Supporting European Aviation

EUROCONTROL

ICAO SAM A-CDM workshop

Implementation – how and what

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FOUNDING MEMBER SESAR JOINT UNDERTAKING

NETWORK MANAGER

Why to implement - Criteria

Review Current:

✓Data availability and exchange

✓CDM Procedures, Systems, Interfaces and factors affecting the operations and turn-round process at your Airport

Identify:

✓Issues that need to be modified in order to comply with Airport CDM

✓

✓any relevant operational changes, initiatives and system upgrades already planned

Gap Analysis - concept

What?

- An Inventory according to the Airport CDM Implementation Manual of what data is needed and what is already available

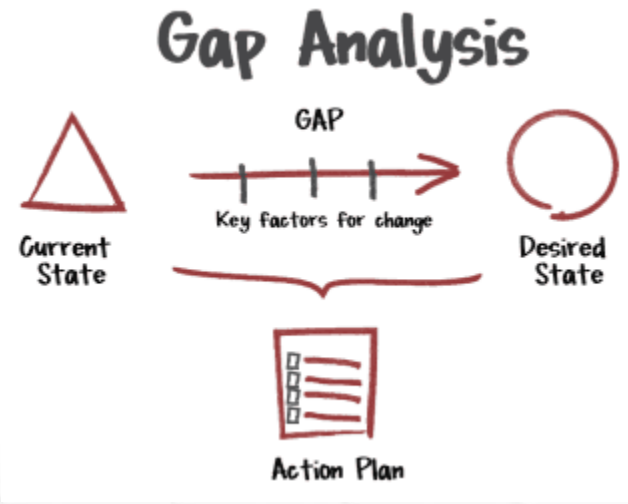
Why?

- You may be surprised to see how much data is available at your airport & planned changes / initiatives and upgrades
- Establish the current data flows & procedures and common understanding of data (acronyms see IP)
- Where the accuracy of certain data can be improved
- When the project gets the green light, a solid platform to start with and concentrate your efforts and resourcing

Gap Analysis - how

How?

- DON'T limit partners involvement
- DON'T limit involvement to IT expertise only, utilise Operational expertise
- KEEP it simple, don't over complicate issues
- Nominate each partners focal point
- KEEP in mind, Airport CDM is for everyone and remember the potential benefits



Gap Analysis – 1st benefits & objectives

First Phase

- Enhanced planning and utilisation of airport resources (ESBAN)
- Better fleet utilisation & improved customer service
- Efficient use of ground handling resources
- Improved arrival information & departure punctuality
- Improved departure planning (by ATC)
- CDM as a prerequisite for DMAN

Gap Analysis – 2nd benefits & objectives

SECOND PHASE

- Reduction in RTF workload
- Optimised use of the available runway and taxiway capacity
- Reduced delays in recovering from minor disruptions
- Reduced fuel emissions and ground noise
- Increased slot (CTOT) adherence
- Data exchange with CFMU only with established TOBT procedures
- Advanced CDM functions possible with good TOBT procedure e.g. Swapping of Flights

