Third Seminar/Workshop on the Implementation of A-CDM

25 – 27 September 2017

Jim Houghton, Head of Business Development, Americas

THE ULTRA EQUATION

OBSERVATION + RESPONSE + ANALYSIS + EVOLUTION = HEIGHTENED EFFICIENCY

Agenda

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- Introduction (context) and Key Themes
- Airport Systems that enable A-CDM
- Evolution of Airport Systems Integration
- Benefits to Airports, Airlines, Passengers, Ground Handlers
- Details and Case Studies (Dublin and Lima)
- Questions

Introduction

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Enabling improvements for airports and airlines across 5 continents

World's Best Airports

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2016 SkyTrax Airport Awards™

WORLD AIRPORT AWARDS

BEST AIRPORTS BY REGION

BEST AIRPORT: NORTHERN EUROPE
Helsinki-Vantaa

BEST AIRPORT: EASTERN EUROPE
Budapest

BEST AIRPORT: WESTERN EUROPE
London Heathrow

BEST AIRPORT: AFRICA
Cape Town

BEST AIRPORT: ASIA
Singapore Changi

BEST INTERNATIONAL AIRPORT: CHINA
Beijing Capital

BEST DOMESTIC AIRPORT: CHINA
Shanghai Hongqiao

BEST AIRPORT: RUSSIA/CIS
Moscow Domodedovo

BEST AIRPORT: NORTH AMERICA
Vancouver

BEST AIRPORT: SOUTH AMERICA
Lima – Jorge Chavez (2009-2015)

BEST AIRPORT: C AMERICA/CARIBBEAN
Panama Tocumen

BEST AIRPORT: MIDDLE EAST
Doha Hamad

BEST INT'L TRANSIT AIRPORT
Seoul Incheon

WORLD'S TOP 10 BEST AIRPORTS

#1	Singapore Changi
#2	Incheon, S Korea
#5	Hong Kong
#7	Zurich
#8	London Heathrow
#10	Doha Hamad

Industry Activities

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Key Themes

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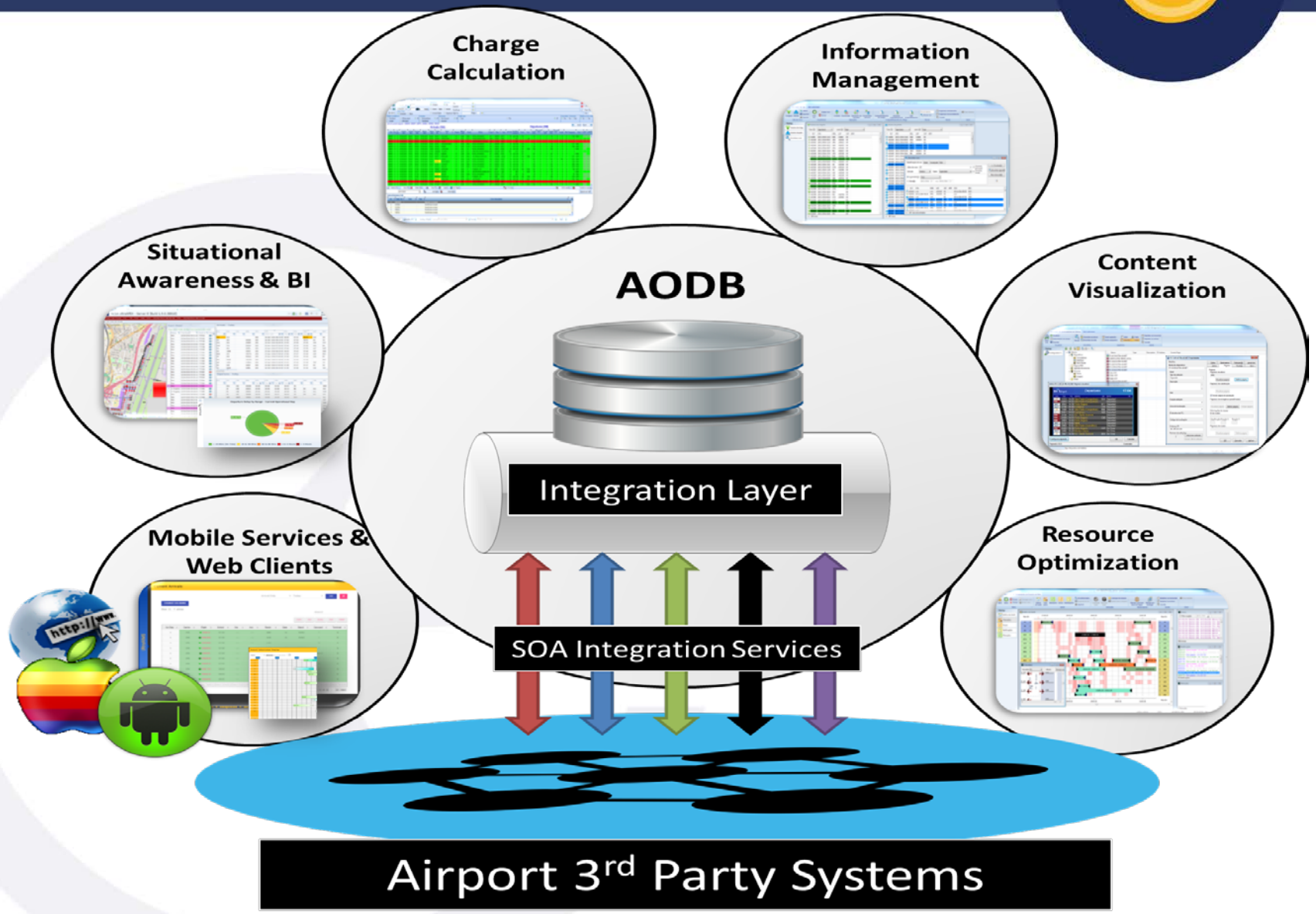
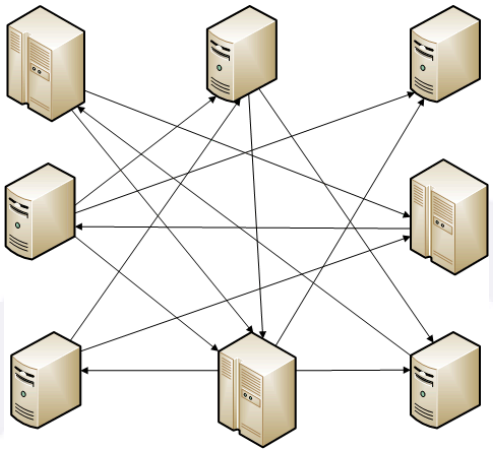
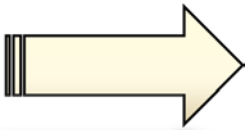
- **This is fun!**
- **A-CDM starts in the parking lot**
- **You have to walk before you can run**
- **It's all about data flow and sharing information**
- **The 90% rule**

