

TAM – Review and Outlook

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IDEAS SHAPE THE COURSE OF *HISTORY*.

-- JOHN MAYNARD KEYNES



2002: 1st TAM Ideas



Futuristic APOC



Potential Solutions

- New Airports in Europe ? Very Difficult !
- Airport Expansions ? Slow !
- **Maximum Use of existing Infrastructure is a Must !!!**

DLR TAM Approach

- „Total Airport Management“ = „Concept extending CDM“
- Holistic View of an Airport
- ...
- Consider an Airport as „System-of-Systems“
- Introduction of a „Total Airport Operations Control Center“



2002: 1st TAM Ideas



2006: TAM-Concept V1.0

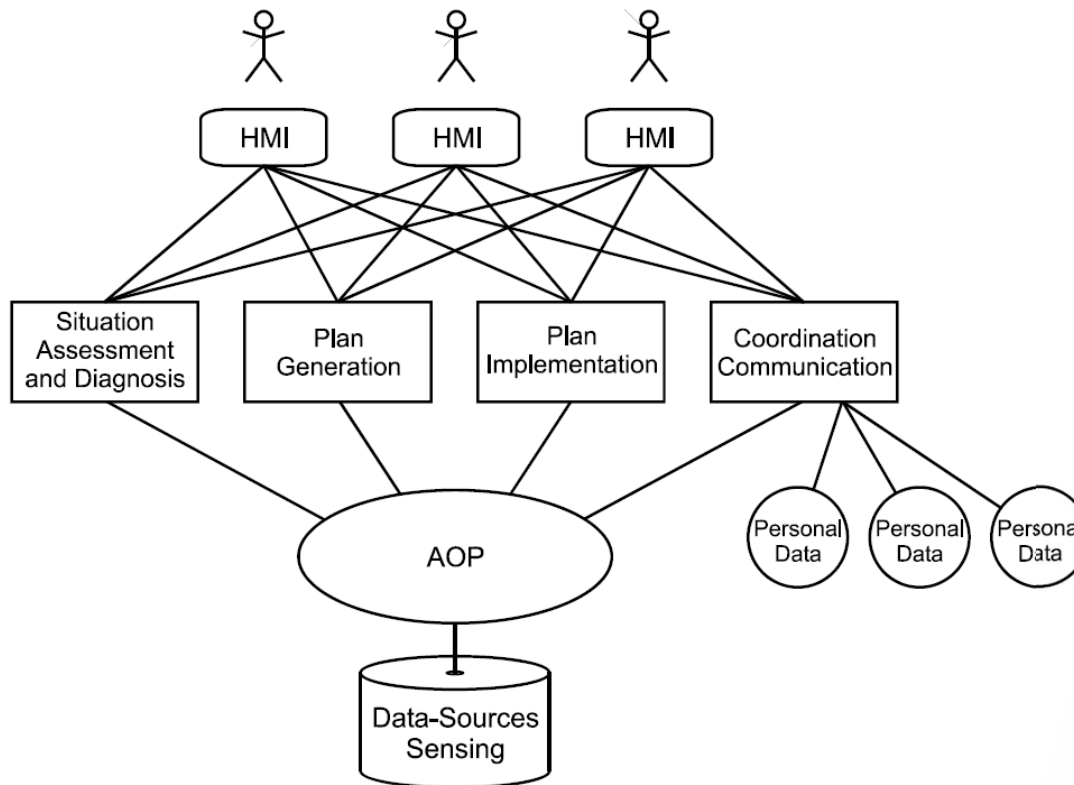


Figure 4-8: Functional architecture of TAM



1st concept by DLR & ECTL



2006: TAM-Concept V1.0

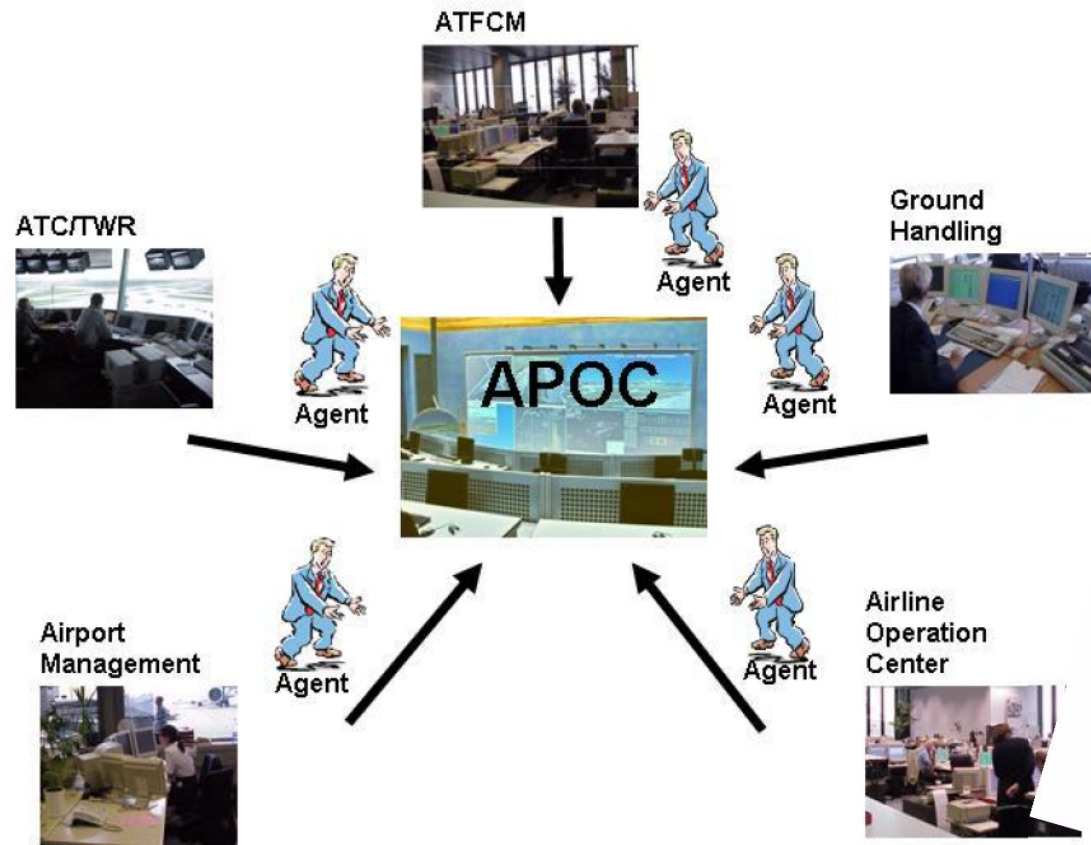


Figure 3-7: agents working in the Airport Operations Centre



2006ff: Progressing...



A-CDM deployment accelerates



Continuity with TAM R&D within DLR, Eurocontrol and SESAR



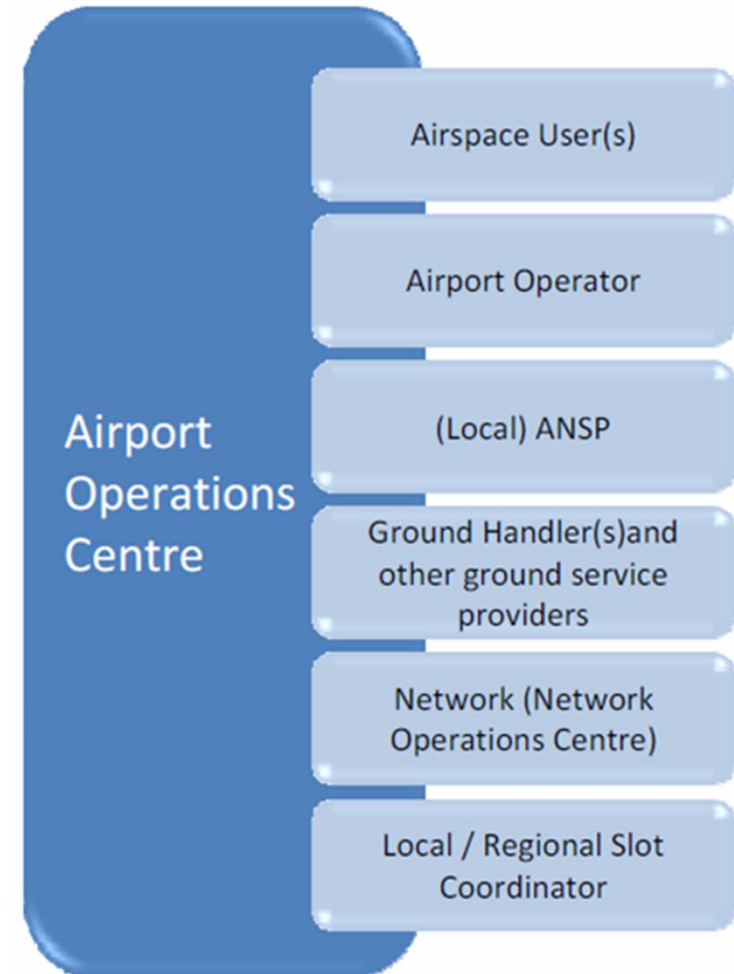
Shaping TAM through SESAR – detailed description and requirements ready