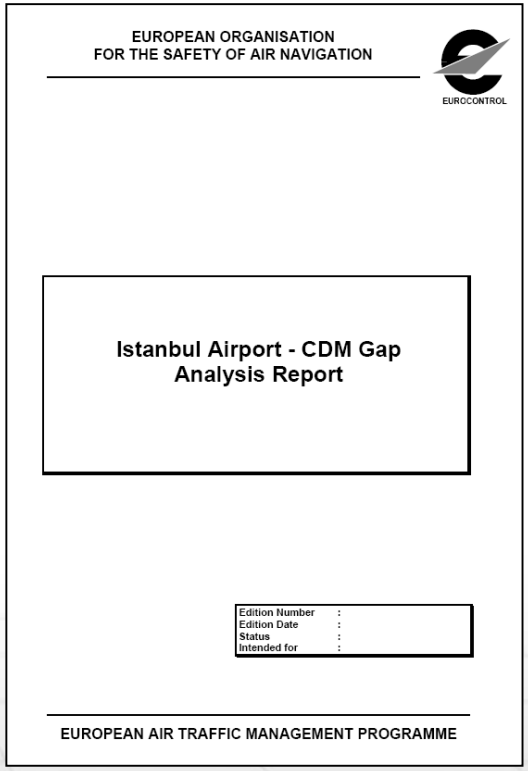
Example of Inventory Template

Data	ATC	Airport	Airline	GH	Available	For CDM	Remarks
Landing Time	YES	YES in FCS, FDPS and FIDS	YES In FIDS	YES In FIDS	**YES**	REQUIRED	
ELDT	ACT msg. in at: FIR entry - 20' incl. a system calculated ELDT based on the flight profile After a/c enters the FIR, ELDT is continuously updated by Radar	from ATC (according to data exchange MATIAS-FIDS)	from ATC (according to data exchange MATIAS-FIDS)	from ATC (according to data exchange MATIAS-FIDS)	**YES**	REQUIRED	Initial ELDT can be calculated by using the FUM and adding a local parameter
ALDT	Manual click	from ATC (MATIAS)	from ATC (MATIAS)	from ATC (MATIAS)	**YES**	REQUIRED	Ideally registered automatically by A-SMGCS
In-block time							
EIBT	NO	NO	NO	NO	**NO**	REQUIRED	
AIBT	YES Manual click -> "park" -> end of FPL	YES in FIDS	YES in FIDS	YES R/T call from ramp agent -> manual input into FIDS	**YES**	REQUIRED	ACCURACY COULD IMPROVE - Ideally registered automatically by A-SMGCS
Taxi-in time	NO	NO	NO	NO	**NO**	REQUIRED	VTT introduction

Gap Analysis - Outcome

Report Content:

- ✓ CDM concept objectives
- ✓ Potential Benefits
- ✓ Inventory
- ✓ General Findings
- ✓ Data Elements Gaps
- ✓ RECOMMENDATIONS
- ✓ Way Forward