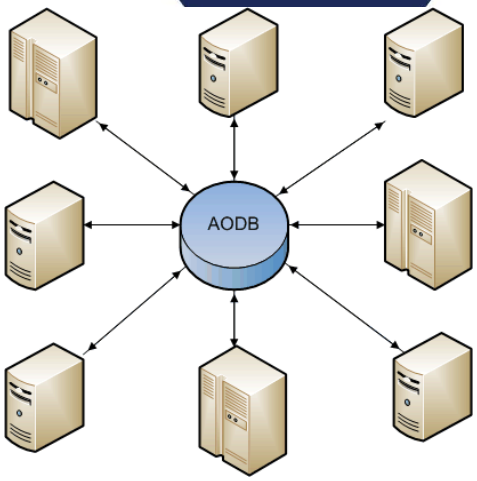
Airport Systems and Functions

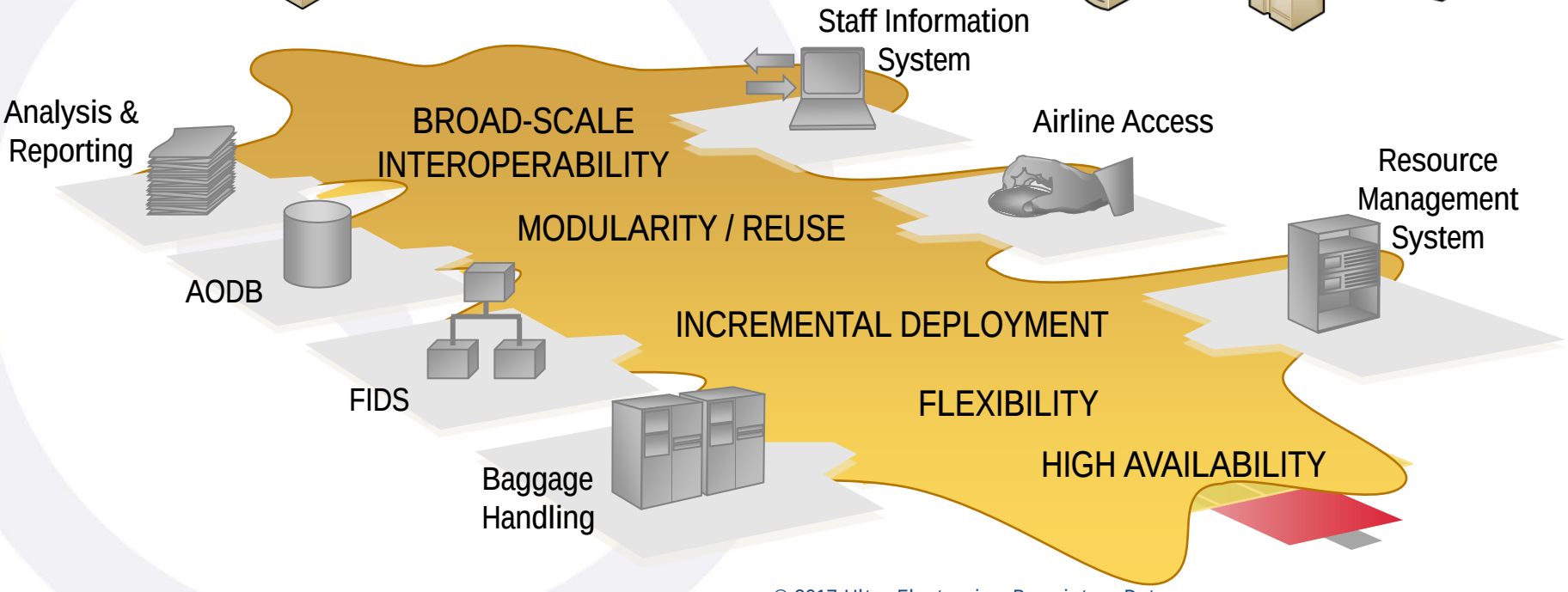


Evolution of Airport Systems Integration









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What is an Integration Platform?

