

International Arrivals Facility Project Delivery

Big Picture Issues

- Budget/Cost
 - Budget Confidence / Certainty
 - Cost Commitments / Risk
 - Cost Control
- Fast Track
 - i.e. overlap of design and construction phases
- Maintaining design quality using Design Build

Timeline / Process Questions

- Budget / Cost
 - What is the progression of committed costs?
 - What is the point of no return? Off ramps?
 - When/how is the budget established?
 - How are costs controlled?
 - When is the actual cost known?
- When is the Design Builder engaged
 - What is the contractual commitment?
 - When is the point of no return?
- How far along will the design be when construction starts?
- What are the commission authorization/decision points?

Project Delivery Methods

- Fundamentals of successful project management are common to all delivery methodologies.
- Challenges posed by the traditional Design-Bid-Build method have led to interest in alternative delivery methods .
- The industry shift to these alternatives, including Design Build, is because they have proven to be better solutions for Owners for many types of projects.

Design Build

Design Build (“DB”) is the consolidation of design and construction under one contract.

Benefits of DB include:

- Single point of accountability
- Ability to compress schedule
- Integrated holistic process
- Shift of risks from Owner to Design Builder starts at beginning of design

Lump Sum DB vs. Progressive DB

Lump Sum Design-Build (LSDB)

- Contract is awarded on fixed price based on Owner furnished partial design.

Progressive Design Build (PDB)

- Design Builder and Owner collaborate to design to Owner's validated budget. Guaranteed Maximum Price (GMP) is established later in design process.

Process Overview

**Initiate
Program
Development
Process**

**Quantify Facility
Performance
Requirements**

**Translate
Performance
Requirements
into Project
Definition**

**Develop
Conceptual
Design Based on
Project
Definition**

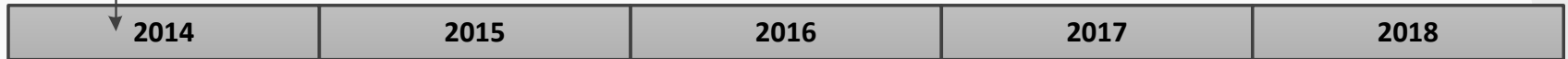
**Proceed with
Stages of
Design
Development**