EUROPEAN ORGANISATION
FOR THE SAFETY OF AIR NAVIGATION

EUROCONTROL

Istanbul Airport - CDM Gap Analysis Report

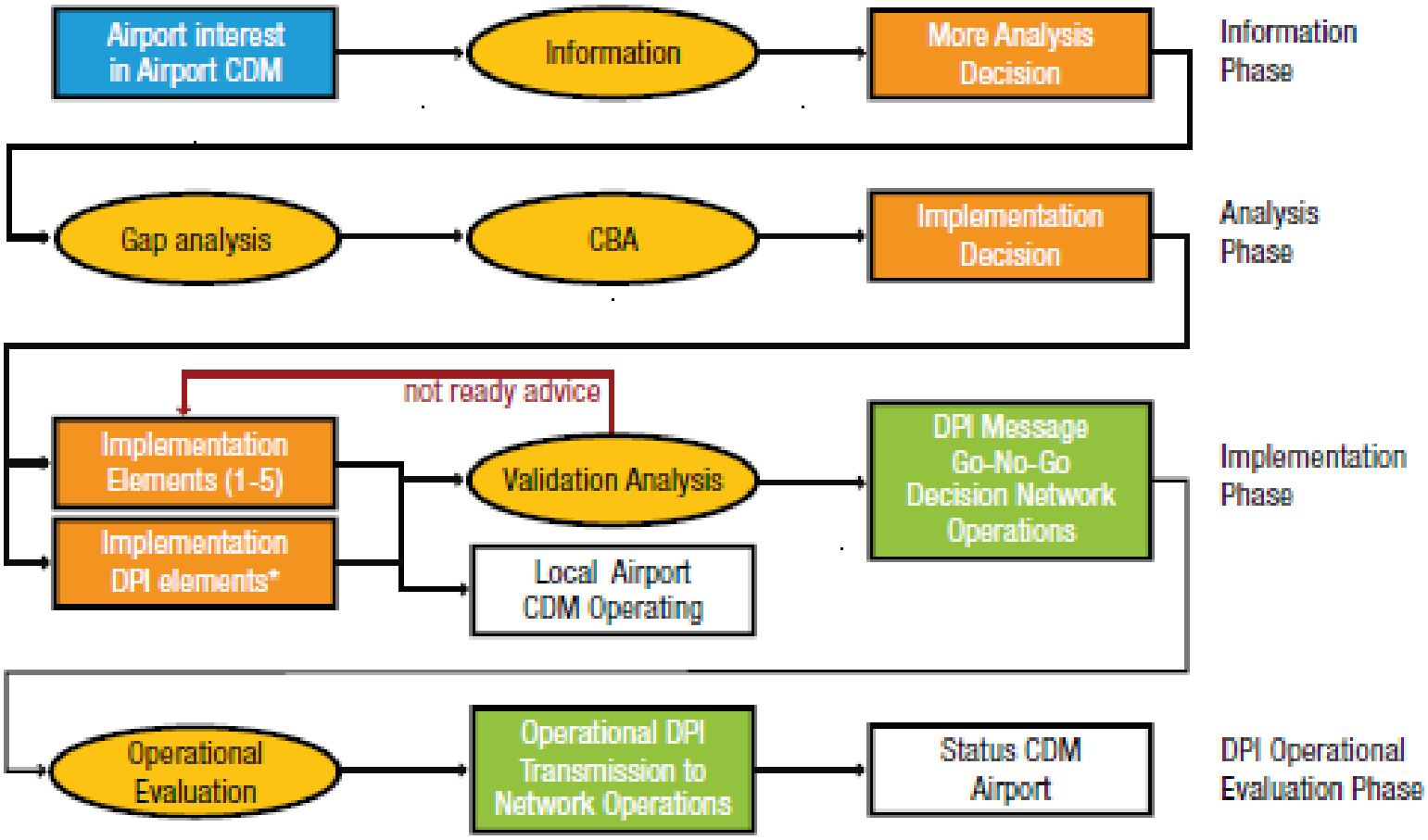
Edition Number :
Edition Date :
Status :
Intended for :

EUROPEAN AIR TRAFFIC MANAGEMENT PROGRAMME

Gap Analysis - Summary

- Information Paper available with gap analysis template based on the CDM Airport Implementation Manual
- Establish MoU in conjunction with GAP Analysis, will eventually be needed for fulfil CFMU data exchange requirements i.e. DPI / FUM messages
- You will verify that most data exists somewhere and accuracy can be improved
- Automation is always key, no additional workload wanted by anyone
- Appoint a Project Manager full time from the onset
- All partners to nominate focal point
- Use any available airport forum to disseminate CDM activities and enhance buy-in e.g. AOC