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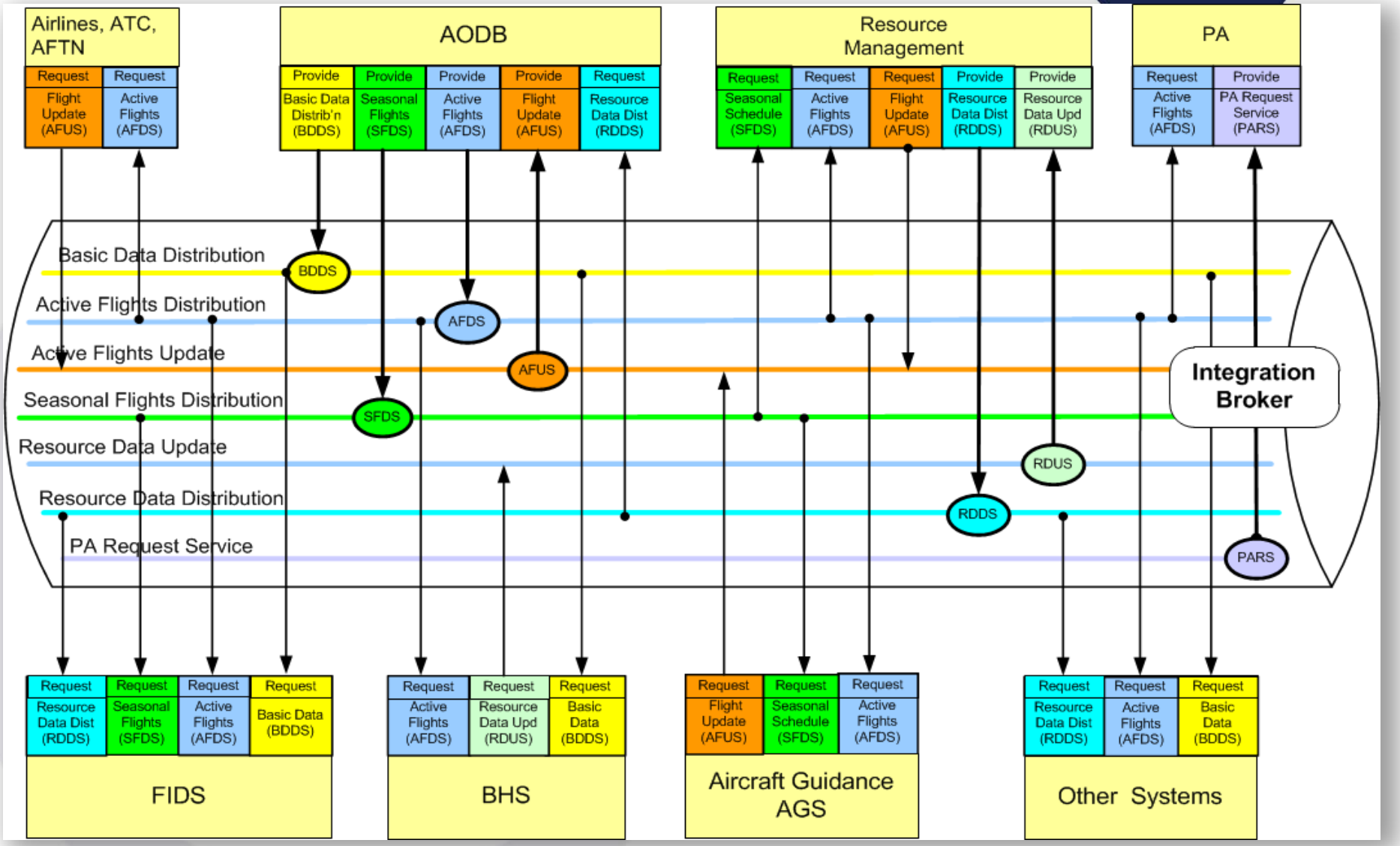
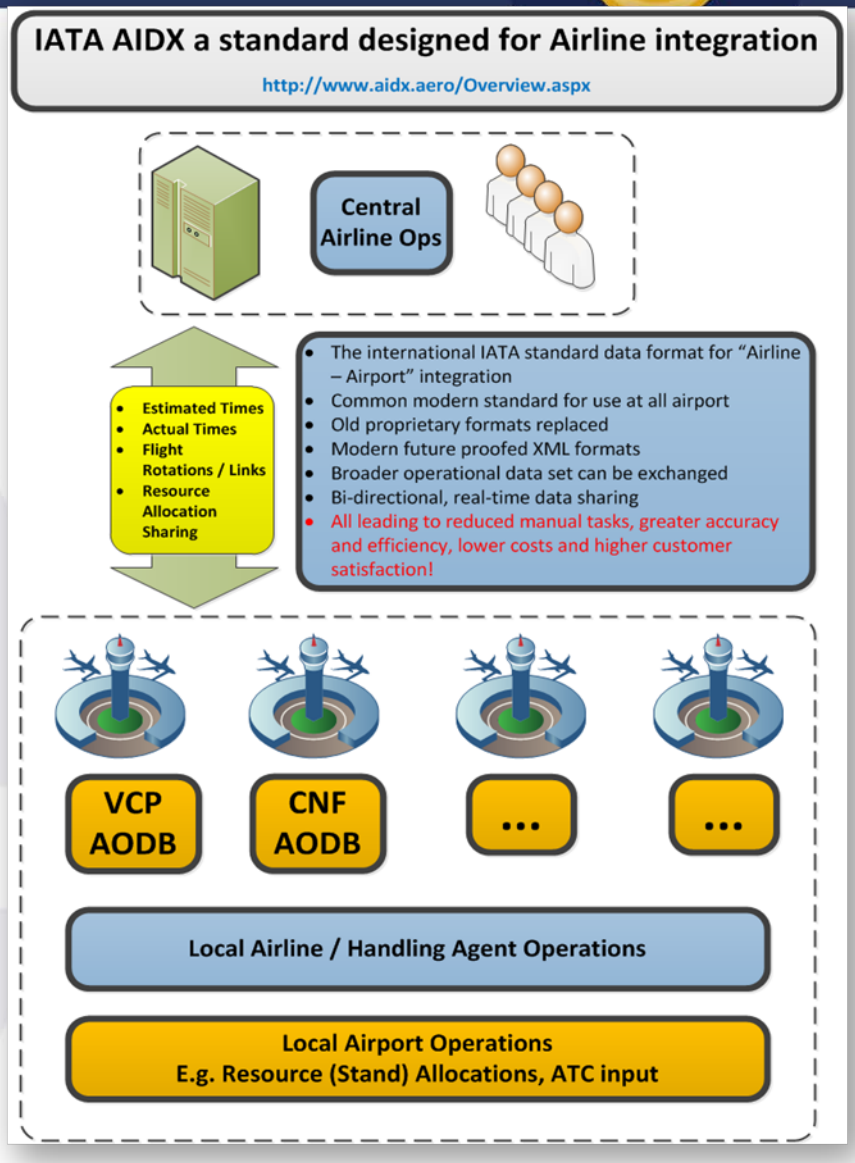
- A robust, **flexible, scalable** and highly reliable information broker that enables systems to “talk” to each other
- Secure, **actively managed** platform that complies with industry best practice architectures, standards and processes
- “**Loose coupling**” of interfaces allowing easy replacement of systems
- Visibility and **guaranteed delivery** of airport operational data
- A **cost effective** and future proofed solution providing reliable integration with many vendors on and off airport

