

Presented by:



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ATA iSpec 2200 : A powerful Enabler for the Airbus A380 Technical Data



AIRBUS

Contents

A380 Programme General Presentation

ATA – Digital Data Sub Committee Vision in 1993

Implementation on the Airbus A380

Conclusion – Lessons Learnt

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A380 - New generation, New experience...

A380-800

560t MTOW - 525 seats – 8,200nm



A380 Dimensions



Height	24.1m	79.0 ft
Length	72.7m	238.6 ft
Wingspan	79.8m	261.8 ft



Customer Status



202 firm orders and commitments
from **17** customers



The A380 network by end 2008

Utilisation to mid-September
12,000 flight hours
1,350 revenue flights



A380 (almost) around the world

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A380 Programme General Presentation

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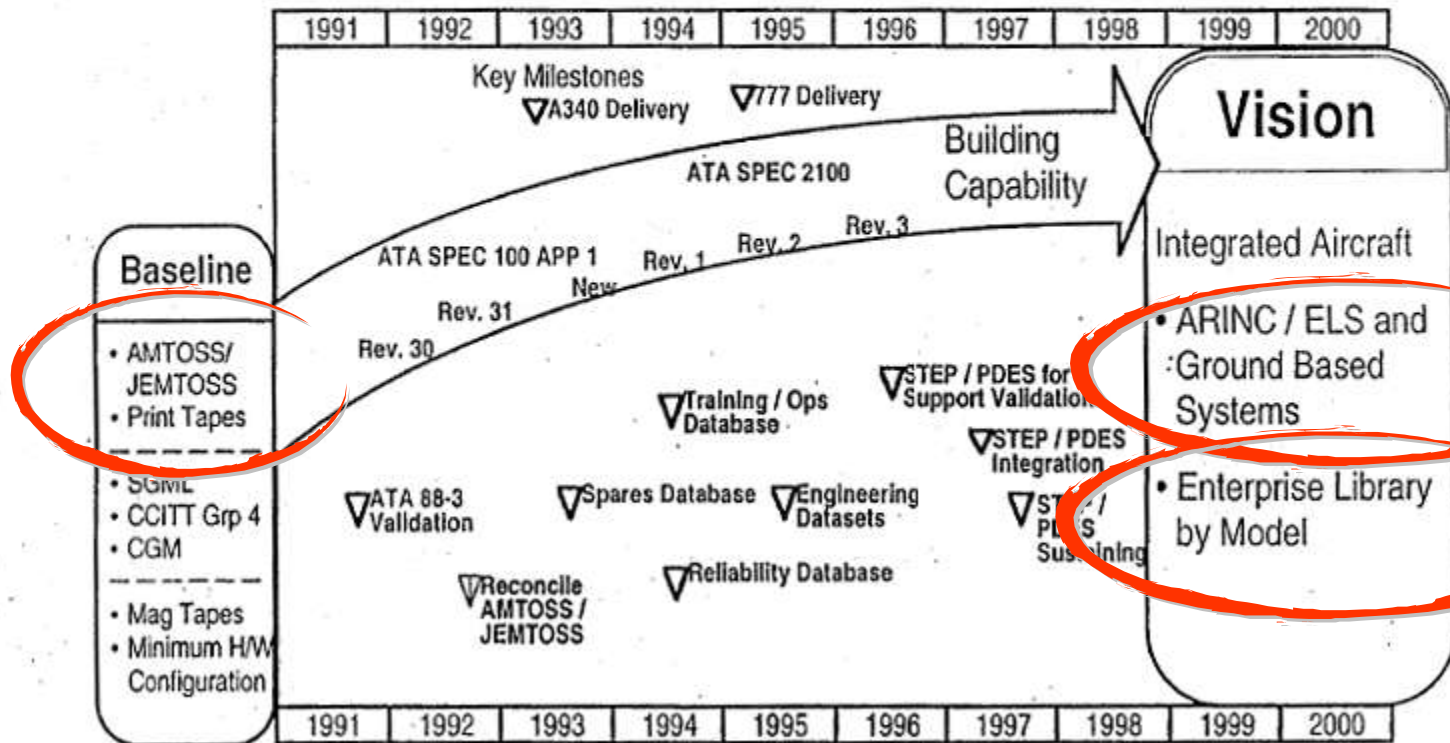
Implementation on the Airbus A380

