



**EVERYTHING INFRASTRUCTURE &
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2 - 4 SEPTEMBER 2019 , 11:00 - 19:00 DAILY | EGYPT INTERNATIONAL EXHIBITION CENTER

Understanding in Depth Egypt BIM Code

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&

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Who We Are? Dar Al-Handasah

Founded by the late Mr. Kamal Al.Shair, Dar Al-Handasah is one of the leading **multidisciplinary engineering consultant** that provide planning, design, management and consultancy for the world's most important and exciting projects.

Dar has worked with more than **950 clients** from over **63 countries** around the globe.

With a team of **+9,500 staff members**, we operate in **40 offices** in the Middle East, Africa, Asia, and Europe. Our five principal design centers are located in **Beirut, Cairo, London, Pune, and Amman**.



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Who We Are? Dar BIM Unit



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In the light of Dar's **migration** from CAD into BIM, Dar has constructed an independent **BIM Unit** to lead this transition.

Dar BIM Unit consists of **43 Architects and Engineers** distributed all over Dar design offices to ensure continuous Research & development, and VDC services.

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Agenda

- BIM Introduction
- BIM Standard History
- Main Figures & Terminologies in “Egypt BIM Standard”

Figures

- BIM Maturity Levels Through “BIM Wedge”
- Project Information Delivery Cycle
- Common Data Environment “CDE”
- Information Management Process “IMP”
- Relation between AIM and other systems
- BIM Execution plan Procedures

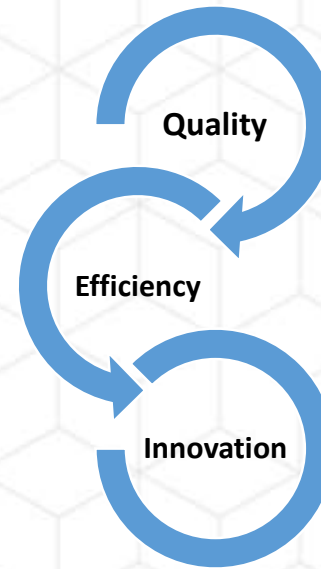
What is BIM?



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BIM or Building Information Modelling is a process for creating and managing information on a construction project across the project lifecycle. *(Source: NBS)*

When properly implemented;



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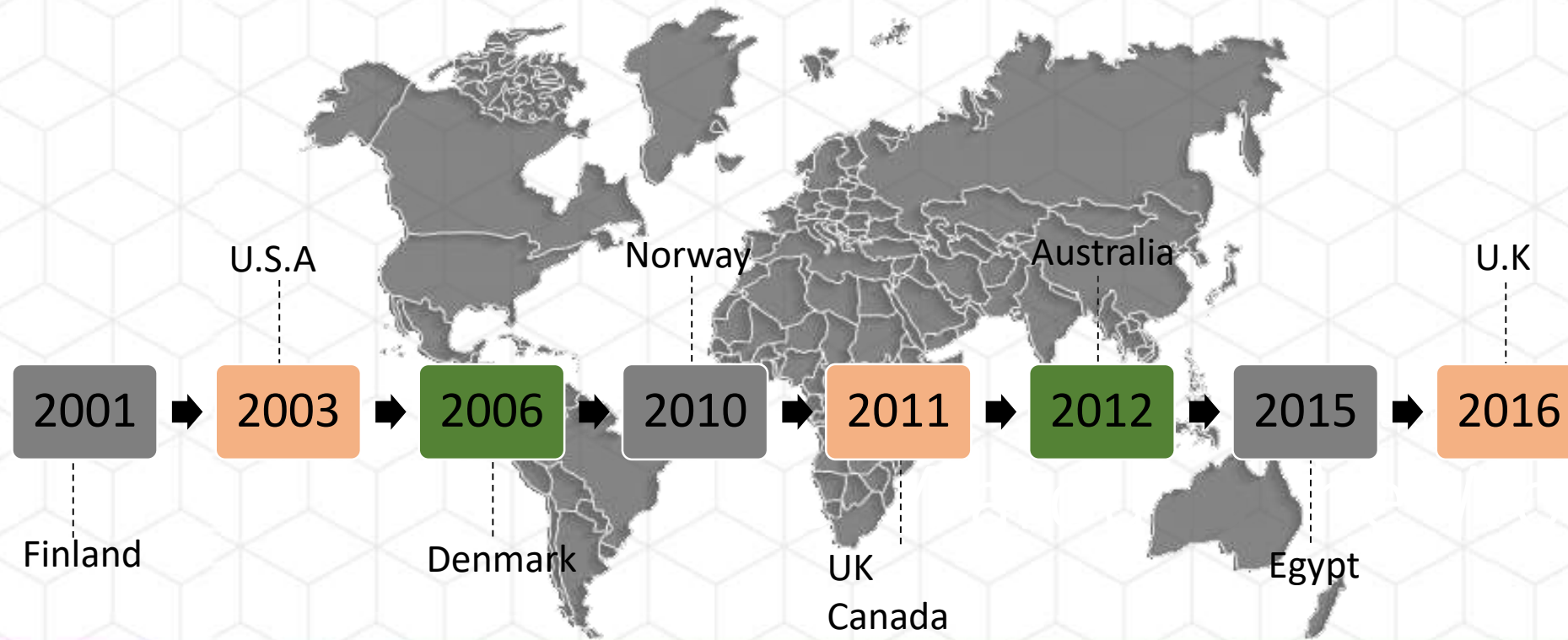
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BIM Standard History







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Lead Or Follow



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UK BIM Standards



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PAS 1192-6:2018

Specification for collaborative sharing and use of structured Health and Safety information using BIM



