



Network Manager
nominated by
the European Commission



Network Cooperative Decision Making Processes (Network CDM)

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1 Introduction

- 1.1. Commission Regulation (EU) No 677/2011 of 7 July 2011 is setting the basis for - through an efficient CDM process with all industry stakeholders - the activities necessary to achieve the SES network performance targets.
- 1.2. The objective of CDM for the network functions is to establish efficient processes which ensure that decisions and actions arising from the exercise of these functions are carried out in a fully transparent manner with all required information and inputs from parties who will have to implement these decisions. CDM is key for a successful implementation of the network functions.
- 1.3. The Network Functions Regulation sets the rules for the governance of the network functions: it defines roles and responsibilities of the Network Management Board (NMB) (e.g. to decide, to approve, to endorse, to monitor...); it also defines a specific role for the Single Sky Committee (i.e. advise prior decision, approval or endorsement by the NMB).
- 1.4. In this context, the Network Functions Regulation defines clearly the roles and responsibilities of the different network stakeholders; the CDM process is developed along these lines, giving a full transparent view on the responsibilities of the states, the operational stakeholders and the network manager.
- 1.5. The CDM process includes how knowledge-based decisions are made, who develops the preparatory details and describes the supporting working and consultation arrangements.
- 1.6. The CDM process includes as well the relevant consultation arrangements already in place through EUROCONTROL and the pan-European dimension introduced by the EUROCONTROL organization and it has to cover as well the coordination with the other regions and international organisations as ICAO.
- 1.7. The network functions involve strategic, planning and operational decisions with different stakeholder groups including civil and military ANSPs, FABs, airports civil and military and airspace users and national regulatory authorities. These varieties of functions and stakeholders are best served by dedicated CDM processes.
- 1.8. The CDM process will recognise the different roles for the different functions, i.e. leading role in the design of the European route network and ATFM and coordination role for scarce resources.

2 Cooperative Decision Making Processes

- 2.1. Commission Regulation (EU) No 677/2011 of 7 July 2011 establishes the deciding, approving, endorsing body for the Network functions for EU states and those states who have signed an SES agreement with the EC.
- 2.2. Given the modernisation of EUROCONTROL, the establishment of revised EUROCONTROL working and consultation arrangements and the establishment of specific provisions for the involvement of non-EU states in the Network Management Board and in the Single Sky Committee, the CDM should make possible comprehensive processes avoiding both separation and duplication between EU and non EU processes.
- 2.3. In addition, to be efficient and pragmatic, the appropriate and regular consultation and decision processes of the States and operational stakeholders participating in the network functions shall be conducted, where appropriate, through existing arrangements.
- 2.4. The Network Management Board will use a Network Director Operations as a forum for preparation, review and implementation of mandated operational actions. The Network DOP structure will include mechanisms for direct involvement of airspace users and airports. The Network DOP shall be an efficient and proactive group which will work closely with the Network Manager at right operational managerial level empowered to make commitments, take actions and agree on operational decisions. The ToR of the Network DOP will be approved by the NMB.
- 2.5. The EUROCONTROL Teams and their substructures would be used for expert input and coordination (namely the: NETOPS – Airports - AIS/SWIM – Safety - CNS Infrastructure). These teams are open to experts of all NM stakeholders and will be tasked to develop and review specific technical and operational NM proposals at expert level. In case of issues impacting significantly the performance, the Network Manager will call specific task forces. These task forces will have limited duration.
- 2.6. In case, the current Teams structure would not cover the needs of the network function (as for the radio frequency functions), a new group will be proposed as part of the CDM of that function.
- 2.7. Network performance improvement proposals are part of the NOP and will follow the CDM NOP process. If however it becomes necessary to make additional improvement proposals during the course of the year, a fast track process of development, review and agreement between NM and Network DOP, including if required the NETOPS team, will be established and endorsed by the NMB.
- 2.8. The CDM processes for the operational activities of the Network Manager were reviewed in the light of the Network Functions Regulation and the ATFM IR. The detailed operational procedures between the Network Manager and ACCs are part of the NM ATFCM Manuals. The principles on how to address these operational issues at the level of the Network DOP include the process for interaction between the Network Manager and the ANSP operational units as well as with the AOs on the development of network performance improvements for capacity and flight efficiency or network delay mitigation measures when the network is suffering from shortfalls. The operational coordination processes is supplemented by network operations monitoring and post ops analysis and reporting.
- 2.9. The Network Manager will have to reinforce the application of measures commonly agreed to improve the network performance. If these measures are not applied, the case will have to be raised to the NMB or even to the Commission in order to be brought to the attention of the SSC, if it cannot be solved by the NMB.
- 2.10. Specific procedures in case of crisis have been developed to ensure that the right decision level is addressed, correctly informed and able to take quickly consolidated decisions.
- 2.11. The processes developed for a crisis situation must ensure that the decision bodies are able to take counsel together as to how to act in a very short period of time.