Conclusion – Lessons Learnt

1993 DDSC – Strategic Plan for the Future

STRATEGIC PLAN FOR THE FUTURE

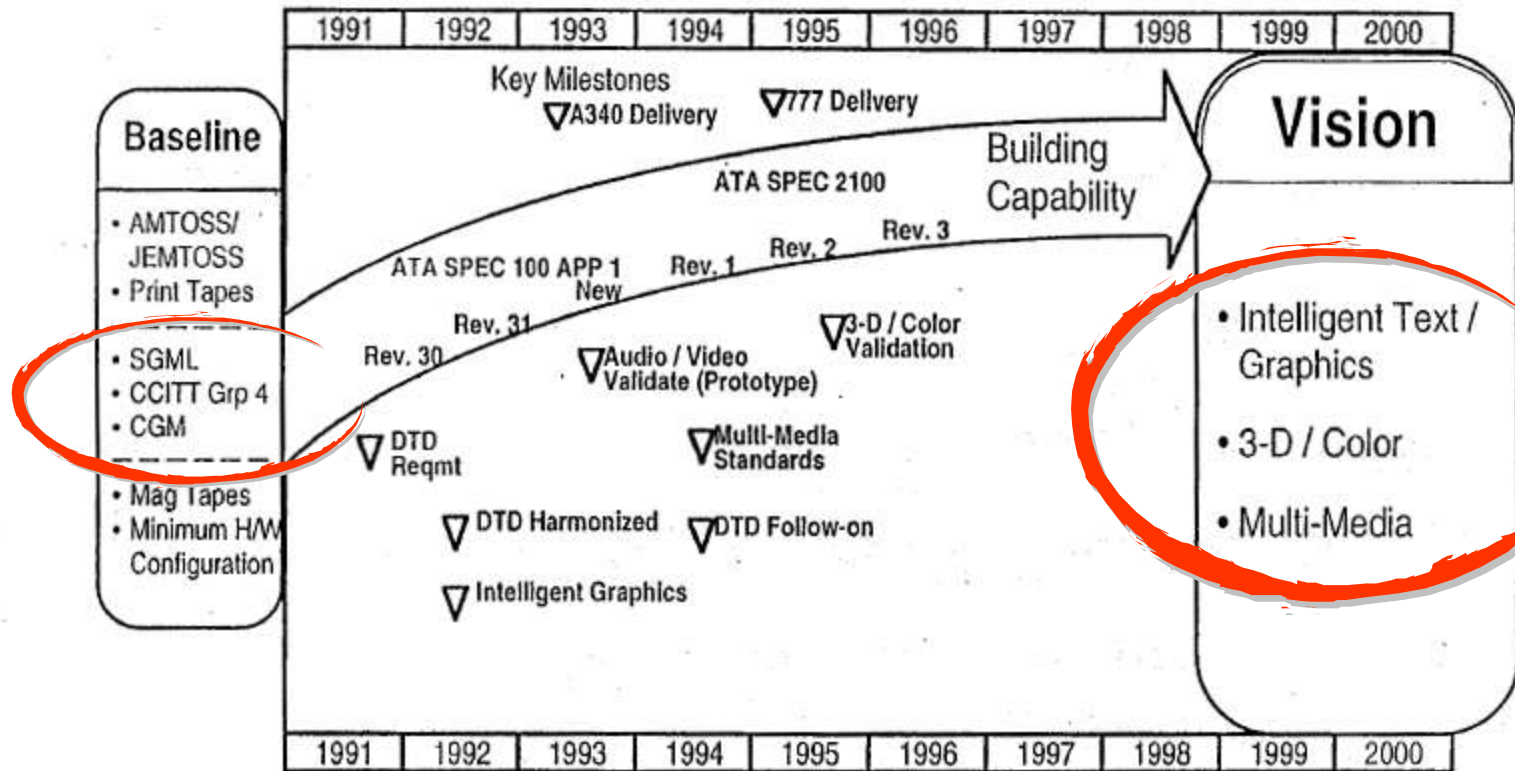
Information Requirements



1993 DDSC – Strategic Plan for the Future

STRATEGIC PLAN FOR THE FUTURE

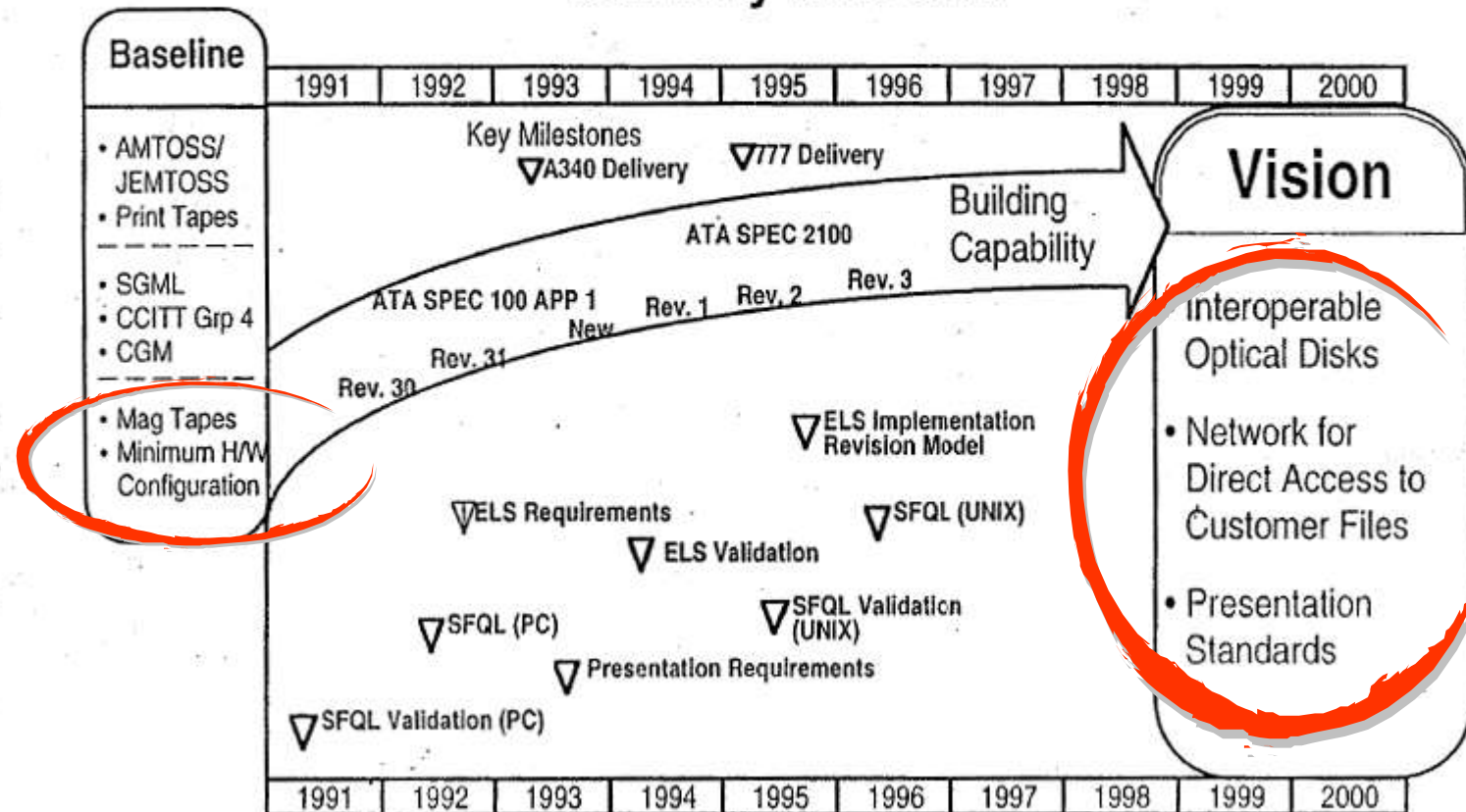
Interchange



1993 DDSC – Strategic Plan for the Future

STRATEGIC PLAN FOR THE FUTURE

Delivery and Use



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A380 Technical Data Figures

- 9 000 AMM Tasks
- 8 000 AWM Figures for 100 000 wires
- 10 000 IPC Figures for 180 000 items
- 15 000 TSM Procedures for 40 000 faults



