| SESAR | Active | | APT |
|---|---|---|---|
| **AOP05** | **Airport Collaborative Decision Making (A-CDM)** | | |
| REG | ASP | MIL | APO | USE | INT | IND | NM | MET | AIS | USP |

## Subject matter and scope

Implement Airport CDM (A-CDM) to enhance the operational efficiency of airports and improve their integration into the Air Traffic Management Network (ATMN) while maintaining or improving the safety levels. These objectives are achievable by increasing the information sharing between the local ANSP, airport operator, aircraft operators, ground handlers, the NM and other airport service providers; and improving the cooperation between these partners to enhance the predictability of events and optimise the utilisation of resources therefore increase the efficiency of the overall system.

The Airport CDM concept is built on the following elements:

- The foundations for Airport CDM are Information Sharing and the Milestone Approach. They consist in collaborative information sharing and monitoring of the progress of a flight from the initial planning to the take off. Those two elements allow the airport partners to achieve a common situational awareness and predict the forthcoming events for each flight.

- Variable Taxi Time Calculation, Collaborative Pre-Departure Sequencing (i.e. initial DMAN) and CDM in Adverse Conditions allow the airport partners to further improve the local management of airport operations, whatever the situation at the airport.

- Once A-CDM has been implemented locally, the link with the ATMN can be strengthened through the exchange of flight update messages between the CDM airport and the NM. This last building block of the A-CDM concept facilitates the flow and capacity management, helps reduce uncertainty and increases efficiency at the network level.

NOTE FOR MILITARY AUTHORITIES: It is the responsibility of each military authority to review this Objective IN ITS ENTIRETY and address each of the SLoAs that the military authority considers RELEVANT for itself. This has to be done on top and above of the review of "MIL" SLoAs which identify actions EXCLUSIVE to military authorities.

## Applicability Area(s) & Timescale(s)

| Applicability Area | See list of airports in MP Level 3 Implementation Plan - Annexes | | |
|---|---|---|---|
| **Timescales:** | **From:** | **By:** | **Applicable to:** |
| Initial operational capability | 01/01/2004 | | Applicability Area |
| Full operational capability | | 31/12/2020 | Applicability Area |

## References

### European ATM Master Plan

| OI step - | [AO-0501]-Improved Operations in Adverse Conditions through Airport Collaborative Decision Making | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Enablers - | PRO-204a | PRO-204b | PRO-204c | PRO-204d | | | |
| OI step - | [AO-0601]-Improved Turn-Round Process through Collaborative Decision Making | | | | | | | |
| | Enablers - | AIRPORT-31 | CDM-01 AOP19 | PRO-213a | PRO-213b | | | |
| OI step - | [AO-0602]-Collaborative Pre-departure Sequencing | | | | | | | |
| | Enablers - | CDM-01 AOP19 | PRO-214a | PRO-214b | | | | |
| OI step - | [AO-0603]-Improved De-icing Operation through Collaborative Decision Making | | | | | | | |
| | Enablers - | AIRPORT-31 | CDM-01 AOP19 | PRO-073 | PRO-075 ENV02 | | | |
| OI step - | [TS-0201]-Basic Departure Management (Pre-departure Management) | | | | | | | |
| | Enablers - | AERODROME -ATC-08 AOP19 | | | | | | |

| Legend: | WXYZ-001 | Covered by SLoA(s) in this objective | WXYZ-002 zzz | Covered by SLoA(s) in another objective Objective covering the enabler | WXYZ-003 | Not covered in the Implementation Plan |
|---|---|---|---|---|---|---|

### Applicable legislation

-none-

| AOP05 | Airport Collaborative Decision Making (A-CDM) |
|-------|----------------------------------------------|

## Essential Operational Changes

Airport and TMA performance

## SESAR Solution

## ICAO GANP - ASBUs

| ACDM-B0/1 | Airport CDM Information Sharing (ACIS) |
|-----------|----------------------------------------|
| ACDM-B0/2 | Integration with ATM Network function |
| NOPS-B0/4 | Initial Airport/ATFM slots and A-CDM Network Interface |