Who needs Data? Who has Data?

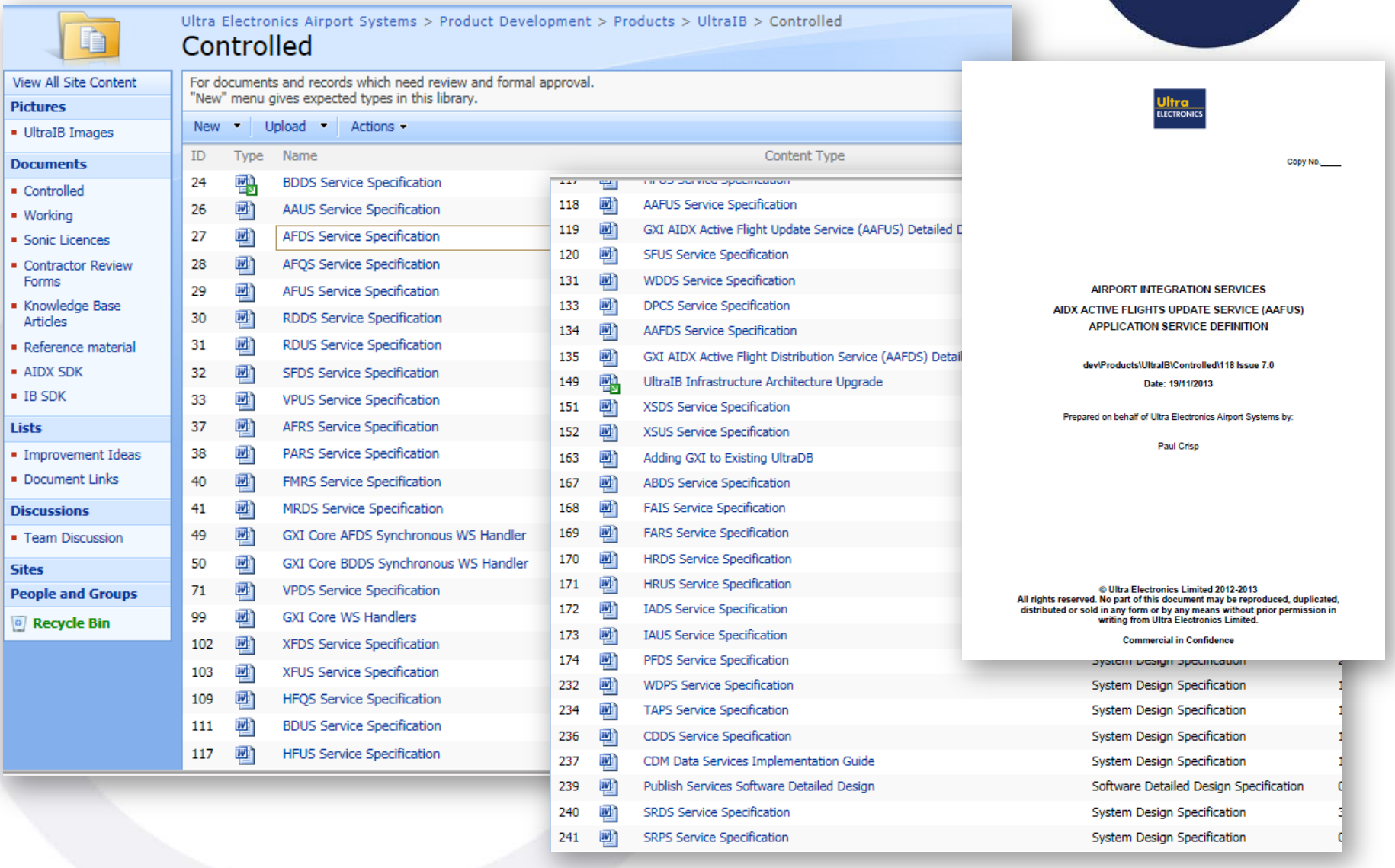


Benefits of Integration

- **Information can be shared** - with agencies and authorities, between airlines and airports, ground handling companies and **passengers**
- **More capacity** – fuller use of terminal and runways
- **Accurate up-to-date data** – direct system communications mean less errors/confusion, better access to accurate data, better decisions made earlier, improved staff efficiency, more responsive actions, overall a happier customer