AMM

IPC

AWM

TSM

iSpec2200 : A powerful Enabler

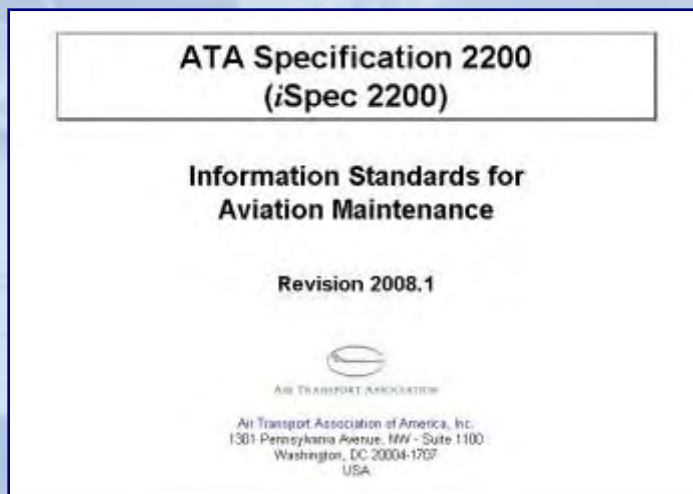
- **Advanced Consultation**

- **Text,**
- **Graphics,**
- **Multimedia**



- **Single Browser / Viewer**

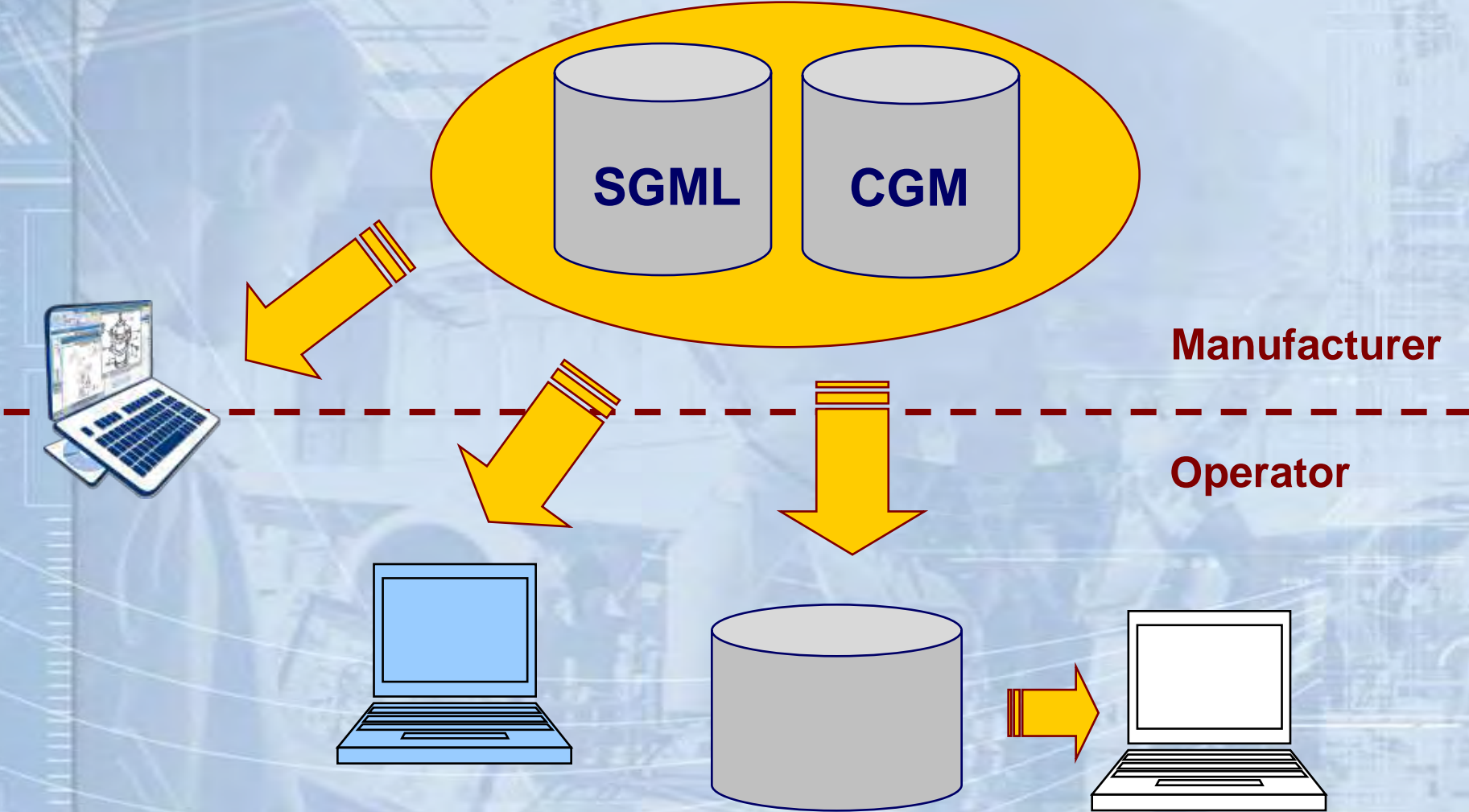
- **On Ground, On Board**
- **On Line, Off Line**