Validation with industry prototypes is underway



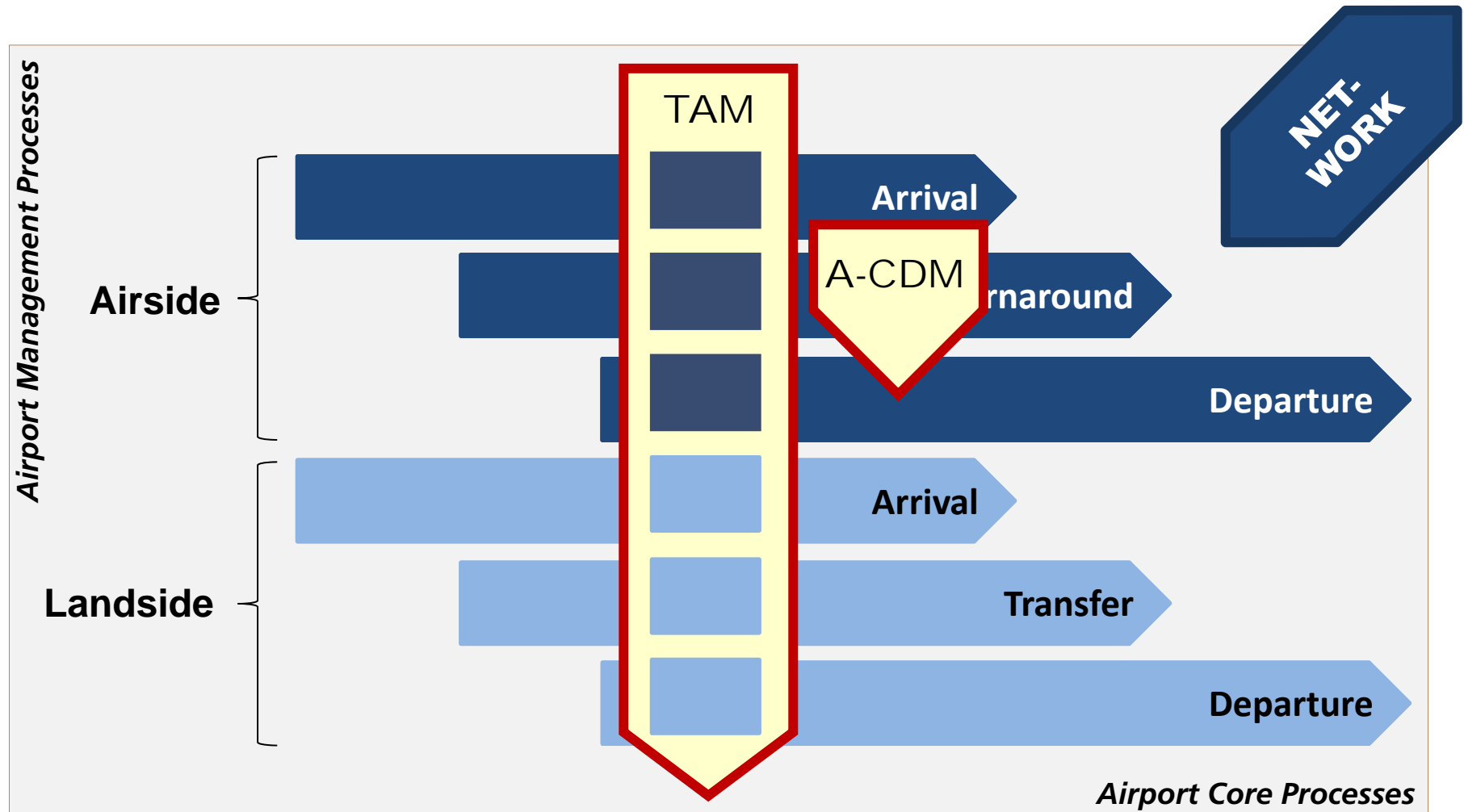
Airports are deploying: ZHR, DUS, MAD, BER, LHR, CDG, AMS to name a few



