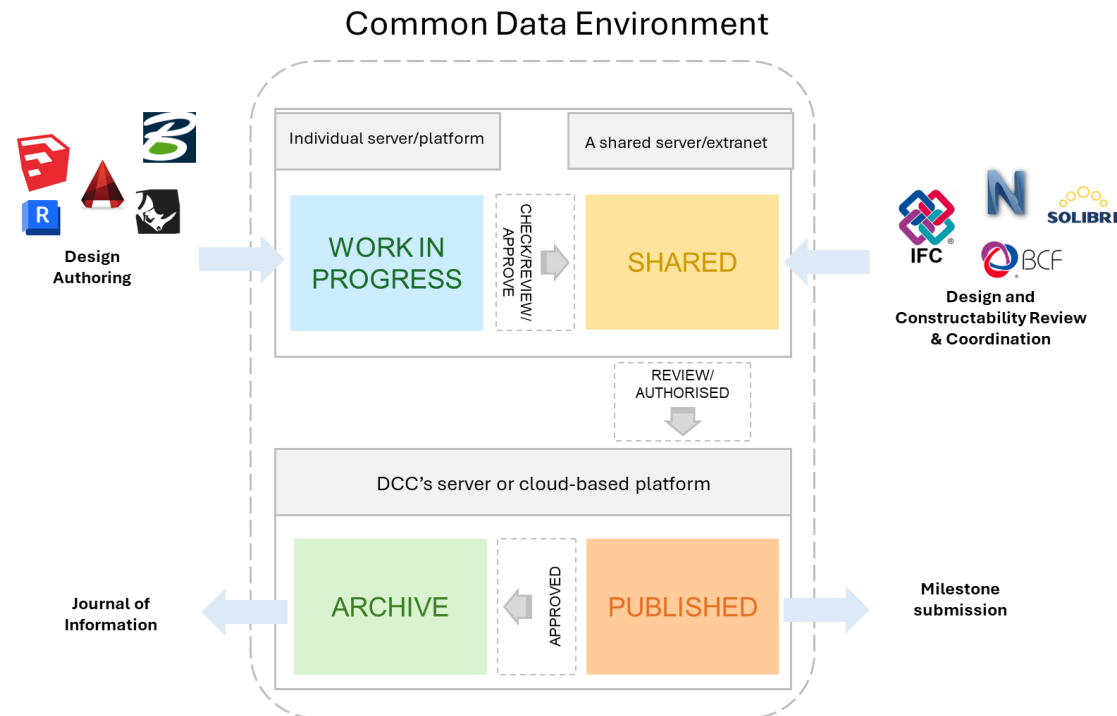
# Appendix E - Mobilisation Strategy

## E.4 Technology

### E.4.2 Technology Selection and Setup

A CDE can take on many forms depending on the size or type of the project. It could be a project server, extranet, or cloud-based system. The important factors are that the system is digital, everyone has access and that it can be easily sub-divided into different areas. More than one platforms can be utilised as part of the CDE as long as they can facilitate the project activities and comply with strict gateway to endure relevant, Check, Reviews, Approvals & Authorisation.

The selected tools must support data standardisation, ensure interoperability, and streamline workflows across the project lifecycle. Below are the key steps involved in selecting appropriate technology:



#### Evaluate and Select Tools

- Define needs and requirements
- Determine essential functionalities
- Interoperability and long-term scalability

#### Setup IT Infrastructure

- Assess existing IT infrastructure and data architecture components
- Consider cloud-based solutions
- Data security compliance

#### Departmental or Project-specific system integration

- Identify specific needs
- Tools that align with department/project workflow
- Cross-discipline collaboration

#### Specific Training on Tools and Workflow

- Role-based training programmes providing basic and advance training based on proficiency level of staff
- Workflow and process training ensuring that everyone adheres to organisation information management standard