## Deployment Programme

| - none - | |
|----------|--|

## European Plan for Aviation Safety

| - none - | |
|----------|--|

## Operating Environments

Airport
En-Route
Network
Terminal Airspace

## Stakeholder Lines of Action (SLoAs)

| SloA ref. | Title | From | By |
|-----------|-------|------|-----|
| **AOP05-ASP01** | Define and agree performance objectives and KPIs at local level, specific to ANSP in accordance with A-CDM Manual guidelines | 01/01/2004 | 01/01/2021 |
| **AOP05-ASP02** | Define and implement local Air Navigation Service (ANS) procedures for information sharing through Letters of Agreement (LoAs) and/or Memorandum of Understanding (MoU) in accordance with A-CDM Manual guidelines | 01/01/2004 | 01/01/2021 |
| **AOP05-ASP03** | Define and implement local procedures for turnaround processes in accordance with CDM manual guidelines | 01/01/2004 | 01/01/2021 |
| **AOP05-ASP04** | Continually review and measure airport performance in accordance with Airport CDM Manual guidelines | 01/01/2004 | 01/01/2021 |
| **AOP05-ASP05** | Define and implement variable taxi-time and predeparture sequencing procedure (i.e. initial DMAN) according to airport CDM Manual guidelines | **DELETED** | |
| **AOP05-ASP06** | Define and implement procedures for CDM in adverse conditions, including the de-icing according to airport CDM Manual guidelines | 01/01/2012 | 01/01/2021 |
| **AOP05-APO01** | Define and agree performance objectives and KPIs at local level specific to airport operations in accordance with A-CDM Manual guidelines | 01/01/2004 | 01/01/2021 |
| **AOP05-APO02** | Define and implement local airport operations procedures for information sharing through Letters of Agreement (LoAs) and/or Memorandum of Understanding (MoU) in accordance with A-CDM Manual guidelines | 01/01/2004 | 01/01/2021 |
| **AOP05-APO03** | Define and implement local procedures for turnaround processes in accordance with CDM manual guidelines (baseline CDM) | 01/01/2004 | 01/01/2021 |
| **AOP05-APO04** | Continually review and measure airport performance in accordance with Airport CDM Manual guidelines | 01/01/2004 | 01/01/2021 |
| **AOP05-APO05** | Define and implement the exchange of messages, Flight Update Message (FUM) and Departure Planning Information (DPI) between NMOC and the airport in accordance with A-CDM Manual guidelines | 01/03/2005 | 01/01/2021 |
| **AOP05-APO06** | Define and implement procedures for CDM in adverse conditions including the de-icing according to airport CDM Manual guidelines | 01/06/2006 | 01/01/2021 |
| **AOP05-USE01** | Define and agree performance objectives and KPIs at local level, specific to aircraft operators, in accordance with A-CDM Manual guidelines | 01/01/2004 | 01/01/2021 |
| **AOP05-USE02** | Define and implement local aircraft operators procedures for information sharing through LoAs and/or MoU in accordance with A-CDM manual guidelines | 01/01/2004 | 01/01/2021 |

| AOP05 | Airport Collaborative Decision Making (A-CDM) |
|---|---|

| AOP05-USE03 | Define and implement local procedures for turnaround processes in accordance with A-CDM manual guidelines | 01/01/2004 | 01/01/2021 |
|---|---|---|---|
| AOP05-USE04 | Continually review and measure airport performance in accordance with Airport CDM Manual guidelines | 01/01/2004 | 01/01/2021 |
| AOP05-USE05 | Define and implement procedures for CDM in adverse conditions including the de-icing according to A-CDM Manual guidelines | 01/01/2012 | 01/01/2021 |
| AOP05-NM01 | Update NM systems and define procedures to support the exchange of messages, Flight Update Message (FUM) and Departure Planning Information (DPI) between NMOC and airports in accordance with A-CDM Manual guidelines | **FINALISED** | |

Description of finalised and deleted SLoAs is available on the eATM Portal @ https://www.eatmportal.eu/working/depl/essip_objectives

## Expected Performance Benefits

| | |
|---|---|
| **Safety:** | - |
| **Capacity:** | Improved through optimal use of facilities and services, better use of airport and ATFM slots. |
| **Operational Efficiency:** | Improved system efficiency and predictability. Significant decrease in fuel burn through better timed operations. |
| **Cost Efficiency:** | Increased airport revenue through additional flights and passengers. |
| **Environment:** | Reduced noise and emissions due to limiting engine ground running time due to better timed operations. |
| **Security:** | - |

## Detailed SLoA Descriptions

| AOP05-ASP01 | Define and agree performance objectives and KPIs at local level, specific to ANSP in accordance with A-CDM Manual guidelines | From: 01/01/2004 | By: 01/01/2021 |
|---|---|---|---|
| **Action by:** | **ANS Providers** | | |
| **Description & purpose:** | Agree and define specific performance objectives and KPIs through a local A-CDM committee, in co-operation with other stakeholders involved. | | |
| **Supporting material(s):** | EUROCAE - ED-145 - Airport-CDM Interface Specification 10/2008<br>Url : https://eshop.eurocae.net/eurocae-documents-and-reports/ed-145/<br>EUROCAE - ED-146 - Guidelines for Test and Validation Related to Airport CDM Interoperability 10/2008<br>Url : https://eshop.eurocae.net/eurocae-documents-and-reports<br>EUROCAE - ED-141 - Minimum Technical Specifications for Airport Collaborative Decision Making (Airport-CDM) Systems 10/2008<br>Url : https://eshop.eurocae.net/eurocae-documents-and-reports/ed-141/#non-member<br>ETSI - EN 303 212 - Airport Collaborative Decision Making (A-CDM); Community Specification for application under the Single European Sky Interoperability Regulation EC 552/2004<br> - Ver. 1.1.1 - OJ 2010C168/04 / 06/2010<br>Url : https://www.etsi.org/deliver/etsi_en/303200_303299/303212/01.01.01_30/en_303212v010101v.pdf<br>EUROCONTROL - Airport CDM Implementation Manual - Edition 5.0 / 03/2017<br>Url : https://www.eurocontrol.int/sites/default/files/publication/files/airport-cdm-manual-2017.PDF | | |
| **Finalisation criteria:** | 1 - List of performance objectives and KPIs has been agreed. | | |
| AOP05-ASP02 | Define and implement local Air Navigation Service (ANS) procedures for information sharing through Letters of Agreement (LoAs) and/or Memorandum of Understanding (MoU) in accordance with A-CDM Manual guidelines | From: 01/01/2004 | By: 01/01/2021 |
| **Action by:** | **ANS Providers** | | |
| **Description & purpose:** | Agree, define and implement local procedures for information sharing and information management systems based on A-CDM Implementation Manual, in co-operation with other stakeholders involved. | | |
| **Supporting material(s):** | EUROCAE - ED-145 - Airport-CDM Interface Specification 10/2008<br>Url : https://eshop.eurocae.net/eurocae-documents-and-reports/ed-145/<br>EUROCAE - ED-146 - Guidelines for Test and Validation Related to Airport CDM Interoperability 10/2008<br>Url : https://eshop.eurocae.net/eurocae-documents-and-reports<br>EUROCAE - ED-141 - Minimum Technical Specifications for Airport Collaborative Decision Making (Airport-CDM) Systems 10/2008<br>Url : https://eshop.eurocae.net/eurocae-documents-and-reports/ed-141/#non-member<br>ETSI - EN 303 212 - Airport Collaborative Decision Making (A-CDM); Community Specification for application under the Single European Sky Interoperability Regulation EC 552/2004<br> - Ver. 1.1.1 - OJ 2010C168/04 / 06/2010<br>Url : https://www.etsi.org/deliver/etsi_en/303200_303299/303212/01.01.01_30/en_303212v010101v.pdf<br>EUROCONTROL - Airport CDM Implementation Manual - Edition 5.0 / 03/2017<br>Url : https://www.eurocontrol.int/sites/default/files/publication/files/airport-cdm-manual-2017.PDF | | |