ACDM project set up – 4 Phases

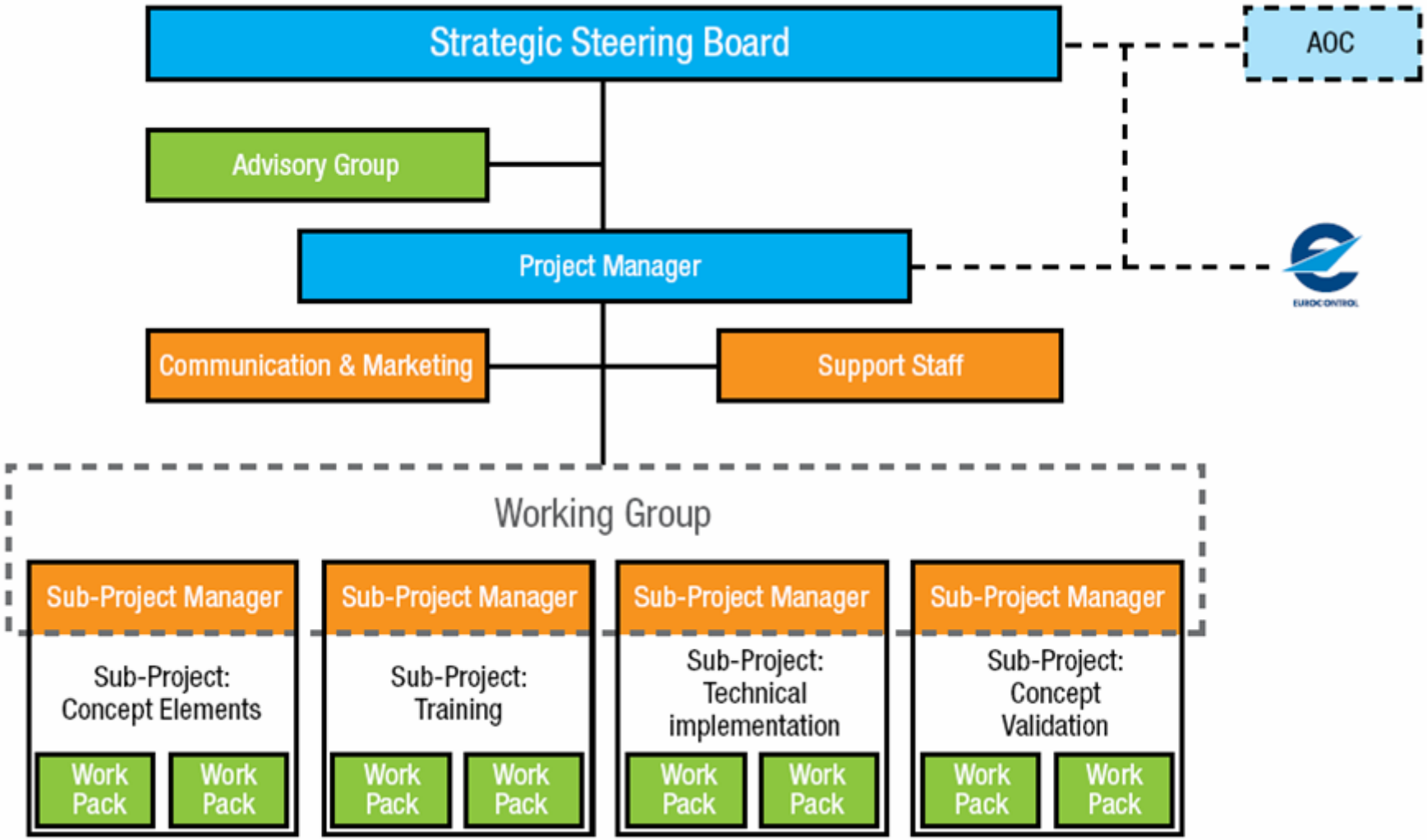


ACDM project set up – 4 Phases

Step by step approach:

- Make sure you understand Airport CDM
- Set the organisation structure
- Set the objectives & define Project Scope
- Check what is needed and what is available
- Encourage, Inform and educate all partners
- Sign MoU
- Set-up Airport CDM Project Plan

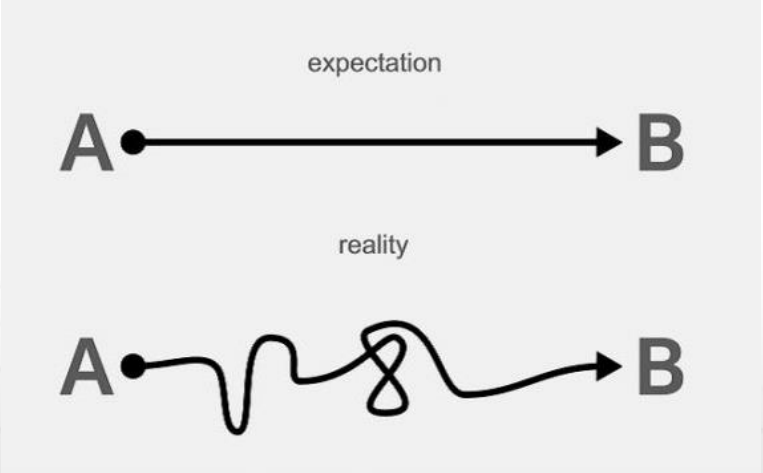
ACDM project set up – Governance



ACDM project set up – Considerations

- **Local & Full implementation:**
  - **When**

  - **Expectations**



Airport – A-CDM

Fully Implemented

Advanced ATC Tower

A-CDM – Where are we now?

