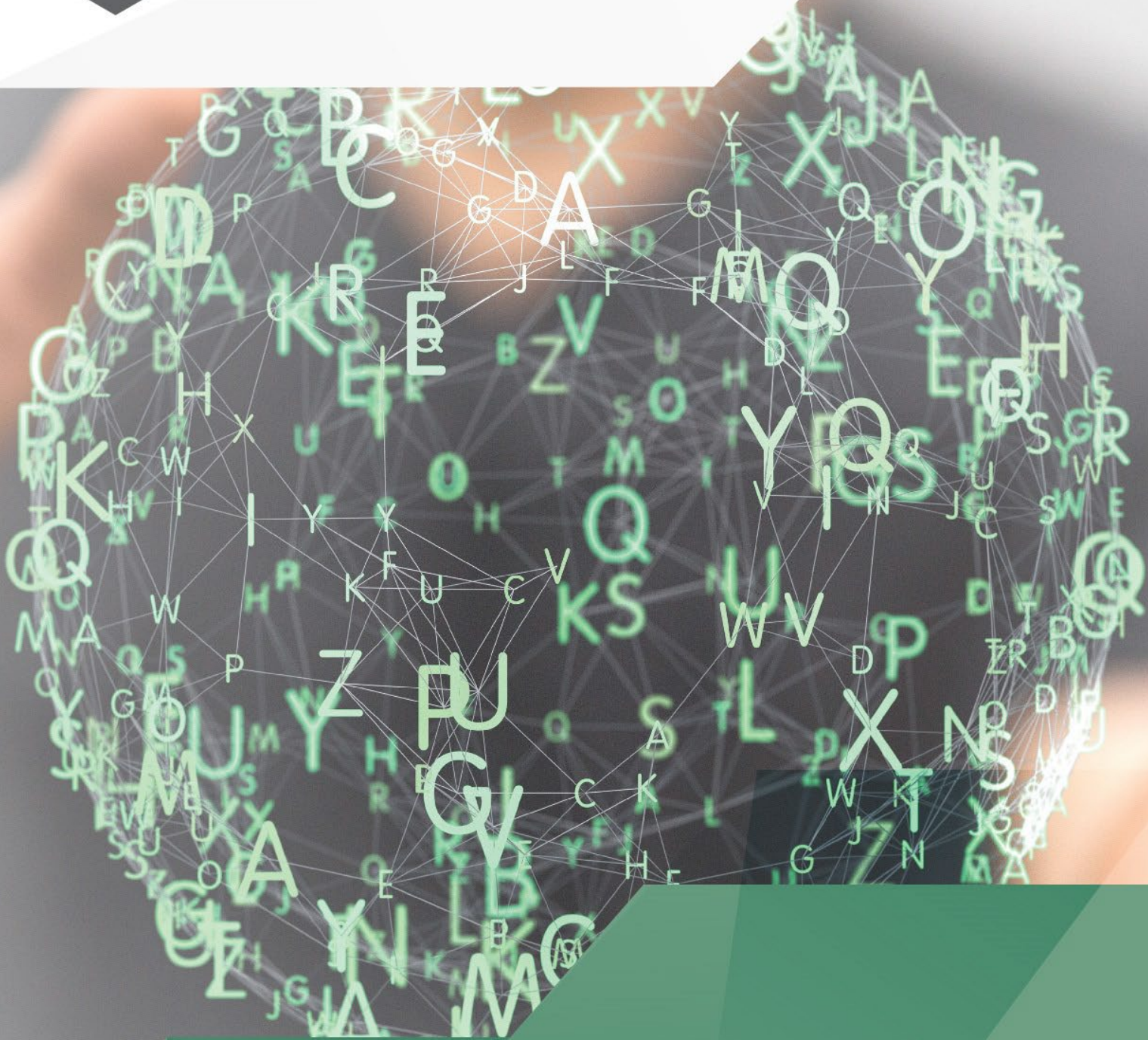




CONSTRUCTION
INDUSTRY COUNCIL
建造業議會



CIC BIM Dictionary

(in line with ISO 19650)
2024

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Whilst reasonable efforts have been made to ensure the accuracy of the information contained in this publication (Reference Materials), the CIC nevertheless encourages readers to seek appropriate independent advice from their professional advisers where possible. Readers should not treat or rely on this publication (Reference Materials) as a substitute for such professional advice.

