





## **Integrated Project Delivery**

I – Objectives, Context and Terminology

Aveiro/Porto, 20 of june 2017















## Index

1. Objective

2. Contents

3. Terms and Definitions









## 1. Objective

Recognize the main components of Integrated Project Delivery

Understand IPD as a global framework;

Awareness of the implications of its implementation as well as the different difficulties in what relates to its components;

Agent's requirements and commitment;

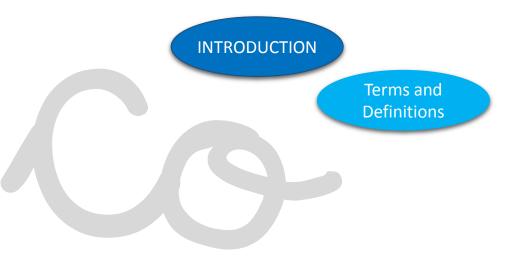
The evolution of IPD and trends towards a specific type of procedure;

Benefits of IPD for the industry.







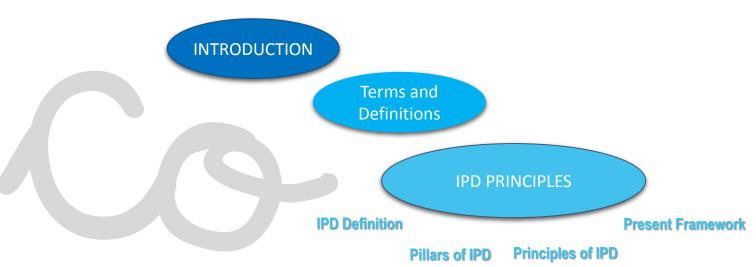










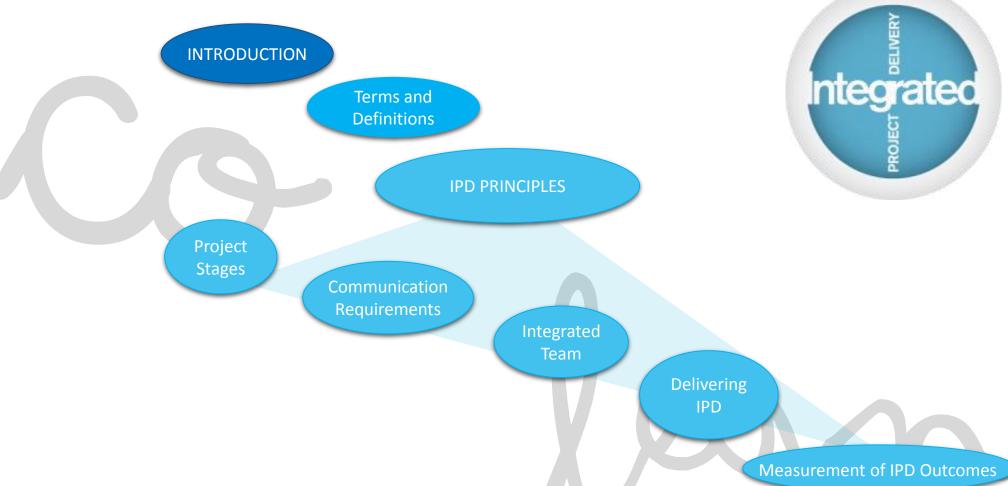






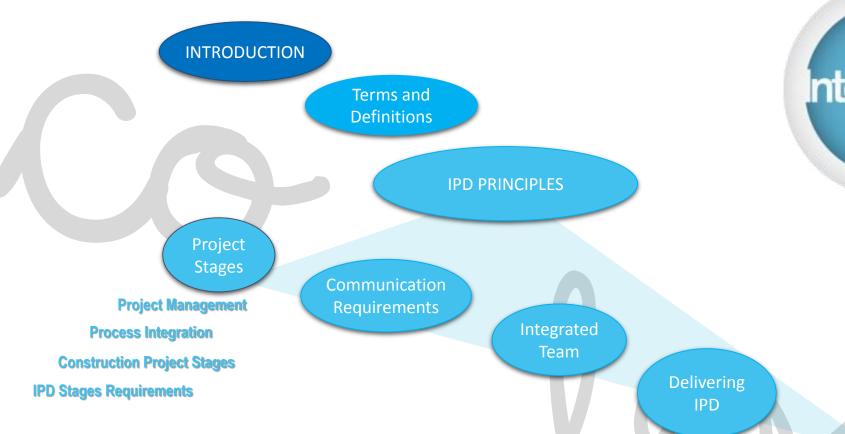














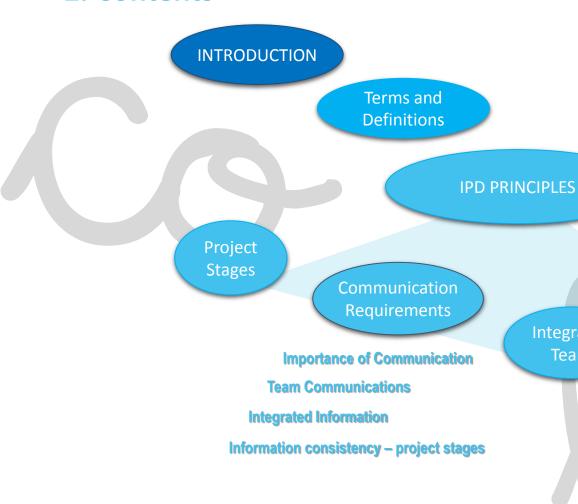