**Procure
Subcontracts
& Start
Construction**

**Complete
Construction**

International Arrivals Facility (IAF) Program General Program Timeline

Today



Initiation

Program Definition/Requirements

Procurement

◆ Select DB

■ DB Negotiation

◆ DB Award

Validation Phase

Design

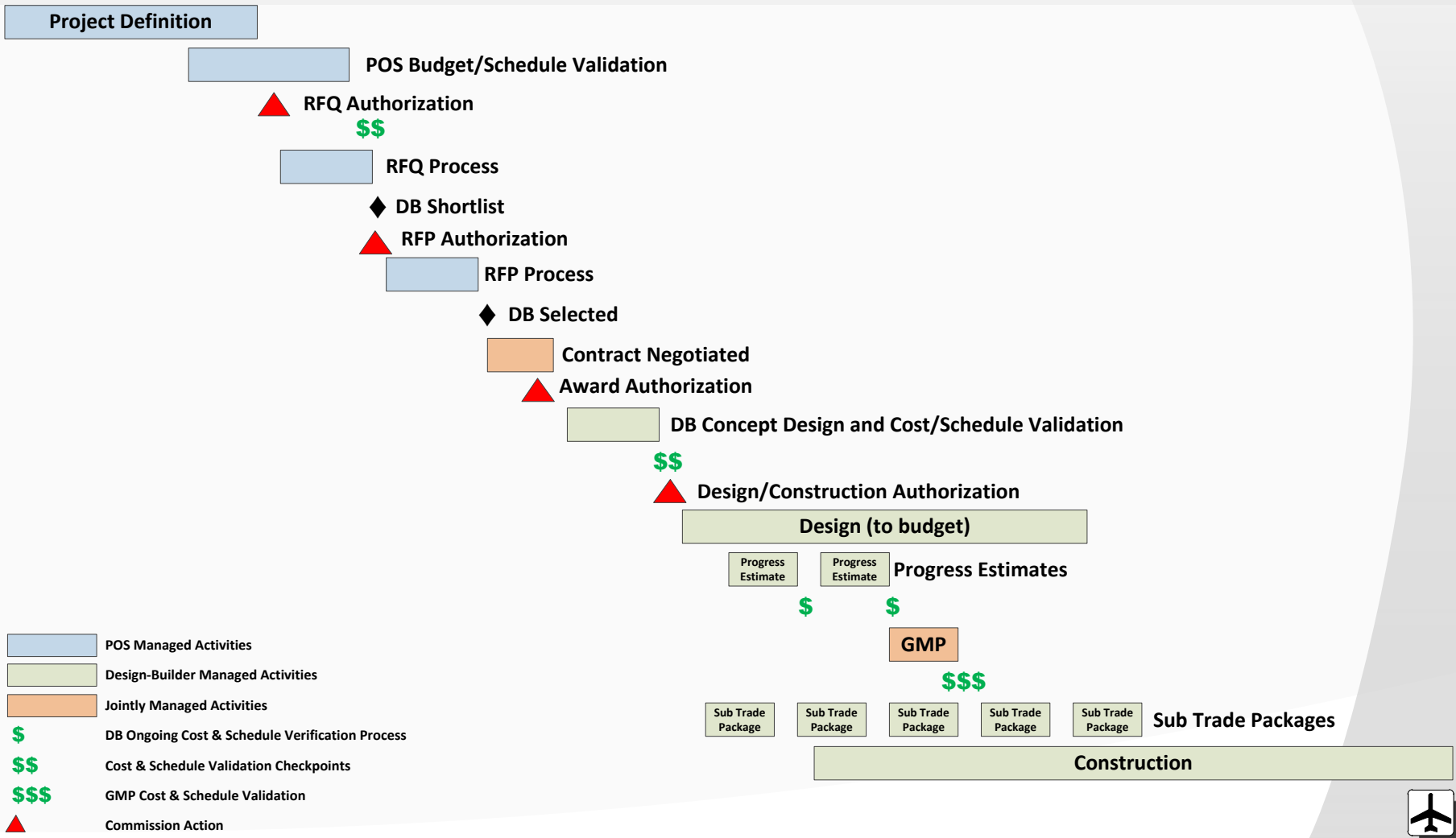
Construction

Activation

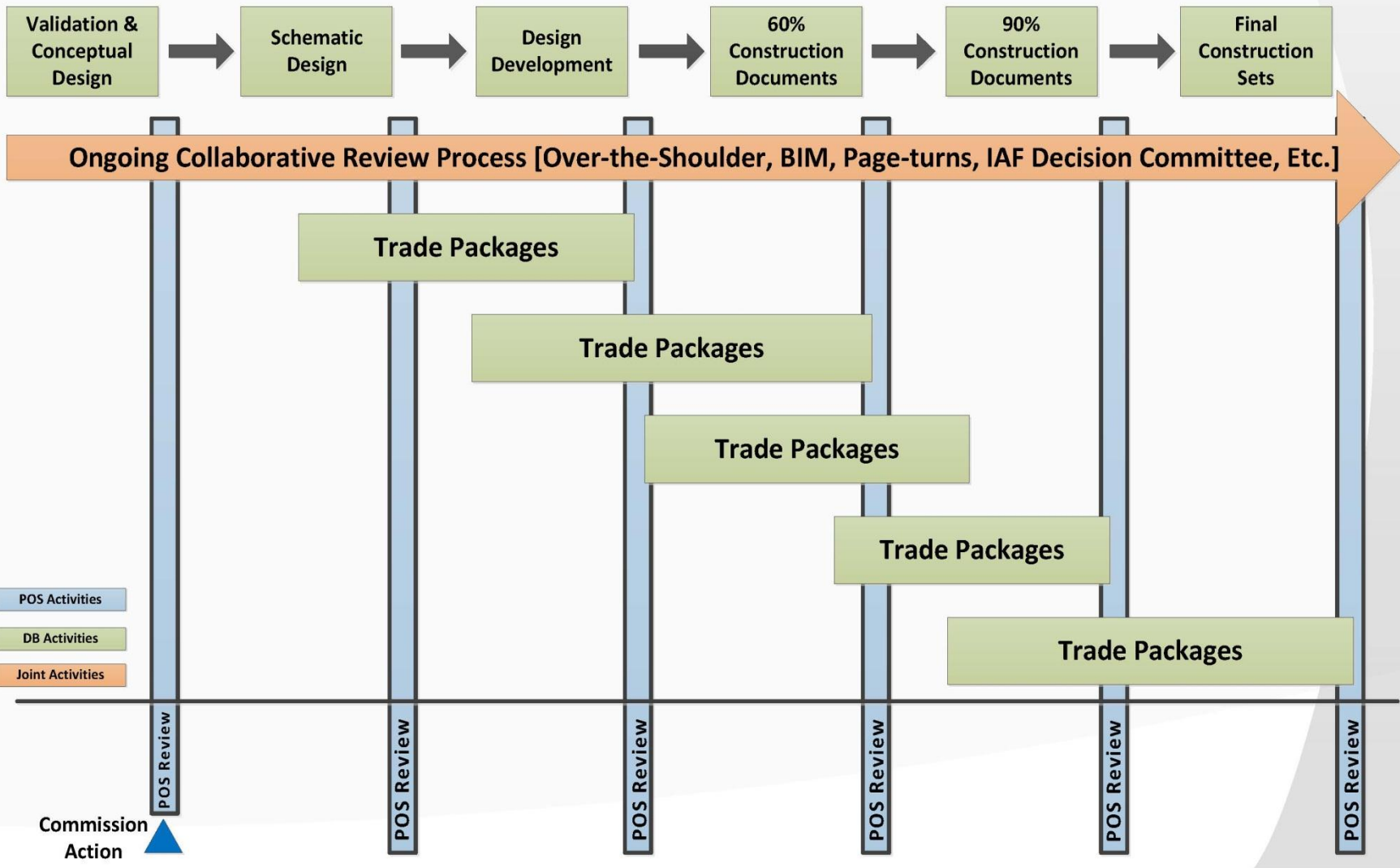
Stakeholder Involvement

International Arrivals Facility (IAF) Program

Procurement and Cost Control



International Arrivals Facility (IAF) Program Design Review & Control Process



Qualifications Based Selection

- Best team is best route to successful project
 - “Qualified” team brings to bear the skills, experience, resources and capabilities needed to be successful
 - Team alignment with Port’s goals harnesses those capabilities for the benefit of the project
 - Port partners with Design Builder to achieve program goals
- A talented and motivated team working in alignment with and on behalf of the Port is the formula for optimal outcome

Design Builder Validation Phase

- Design Builder:
 - Reviews Program Definition Documentation
 - Conducts exhaustive site investigations
 - Produces estimate and schedule based on Program Definition and all other information gathered
 - Researches codes and regulatory requirements
 - Takes ownership of Program Definition, Budget and Schedule