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Document Revision Tracking

Issue Date	Notes
December 2020	First release
December 2021	<p>Annual revision</p> <p>Chinese terms are included</p> <p>New terms are added:</p> <ol style="list-style-type: none"> 1. Seven dimensional Building Information Modelling (Energy / Sustainability) 2. BIM Model 3. BIM Uses 4. Delivery Team 5. Federated Model 6. Model Author 7. Task Team <p>Terms updated:</p> <ol style="list-style-type: none"> 1. Three dimensional Building Information Modelling 2. Three dimensional printing 3. Four dimensional Building Information Modelling (Time) 4. Five dimensional Building Information Modelling (Cost) 5. Application Programming Interface 6. BIM Collaboration Format 7. BIM Execution Plan 8. BIM 9. BIM attribute 10. buildingSMART Data Dictionary 11. Common Data Environment 12. Construction Operation Building information exchange 13. Delivery Team 14. Level of Documentation 15. Exchange Information Requirements 16. Information Delivery Manuals 17. Level of Development – Graphics 18. Level of Development – Information 19. Model View Definition 20. openBIM
December 2024	<p>New terms are added:</p> <ol style="list-style-type: none"> 1. BIM CDCP 2. CFD 3. CSDI 4. GBDR 5. LOD-G+ 6. LLM 7. SSSS 8. IDS

Foreword

I was glad to see the release of **Construction Industry Council (CIC) Building Information Modelling (BIM) Dictionary in December 2020**, which has been long awaited ever since the publication of CIC BIM Standards – General in 2015. This CIC BIM Dictionary 2021 shall be read in conjunction with the CIC BIM Standard - General (Version 2.1 – 2021) which in line with ISO 19650's Information Management principles, workflows and requirements. The common abbreviations and terms found in the following publications have been included in this CIC BIM Dictionary.

- (i) *CIC BIM Standards – General (August 2019); (Version 2 - December 2020) and (Version 2.1 - 2021);*
- (ii) *CIC BIM Standards for Architecture and Structural Engineering (Version 2 - December 2020); and (Version 2.1 - 2021);*
- (iii) *CIC BIM Standards for Underground Utilities (August 2019); and (Version 2 - 2021);*
- (iv) *CIC BIM Standards for Mechanical, Electrical and Plumbing (August 2019); and (Version 2 - 2021);*
- (v) *CIC BIM Standards for Preparation of Statutory Plan Submissions (December 2020); and (Version 1.1 - 2021);*
- (vi) *CIC Production of BIM Objects Guide – General Requirements (August 2019); and (Version 2 - 2021);*
- (vii) *CIC BIM Exchange Information Requirements (EIR) Template (December 2020); and (Version 1.1 - 2021);*
- (viii) *CIC BIM Special Conditions of Contract (September 2021);*
- (ix) *CIC BIM Services Agreements (September 2021); and*
- (x) *CIC BIM Guide for using BIM in generation of MEP digital drawings for statutory submissions (2021).*

We welcome feedback on the CIC BIM Dictionary from practitioners subsequent to the issuance of this publication will be considered in future revisions.

On behalf of the CIC, I would like to thank everyone who has contributed to producing this CIC BIM Dictionary and subsequent updates, in particular to the members of the Task Force on BIM Standards.

Ar. Prof. Ada FUNG, BBS

Chairperson

Committee on Building Information Modelling

Construction Industry Council

December 2021

Preface

The Construction Industry Council (CIC) is committed to seeking continuous improvement in all aspects of the construction industry in Hong Kong. To achieve this aim, the CIC forms Committees, Task Forces and other forums to review specific areas of work with the intention of producing Alerts, Reference Materials, Guidelines and Codes of Conduct to assist participants in the industry to strive for excellence.

The CIC appreciates that some improvements and practices can be implemented immediately whilst others may take more time for implementation. It is for this reason that four separate categories of publication have been adopted, the purposes of which are as follows:

Alerts	The Alerts are reminders in the form of brief leaflets produced quickly to draw the immediate attention of relevant stakeholders to the need to follow some good practices or to implement some preventive measures in relation to the construction industry.
Reference Materials	The Reference Materials are standards or methodologies generally adopted and regarded by the industry as good practices. The CIC recommends the adoption of the Reference Materials by industry stakeholders where appropriate.
Guidelines	The Guidelines provide information and guidance on particular topics relevant to the construction industry. The CIC expects all industry stakeholders to adopt the recommendations set out in the Guidelines where applicable.
Codes of Conduct	The Codes of Conduct set out the principles that all relevant industry participants should follow. Under the Construction Industry Council (Cap 587), the CIC is tasked to formulate codes of conduct and enforce such codes. The CIC may take necessary actions to ensure compliance with the codes.