Fully Implemented

2007 – **1** airport
2010 – **3** airports
2013 – **8** airports
2015 – **18** airports
2017 – **26** airports
2018 – **28** airports

Advanced ATC Tower

2012 – **1** airport
2013 – **6** airports
2015 – **13** airports
2016 – **16** airports
2017 – **19** airports
2018 – **21** airports

ACDM project set up – Steps

Steps	Description	Responsibility	The How	Timeframe	Benefits / Comments
1	Officially launch the Airport CDM Project with implementation target date	Steering Group (SG)	Press release both internally and externally	4-8 Weeks	Makes a statement of intent, enhances the buy in and additional commitment needed for successful implementation
2	Appoint full time project manager to manage all organisational aspects	Steering Group (CDM Project Group)	As the project Manager is responsible for the day to day project coordination it is important for all partners to agree who is selected	KO + 2 weeks	Essential requirement to achieve project success.
3	Airport Authority, ATC, Aircraft Operator and AOC sign MoU	Steering Group (CDM Project Group)	Use generic EUROCONTROL MoU as basis and adapt accordingly	KO + 4 weeks	By signing all partners show commitment to the project and can clearly see who is responsible for what
4	Create a multi- partner project plan	CDM Project Manager	Following direction from the SG setting the project objectives and task priorities, a Project Plan should be produced clearly identifying objectives, task duration, principle, activities, inputs, outputs, KPIs and potential risks	KO 4 – 8 weeks	By keeping this document continually updated it will become an essential common reference document for all partners.

ACDM project set up – Steps

Steps	Description	Responsibility	The How	Timeframe	Benefits / Comments
5	Working groups (WG) should be created	CDM Project Manager	In conjunction with step 4, WGs should be created with specific tasks, timeframes and accountability	As identified in Project Plan	Groups should be kept as small as possible to maximize output. All work should be coordinated with CDM Project Manager who reports to, and seeks direction / decisions from, the SG.
6	Implement findings / actions identified by WGs	All partners	New procedures. Trials. System adaptations	As identified in Project Plan	
7	Local Implementation	All partners	Phased approach as per the Implementation manual	As identified in Project Plan	
8	Measure success of CDM implementation	All partners	Compare before and after situation using KPIs from implementation manual	As identified in Project Plan	