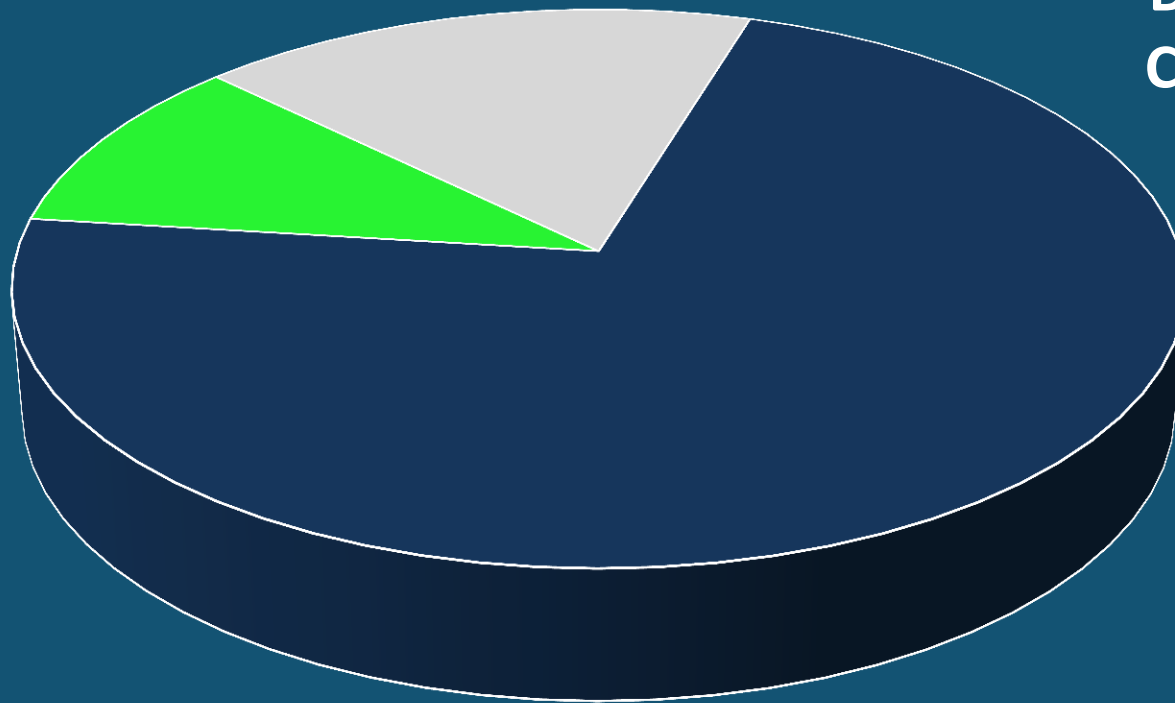
Guaranteed Maximum Price (GMP)

- GMP caps cost exposure, shifts risk to Design Builder
- Reached by mutual agreement - "open book" process
- Includes sub pricing, validated estimates, business terms, GCs, allowances and contingencies
- Timing varies - as early as possible once scope has been defined.
- Construction schedule also a major factor in timing of the GMP
- Savings revert to Port less any performance incentives
- Design Builder responsible for GMP overage
- Port may terminate contract if GMP agreement not reached



GMP Cost Distribution

Design Builder's Cost Breakdown



- Trade Packages (Competitively Bid)
- Design Builder (GC's, Design, Fees, etc...)
- Project Reserves

Design Control

- Program Definition
- Structured review process
 - Design Progress Reviews
 - Construction Packages
 - Alternates and Substitutions
 - Mock-ups
- Focus on design intent and compliance with technical criteria
- Multiple specialized reviews
 - Building Information Modeling / Focus Groups / IAF Decision Committee
- Design is monitored for adherence to comprehensive Program Definition documents



Quality Control

- The GMP will include mutually agreed upon assumptions for quality.
 - Design Quality Control Plan
 - Construction Control Plan
 - Work Plans
 - Port verification of adherence to Plans
- Quality Approach can be scored in the RFP
- Design Builder's Quality Manager will report outside of the project organization and will partner with the Port to assure a quality product

Recap

- Progressive Design Build is the right delivery method for the IAF to achieve budget, schedule and quality goals
 - Early budget validation will provide a high degree of confidence prior to major cost commitments
 - Schedule compression can be accomplished with less risk to the Owner
 - Quality results are achieved based on mutually agreed upon performance standards