▪ APOC Supervisor



TAM – Expanding the Scope of A-CDM



Concept Evolution

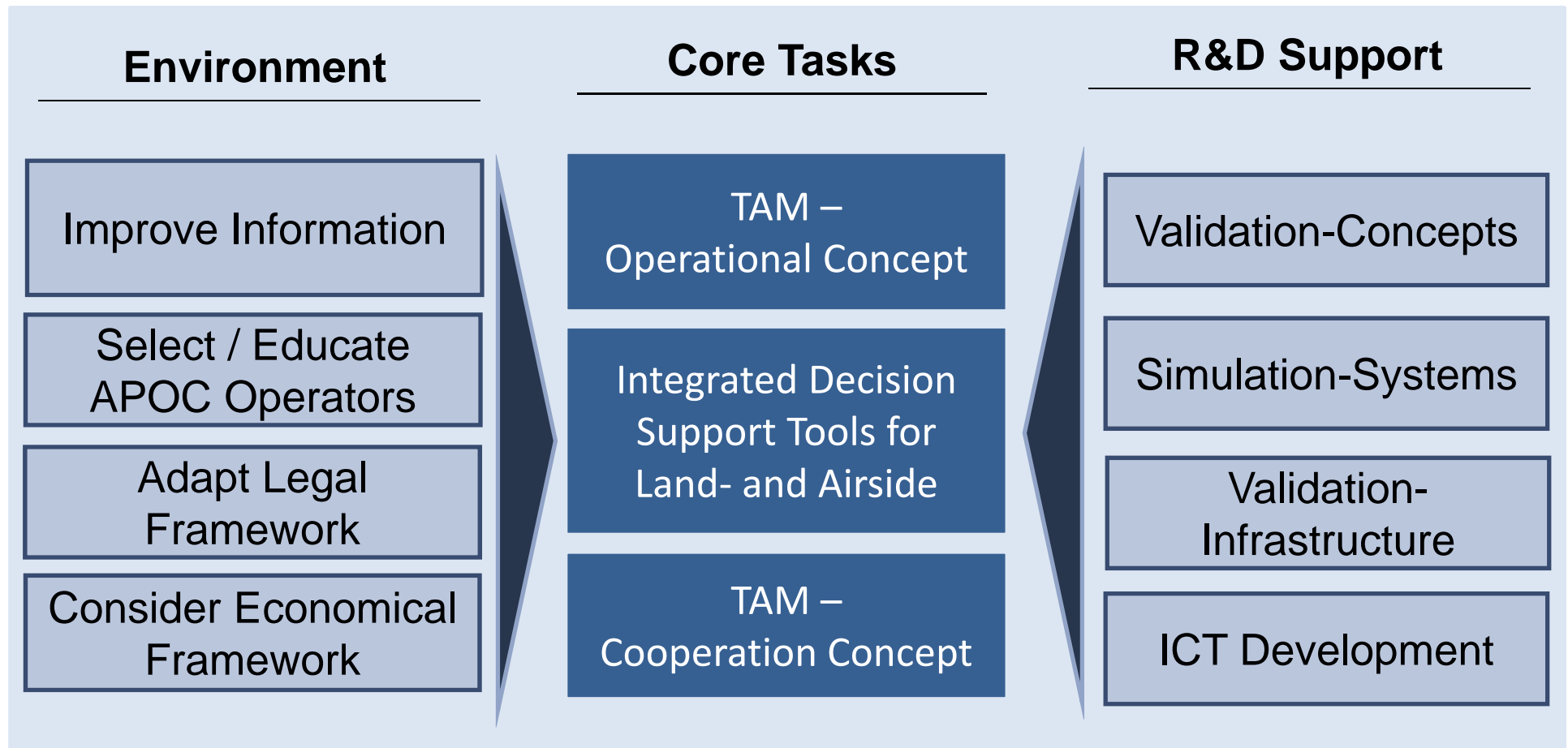


[illegible]

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- The diagram illustrates the interaction flow between Airport / AOP Stakeholders and the Airport Monitor, Impact Assessment, Decision-Support, and AOP Life Cycle Management components.
- Airport / AOP Stakeholders** (represented by an orange arrow pointing left) provides input to the **Impact & what-if assessments** process.
 - The **Airport Monitor** (a blue box containing: Process Monitor, Performance Monitor, Monitor Airside Resource, Monitor Landside Resource, Monitor demand versus capacity) sends **Alerts/ Warnings** (indicated by a grey arrow) to the **Impact Assessment** process.
 - The **Impact Assessment** process (a blue box containing: Analyze monitoring alerts & warnings, Assess severity level, Assess impact of possible solutions) sends a **Collaborative impact assessment request** (green arrow) to the **AOP Life Cycle Management** process.
 - The **Impact Assessment** process sends **APOC Alerts** (green arrow) to the **AOP Life Cycle Management** process, categorized as **Low / Medium / High Impact** (text below the arrow).
 - The **Impact Assessment** process sends data (blue arrow) to the **Decision-Support** process.
 - The **Decision-Support** process (a blue box containing: Identify possible solutions, Analyze and trade-off solutions, Decide on solution) sends a **Collaborative what-if assessment request** (green arrow) to the **AOP Life Cycle Management** process.
 - The **Decision-Support** process sends an **Action request** (green arrow) to the **AOP Life Cycle Management** process.