If you have read this publication, we encourage you to share your feedback with us. Please take a moment to fill out the Feedback Form attached to this publication in order that we can further enhance it for the benefit of all concerned. With our joint efforts, we believe our construction industry will develop further and will continue to prosper for years to come.

Introduction

This CIC BIM Dictionary aims to apply the Abbreviations, Terminology and Definition / Glossary to all CIC BIM Standards and related publications. This document is essential to have agreed and aligned terms to provide the same understanding and fundamental meaning to the industry. This benefits the industry in order to adopt and use of BIM. The first release of this CIC BIM Dictionary is December 2020, subsequent update may be on an annual basis and when necessary.

CIC BIM Dictionary

(Guidance Note: Some abbreviations may be left out blank due to currently there is no common abbreviation to simplify the terms. Alternative terms as considered other commonly used terms may be indicated in a bracket [] for reference)

Abbreviation	Term	詞彙	Definition
3D BIM	Three dimensional Building Information Modelling	三維	The use of software tools to generate three-dimensional geometries, either as surfaces or non-parametric solids.
3D printing	Three dimensional printing	三維打印	Producing a physical representation of a digital 3D model using 3D printing technology.
4D BIM	Four dimensional Building Information Modelling (Time)	四維建築信息模擬 (時間)	4D BIM refers to 3D BIM + time data. A model or a modelling workflow is considered to be 4D BIM process / approach when time data is linked to / embedded within model objects to allow construction scheduling.
5D BIM	Five dimensional Building Information Modelling (Cost)	五維建築信息模擬 (造價)	5D BIM refers to 4D BIM + cost data. A model or modelling workflow is considered to be 5D BIM process / approach when cost data is linked to / embedded within BIM models and model components. 5D BIM is used for the purposes of cost management, not limited to generating cost estimates and practicing target value design.
6D BIM	Six dimensional Building Information Modelling (AM / FM)	六維建築信息模擬 (資產管理與設施管理)	6D BIM enables managers to operate and maintain facilities throughout the life cycle. The technique allows the project participants to extract and track asset information like component status, specification, operation manual, warranty data, and more. Utilising 6D BIM, AEC professionals can get quick part replacements, improved compliance, and a modernised asset life cycle management. The 6D BIM technique also provides ways for managing the data of the subcontractor, supplier as well as facility component through the whole facility life cycle.
7D BIM	Seven dimensional Building Information Modelling (Energy / Sustainability)	七維建築信息模擬 (能源與可持續性)	7D BIM helps to perform analysis of energy consumption. The use of 7D BIM technology results in complete and accurate energy estimates in the design process. The technique also facilitates measurement and verification during building occupation, enhancing construction processes in high-performance facilities.
AEC	Architecture, Engineering and Construction	建築、工程及建造	A phrase that may be used as an alternative to describe the building construction industry.
AECO	Architecture, Engineering, Construction and Operations	建築、工程、建造及營運	An extension of the AEC acronym which includes professionals and enterprises related to the operations and maintenance of buildings and infrastructures.
AIM	Asset Information Model	資產信息模型	Maintained information model used to manage, maintain and operate the asset; required to support an organisation's asset management system.
AIR	Asset Information Requirements	資產信息需求	Data and information requirements of the organisation in relation to the asset(s) it is responsible for.
AM	Asset Management	資產管理	Asset management refers to a systematic approach to the governance and realisation of value responsible for, over their whole life cycles. It may apply both to tangible assets (physical objects such as buildings or equipment) and to intangible assets (such as human capital, intellectual property, goodwill or financial assets). It refers to the process of developing, operating, maintaining, upgrading, and disposing of assets in the most cost-effective manner (including all costs, risks and performance attributes). It is also increasingly used in both the business world and public infrastructure sectors to ensure a coordinated approach to the optimisation of costs, risks, service/performance and sustainability. The international standard, ISO 55000, provides an introduction and requirements specification for a management system for asset management.
	Appointing Party	委任方	The "receiver of information concerning works, goods or services from a lead appointed party" refers to ISO 19650-1 (3.2.4). An appointing party might be a client, a designer, a contractor, or an asset operator/manager.