- **Better Service and Efficiency** – reduces tedious tasks, reduces conflicts and stress, frees staff for more meaningful work
- **Expandability** – without good system integration, the interactions and problems between the growing airport departments and companies increase exponentially
- **Re-useable** – making the right decision now makes it easier and reduces costs in the future



Message Services Library



Integration Enables A-CDM

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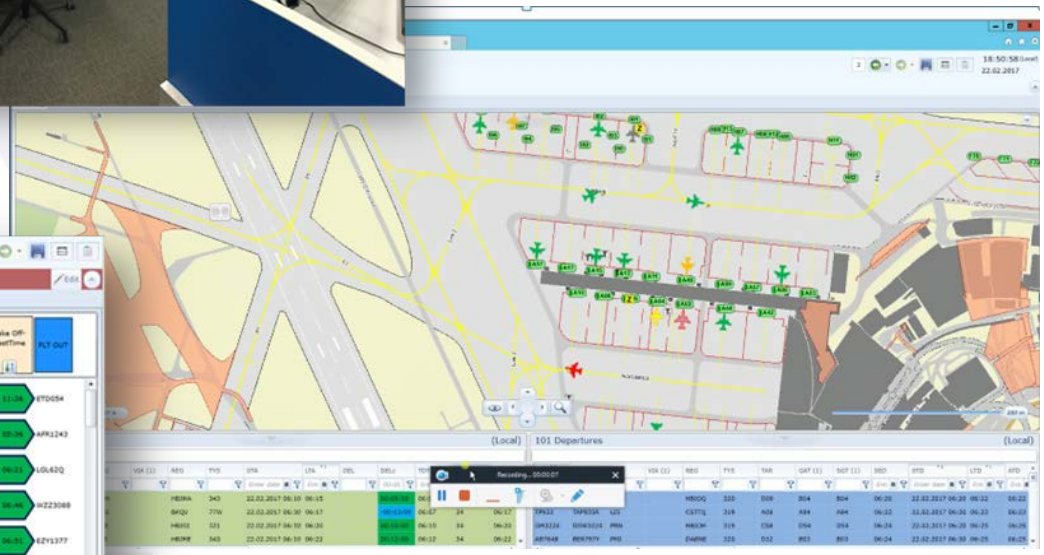
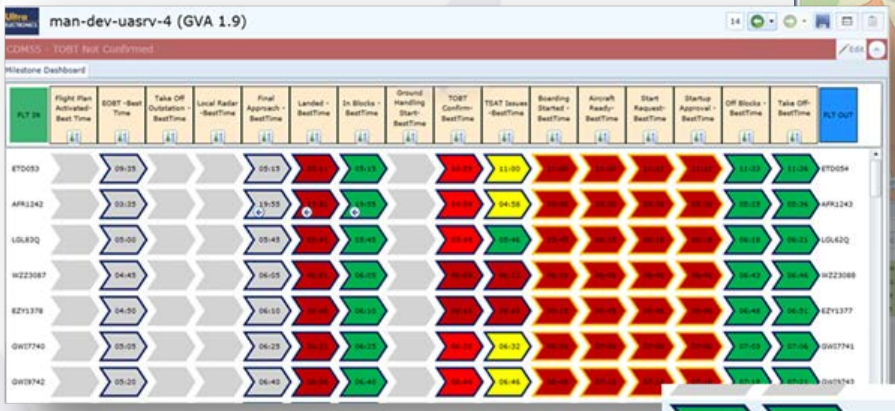
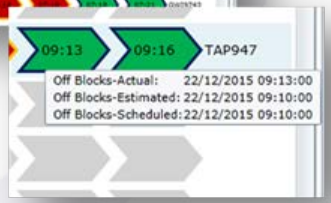