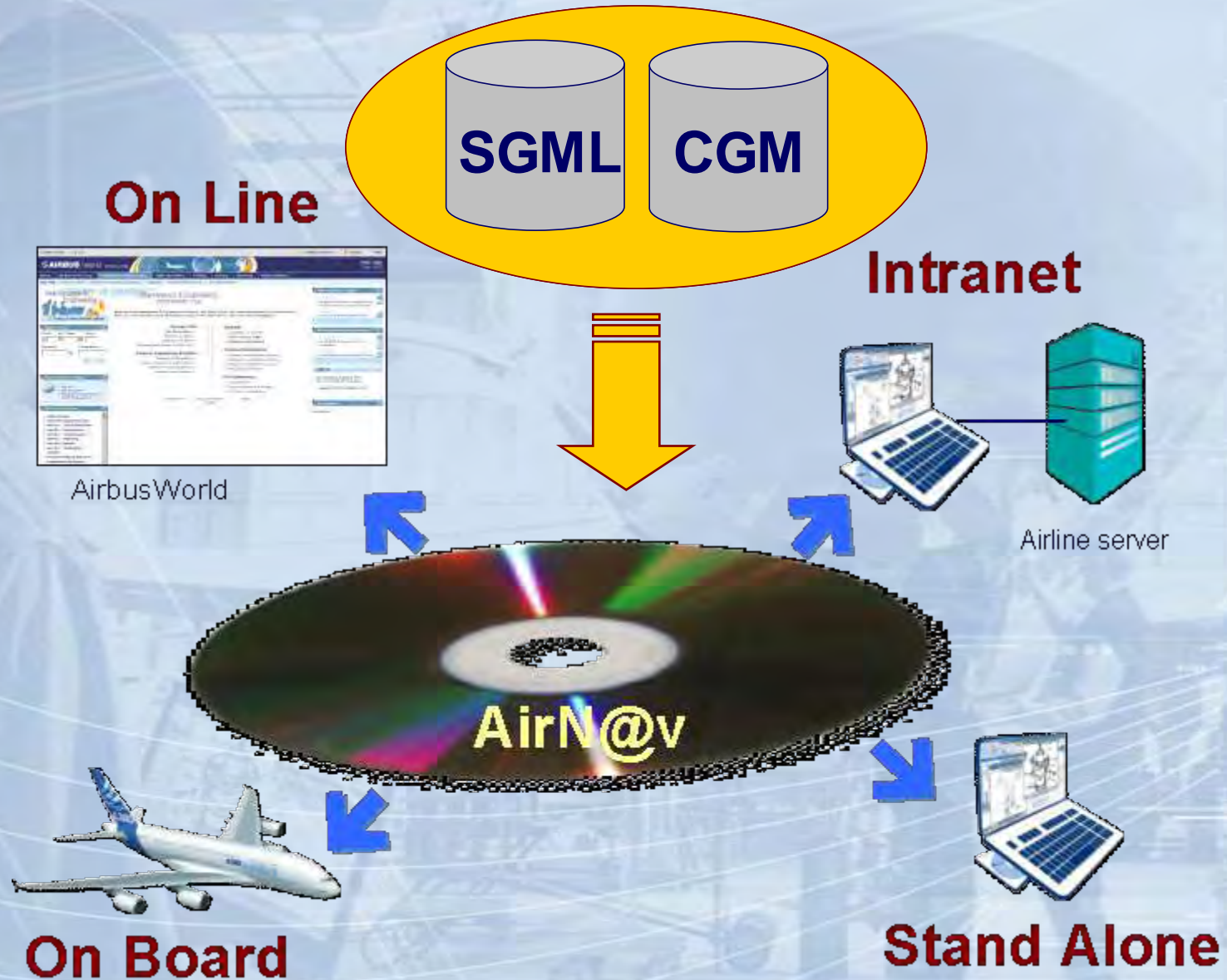
- **Data Exchange**

- **Suppliers**
- **Customers**

iSpec2200 allows : “Flexibility in Customer Process ”



iSpec2200 allows : “One product for multi site accesses”



iSpec2200 allows : “One single Viewer for all Documents”