ACDM project set up – Steps

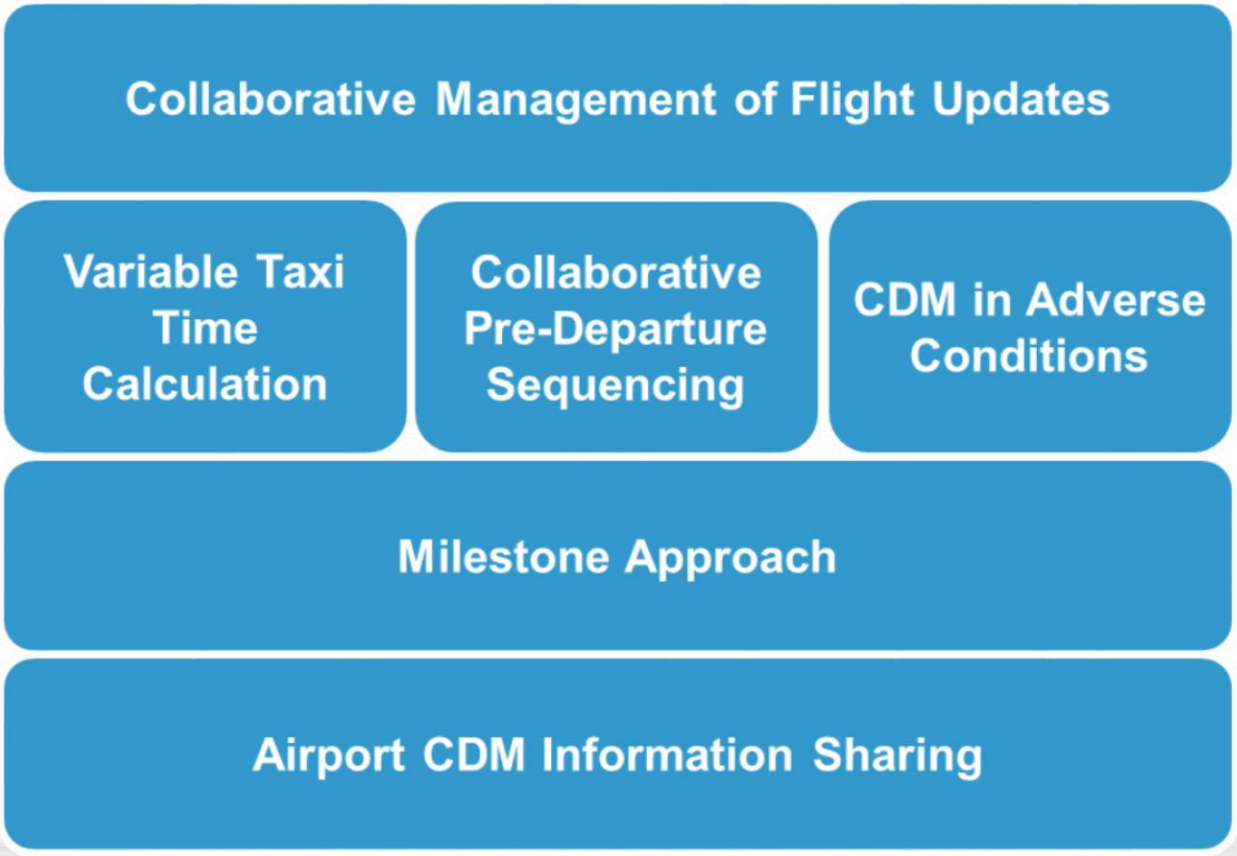
Steps	Description	Responsibility	The How	Timeframe	Benefits / Comments
9	Full Implementation	All partners	Phased Approach as per Implementation Manual in conjunction with Network Manager	As identified in Project Plan	
10	Measure success of CDM implementation	All partners	Compare before and after situation using KPIs from implementation manual	As identified in Project Plan	
11	Declare CDM procedures as normal operations	Steering Group (CDM Project Group)	Inclusion of procedures in AIP	SG Decision	

ACDM project set up – Steps

Parallel Work during Project Duration

- Communication
- Airport CDM Website development
- ACDM Training program
- Continued remote support from ……
- Support to & in Working Groups from ……

A-CDM -Elements



ACDM project set up – PMP

Step by step approach:

- Implementation
  - Information Sharing
  - Milestone Approach
  - Other elements
- Project risks and mitigation
- Set the objectives & define Project Scope
- How to measure success (select KPIs)
- Post implementation
- Disseminate best practice

ACDM project set up – PMP

Support in

Project Set up & guidance
Training (E-Learning, Courses, Train the Trainer)
Communication

Expertise and harmonised documentation

Forum to exchange best practices and lessons learnt

ACDM project set up – Lessons Learned

Appoint a dedicated Project Manager

Use established Guidance material

Establish MoU from outset

Structure the project and identify responsibilities between partners

Prioritise your projects

Define and maintain a Project Management Plan (tasks, accountability and timeframes)

Communication is the key !

Prefer small working groups

Steering group must be reactive and have power

Make sure that partner's participation is consistent

Airport CDM needs 'doers' and not talkers !