 - The **AOP Life Cycle Management** process (a blue box containing: Dispatch APOC Alerts & Requests) is the central hub for the AOP process.



TAM – a Multidisciplinary Task



**“MAY THE DREAMS OF YOUR PAST
BE THE REALITY OF YOUR FUTURE”**

-- AFRICAN PROVERB QUOTE



For discussion ...

Harmonisation	<ul style="list-style-type: none">• TAM is being deployed in different forms; a threat?
Benefit	<ul style="list-style-type: none">• Building stakeholder trust in the advantages of TAM, provide evidence!
« Coopetition »	<ul style="list-style-type: none">• Aligning shared business goals, conforming, sharing information ...
Common KPI	<ul style="list-style-type: none">• What are the best KPI for Airport performance management .. can they be common across airports?
Airport Dashboard	<ul style="list-style-type: none">• Who is the final decision maker in this collaborative environment?
Network and Airport Performance ..	<ul style="list-style-type: none">• Conflicting or complementary
The European Performance Scheme	<ul style="list-style-type: none">• Target in RP3?



Concluding ...

Con- clusion

Total Airport Management

- will be the successor of A-CDM
- needs a holistic approach towards airport operations optimisation – landside / airside!
- drives performance
- will change stakeholders cultures...

Coop- erate

Your cooperation is needed

- participate in the development and validation
- position yourself and take advantage
- support implementation
- shape the future



***“IT IS THROUGH COOPERATION, RATHER
THAN CONFLICT, THAT YOUR GREATEST
SUCCESSES WILL BE DERIVED”***

-- RALPH CHARELL