BS 1192-4:2014



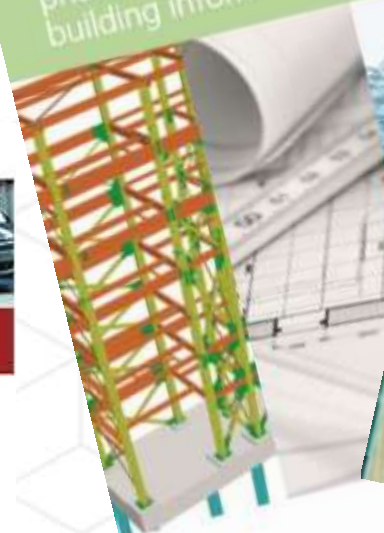
BSI Standards Publication

Collaborative production of information

Part 4: Fulfilling employer's information exchange requirements using COBie – Code of practice

PAS 1192-2:2013
Incorporating Corrigendum No. 1

Specification for information management for the capital/delivery phase of construction projects using building information modelling



PAS 1192-5:2015

Specification for security-minded building information modelling, digital built environments and smart asset management



PAS 1192-3:2014

Specification for information management for the operational phase of assets using building information modelling



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List of Figures



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The Egyptian Code for Building Information Modeling (BIM)

LIST OF FIGURES

Figure 1: Project Information Delivery.....	2
Figure 2: Adjusted BIM Maturity Levels for the Egyptian Construction Sector	4
Figure 3: Structure of Common Data Environment (CDE).....	10
Figure 4: Information Management Process.....	28
Figure 5: Relations between AIM and other systems	31
Figure 6: BIM Execution Plan Procedures	34

Ref. : Egypt Code for BIM

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BIM Maturity Levels

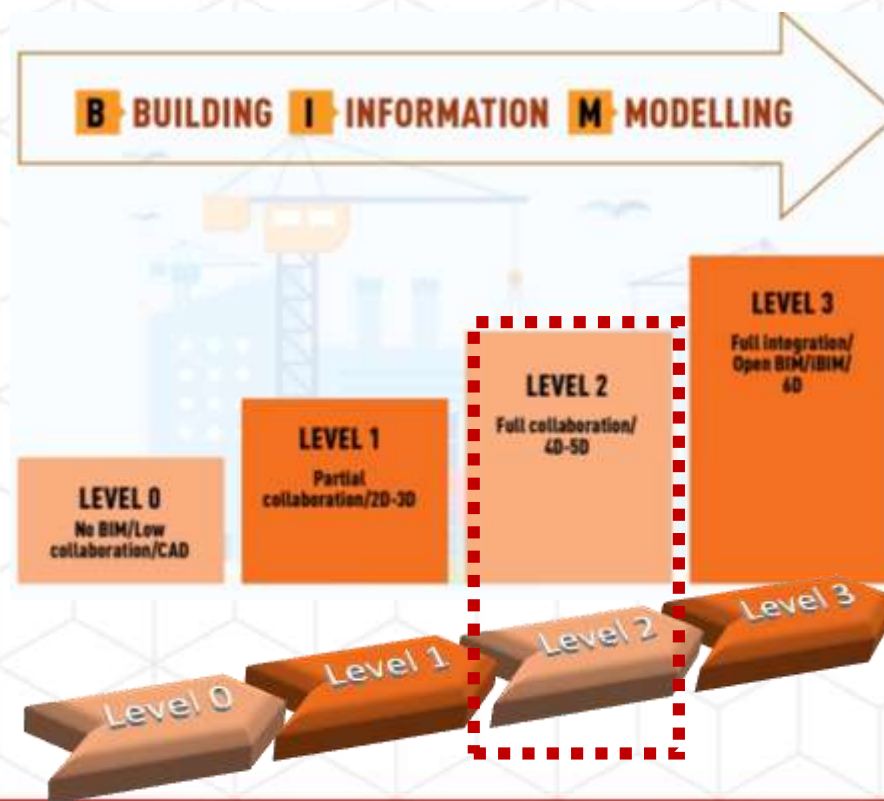
There are currently Four levels of BIM :