| AOP05 | Airport Collaborative Decision Making (A-CDM) |
|---|---|

| **ATM Master Plan relationship:** | [AIRPORT-31]-Airport CDM (levels 1, 2 & 3) | | |
|---|---|---|---|
| **Finalisation criteria:** | 1 - Agreed LoA or MoU between the Airport CDM Partners has been signed. | | |
| **AOP05-ASP03** | **Define and implement local procedures for turnaround processes in accordance with CDM manual guidelines** | From:<br>01/01/2004 | By:<br>01/01/2021 |
| **Action by:** | **ANS Providers** | | |
| **Description & purpose:** | Define and implement local procedures for turnaround processes (milestone approach) based on A-CDM Implementation Manual and through LoAs. | | |
| **Supporting material(s):** | EUROCAE - ED-145 - Airport-CDM Interface Specification 10/2008<br>Url : https://eshop.eurocae.net/eurocae-documents-and-reports/ed-145/<br>EUROCAE - ED-146 - Guidelines for Test and Validation Related to Airport CDM Interoperability 10/2008<br>Url : https://eshop.eurocae.net/eurocae-documents-and-reports<br>EUROCAE - ED-141 - Minimum Technical Specifications for Airport Collaborative Decision Making (Airport-CDM) Systems 10/2008<br>Url : https://eshop.eurocae.net/eurocae-documents-and-reports/ed-141/#non-member<br>ETSI - EN 303 212 - Airport Collaborative Decision Making (A-CDM); Community Specification for application under the Single European Sky Interoperability Regulation EC 552/2004<br> - Ver. 1.1.1 - OJ 2010C168/04 / 06/2010<br>Url : https://www.etsi.org/deliver/etsi_en/303200_303299/303212/01.01.01_30/en_303212v010101v.pdf<br>EUROCONTROL - Airport CDM Implementation Manual - Edition 5.0 / 03/2017<br>Url : https://www.eurocontrol.int/sites/default/files/publication/files/airport-cdm-manual-2017.PDF | | |
| **ATM Master Plan relationship:** | [PRO-213a]-CDM information sharing Airport Procedures for turn-around | | |
| **Finalisation criteria:** | 1 - Agreed LoA or MoU between the A-CDM Partners has been signed. | | |
| **AOP05-ASP04** | **Continually review and measure airport performance in accordance with Airport CDM Manual guidelines** | From:<br>01/01/2004 | By:<br>01/01/2021 |
| **Action by:** | **ANS Providers** | | |
| **Description & purpose:** | Measure performance (KPIs) according to agreed success criteria, and quantify the benefits at local airport after implementation and through a local A-CDM committee. | | |
| **Supporting material(s):** | EUROCAE - ED-145 - Airport-CDM Interface Specification 10/2008<br>Url : https://eshop.eurocae.net/eurocae-documents-and-reports/ed-145/<br>EUROCAE - ED-146 - Guidelines for Test and Validation Related to Airport CDM Interoperability 10/2008<br>Url : https://eshop.eurocae.net/eurocae-documents-and-reports<br>EUROCAE - ED-141 - Minimum Technical Specifications for Airport Collaborative Decision Making (Airport-CDM) Systems 10/2008<br>Url : https://eshop.eurocae.net/eurocae-documents-and-reports/ed-141/#non-member<br>ETSI - EN 303 212 - Airport Collaborative Decision Making (A-CDM); Community Specification for application under the Single European Sky Interoperability Regulation EC 552/2004<br> - Ver. 1.1.1 - OJ 2010C168/04 / 06/2010<br>Url : https://www.etsi.org/deliver/etsi_en/303200_303299/303212/01.01.01_30/en_303212v010101v.pdf<br>EUROCONTROL - Airport CDM Implementation Manual - Edition 5.0 / 03/2017<br>Url : https://www.eurocontrol.int/sites/default/files/publication/files/airport-cdm-manual-2017.PDF | | |
| **Finalisation criteria:** | 1 - Results/benefits at airport have been published. | | |
| **AOP05-ASP06** | **Define and implement procedures for CDM in adverse conditions, including the de-icing according to airport CDM Manual guidelines** | From:<br>01/01/2012 | By:<br>01/01/2021 |
| **Action by:** | **ANS Providers** | | |
| **Description & purpose:** | Agree, define and implement local CDM procedures to manage adverse conditions based on A-CDM Implementation Manual, in co-operation with other stakeholders involved. | | |