# Appendix E - Mobilisation Strategy

## E.4 Technology

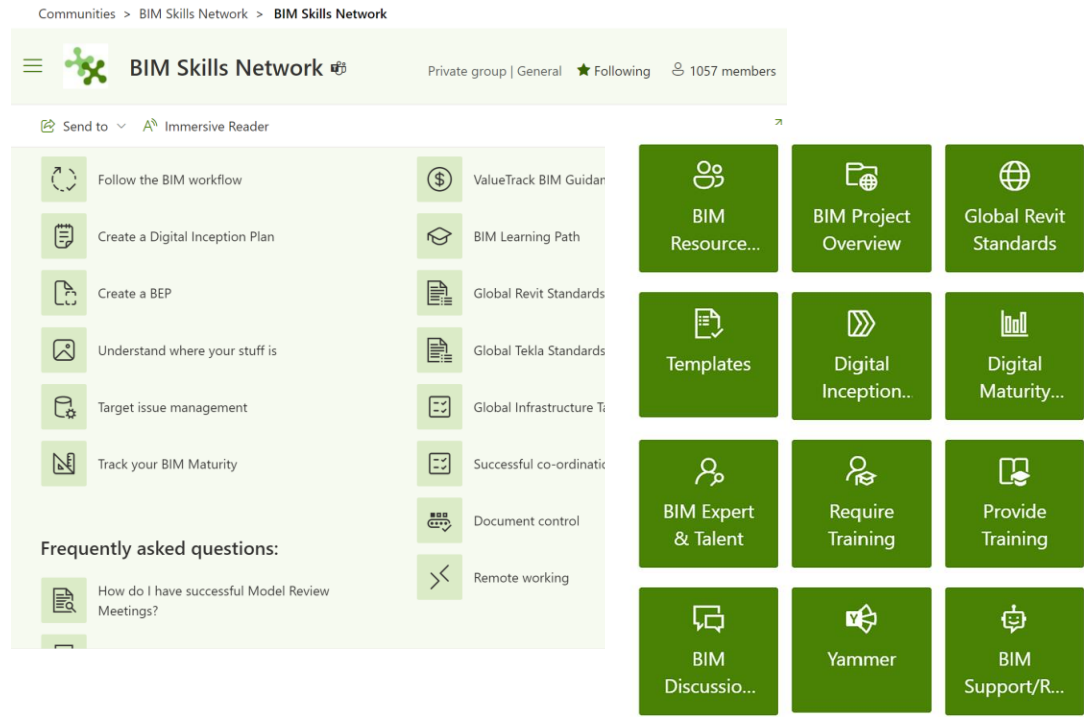
### E.4.3 Centralised BIM Resource Hub

To support the effective adoption and long-term sustainability of BIM within DCC, it is recommended to develop a centralised BIM resource hub. This hub will serve as a single source of truth for all BIM-related materials, including standards, templates, workflows, guidance documents, and best practices. Centrally managing these resources will ensure consistency across departments and projects, reduce duplication of effort, and support a coordinated approach to digital delivery.

A core component of this hub will be a central learning platform, inspired by models such as HS2's UK BIM Learning Portal. This platform will host a range of training resources, including e-learning modules, recorded webinars, case studies, and role-specific learning pathways. It will cater to both internal staff and external partners, ensuring that everyone working with DCC is aligned on expectations, competencies, and processes. The platform will also allow for the tracking of learning progress and certification, supporting workforce development and compliance.

Beyond training, the resource hub will also support collaboration and knowledge sharing, acting as a living environment where lessons learned, project insights, and innovations can be captured and shared across DCC. By investing in this shared digital infrastructure, DCC will not only build internal capability but also strengthen engagement with the wider construction and asset management ecosystem - positioning itself as a digitally mature, collaborative, and forward-thinking public sector leader.

DCC could enhance the BIM resource hub by establishing **informal learning groups and communities of practice** to encourage peer-to-peer knowledge sharing across departments. These groups could host monthly sessions, case study presentations, and tool demonstrations to surface practical insights and support real-time problem-solving.



Example of the Arup BIM Skills Network