Level 0

Level 1

Level 2

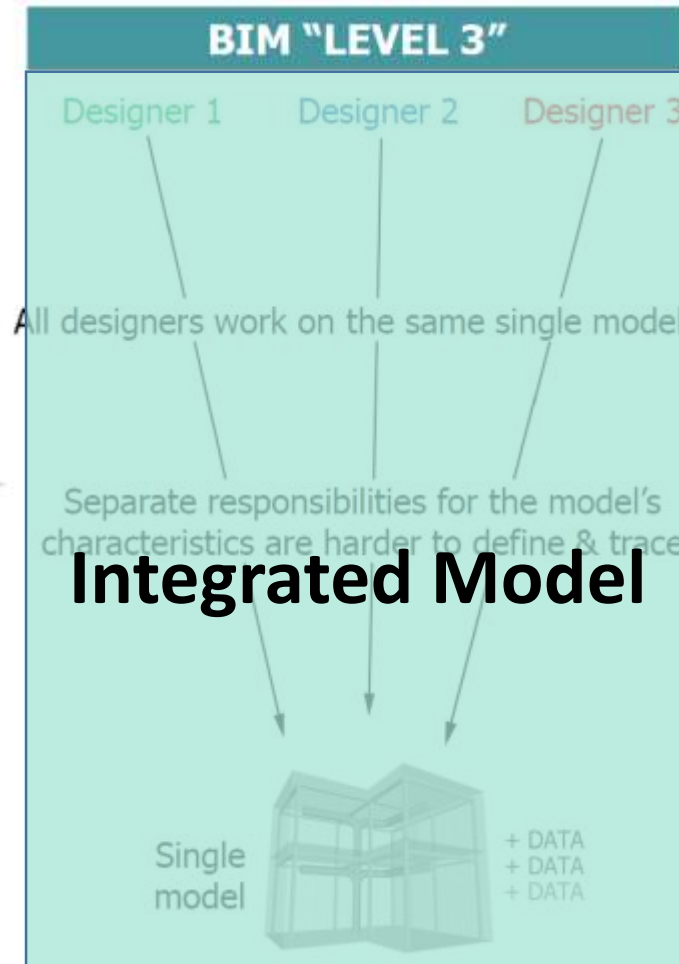
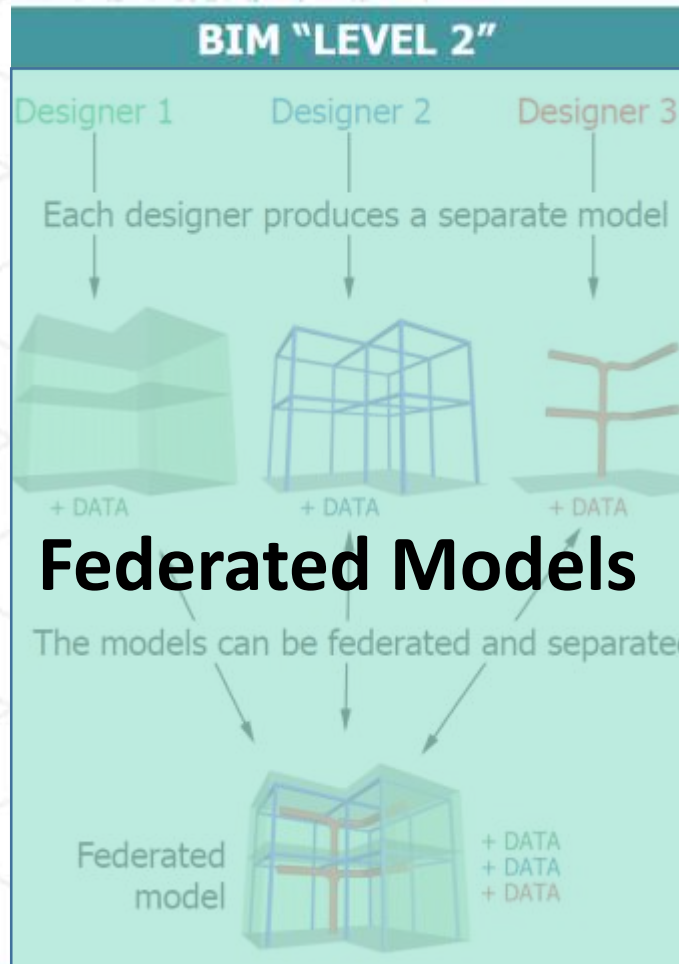
Level 3



BIM Maturity Levels



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Terminologies



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EIR

OIR

AIR

CAPEX

OPEX

BEP

TIDP

MIDP

AIM

PIM

CDE

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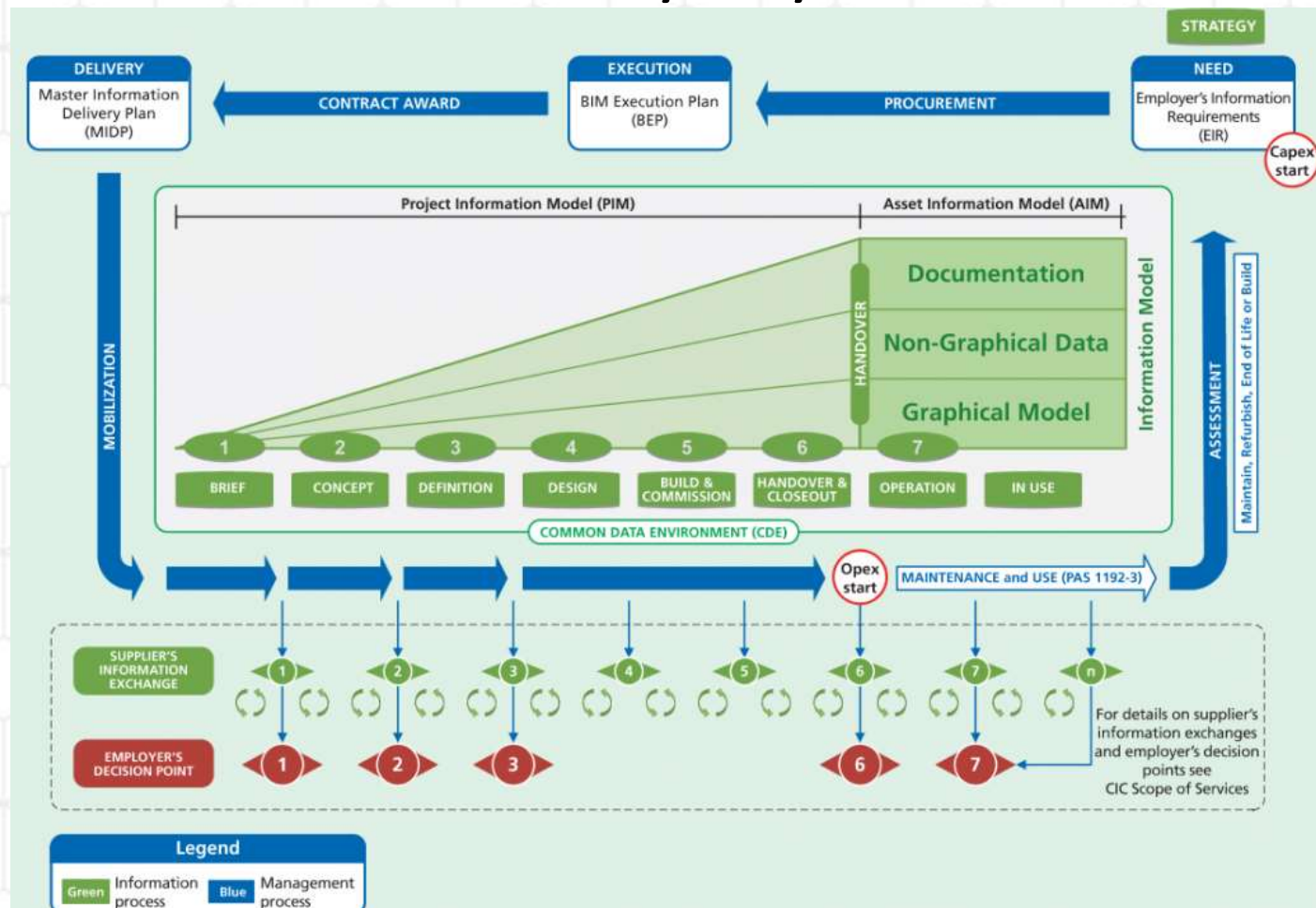
List of Figures