| AOP05 | Airport Collaborative Decision Making (A-CDM) |
|---|---|

| Supporting material(s): | EUROCAE - ED-145 - Airport-CDM Interface Specification 10/2008 |
|---|---|
| | Url : https://eshop.eurocae.net/eurocae-documents-and-reports/ed-145/ |
| | EUROCAE - ED-146 - Guidelines for Test and Validation Related to Airport CDM Interoperability 10/2008 |
| | Url : https://eshop.eurocae.net/eurocae-documents-and-reports |
| | EUROCAE - ED-141 - Minimum Technical Specifications for Airport Collaborative Decision Making (Airport-CDM) Systems 10/2008 |
| | Url : https://eshop.eurocae.net/eurocae-documents-and-reports/ed-141/#non-member |
| | ETSI - EN 303 212 - Airport Collaborative Decision Making (A-CDM); Community Specification for application under the Single European Sky Interoperability Regulation EC 552/2004 - Ver. 1.1.1 - OJ 2010C168/04 / 06/2010 |
| | Url : https://www.etsi.org/deliver/etsi_en/303200_303299/303212/01.01.01_30/en_303212v010101v.pdf |
| | EUROCONTROL - Airport CDM Implementation Manual - Edition 5.0 / 03/2017 |
| | Url : https://www.eurocontrol.int/sites/default/files/publication/files/airport-cdm-manual-2017.PDF |

| ATM Master Plan relationship: | [PRO-073]-Airport Procedures to maximise throughput of de-icing stands |
|---|---|
| | [PRO-204b]-Collaborative Procedures (ATC) for improving Airport Operations in Adverse Conditions |

| Finalisation criteria: | 1 - LoA or MoU between the Airport CDM Partners has been agreed. |
|---|---|
| | 2 - CDM procedures for the management of adverse conditions, including de-icing, have been established. |

| AOP05-APO01 | Define and agree performance objectives and KPIs at local level specific to airport operations in accordance with A-CDM Manual guidelines | From: 01/01/2004 | By: 01/01/2021 |
|---|---|---|---|

| Action by: | Airport Operators |
|---|---|

| Description & purpose: | Agree and define specific performance objectives and KPIs through a local A-CDM committee, in co-operation with other stakeholders involved. |
|---|---|

| Supporting material(s): | EUROCAE - ED-145 - Airport-CDM Interface Specification 10/2008 |
|---|---|
| | Url : https://eshop.eurocae.net/eurocae-documents-and-reports/ed-145/ |
| | EUROCAE - ED-146 - Guidelines for Test and Validation Related to Airport CDM Interoperability 10/2008 |
| | Url : https://eshop.eurocae.net/eurocae-documents-and-reports |
| | EUROCAE - ED-141 - Minimum Technical Specifications for Airport Collaborative Decision Making (Airport-CDM) Systems 10/2008 |
| | Url : https://eshop.eurocae.net/eurocae-documents-and-reports/ed-141/#non-member |
| | ETSI - EN 303 212 - Airport Collaborative Decision Making (A-CDM); Community Specification for application under the Single European Sky Interoperability Regulation EC 552/2004 - Ver. 1.1.1 - OJ 2010C168/04 / 06/2010 |
| | Url : https://www.etsi.org/deliver/etsi_en/303200_303299/303212/01.01.01_30/en_303212v010101v.pdf |
| | EUROCONTROL - Airport CDM Implementation Manual - Edition 5.0 / 03/2017 |
| | Url : https://www.eurocontrol.int/sites/default/files/publication/files/airport-cdm-manual-2017.PDF |

| Finalisation criteria: | 1 - List of performance objectives and KPIs has been agreed. |
|---|---|

| AOP05-APO02 | Define and implement local airport operations procedures for information sharing through Letters of Agreement (LoAs) and/or Memorandum of Understanding (MoU) in accordance with A-CDM Manual guidelines | From: 01/01/2004 | By: 01/01/2021 |
|---|---|---|---|

| Action by: | Airport Operators |
|---|---|

| Description & purpose: | Agree, define and implement local procedures for information sharing and information management systems based on A-CDM Implementation Manual, in co-operation with other stakeholders involved. |
|---|---|