Measurement of IPD Outcomes





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#### 2. Contents



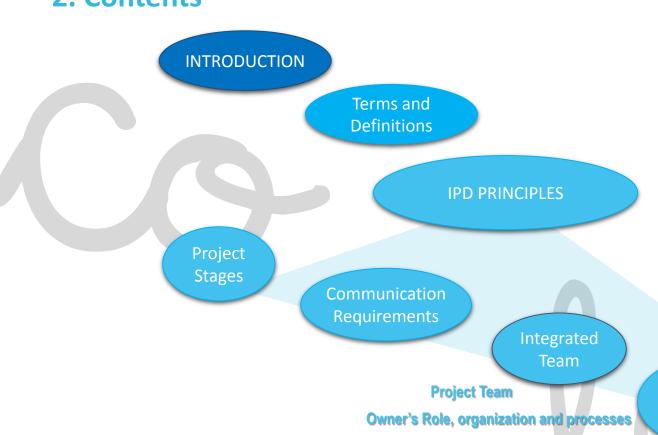
Integrated

Delivering **IPD** 

Measurement of IPD Outcomes







**Integrated Organization** 

**Common obstacles** 

Tools for engagement, roles, responsibilities

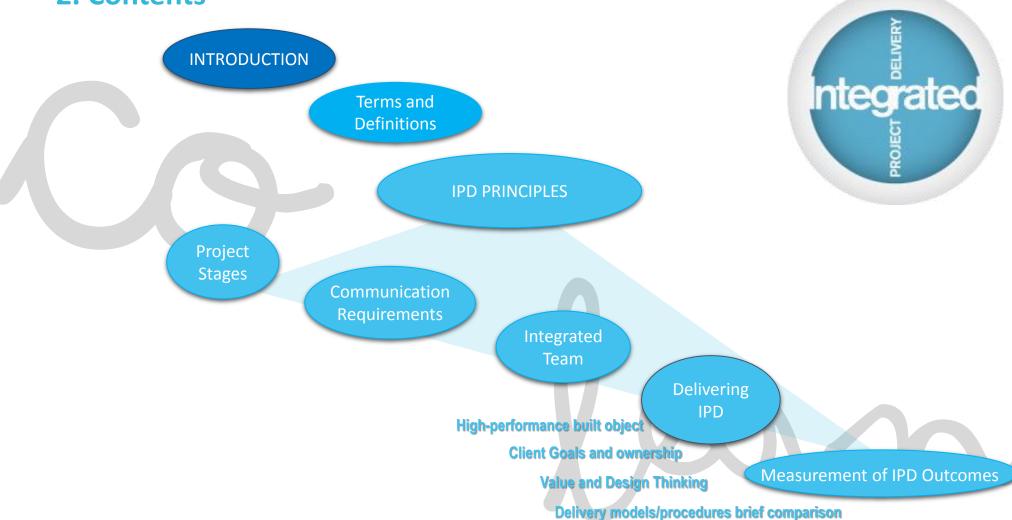


Delivering IPD

Measurement of IPD Outcomes



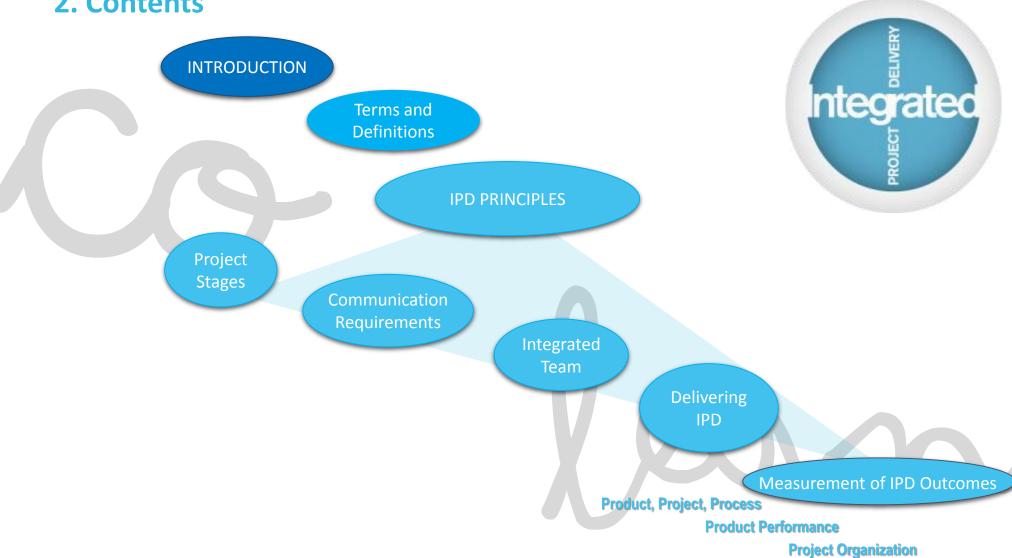








**Process Metrics** 







Client Opiect Ala

Procedure Facility stakeholder

**Project life cycle** 

Integrated

# **Integrated Project Delivery**

Procurement

Users es BIM actor & RIBA

**Design Team** 

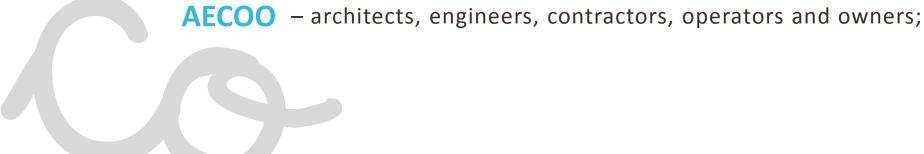
Life Cycle

**Project Team** 

Owner
Project
Operator







AIA - American Institute of Architects;

RIBA - Royal Institute of British Architects;





# Agent stakeholder actor

- person or organization or an organizational unit (such as a department, team, etc.) that can affect, be affected by, or perceive themselves to be affected by any aspect of the project/construction process (definition combined with ISO 21500 and ISO 29481-1);

**Stage** – division of a standardized process map for the acquisition of a facility, at some of which the requirements can be delivered (PAS 1192-2:2013);

**Built Object** 

 physical construction result (3.4.6) intended to serve a function or user activity (adapted from ISO 12006-2:2015);





**Client** – person or organization that requires a building to be provided, altered or extended and is responsible for initiating and approving the brief (ISO 15686-1);