3 Detailed Cooperative Decision Making Processes

3.1 Introduction

Considering all the activities defined in the Regulation, the network functions are covering different activities for which specific CDM processes have been developed. The following processes have been identified:

- Network Strategy Plan (NSP)
- Network Performance Plan (NPP)
- Work Programme
- Annual Budget
- Annual Report
- Network Operations Plan (NOP)
- European Route Network Design
- ATM Procedures
- Radio Frequency Function (RFF)
- Transponder Code Function (TCF)
- Crisis Management
- ATFM
- 3rd Country ANSP Arrangements

3.2 Development of the processes

These Cooperative Decision Making processes have been developed following some basic principles and a same logic which are described hereafter:

- reflect intention of applicable EC Regulations
- if it works today, re-use
- simplify by grouping into approval process for the Network Strategy Plan and Network Operations Plan
- use EUROCONTROL working arrangements as far as practicable (avoid duplication/include pan-European stakeholders).

Each process is following a three phases approach:

- the preparatory work which include the input and the first drafting
- the consultation which will bring the deliverable from a draft proposal to a mature proposal
- and the final approval or decision making phase

For each of the phases, it must also be very clear what is the deliverable, who is involved and who is preparing the material and eventually who is applying the decision (or to whom the decision applies).

Out of the identified processes listed here above, four processes directly related to the Network functions have detailed cooperative decision making procedures which have been developed together with the stakeholders concerned. Short descriptions are included hereafter and the full package descriptions are provided as Attachments.

The NSP and NOP consultation were discussed and agreed at the NMB.

3.3 Location of the full Network CDM package

The full CDM package includes the ToRs of the involved consultation groups and the governance. A summary table for all processes is found at the end of this document. The detailed description as well as the ToR/RoP will be maintained up to date on a dedicated OST website.

4 Network Strategy Plan (NSP)

4.1 High level Process description

1. Preparation

- Input from ATM Master Plan, NOP, NM Annual report, SES Regulations
- Input on deployment and ops priorities coming from the Teams
- Network DOP to support input
- NM to prepare draft NSP

2. Consultation

- Network DOP to review the draft NSP
- NMB or any other designated group by the NMB (e.g. ad hoc TF) to review draft NSP

3. Approval

- NMB to endorse Network Strategy Plan
- European Commission to adopt Network Strategy Plan

4.2 NSP Process

The Network Strategy Plan (NSP) is required as part of the Commission Regulation (EU) No 677/2011 (Network Functions) of 7 July 2011.

The NSP is endorsed by NMB prior adoption in accordance with Article 5 (3) of Regulation (EC) No 549/2004.

The Network Manager shall develop, maintain and implement the NSP:

- It aims at achieving the performance targets defined in Commission Implementing Regulation (EU) No 390/2013 laying down a performance scheme for air navigation services and network functions
- It defines the strategic objectives for the next known reference period and the main operational drivers for this reference period
- It shall be consistent with the European ATM Master Plan
- The NSP will be updated to take account of technological, institutional and economic developments where appropriate and the performance objectives of the next known reference period.
- The NSP, once endorsed by NMB, is a formal document which defines the objectives which must be implemented by all actors through concrete actions put in particular in the NOP and in the Network Performance Plan.