| Supporting material(s): | EUROCAE - ED-145 - Airport-CDM Interface Specification 10/2008 |
|---|---|
| | Url : https://eshop.eurocae.net/eurocae-documents-and-reports/ed-145/ |
| | EUROCAE - ED-146 - Guidelines for Test and Validation Related to Airport CDM Interoperability 10/2008 |
| | Url : https://eshop.eurocae.net/eurocae-documents-and-reports |
| | EUROCAE - ED-141 - Minimum Technical Specifications for Airport Collaborative Decision Making (Airport-CDM) Systems 10/2008 |
| | Url : https://eshop.eurocae.net/eurocae-documents-and-reports/ed-141/#non-member |
| | ETSI - EN 303 212 - Airport Collaborative Decision Making (A-CDM); Community Specification for application under the Single European Sky Interoperability Regulation EC 552/2004 - Ver. 1.1.1 - OJ 2010C168/04 / 06/2010 |
| | Url : https://www.etsi.org/deliver/etsi_en/303200_303299/303212/01.01.01_30/en_303212v010101v.pdf |
| | EUROCONTROL - Airport CDM Implementation Manual - Edition 5.0 / 03/2017 |
| | Url : https://www.eurocontrol.int/sites/default/files/publication/files/airport-cdm-manual-2017.PDF |

| ATM Master Plan relationship: | [AIRPORT-31]-Airport CDM (levels 1, 2 & 3) |
|---|---|

| Finalisation criteria: | 1 - LoA or MoU between the A-CDM Partners has been agreed. |
|---|---|
| | 2 - Information sharing has been implemented. |

| AOP05 | Airport Collaborative Decision Making (A-CDM) |
|---|---|

| AOP05-APO03 | **Define and implement local procedures for turnaround processes in accordance with CDM manual guidelines (baseline CDM)** | From:<br>01/01/2004 | By:<br>01/01/2021 |
|---|---|---|---|

| **Action by:** | **Airport Operators** |
|---|---|
| **Description & purpose:** | Define and implement local procedures for turnaround processes (milestone approach) based on A-CDM Implementation Manual and through LoAs. |
| **Supporting material(s):** | EUROCAE - ED-145 - Airport-CDM Interface Specification 10/2008<br>Url : https://eshop.eurocae.net/eurocae-documents-and-reports/ed-145/<br>EUROCAE - ED-146 - Guidelines for Test and Validation Related to Airport CDM Interoperability 10/2008<br>Url : https://eshop.eurocae.net/eurocae-documents-and-reports<br>EUROCAE - ED-141 - Minimum Technical Specifications for Airport Collaborative Decision Making (Airport-CDM) Systems 10/2008<br>Url : https://eshop.eurocae.net/eurocae-documents-and-reports/ed-141/#non-member<br>ETSI - EN 303 212 - Airport Collaborative Decision Making (A-CDM); Community Specification for application under the Single European Sky Interoperability Regulation EC 552/2004<br> - Ver. 1.1.1 - OJ 2010C168/04 / 06/2010<br>Url : https://www.etsi.org/deliver/etsi_en/303200_303299/303212/01.01.01_30/en_303212v010101v.pdf<br>EUROCONTROL - Airport CDM Implementation Manual - Edition 5.0 / 03/2017<br>Url : https://www.eurocontrol.int/sites/default/files/publication/files/airport-cdm-manual-2017.PDF |
| **ATM Master Plan relationship:** | [PRO-213a]-CDM information sharing Airport Procedures for turn-around |
| **Finalisation criteria:** | 1 - LoA or MoU between the A-CDM Partners has been agreed. |

| AOP05-APO04 | **Continually review and measure airport performance in accordance with Airport CDM Manual guidelines** | From:<br>01/01/2004 | By:<br>01/01/2021 |
|---|---|---|---|

| **Action by:** | **Airport Operators** |
|---|---|
| **Description & purpose:** | Measure performance (KPIs) according to agreed success criteria, and quantify the benefits at local airport after implementation and through a local A-CDM committee. |
| **Supporting material(s):** | EUROCAE - ED-145 - Airport-CDM Interface Specification 10/2008<br>Url : https://eshop.eurocae.net/eurocae-documents-and-reports/ed-145/<br>EUROCAE - ED-146 - Guidelines for Test and Validation Related to Airport CDM Interoperability 10/2008<br>Url : https://eshop.eurocae.net/eurocae-documents-and-reports<br>EUROCAE - ED-141 - Minimum Technical Specifications for Airport Collaborative Decision Making (Airport-CDM) Systems 10/2008<br>Url : https://eshop.eurocae.net/eurocae-documents-and-reports/ed-141/#non-member<br>ETSI - EN 303 212 - Airport Collaborative Decision Making (A-CDM); Community Specification for application under the Single European Sky Interoperability Regulation EC 552/2004<br> - Ver. 1.1.1 - OJ 2010C168/04 / 06/2010<br>Url : https://www.etsi.org/deliver/etsi_en/303200_303299/303212/01.01.01_30/en_303212v010101v.pdf<br>EUROCONTROL - Airport CDM Implementation Manual - Edition 5.0 / 03/2017<br>Url : https://www.eurocontrol.int/sites/default/files/publication/files/airport-cdm-manual-2017.PDF |
| **Finalisation criteria:** | 1 - Results/benefits at airport have been published. |

| AOP05-APO05 | **Define and implement the exchange of messages, Flight Update Message (FUM) and Departure Planning Information (DPI) between NMOC and the airport in accordance with A-CDM Manual guidelines** | From:<br>01/03/2005 | By:<br>01/01/2021 |
|---|---|---|---|