Users – person, organization or animal for which a building is designed (including building owner, manager and occupants) (ISO 15686-1);

Owner – individual or organization owning or procuring an asset/facility (BS 8536-1:2015);

Designer – person or organization responsible for stating the form and specification of a building or parts of a building (ISO 15686-1);

**Operator** – organization responsible for the day-to-day operation of an asset/facility (BS 8536-1:2015);





Project - unique process, consisting of a set of coordinated and controlled activities (3.1) with start and finish dates, undertaken to achieve an objective conforming to specific requirements, including the constraints of time, cost and resources (ISO 9000);

> Project Team - person or organization involved on the process of delivering a built object/facility;

**Design Team** – person or organization responsible for stating the form and specification of a building or parts of a building (ISO 15686-1);





**Procedure** – is a structured way of performing procurement to consult the market for the purchase of these goods and services. A procurement procedure leads to the conclusion of a public contract (Eurojust).

#### **Procurement**

- activity of acquiring goods (3.7) or services (3.23) from suppliers (3.30). The procurement process considers the whole cycle from identification of needs through to the end of a services contract or the end of the life of goods, including disposal. Sourcing is a part of the procurement process that includes planning, defining specifications (3.26) and selecting suppliers. (ISO 20400:217);

 collection of assets which is built, installed or established to serve an entity's needs (ISO/DIS 18480-1);





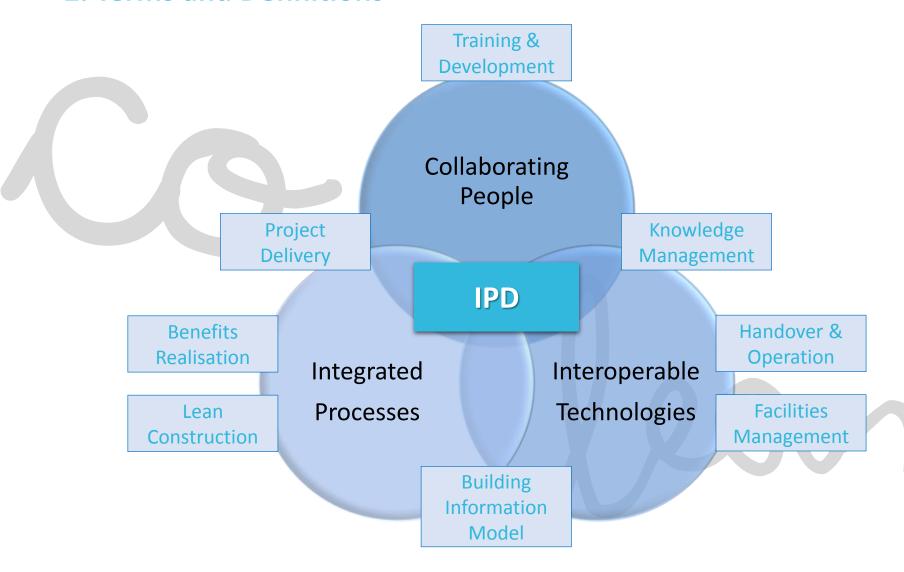
BIV - Building (construction) Information Model - shared digital representation of physical and functional characteristics of any built object, including buildings, bridges, roads, process plant. It may form the common basis for decisions and may form the contractual point of reference, across one or more stages in the life cycle. (Definition combined with ISO 29481-1 and ISO/TS 12911);

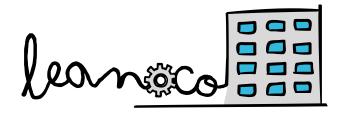
**Life Cycle** – consecutive and interlinked stages of the object under consideration; stages and activities spanning the life of the system from the definition of its requirements to the termination of its use, covering its conception, development, operation, maintenance support and disposal (ISO 15685-5:2008 and adapted from ISO 14040 combined with IEC 61508 and ISO/IEC 15288:2008 and ISO/TR 18529);

Project life cycle - defined set of stages from the start to the end of the project/construction process (ISO 21500 and ISO 12006-2);











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