Abbreviation	Term	詞彙	Definition
	Appointed Party	獲委任方	The "provider of information concerning works, goods or services" refers to ISO 19650-1 (3.2.3).
API	Application Programming Interface	應用程式介面	An application programming interface (API) is a computing interface which defines interactions between multiple software intermediaries. It can also provide extension mechanisms so that users can extend existing functionality in various ways and to varying degrees.
AR	Augmented Reality	擴增實境	3D models combined with other technologies - allow users to experience virtual objects superimposed on top of physical objects or places. As opposed to Virtual Reality Simulation, Augmented Reality (AR) is only partial 'immersive' thus allowing images from the physical and virtual worlds to appear as one. AR is typically experienced through hand-held screens, wearables, holograms and projections.
BCF	BIM Collaboration Format	建築信息模擬協作格式	A schema used for exchanging information and model viewpoints between individuals irrespective of the software tools used. The Open BIM Collaboration Format (BCF) is typically used to highlight issues discovered during model reviews.
BEP (BIM PXP)	BIM Execution Plan	建築信息模擬執行計劃	Document to explain how the information modelling aspects of a contract will be carried out.
BIM	Building Information Modelling	建築信息模擬	Use of a shared digital representation of a built asset to facilitate design, construction and operation processes to form a reliable basis for decisions.
	BIM attribute	BIM 屬性	A piece of information forming a partial description of an object or entity, where entities and objects are synonyms, meaning items having a state, behavior and unique identity, that is, a thing we can think or talk about, such as a wall.
	BIM Coordinator	建築信息模擬協調員	A BIM Coordinator is BIM role combining model management, project information management and process management activities. Model management activities are technical in nature and focus on the generation and delivery of one or more model uses. Project information management activities focus on the inclusion / accuracy / detail of information as to meet contractual requirements. Process management activities focus on facilitating the relationship between project participants by assisting them to select collaboration workflows, delivery standards and communication protocols as best suited for each particular project, or project phase.
	BIM Manager	建築信息模擬經理	A BIM Role played by an individual or an organisation on behalf of the whole project team. The BIM Manager has many responsibilities which include: BIM facilitation, coordinating data-exchange activities, fulfilling pre-defined design specifications and delivery specifications, and overall model quality control.
	BIM Model	建築信息模型	It means the digital representation of the physical and functional characteristics, data, documentation and information of and related to the built asset to be delivered for the Project.
	BIM Modeller	建築信息模擬建模員	A BIM Modeller represents a skilled BIM software modelling person with good understanding of their specific design discipline (architectural, MEP or civil and structural etc.).
	BIM Object	BIM 物件 [BIM 元件]	It means a self-contained, uniquely identified object in a Model representing a building component or assembly within the Project as referred to in the CIC Production of BIM Object Guide – General Requirements.
BIM CDCP	Common Data Collaboration Platform for BIM	BIM 共用數據協作平台	BIM CDCP is a platform that enhances the effective use of BIM by ensuring that the BIM model serves as a single source of truth for collaboration throughout the entire project life cycle, including the asset management stage.
BIM QTO	BIM Quantity take-offs	BIM 工料估算	A model use representing how 3D models are used to calculate the quantity of furniture, fixtures and equipment or building materials for the purpose of generating cost estimates or Bills of Quantities.
	BIM Uses	BIM 應用 [BIM 用法]	It means the specific BIM Uses as listed in the Exchange Information Requirements and described in the CIC BIM Standards – General published by the Construction Industry Council.