| **Action by:** | **Airport Operators** |
|---|---|
| **Description & purpose:** | Agree, define and implement local procedures for exchange of messages (FUMs and DPIs) between NM and the airport based on A-CDM Implementation Manual, in co-operation with other stakeholders involved. |
| **Supporting material(s):** | EUROCAE - ED-145 - Airport-CDM Interface Specification 10/2008<br>Url : https://eshop.eurocae.net/eurocae-documents-and-reports/ed-145/<br>EUROCAE - ED-146 - Guidelines for Test and Validation Related to Airport CDM Interoperability 10/2008<br>Url : https://eshop.eurocae.net/eurocae-documents-and-reports<br>EUROCAE - ED-141 - Minimum Technical Specifications for Airport Collaborative Decision Making (Airport-CDM) Systems 10/2008<br>Url : https://eshop.eurocae.net/eurocae-documents-and-reports/ed-141/#non-member<br>ETSI - EN 303 212 - Airport Collaborative Decision Making (A-CDM); Community Specification for application under the Single European Sky Interoperability Regulation EC 552/2004<br> - Ver. 1.1.1 - OJ 2010C168/04 / 06/2010<br>Url : https://www.etsi.org/deliver/etsi_en/303200_303299/303212/01.01.01_30/en_303212v010101v.pdf<br>EUROCONTROL - Airport CDM Implementation Manual - Edition 5.0 / 03/2017<br>Url : https://www.eurocontrol.int/sites/default/files/publication/files/airport-cdm-manual-2017.PDF |

| AOP05 | Airport Collaborative Decision Making (A-CDM) |
|---|---|

| **ATM Master Plan relationship:** | [PRO-214a]-Airport CDM Procedures for pre-departure sequencing |
|---|---|
| **Finalisation criteria:** | 1 - LoA or MoU between the A-CDM Partners and the NM has been agreed.<br>2 - Exchange of messages has been implemented. |

| **AOP05-APO06** | **Define and implement procedures for CDM in adverse conditions including the de-icing according to airport CDM Manual guidelines** | From:<br>01/06/2006 | By:<br>01/01/2021 |
|---|---|---|---|

| **Action by:** | **Airport Operators** |
|---|---|
| **Description & purpose:** | Agree, define and implement local CDM procedures to manage adverse conditions based on A-CDM Implementation Manual, in co-operation with other stakeholders involved. |
| **Supporting material(s):** | EUROCAE - ED-145 - Airport-CDM Interface Specification 10/2008<br>Url : https://eshop.eurocae.net/eurocae-documents-and-reports/ed-145/<br>EUROCAE - ED-146 - Guidelines for Test and Validation Related to Airport CDM Interoperability 10/2008<br>Url : https://eshop.eurocae.net/eurocae-documents-and-reports<br>EUROCAE - ED-141 - Minimum Technical Specifications for Airport Collaborative Decision Making (Airport-CDM) Systems 10/2008<br>Url : https://eshop.eurocae.net/eurocae-documents-and-reports/ed-141/#non-member<br>ETSI - EN 303 212 - Airport Collaborative Decision Making (A-CDM); Community Specification for application under the Single European Sky Interoperability Regulation EC 552/2004<br> - Ver. 1.1.1 - OJ 2010C168/04 / 06/2010<br>Url : https://www.etsi.org/deliver/etsi_en/303200_303299/303212/01.01.01_30/en_303212v010101v.pdf<br>EUROCONTROL - Airport CDM Implementation Manual - Edition 5.0 / 03/2017<br>Url : https://www.eurocontrol.int/sites/default/files/publication/files/airport-cdm-manual-2017.PDF |
| **ATM Master Plan relationship:** | [PRO-073]-Airport Procedures to maximise throughput of de-icing stands<br>[PRO-204a]-Collaborative Procedures (Airport) for improving Airport Operations in Adverse Conditions |
| **Finalisation criteria:** | 1 - LoA or MoU between the A-CDM partners has been agreed.<br>2 - CDM procedures for the management of adverse conditions, including de-icing, have been established. |

| **AOP05-USE01** | **Define and agree performance objectives and KPIs at local level, specific to aircraft operators, in accordance with A-CDM Manual guidelines** | From:<br>01/01/2004 | By:<br>01/01/2021 |
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| **Action by:** | **Airspace Users** |
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| **Description & purpose:** | Agree and define specific performance objectives and KPIs at local level, in co-operation with airport and ANSP. |
| **Supporting material(s):** | EUROCAE - ED-145 - Airport-CDM Interface Specification 10/2008<br>Url : https://eshop.eurocae.net/eurocae-documents-and-reports/ed-145/<br>EUROCAE - ED-146 - Guidelines for Test and Validation Related to Airport CDM Interoperability 10/2008<br>Url : https://eshop.eurocae.net/eurocae-documents-and-reports<br>EUROCAE - ED-141 - Minimum Technical Specifications for Airport Collaborative Decision Making (Airport-CDM) Systems 10/2008<br>Url : https://eshop.eurocae.net/eurocae-documents-and-reports/ed-141/#non-member<br>ETSI - EN 303 212 - Airport Collaborative Decision Making (A-CDM); Community Specification for application under the Single European Sky Interoperability Regulation EC 552/2004<br> - Ver. 1.1.1 - OJ 2010C168/04 / 06/2010<br>Url : https://www.etsi.org/deliver/etsi_en/303200_303299/303212/01.01.01_30/en_303212v010101v.pdf<br>EUROCONTROL - Airport CDM Implementation Manual - Edition 5.0 / 03/2017<br>Url : https://www.eurocontrol.int/sites/default/files/publication/files/airport-cdm-manual-2017.PDF |
| **Finalisation criteria:** | 1 - List of performance objectives and KPIs have been agreed with ANSP and AO. |