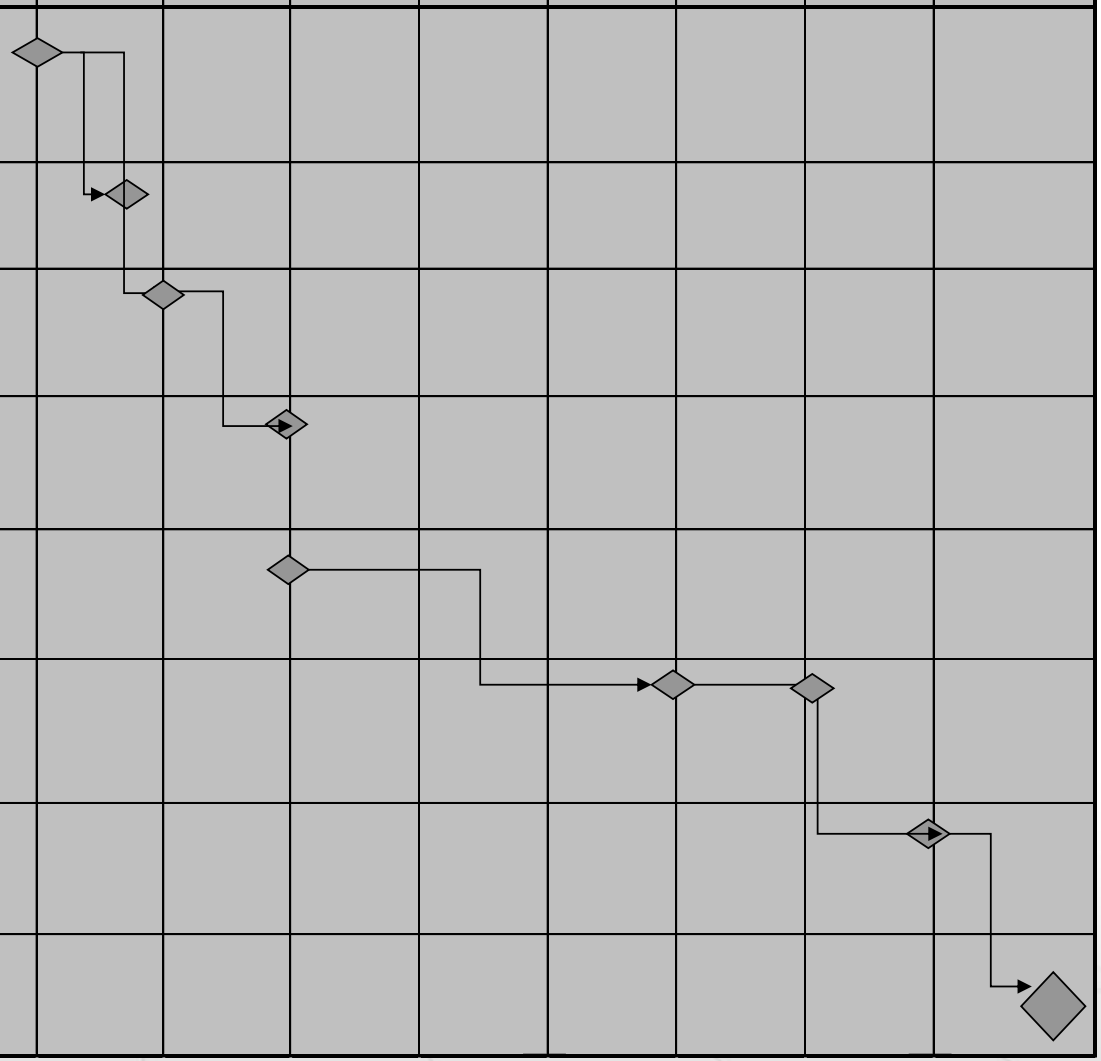
Develop the procedures and then the platform

Avoid the 'blame culture'

Maintain commitment of all partners

ACDM project set up – PMP

Steps	Description
1	Officially Launch CPH CDM Project & Kick Off Meeting
2	SG Appoint Project Manager
3	Partners Sign MoU
4	Multi Partner Project Plan Agreed GAP Analysis completed
5	Working Groups Created
6	Implement findings / actions identified by WGs
7	Measure Success of implementaton
8	Declare CDM procedures as normal operations



Thank you