5 Network Performance Plan (NPP)

5.1 High level Process description

1. Preparation

- Input from previous Performance Plan, Network Strategy Plan, NOP, ABP, NM Annual Report, SES Regulations
- Input from the Commission Implementing Decision setting the Union-wide performance targets
- Input on deployment and ops priorities coming from the Teams
- Network DOP to support input to draft Network Performance Plan
- PRB to provide input for draft NPP
- NM to prepare draft NPP

2. Consultation

- Operational Stakeholders through Network DOP
- Operational Stakeholders, including FABs, through NMB or any other designated group by the NMB
- NM Social partners

3. Approval

- NMB to endorse NPP
- European Commission to adopt NPP, following assessment with the assistance of the PRB

5.2 NPP Process

The Network Performance Plan (NPP) is required by the Commission Implementing Regulation (EU) No 390/2013 Article 6 (d).

The NPP is endorsed by NMB prior to the submission to the EC by latest 6 months before the beginning of each reference period for assessment and adoption.

The Network Manager shall develop, maintain and implement the NPP, which:

- shall contain performance targets for all key performance areas and for all indicators, consistent with the Union-wide performance targets for the entire reference period, with the use of annual values for monitoring purposes;
- shall contain a description of the actions aimed at reaching the targets;
- shall contain, where necessary or where decided by the Commission, additional key performance indicators and targets
- aims at achieving the performance targets defined in Regulation (EU) No 390/2013.

6 Rolling Work Programme Annual Approval Process for x+1 - x+5 (where x = current year)

6.1 High level process description

1. Preparation

- Input from previous annual and multi-annual Work Programmes.
- NSP, NPP, NOP, National Capacity Plans.
- NM Annual Report, Network Performance targets for current RP and next RP (if known).
- Network Performance Plan for current RP and next RP (if already available).

2. Consultation

- NM to prepare multi-annual draft work programme for x+1 – x+5, in cooperation with NMB TF on budget issues
- NM to seek input on draft work programme for x+1 – x+5 by NMB

3. Approval

- NMB to approve the NM work programme for x+1 – x+5

6.2 Rolling work programme for x+1 – x+5 process

- NM will prepare a first draft of the work programme for x+1 – x+5 end of February of year x, derived from the previous multi-annual work programme approved by the NMB.
- A comprehensive progress report should be presented to the first meeting of the NMB in year x. This would best be in March.
- NM will then discuss and fine-tune the content of that draft work programme for x+1 – x+5 with the NMB Budget TF: this step should take place well in advance of the second meeting of NMB in year x. It is expected that the NMB Budget TF will be in a position of confirming it is content with the draft work programme for x+1 – x+5 prior submission to the NMB in due time.
- NM will present a draft work programme for x+1 – x+5 at the NMB second meeting seeking the approval by the NMB. The NMB will approve the work programme for x+1 – x+5.
In the event that the NMB has further requirements and, as a consequence, is not able to approve the work programme for x+1 – x+5, the NM will continue to work with the NMB TF to iron-out minor difficulties, returning swiftly to the NMB if absolutely necessary.
- The NM may then seek NMB formal approval of the work programme for x+1 – x+5 at the third meeting of the NMB in autumn.

7 Annual Budget

7.1 High level process description

1. Preparation

- Input from annual and multi-annual Work Programmes.
- Previous NM budget requirements.
- NSP, NPP, NOP, National Capacity Plans.
- NM Annual Report, Network Performance targets for current RP and next RP (if known).
- Network Performance Plan for current RP and next RP (if already available).
- Principles for NM budget as laid down in Commission regulation 677/2011 (as revised).

2. Consultation

- NM to prepare budget for x+1 (where x = current year), in cooperation with NMB TF on budget issues
- NM to seek confirmation¹ of draft budget by NMB
- NM to seek positive opinion² on draft budget by SSC
- NM to seek endorsement of budget by NMB

3. Approval

- NMB to endorse the NM budget after positive opinion of the SSC.
- NM to send this budget to EUROCONTROL to include within the wider EUROCONTROL budget
- The NM budget accepted by the EUROCONTROL PC with no amendments to NMB endorsed version as “a Part” of wider EUROCONTROL budget.