AirN@v
Maintenance



AirN@v
Engineering



AirN@v
Assoc Data



AirN@v
Planning



AirN@v
Repair



AirN@v
Workshop

- AMM
- TSM
- IPC
- AWM
- ASM
- AWL
- ESPM
- PIPC
- IFE Supp

- AD/CN
- AOT / OIT
- TFU
- SIL
- SB
- MID
- MOD / MP
- VSB

- SM
- CML
- ESPM
- TEM

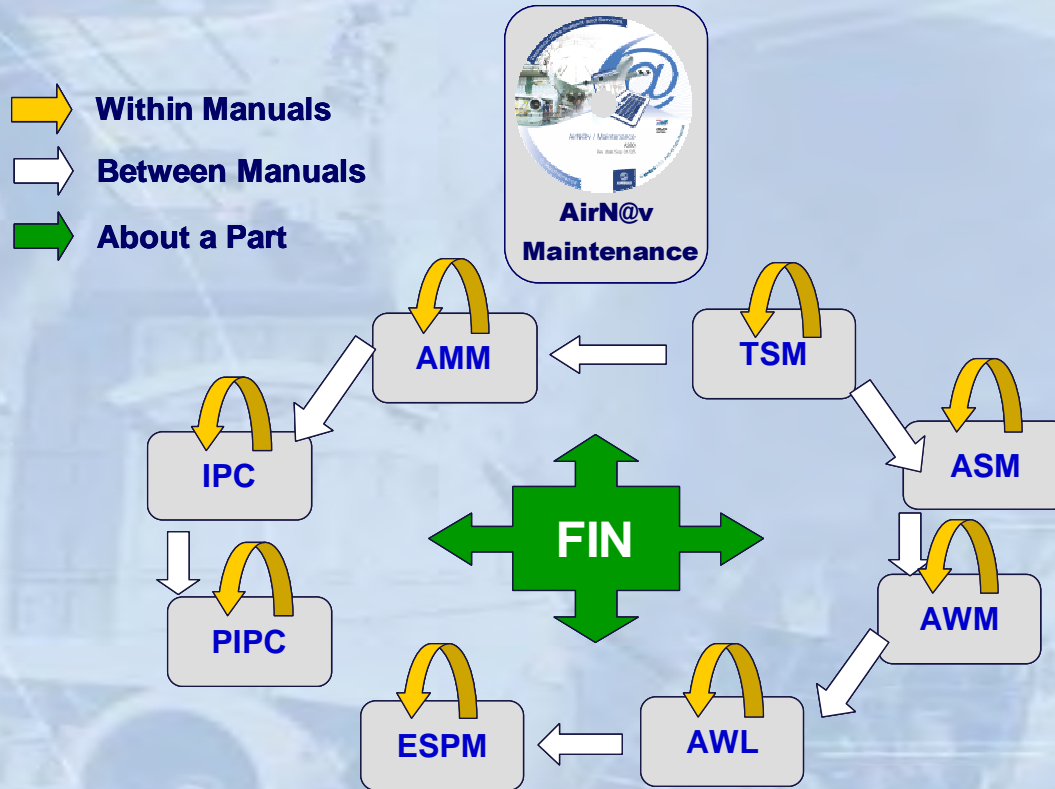
- MPD

- SRM
- NTM

- CMMm
- DFPRM

**Most Documents based
on iSpec2200 DTDs
and / or Tech Req**

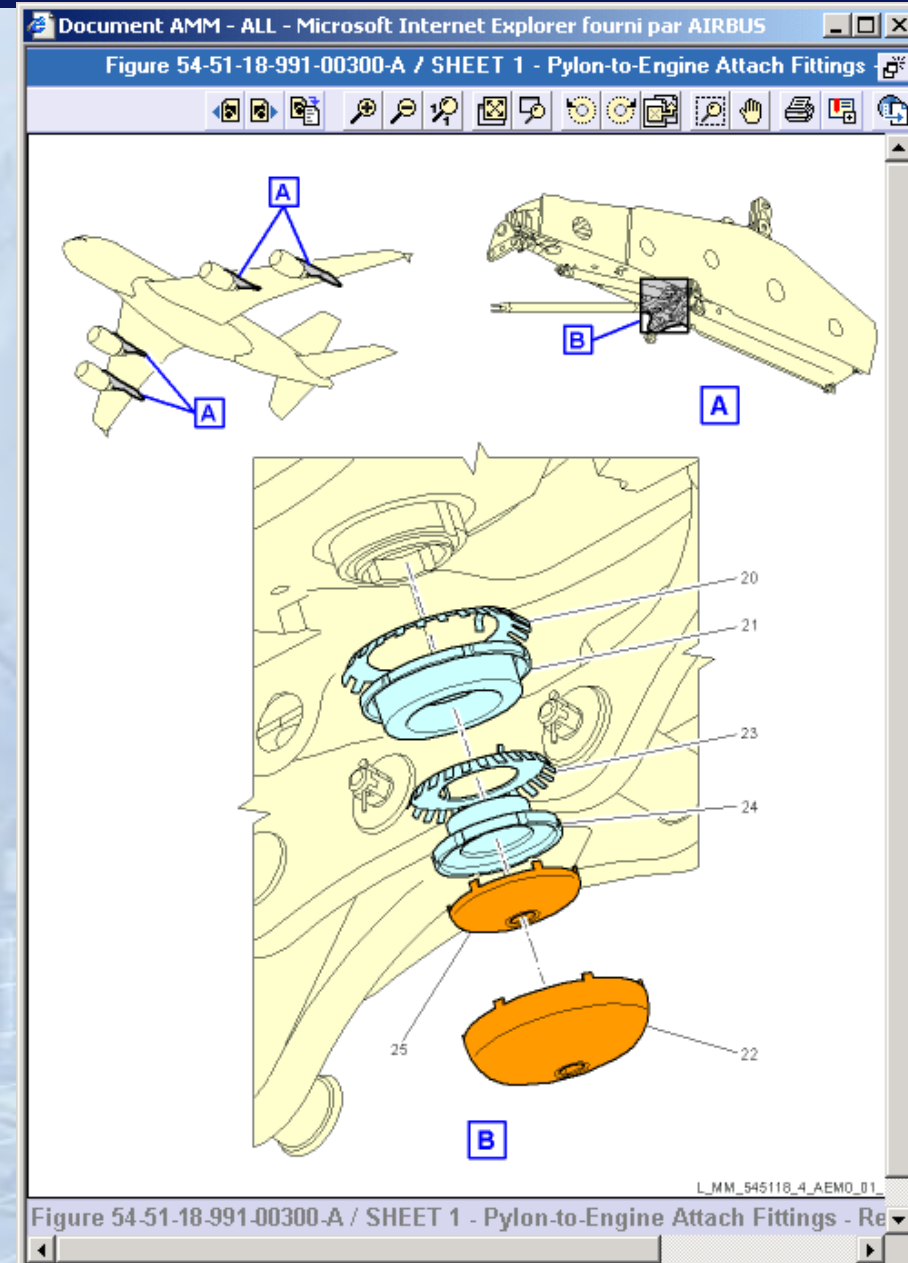
iSpec2200 allows : “Advanced Data Hyperlinking”