The Egyptian Code for Building Information Modeling (BIM)

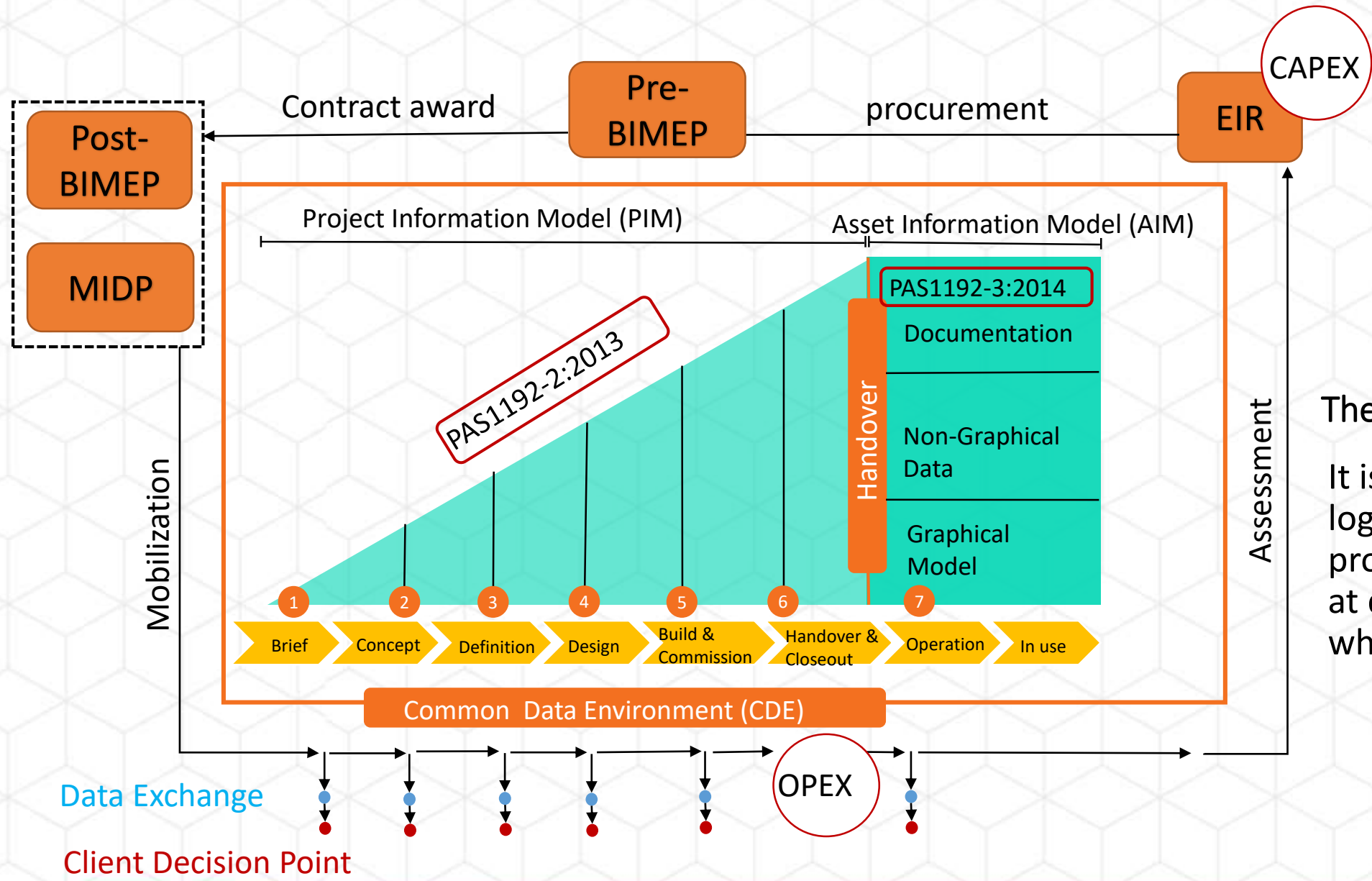
LIST OF FIGURES

Figure 1: Project Information Delivery.....	2
Figure 2: Adjusted BIM Maturity Levels for the Egyptian Construction Sector	4
Figure 3: Structure of Common Data Environment (CDE).....	10
Figure 4: Information Management Process.....	28
Figure 5: Relations between AIM and other systems	31
Figure 6: BIM Execution Plan Procedures	34

The Information Delivery Cycle



Ref. : PAS 1192-2:2013 – fig.2



The Information Delivery Cycle

It is a cycle that provides a logical framework for the production of information at discrete stages of the whole building lifecycle.