| **AOP05-USE02** | **Define and implement local aircraft operators procedures for information sharing through LoAs and/or MoU in accordance with A-CDM manual guidelines** | From:<br>01/01/2004 | By:<br>01/01/2021 |
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| **Action by:** | **Airspace Users** |
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| **Description & purpose:** | Agree, define and implement local procedures for information sharing and information management systems based on A-CDM Implementation Manual, in co-operation with other stakeholders involved. |

| AOP05 | Airport Collaborative Decision Making (A-CDM) |
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| **Supporting material(s)**: | EUROCAE - ED-145 - Airport-CDM Interface Specification 10/2008 |
|---|---|
| | Url : https://eshop.eurocae.net/eurocae-documents-and-reports/ed-145/ |
| | EUROCAE - ED-146 - Guidelines for Test and Validation Related to Airport CDM Interoperability 10/2008 |
| | Url : https://eshop.eurocae.net/eurocae-documents-and-reports |
| | EUROCAE - ED-141 - Minimum Technical Specifications for Airport Collaborative Decision Making (Airport-CDM) Systems 10/2008 |
| | Url : https://eshop.eurocae.net/eurocae-documents-and-reports/ed-141/#non-member |
| | ETSI - EN 303 212 - Airport Collaborative Decision Making (A-CDM); Community Specification for application under the Single European Sky Interoperability Regulation EC 552/2004<br> - Ver. 1.1.1 - OJ 2010C168/04 / 06/2010 |
| | Url : https://www.etsi.org/deliver/etsi_en/303200_303299/303212/01.01.01_30/en_303212v010101v.pdf |
| | EUROCONTROL - Airport CDM Implementation Manual - Edition 5.0 / 03/2017 |
| | Url : https://www.eurocontrol.int/sites/default/files/publication/files/airport-cdm-manual-2017.PDF |
| **ATM Master Plan relationship:** | [AIRPORT-31]-Airport CDM (levels 1, 2 & 3) |
| **Finalisation criteria:** | 1 - LoA or MoU between the A-CDM partners has been agreed. |

| **AOP05-USE03** | **Define and implement local procedures for turnaround processes in accordance with A-CDM manual guidelines** | From:<br>01/01/2004 | By:<br>01/01/2021 |
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| **Action by:** | **Airspace Users** | | |
| **Description & purpose:** | Define and implement local procedures for turnaround processes (milestone approach) based on A-CDM Implementation Manual and through LoAs. | | |
| **Supporting material(s)**: | EUROCAE - ED-145 - Airport-CDM Interface Specification 10/2008 | | |
| | Url : https://eshop.eurocae.net/eurocae-documents-and-reports/ed-145/ | | |
| | EUROCAE - ED-146 - Guidelines for Test and Validation Related to Airport CDM Interoperability 10/2008 | | |
| | Url : https://eshop.eurocae.net/eurocae-documents-and-reports | | |
| | EUROCAE - ED-141 - Minimum Technical Specifications for Airport Collaborative Decision Making (Airport-CDM) Systems 10/2008 | | |
| | Url : https://eshop.eurocae.net/eurocae-documents-and-reports/ed-141/#non-member | | |
| | ETSI - EN 303 212 - Airport Collaborative Decision Making (A-CDM); Community Specification for application under the Single European Sky Interoperability Regulation EC 552/2004<br> - Ver. 1.1.1 - OJ 2010C168/04 / 06/2010 | | |
| | Url : https://www.etsi.org/deliver/etsi_en/303200_303299/303212/01.01.01_30/en_303212v010101v.pdf | | |
| | EUROCONTROL - Airport CDM Implementation Manual - Edition 5.0 / 03/2017 | | |
| | Url : https://www.eurocontrol.int/sites/default/files/publication/files/airport-cdm-manual-2017.PDF | | |
| **ATM Master Plan relationship:** | [PRO-213b]-CDM information sharing Airline Procedures for turn-around | | |
| **Finalisation criteria:** | 1 - LoA or MoU between the A-CDM partners has been agreed. | | |