The *iSpec2200* Tagging scheme allows to “overcome the Document Concept”

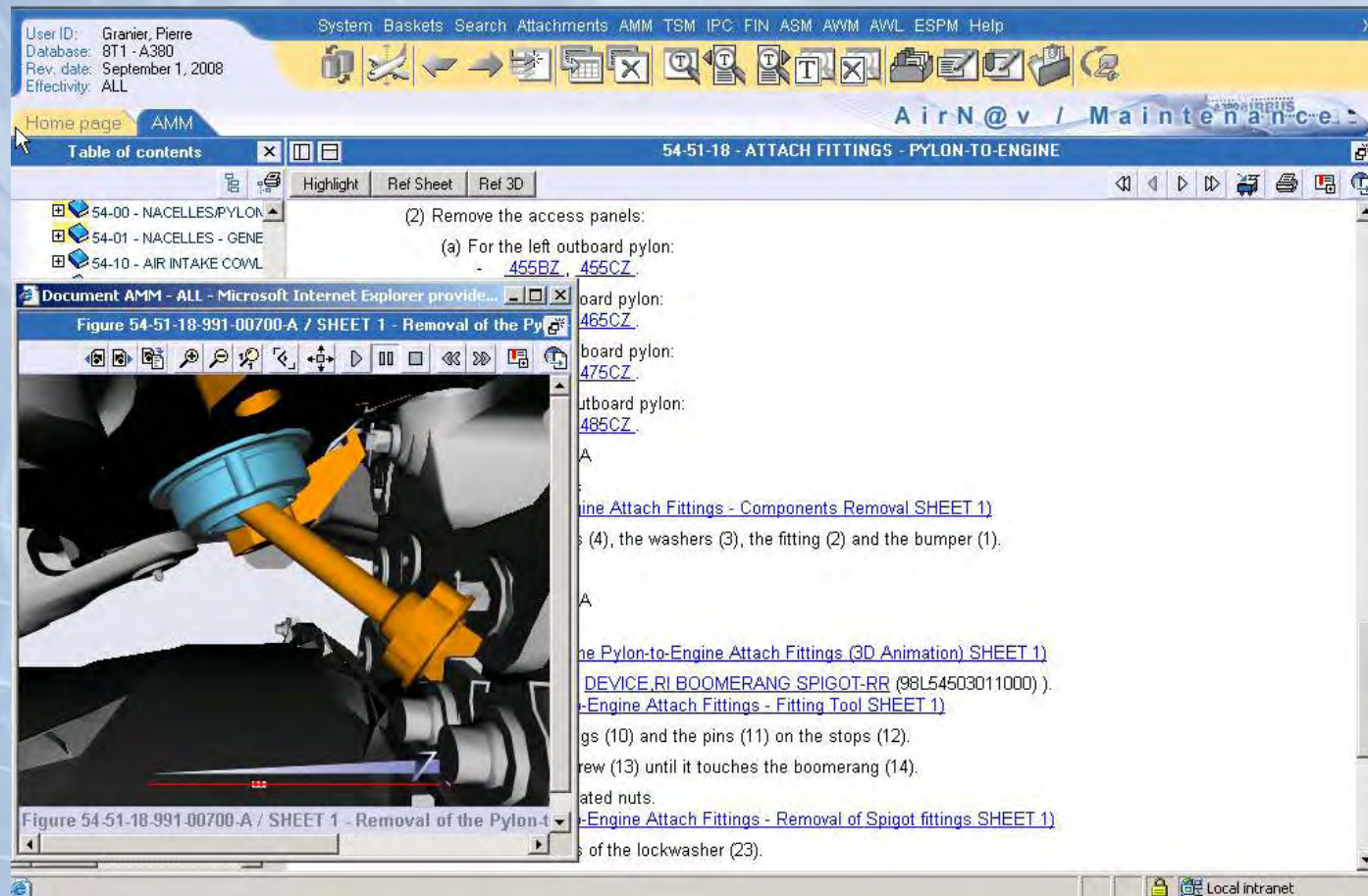
iSpec2200 allows : “Advanced Graphics”