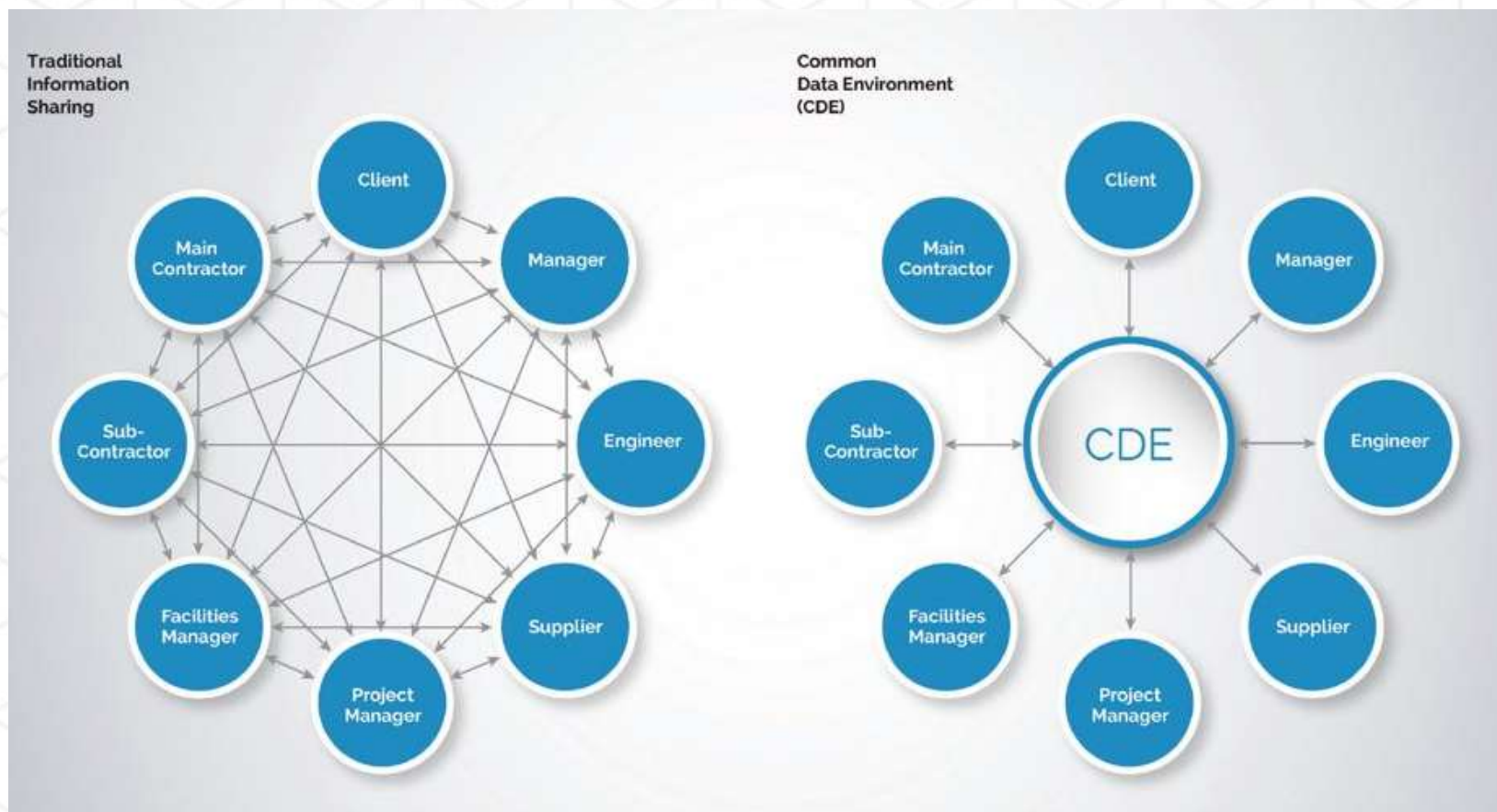
List of Figures

The Egyptian Code for Building Information Modeling (BIM)