Abbreviation	Term	詞彙	Definition
BMS	Building Management System	樓宇管理系統	Refer to "CCMS"
BoQ	Bills of Quantities	建築工料清單	A Bill of Quantities is a list of quantified items of work or services required for the completion of construction works with the quantities of the work or services stated in appropriate units of measurement and with materials, workmanship, quality and standard required for the work or services fully described. "Bills of Quantities" are usually given in plural since usually there are more than one bill in a set of Bills of Quantities and more than one item in a Bill of Quantities.
bSDD	buildingSMART Data Dictionary	buildingSMART 數據字典	buildingSMART Data Dictionary is an online service that hosts classifications and their properties, allowed values, units and translations
Building-SMART	buildingSMART	buildingSMART	An international organisation aiming to promote the exchange of interoperable, open and non-proprietary data between software applications used within the construction industry. buildingSMART is involved in the development of Industry Foundation Classes, buildingSMART Data Dictionary (bSDD) and the Information Delivery Manual (IDM).
CAVE	Cave Automatic Virtual Environment System	虛擬實境洞穴系統顯示	An immersive environment that allows users to interact with 3D models in a virtual space.
CCBC	CIC-Certified BIM Coordinator	建造業議會認可建築信息模擬協調員	Refer to CIC website https://www.bim.cic.hk/en/certification_and_accreditation/certification_introduction
CCBM	CIC-Certified BIM Manager	建造業議會認可建築信息模擬經理	Refer to CIC website https://www.bim.cic.hk/en/certification_and_accreditation/certification_introduction
CCMS	Central Control and Monitoring System	中央控制及監測系統	Central Control and Monitoring System (CCMS) or Building Management System (BMS) is a computer software program, usually configured in a hierarchical manner, to control, monitor and manage all the equipment installed in the building. This equipment can include heating, ventilation, cooling, security, and lighting. The monitoring facilities of a CCMS allow plant status, environmental conditioning and energy consumption etc. to be monitored and recorded. The data provides the building operator with full pictures of how the equipment is operated. This can often lead to the identification of problems and improvement on plant operation.
CDE	Common Data Environment	綜合數碼共用平台	It represents the centralised digital/electronic document management system which is used for multidisciplinary BIM collaboration, storing and exchange digital data, including but not limited to BIM models. The digital transmission processes follow well-defined authorisation and acceptance procedures in a secured and shared environment. (Remark: Full descriptions of CDE can be found in the CIC BIM Standards – General (Version 2.1 – 2021))
CFD	Computational Fluid Dynamics	計算流體動力學	A branch of fluid mechanics that uses numerical analysis and algorithms to solve problems involving fluid flows.
CIC	Construction Industry Council	建造業議會	The Construction Industry Council (CIC) is a statutory body established on 1 February 2007 after the enactment of the Construction Industry Council Ordinance on 24 May 2006. The main functions of the CIC are to convey the industry's needs and aspirations to HKSARG, as well as provide a communication channel for government to solicit advice on all construction-related matters.
CNC	Computer Numerical Control	電腦數值控制	Manufacturing processes driven by computer code. CNC systems automate manufacturing tasks across many types of machinery including plasma cutters, water jets and milling machines.
COBie	Construction Operation Building information exchange	建造與營運建築信息交換標準	Non-proprietary data format for the publication of a subset of building information models (BIM) focused on delivering asset data as distinct from geometric information.
	Delivery Team	交付團隊	It means the team led by the lead consultant or the lead contractor with other appointed parties for a particular project. A delivery team will consist of multiple task teams from within the lead consultant's/lead contractor's organisation and any appointed parties.