| **AOP05-USE04** | **Continually review and measure airport performance in accordance with Airport CDM Manual guidelines** | From:<br>01/01/2004 | By:<br>01/01/2021 |
|---|---|---|---|
| **Action by:** | **Airspace Users** | | |
| **Description & purpose:** | Measure performance (KPIs) according to agreed success criteria and quantify the benefits at local airport after implementation and through a local A-CDM committee. | | |
| **Supporting material(s)**: | EUROCAE - ED-145 - Airport-CDM Interface Specification 10/2008 | | |
| | Url : https://eshop.eurocae.net/eurocae-documents-and-reports/ed-145/ | | |
| | EUROCAE - ED-146 - Guidelines for Test and Validation Related to Airport CDM Interoperability 10/2008 | | |
| | Url : https://eshop.eurocae.net/eurocae-documents-and-reports | | |
| | EUROCAE - ED-141 - Minimum Technical Specifications for Airport Collaborative Decision Making (Airport-CDM) Systems 10/2008 | | |
| | Url : https://eshop.eurocae.net/eurocae-documents-and-reports/ed-141/#non-member | | |
| | ETSI - EN 303 212 - Airport Collaborative Decision Making (A-CDM); Community Specification for application under the Single European Sky Interoperability Regulation EC 552/2004<br> - Ver. 1.1.1 - OJ 2010C168/04 / 06/2010 | | |
| | Url : https://www.etsi.org/deliver/etsi_en/303200_303299/303212/01.01.01_30/en_303212v010101v.pdf | | |
| | EUROCONTROL - Airport CDM Implementation Manual - Edition 5.0 / 03/2017 | | |
| | Url : https://www.eurocontrol.int/sites/default/files/publication/files/airport-cdm-manual-2017.PDF | | |
| **Finalisation criteria:** | 1 - Results/benefits at airport have been published. | | |

| **AOP05-USE05** | **Define and implement procedures for CDM in adverse conditions including the de-icing according to A-CDM Manual guidelines** | From:<br>01/01/2012 | By:<br>01/01/2021 |
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| **Action by:** | **Airspace Users** | | |

| AOP05 | Airport Collaborative Decision Making (A-CDM) |
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| **Description & purpose:** | Agree, define and implement local CDM procedures to manage adverse conditions based on A-CDM Implementation Manual, in co-operation with other stakeholders involved. |
| **Supporting material(s):** | EUROCAE - ED-145 - Airport-CDM Interface Specification 10/2008 |
| | Url : https://eshop.eurocae.net/eurocae-documents-and-reports/ed-145/ |
| | EUROCAE - ED-146 - Guidelines for Test and Validation Related to Airport CDM Interoperability 10/2008 |
| | Url : https://eshop.eurocae.net/eurocae-documents-and-reports |
| | EUROCAE - ED-141 - Minimum Technical Specifications for Airport Collaborative Decision Making (Airport-CDM) Systems 10/2008 |
| | Url : https://eshop.eurocae.net/eurocae-documents-and-reports/ed-141/#non-member |
| | ETSI - EN 303 212 - Airport Collaborative Decision Making (A-CDM); Community Specification for application under the Single European Sky Interoperability Regulation EC 552/2004 <br> - Ver. 1.1.1 - OJ 2010C168/04 / 06/2010 |
| | Url : https://www.etsi.org/deliver/etsi_en/303200_303299/303212/01.01.01_30/en_303212v010101v.pdf |
| | EUROCONTROL - Airport CDM Implementation Manual - Edition 5.0 / 03/2017 |
| | Url : https://www.eurocontrol.int/sites/default/files/publication/files/airport-cdm-manual-2017.PDF |
| **ATM Master Plan relationship:** | [PRO-204c]-Collaborative Procedures (Airlines) for improving Airport Operations in Adverse Conditions |
| **Finalisation criteria:** | 1 - LoA or MoU between the A-CDM partners has been agreed. <br> 2 - CDM procedures for the management of adverse conditions, including de-icing, have been established. |

| | | From: | By: |
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| **AOP05-NM01** | **Update NM systems and define procedures to support the exchange of messages, Flight Update Message (FUM) and Departure Planning Information (DPI) between NMOC and airports in accordance with A-CDM Manual guidelines** | 01/03/2005 | 01/01/2021 |

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| **Action by:** | **NM** |
| **Description & purpose:** | Update NM systems and define procedures to support the exchange of messages (FUMs and DPIs) between NM and airports based on A-CDM Implementation Manual. |
| **Supporting material(s):** | EUROCAE - ED-145 - Airport-CDM Interface Specification 10/2008 |
| | Url : https://eshop.eurocae.net/eurocae-documents-and-reports/ed-145/ |
| | EUROCAE - ED-146 - Guidelines for Test and Validation Related to Airport CDM Interoperability 10/2008 |
| | Url : https://eshop.eurocae.net/eurocae-documents-and-reports |
| | EUROCAE - ED-141 - Minimum Technical Specifications for Airport Collaborative Decision Making (Airport-CDM) Systems 10/2008 |
| | Url : https://eshop.eurocae.net/eurocae-documents-and-reports/ed-141/#non-member |
| | ETSI - EN 303 212 - Airport Collaborative Decision Making (A-CDM); Community Specification for application under the Single European Sky Interoperability Regulation EC 552/2004 <br> - Ver. 1.1.1 - OJ 2010C168/04 / 06/2010 |
| | Url : https://www.etsi.org/deliver/etsi_en/303200_303299/303212/01.01.01_30/en_303212v010101v.pdf |
| | EUROCONTROL - Airport CDM Implementation Manual - Edition 5.0 / 03/2017 |
| | Url : https://www.eurocontrol.int/sites/default/files/publication/files/airport-cdm-manual-2017.PDF |
| **ATM Master Plan relationship:** | [PRO-214a]-Airport CDM Procedures for pre-departure sequencing |
| **Finalisation criteria:** | 1 - NM systems have been updated. <br> 2 - Procedures have been defined to support the exchange of messages (FUMs and DPIs) between NM and airports . |