LIST OF FIGURES

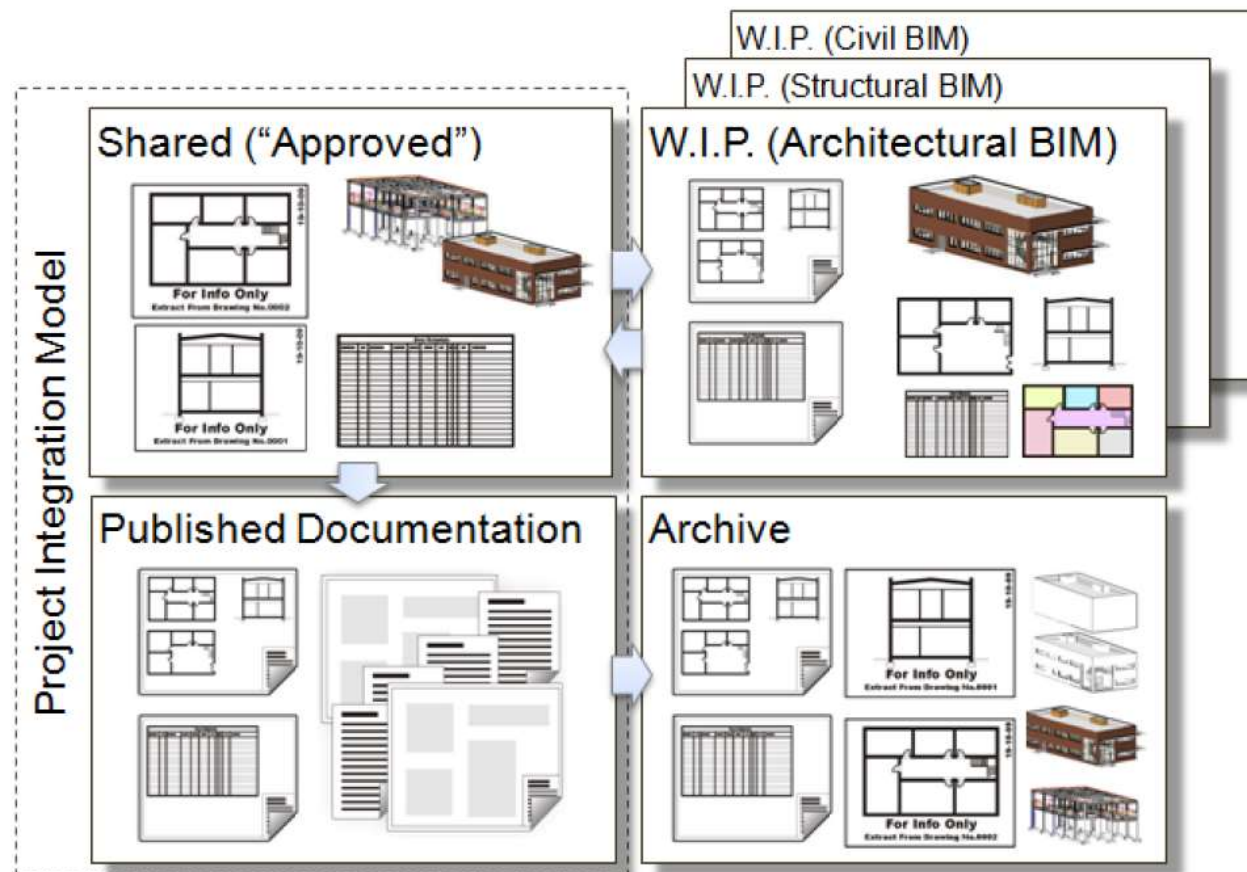
Figure 1: Project Information Delivery.....	2
Figure 2: Adjusted BIM Maturity Levels for the Egyptian Construction Sector	4
Figure 3: Structure of Common Data Environment (CDE).....	10
Figure 4: Information Management Process.....	28
Figure 5: Relations between AIM and other systems	31
Figure 6: BIM Execution Plan Procedures	34

Common Data Environment (CDE)



It is a single source of information used to collect, manage and disseminate documentation, the graphical model and non-graphical **data** for the whole project team (i.e. all project information whether created in a BIM **environment** or in a conventional **data** format).

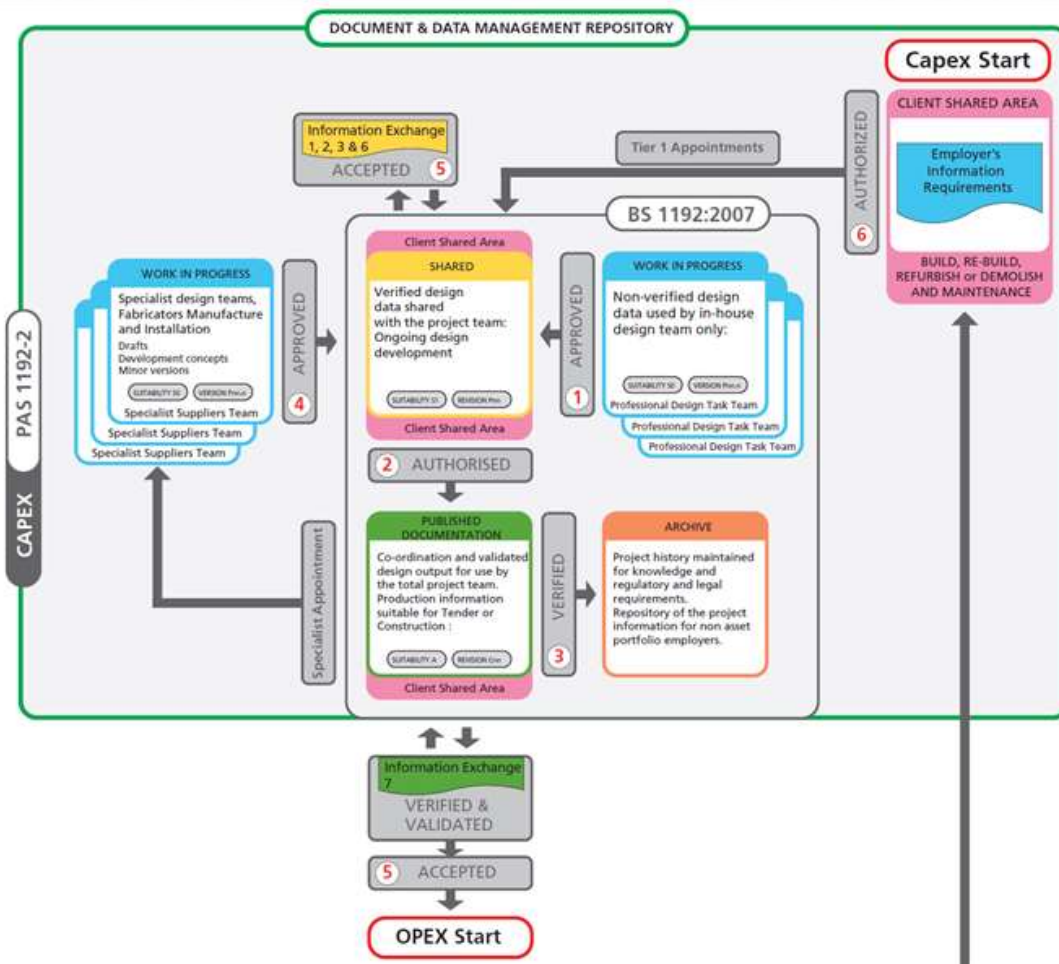
Common Data Environment (CDE)



Ref. : PAS 1192-2:2013 – fig.15

Common Data Environment

Common Data Environment (CDE)



Ref. : PAS 1192-2:2013 – fig.15

List of Figures

The Egyptian Code for Building Information Modeling (BIM)

LIST OF FIGURES

Figure 1: Project Information Delivery.....	2
Figure 2: Adjusted BIM Maturity Levels for the Egyptian Construction Sector	4
Figure 3: Structure of Common Data Environment (CDE).....	10
Figure 4: Information Management Process.....	28
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Asset Information Management Process



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It is a process which can be implemented & maintained through the organization which is responsible for operating and maintain an **“Asset”** .