Abbreviation	Term	詞彙	Definition
CSDI	Common Spatial Data Infrastructure	共同空間數據基礎設施	A framework for integrating and sharing spatial data across different platforms and applications.
DfMA	Design for Manufacture and Assembly	裝配式設計	A design approach aims to ease of manufacture and efficiency of assembly of a product. With the increasing use of off-site prefabrication, the construction sectors have begun to adopt DfMA. By manufacturing construction components with the most-cost-effective materials and processes at off-site facilities and assembling them at reduced cost and minimised operations on-site, a construction project can be delivered with higher quality, lower cost and lesser time.
	Digital Twin	數碼分身	A set of digital assets – models, documents and data sets - that mirror a physical asset for part/whole of the asset life cycle. In the construction industry, a digital twin typically refers to a data-rich 3D model – of a building for example - that represents, reacts to, and can cause changes in the physical twin, the actual building. Through asset coupling, the connection between the two twins can be either (i) one-way or (ii) two-way, (a) synchronous or (b) asynchronous, depending on their coupling level. Higher coupling – through two-way connectedness of BIM models with live sensors, cameras, scanners and Building Management Systems - allows a twin to adjust itself according to the information received from the other.
DOC	Level of Documentation	文件等級	Level of Documentation is one of the three components of Level of Information Need framework (other being Geometrical Information and Alphanumeric Information), which defines the range and contents of documents required to describe an object, e.g.: non-editable drawings, specifications, manuals, sketches, photographs, etc.
EIR	Exchange Information Requirements	信息交換需求	"Information Requirements in relation to an Appointment" as referred to in ISO 19650-1 (3.3.6) generated by the Appointing Party. The EIR sets out the managerial, commercial, and technical aspects as to satisfy what was defined in Project Information Requirements and Asset Information Requirements
	Federated Model	組合模型 [合併模型 / 聯合模型]	It means a Model that links distinct component Models, tables, analysis and other data sources without losing their identity or integrity by being linked, such that any change to one component Model will not change another component Model.
FM	Facility Management	設施管理	The term Facility Management (FM) refers to the interdisciplinary activities performed during the Operation Phase of building, space or infrastructure. FM activities typically include operation, leasing occupancy, maintenance, cleaning, etc.
gbXML	The Green Building XML schema	綠色建築可擴充標示語言大綱	The Green Building XML schema (gbXML) is an open schema developed to facilitate transfer of building data stored in BIM to engineering analysis tools. gbXML is being integrated into a range of software CAD and engineering tools and supported by leading 3D BIM vendors. gbXML is streamlined to transfer building properties to and from engineering analysis tools to reduce the interoperability issues and eliminate plan take-off time.
GBDR	Government BIM Data Repository	政府建築信息模擬數據庫	An internal repository for storing and managing BIM data managed by the Government.
GIS	Geographic Information System	地理信息系统	The Geographic Information System (GIS) is a conceptualised framework that provides the ability to capture and analyse spatial and geographic data. GIS applications (or GIS apps) are computer-based tools that allow the user to create interactive queries (user-created searches), store and edit spatial and non-spatial data, analyse spatial information output, and visually share the results of these operations by presenting them as maps.
GPS	Global Positioning System	全球定位系統	GPS, or the Global Positioning System, is a global navigation satellite system that provides location, velocity and time synchronisation. You can find GPS systems in your car, your smartphone and your watch.
Hologram	Hologram	全息圖	An image that appears to be 3D and can be seen with the naked eye. Holography is the science and practice of making holograms, a photographic recording of a light field, rather than an image formed by a lens.
IDM	Information Delivery Manuals	信息交付手冊	Methodology to capture and specify processes and information flow during the lifecycle of a facility IDM is an ISO standard intended to "facilitate interoperability between software applications used in the construction process, to promote digital collaboration between actors in the construction process and to provide a basis for accurate, reliable, repeatable and high-quality information exchange" (ISO 29481-1:2010).
IDS	Information Delivery Specification	信息交付規範	A standard in development from buildingSMART for defining information requirements in a way that is easily read by humans and interpreted by computers.