- Colored Graphics per ATA “Graphics Style Standards”
- Interactive Graphics per GREXCHANGE profile
 - ▶ Using CGM V4
 - ▶ Companion Files



iSpec2200 allows use of “Virtual Reality”

- Virtual reality used as a complement to Graphics
- Use of embedded VRML per iSpec2200



The screenshot displays the iSpec2200 software interface, which is a web-based application for aircraft maintenance. The top navigation bar includes options like "System Baskets", "Search Attachments", "AMM", "TSM", "IPC", "FIN", "ASM", "AWM", "AWL", "ESPM", and "Help". The user information shows "User ID: Granier, Pierre", "Database: 8T1 - A380", "Rev. date: September 1, 2008", and "Effectivity: ALL". The main content area is titled "54-51-18 - ATTACH FITTINGS - PYLON TO-ENGINE" and contains a list of instructions for removing access panels and pylon components. A 3D model of the engine pylon assembly is visible in the lower-left corner, showing various parts in different colors (blue, orange, grey). The interface also includes a "Table of contents" on the left and a "Document AMM - ALL - Microsoft Internet Explorer provide..." window at the top. The bottom status bar shows "Local intranet".

User ID: Granier, Pierre
Database: 8T1 - A380
Rev. date: September 1, 2008
Effectivity: ALL

System Baskets Search Attachments AMM TSM IPC FIN ASM AWM AWL ESPM Help

Home page AMM

Table of contents

54-51-18 - ATTACH FITTINGS - PYLON TO-ENGINE

Highlight Ref Sheet Ref 3D

54-00 - NACELLES/PYLON
54-01 - NACELLES - GENE
54-10 - AIR INTAKE COVLS

(2) Remove the access panels:
(a) For the left outboard pylon:
- 455BZ, 455CZ.
board pylon:
455CZ.
board pylon:
475CZ.
outboard pylon:
485CZ.
A
ine Attach Fittings - Components Removal SHEET 1
(4), the washers (3), the fitting (2) and the bumper (1).
A
he Pylon-to-Engine Attach Fittings (3D Animation) SHEET 1
DEVICE_RI BOOMERANG SPIGOT-RR (98L54503011000).
-Engine Attach Fittings - Fitting Tool SHEET 1
gs (10) and the pins (11) on the stops (12).
rew (13) until it touches the boomerang (14).
ated nuts.
-Engine Attach Fittings - Removal of Spigot fittings SHEET 1
s of the lockwasher (23).

Figure 54-51-18-991-00700-A / SHEET 1 - Removal of the Pylon-t

Local intranet

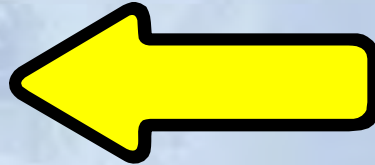
iSpec2200 allows : “On Board Consultation”



Maintenance Workstation



On Board Information Terminals



**AirN@v
Maintenance**

- Tagging Model provides capability to :**
- **Link Data to a Maintenance Workflow**
 - **Interact between Data and A/C Systems**

Maintenance Work station



Home Page

Log Book

Fault
Details

TSM

BITE

Removal

Open C/B

Installation

S/W Loading

Report

iSpec2200 allows Data Exchange and Integration



Rolls-Royce



Panasonic
Panasonic Avionics Corporation

THALES



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iSpec2200 : Lessons Learnt

**ATA Specification 2200
(iSpec 2200)**

**Information Standards for
Aviation Maintenance**

✓ **Satisfies initial Business Requirements**

✓ **Allows Innovation**

... but

✓ **Room for Improvement remains for**

- **Data Consistency and Redundancy**
- **Data Exchange Process**
 - **between Suppliers and Airlines / MRO**
 - **Incremental Update**
 - **3D Models**
- **Ease of Deployment**

Coming next ...

Deployment of ASD S1000D



Airbus A400M



Airbus A350XWB

Main Expectations

“Cleaner” Data Schemas

Wider Tool Offer

Easier Data Exchange

Easier Data Consultation

Better adapted to Extended Enterprise model

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