The **“IMP”** is covering the life cycle of an asset starting from the **“Handover”** till the **“operation”** **“maintenance”** **“Demolition”**.

The **“IMP”** operates satisfying the **“OIR”** using **“AIM”**

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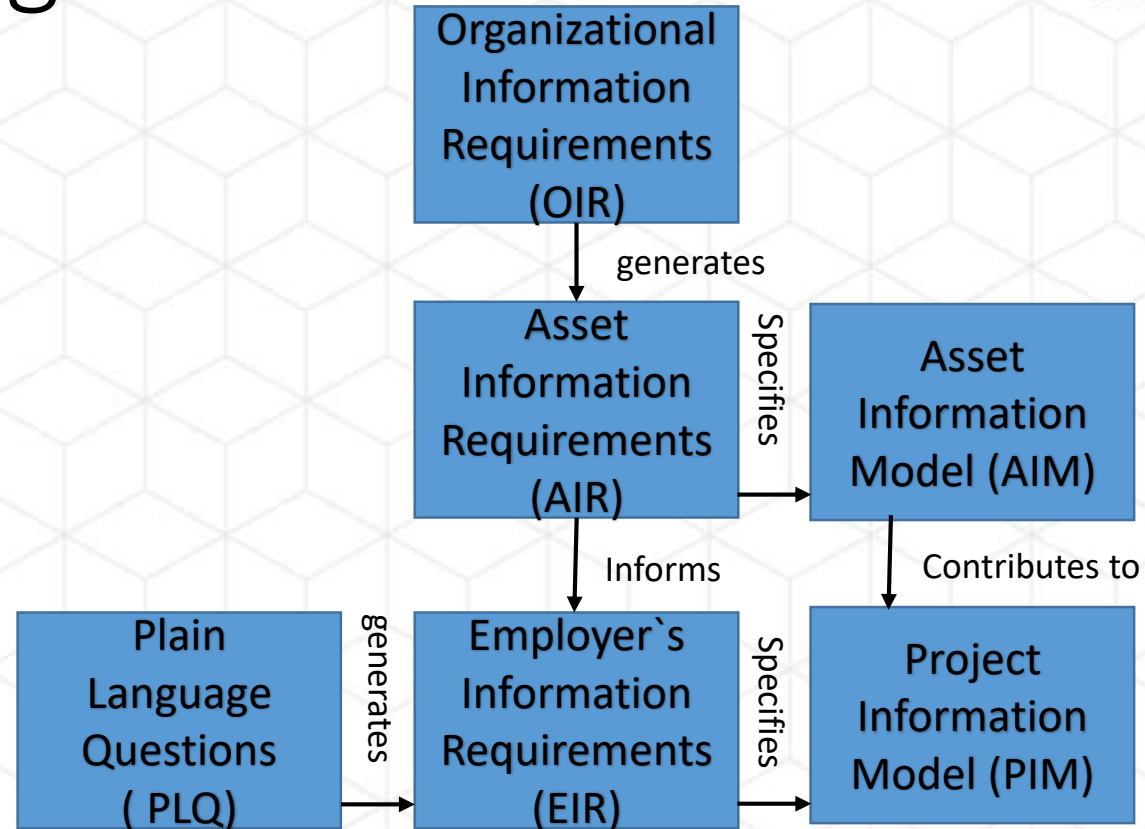
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Relationship between elements of Information Management



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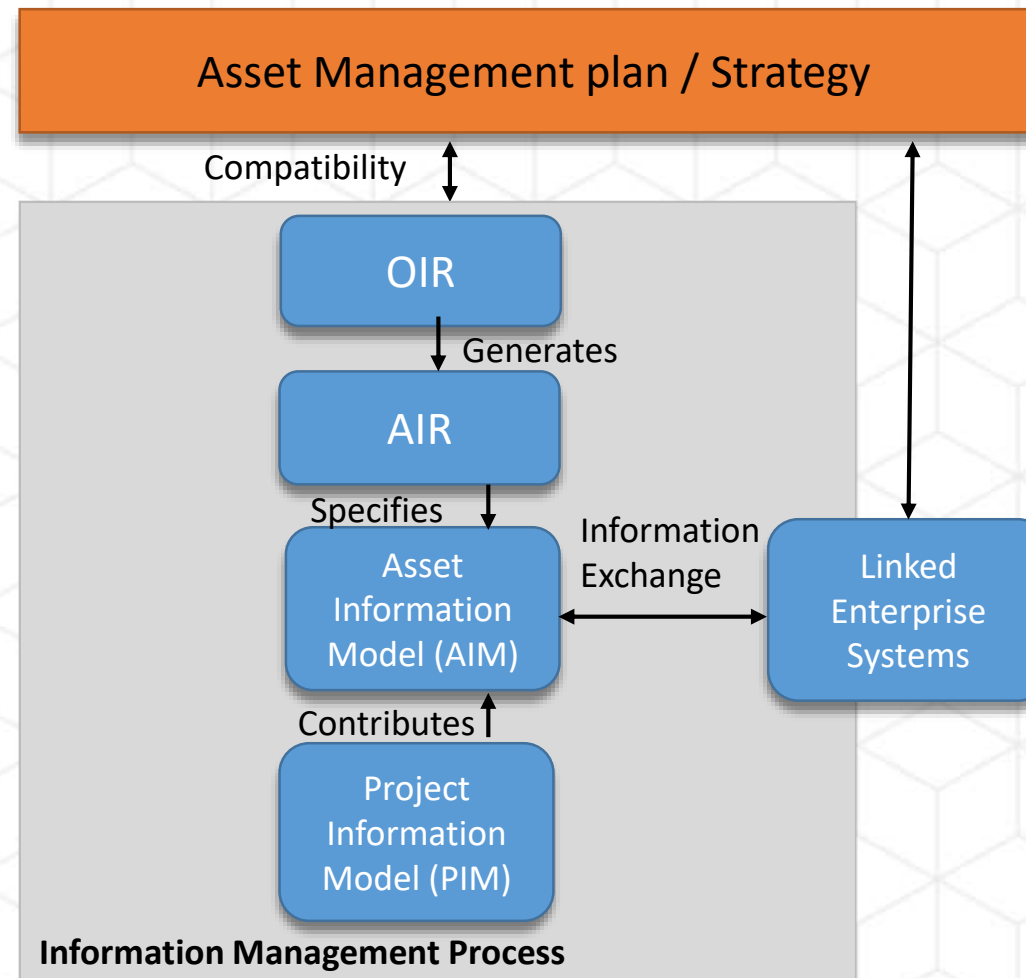