Abbreviation	Term	詞彙	Definition
IFC	Industry Foundation Classes	行業基礎類別	An international specification for product data exchange and sharing for AEC/FM. IFC enables interoperability between the computer applications for AEC/FM. IFC is approved as ISO 16739.
	Information Manager	信息管理經理	The information manager is a procedural gate-keeper, policing the common data environment to ensure that it follows the agreed protocol and that the data is secure. They are not a BIM co-ordinator and have no design responsibility and no responsibility for clash detection or model coordination.
	ISO 19650-1	ISO 19650-1 標準	International standard for "Organization and digitization of information about buildings and civil engineering works, including building information modelling -- Information management using building information modelling: Concepts and principles (ISO 19650-1:2018)."
	ISO 19650-2	ISO 19650-2 標準	International standard for "Organization and digitization of information about buildings and civil engineering works, including building information modelling (BIM) — Information management using building information modelling — Part 2: Delivery phase of the assets (19650-2:2018)."
	ISO 19650-3	ISO 19650-3 標準	International standard for "Organization and digitization of information about buildings and civil engineering works, including building information modelling (BIM) — Information management using building information modelling — Part 3: Operational phase of the assets (ISO 19650-3:2020)."
	ISO 19650-5	ISO 19650-5 標準	International standard for "Organization and digitization of information about buildings and civil engineering works, including building information modelling (BIM) - Information management using building information modelling - Part 5: Security-minded approach to information management (ISO 19650-5:2020)."
	ISO/CD 19650-4	ISO 標準/ 委員會草案 19650-4	International standard for "Organization and digitization of information about buildings and civil engineering works, including building information modelling (BIM) — Information management using building information modelling — Part 4: Information exchange (ISO/CD 19650-4)."
	Laser Scanning	激光掃描	A process of generation of point cloud data of as-built structures, terrain and vegetation using a fixed, mobile or airborne 3D laser scanner.
LOA	Level of Accuracy	準確度	Specifies the accepted level of measurement accuracy for documenting built assets. The Level of Accuracy (LOA) includes a number of metrics: Measurement Accuracy (LOA10-LOA50), Validation (A, B or C) and Representation Accuracy (Standard Deviation) [USIBD]
LOD	Level of Development	建模發展等級	A BIM metric to identify what information to include in a model during the design and construction process. The LOD abbreviation refers to multiple terms, definitions, and numbering systems even within the <i>CIC BIM Standards - General</i> .
LOD-G	Level of Development – Graphics / Level of Graphics	建模發展等級-圖形	LOD-G is one of the components of Level of Information Need related to the geometrical representation of a model element.
LOD-G+	Customised level of Development – Graphics / Level of Graphics	自訂建模發展等級-圖形	LOD-G+ refers to a customisable level of graphical representation that allows project teams and stakeholders to create tailored definitions based on unique project requirements, industry standards, or specific use cases. This concept is designed to accommodate the diverse needs of various disciplines and project types, ensuring that all relevant graphical information can be effectively communicated and utilised.
LOD-I	Level of Development – Information / Level of Information	建模發展等級-信息	LOD-I is one of the components of Level of Information Need related to the description of non-graphical information in a model element.
LOIN	Level of Information Need	信息需求程度	Framework which defines the extent and granularity of information.
LLM	Large Language Model	大型語言模型	A type of artificial intelligence model that is trained on vast amounts of text data to understand and generate human-like language, enabling applications such as natural language processing, text generation, and conversational agents.

Abbreviation	Term	詞彙	Definition
MEP	Mechanical, Electrical and Plumbing	機械、電氣及管道	Mechanical, electrical and plumbing (MEP), also called Building Services, refers to these aspects of building design and construction.
MiC	Modular Integrated Construction	「組裝合成」建築法	Modular Integrated Construction (MiC) is an innovative construction method. By adopting the concept of “factory assembly followed by on-site installation”. BIM makes MiC a feasible solution as it provides 3D model for team coordination, engineering analysis, simulation, prefabrication / manufacturing in factory and assembly on site. (Also refer: http://www.cic.hk/eng/main/mic/whatsmic/aboutmic/)
MiMEP	Multi-trade Integrated Mechanical, Electrical and Plumbing	機電裝備合成法	MiMEP refers to the integration of multi-trade building services components, into a single volumetric assembly of prefabricated modules, manufactured off-site in a workshop, then transported to the site for connection of modules to complete various trades of building services installations to minimise on-site works.
MIDP	Master Information Delivery Plan	主信息交付計劃	A plan listing all the information deliverables of a project including models, drawings, specifications, equipment, schedules and Room Data Sheets. A Master Information Delivery Plan (MIDP) identifies when project information is to be prepared, by whom. An MIDP incorporates all relevant Task Team Information Delivery Plans (TIDP)s and a updated/detailed responsibility matrix.
	Model Author	模型建立者 [模型創作者 / 模型作者]	It means the Project Party responsible for developing the content of a specific Model or Object for the Project.
MR	Mixed Reality	混合實境	A term combining both Virtual Reality (VR) and Augmented Reality (AR). While VR experience allows the users to immerse themselves in a digital environment completely detached from the physical world, AR enables the digital content on top of the physical world and MR facilitates the digital content to be interactive with the physical world.
MVD	Model View Definition	模型視圖定義	It is a subset of the IFC schema to describe information exchange for a specific use or workflow that is needed to satisfy one or many Exchange Requirements
	OmniClass®	建築信息分類編碼	OmniClass® is a classification system for organising library materials, product literature and project information. OmniClass® has 15 'classification tables'; some of which are incorporated from other classification systems including: MasterFormat (a classification for 'work results') and UniFormat (a classification of 'construction elements'). OmniClass® is an open standard developed by the Construction Specifications Institute (CSI).
OIR	Organisation Information Requirements	組織信息需求	Data and information required to achieve the organisation's objectives.
	openBIM	開放式建築信息模擬	The term generically refers to the process of exchanging non-proprietary BIM models and other data. openBIM is a "universal approach to the collaborative design, realisation and operation of buildings based on open standards and workflows.
	Photogrammetry	攝影測量法	An automatic or semi-automatic process of generating 3D models through photography and image analyses.
PIM	Project Information Model	項目信息模型	Information model developed during the design and production and construction phase of a project, consisting of graphical information, non-graphical information and documentation defining the delivered project.
	Point Cloud	點雲	A set of data points in 3D which are typically created by 3D laser scanners to capture an object, space or a whole building. Point clouds can be transformed into meshes, surfaces and even 3D objects using specialised tools. Point cloud files can be imported into most BIM software tools to as-built models or model parts.
RDS	Room Data Sheet	房間數據表	Room Data Sheet (RDS)s are 2D drawings detailing the facility operator's requirements (room layout, furniture, fittings, equipment, and surface finishes) of each room type within a large facility. RDSs are typically developed for projects that include numerous identical rooms (e.g. hospitals and large hotels).
RFID	Radio Frequency Identification	射頻識別	A technology that uses radio waves to transfer data from an electronic tag or label, attached to an object, through a reader for the purpose of identifying and tracking the object.