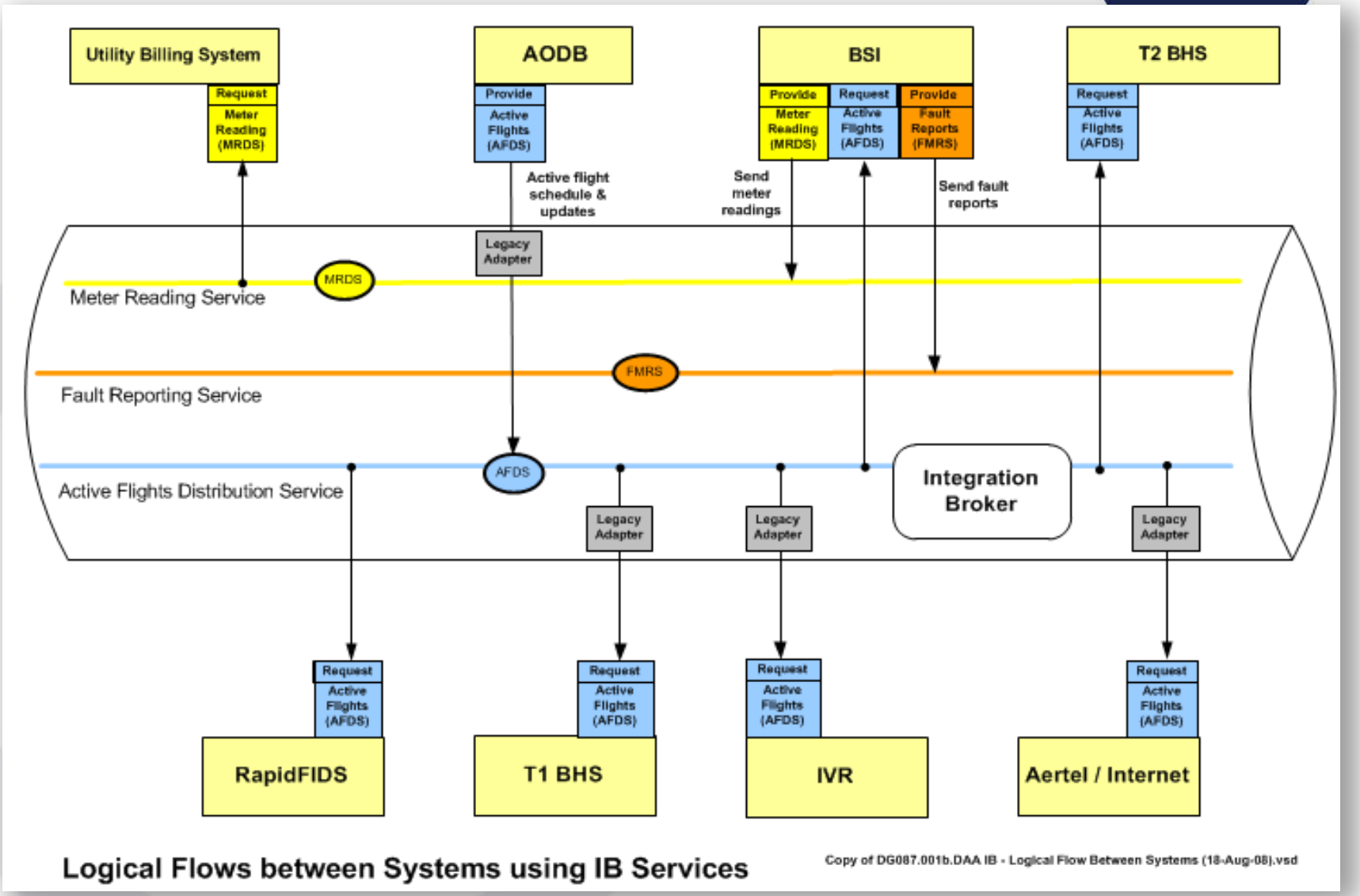




Aircraft Flow Management

Case Study: Dublin 2008

- 3 services, 10 clients



Case Study: Dublin 2016

- 8 services, 35 clients (Ready for A-CDM)