Ref. : Relationship between elements of information management as per PAS 1192-3 2014 , fig.4

Asset Information Process Map







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Ref. : PAS 1192-3:2014 – fig.5

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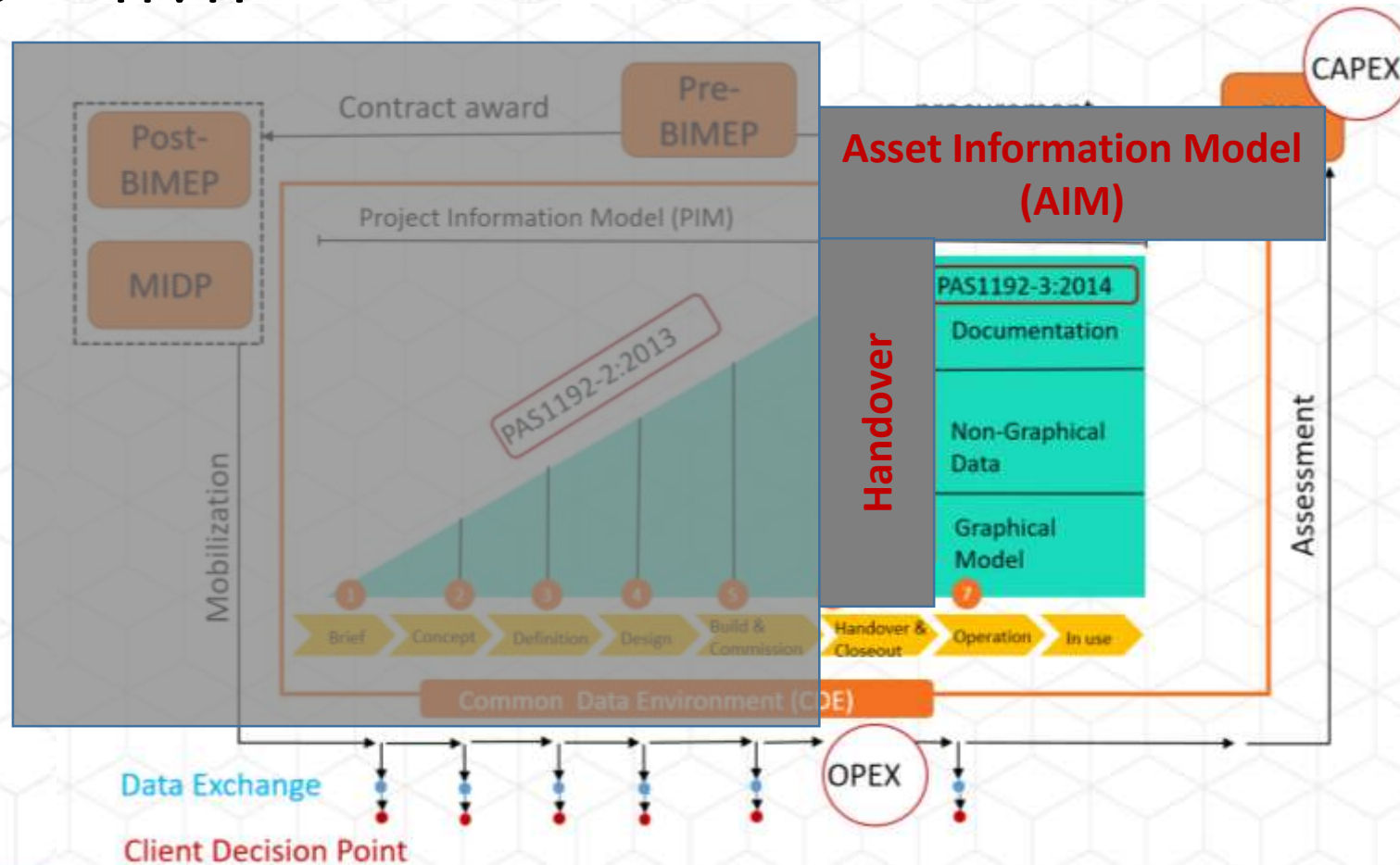
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Asset Information Management Process "IMP"






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BIM Execution Plan Procedures



Ref. : Egypt BIM Standard , fig.6

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