Abbreviation	Term	詞彙	Definition
RM	Responsibility Matrix	責任矩陣	A table setting out the responsibilities of each discipline for model or information production according to pre-defined project stages. The Responsibility Matrix (RM) is typically first included - in low detail - within the Exchange Information Requirements and then - in higher detail - within the Master Information Delivery Plan (MIDP).
SCADA	Supervisory Control And Data Acquisition	監督控制及數據收集	Supervisory control and data acquisition (SCADA) is a control system architecture comprising computers, networked data communications and graphical user interfaces for high-level process supervisory management, while also comprising other peripheral devices like programmable logic controllers and discrete proportional-integral-derivative controllers to interface with process plant or machinery. The use of SCADA has been considered also for management and operations of project-driven-process in construction.
SSSS	Smart Site Safety System	安全智慧工地系統	A technology-driven system designed to enhance safety on construction sites through the use of sensors, data analytics, and real-time monitoring to prevent accidents and ensure compliance with safety regulations.
TIDP	Task Information Delivery Plan	任務信息交付計劃	The Task Information Delivery Plan (TIDP) is a schedule of information containers and delivery dates, for a specific task team.
	Task Team	任務團隊 [任務組]	It means a team of individuals assembled by the Appointed Party or other Project Parties to perform a specific task, normally for a particular discipline, e.g. architectural, structural, mechanical, electrical, surveying, interior design etc.
UU	Underground Utilities	地下公用設施	Underground Utilities means any below ground line, structure, facility or installation used by a utility or service provider including, but not limited to, telephone company lines; cable television lines; internet lines; sewer lines and water lines, including individual sewer and water service lines; stormwater lines; gas lines; electrical lines; and traffic signal lines.
VDC	Virtual Design and Construction	虛擬設計與建造	VDC is a combination of new technologies with an adequate work and management scheme, supporting people working together on the project, in an integrated and simultaneous way. The scheme is focused on achieving the project's objectives, which should help the client to achieve their goals while collecting data and tracking workflow progress.
VR	Virtual Reality	虛擬實境	3D models are part of an immersive environment where users experience simulated places, objects and processes. As opposed to augmented reality simulation, VR may require full 'immersion' within multi-projection rooms and/or through stereoscopic goggles and other specialised gear.
WIP (when used in CDE)	Work in progress	工作進行中	It refers to a state that is used for information while it is being developed by its task team. An information container in this state should not be visible or accessible to any other task team. This is particularly important if a CDE solution is implemented through a shared system, for example a shared server or web-portal.
XML	eXtensible Markup Language	可擴充標示語言	A language for defining and exchanging structured, computer interpretable information. It provides a method for both the definition of information, and the encoding of data based on the definition into an exchange format.

Acknowledgement

1. Development Bureau
2. ArchSD (Architectural Services Department)
3. CEDD (Civil Engineering and Development Department)
4. DSD (Drainage Services Department)
5. EMSD (Electrical and Mechanical Services Department)
6. WSD (Water Supplies Department)
7. HyD (Highways Department)
8. BIM Dictionary (<https://bimdictionary.com/>)
9. MTR Corporation Limited
10. The Hong Kong Institute of Surveyors

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