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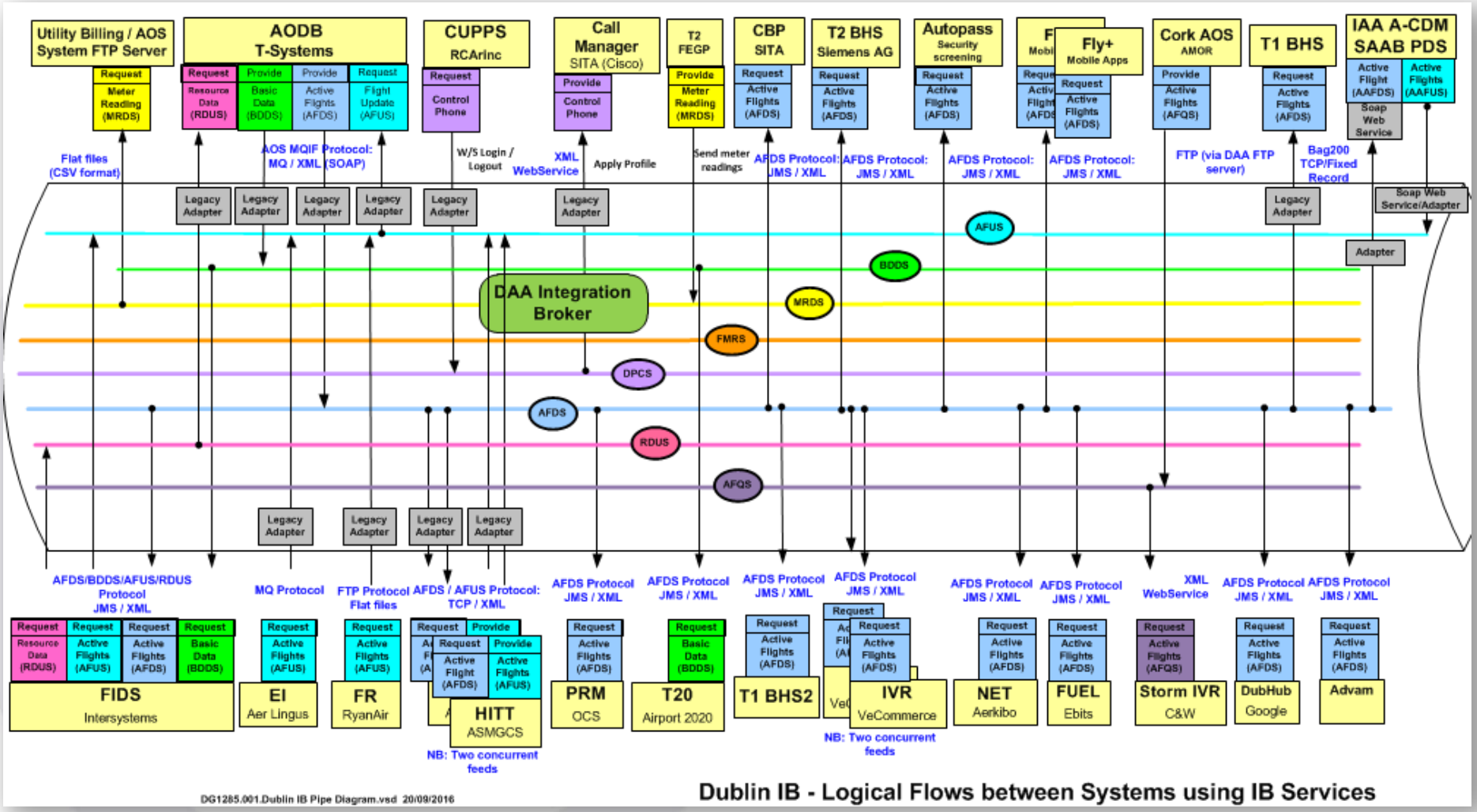
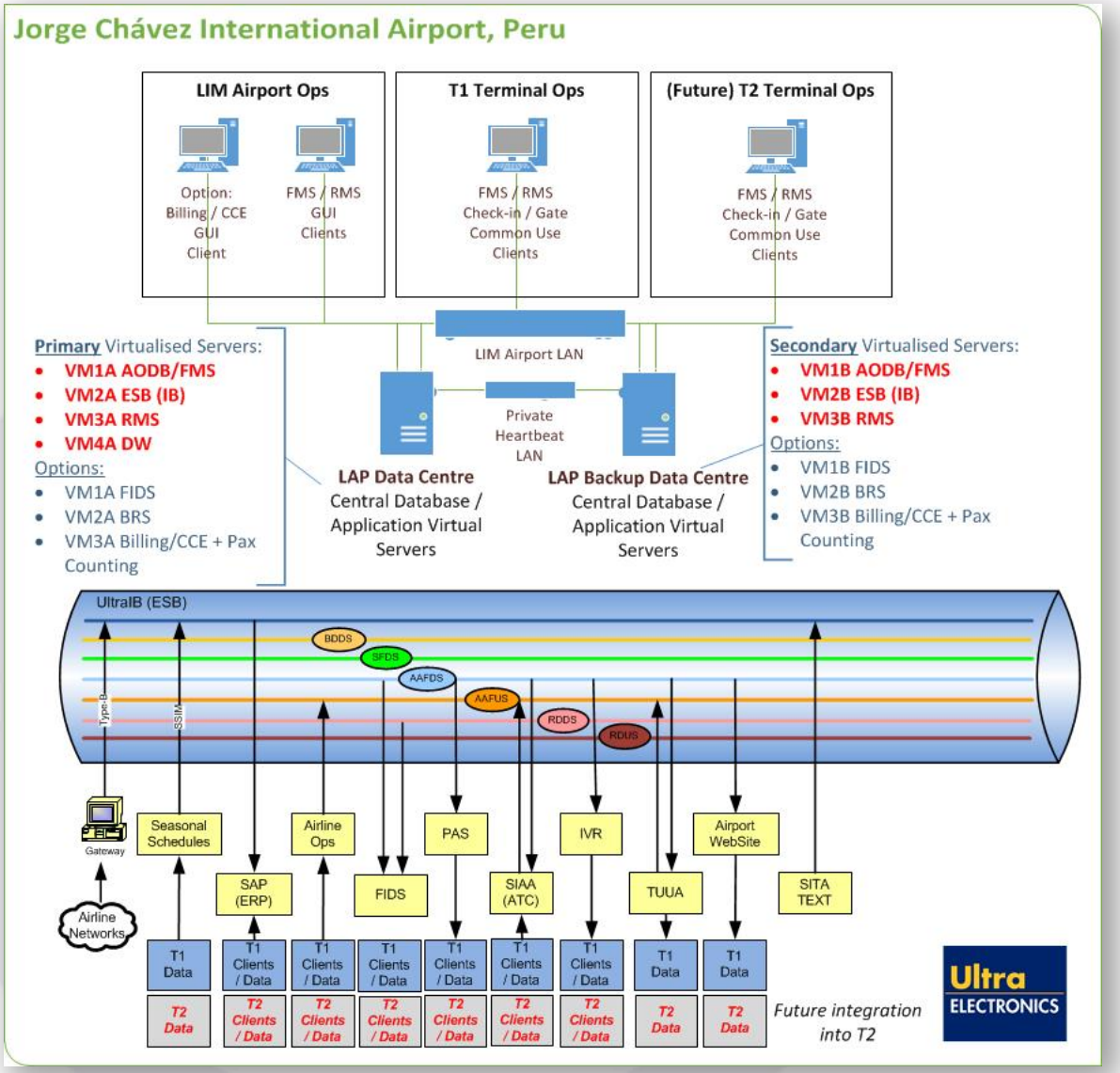
www.dublinairport.com/regulation-and-planning/regulatory/airport-cdm



Case Study: Lima



- Common AIS platform
- Reusable Integration Services
- Airport-wide & Terminal specific configuration
- Separate Airport & Terminal Operations Centres
- Dual data centres

Airport Systems Integration

- Experience Required

Airport	Ann Pax	Relevant Installed Products	Country	Last Upgrade
BAH - Bahrain Airport	8	AODB, DW, MW, EVIDS, RMS	BAHRAIN	2016
JFK - JFK Airport Terminal 4	20	AODB, DW, MW, RMS, EVIDS, BILLING	USA	2016
PTY - Tocumen Panama Airport	13	AODB, DW, ESB, RMS, EVIDS, BILLING	PANAMA	2016
RDU - Raleigh-Durham Airport	10	AODB, DW, MW, EVIDS, RMS	USA	2016
SHA - Shanghai Hongqiao Airport	37	AODB, DW, ESB, RMS	CHINA	2016
LHR - Heathrow Airport	73	EVIDS, ESB	UK	2016
PVG - Shanghai Pudong	52	AODB, DW, ESB, RMS,ESB	CHINA	2016
YEG - Edmonton Airport	7	AODB, DW, MW, EVIDS, RMS	CANADA	2016
DEN - Denver Airport	53	RMS, MW	USA	2015
CNF - Belo Horizonte Confins Airport	11	AODB, DW, ESB, RMS, EVIDS	BRAZIL	2015
SNA - John Wayne Santa Ana Airport	10	AODB, DW, MW, EVIDS, RMS	USA	2015
VCP - Viracopos Airport	10	AODB, DW, MW, EVIDS, RMS	BRAZIL	2015
GVA - Geneva Airport	15	AODB, DW, MW, RMS, EVIDS	SWITZERLAND	2015
HIA - Doha Airport	29	AODB, DW, ESB, EVIDS	QATAR	2014
HGH - Hangzhou Xiaoshan Airport	22	AODB, DW, ESB, RMS	CHINA	2013
UIO - Quito Airport	6	AODB, DW, MW, EVIDS, RMS	ECUADOR	2013
SIN - Changi Airport	54	AODB, DW, ESB, EVIDS	SINGAPORE	2012
KMG - Kunming Changshui Airport	30	AODB, DW, ESB, RMS	CHINA	2012
MSP - Minneapolis Airport	34	AODB, DW, MW, EVIDS, RMS	USA	2008

Summary

THE ULTRA EQUATION

- A robust, flexible, scalable and highly reliable information broker that enables **systems to "talk" to each other**
- Secure, actively managed platform that complies with industry **best practice architectures**, **standards and processes**
- "Loose coupling" allowing **easy replacement of systems**
- **Visibility** and guaranteed delivery of airport operational data
- Expansion through addition of services and clients over time **to enable A-CDM**
- A cost effective and **future proofed** solution providing reliable integration with many vendors on and off airport

Questions?

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