7.2 Annual budget process

- NM will prepare a first draft of the budget for year x+1 end of February of year x, in line with the cost-efficiency performance targets for the NM, derived from the multi-annual work programme approved by the NMB and presenting in a separate part (e.g. Part IX) the NM activities compared to other activities of EUROCONTROL.
- A comprehensive progress report should be presented to the first meeting of the NMB in year x. This would best be in March.
- NM will then discuss and fine-tune the content of that draft with the NMB Budget TF: this step should take place well in advance of the second meeting of NMB in year x. It is expected that the NMB Budget TF will be in a position of confirming it is content with the draft budget prior submission to the NMB in due time.
- NM will present a draft comprehensive budget at the NMB second meeting seeking the endorsement by the NMB. The NMB will endorse the NM budget of the year x+1 budget in principle prior to subsequent positive opinion at the summer SSC meeting (June or July).
In the event that the NMB has further requirements and, as a consequence, is not able to endorse the draft budget, the NM will continue to work with the NMB TF to iron-out minor difficulties, returning swiftly to the NMB if absolutely necessary.
Together with its positive opinion, the SSC will adopt a recommendation to the States and PC confirming that the NM budget is in line with regulatory requirements and that it is frozen.
- The NM may then seek NMB formal endorsement of the budget for year x+1 at the third meeting of the NMB in autumn (or by written procedure following the SSC positive opinion).
- At last the NM will ensure the wider EUROCONTROL budget, including the NM budget, is adopted by the EUROCONTROL PC without amendment to the NM part thereof.

To enable this process, the NMB must sequence its meeting calendar with that of the SSC in an optimal manner, leaving 3-4 clear weeks between NMB and SSC meetings. In the event that the annual budget for the x+1 year is not endorsed by the NMB in due time, the Network Manager will apply appropriate measures to ensure business continuity until the moment the annual budget is endorsed.

¹ - Confirmation – NMB broadly content with the draft budget with minor manoeuvring room between NMB TF and NM prior to Positive Opinion

² - Positive Opinion – majority approval in SSC.

8 Network Manager Annual Report (NMAR)

8.1 High level Process description

1. Preparation

- Input from ATM Master Plan, NSP, NPP, NOP, Network Operations Report, previous NM Annual report, SES Regulations
- NM to prepare draft NMAR in accordance with the Annex VI, paragraph 7 of the Commission Regulation (EU) No 677/2011 Network Functions) of 7 July 2011.

2. Consultation

- Operational Stakeholders through Network DOP
- Operational Stakeholders, including FABs, through NMB

3. Approval

- NMB to approve the NMAR
- NM to submit, following NMB approval, the NMAR to the European Commission and EASA

8.2 NMAR Process

The Network Manager Annual Report (NMAR) is required as part of the Commission Regulation (EU) No 677/2011 Network Functions) of 7 July 2011.

The Network Manager shall submit annually a report to the European Commission and EASA, closely linked to the NSP, NPP and the NOP, on:

- The measures taken to fulfil its tasks;
- Individual network functions;
- The total network situation;

The NMAR is approved by NMB in accordance with Article 20 (3) of Regulation (EC) No 677/2011.

The European Commission shall inform the Single Sky Committee on the NMAR.

9 Network Operations Plan (NOP)

9.1 High level Process description

1. Preparation

- Input from previous NOP, NSP, National Capacity Plans, NM Annual Report, Network Performance targets
- Input from the Teams per domain of the NOP
- (D)NM to draft the NOP Seasonal/yearly and NOP 3-5 years

2. Consultation

- NetOPS to agree on the draft content of the NOP Seasonal/yearly and NOP 3-5 years
- Network DOP to agree draft NOP

3. Approval

- NMB approves NOP

9.2 NOP Process

The content of the NOP shall be prepared following the structure detailed in the Annex V of the Commission Regulation (EU) No 677/2011 of 7 July 2011 laying down detailed rules for the implementation of air traffic management (ATM) functions.

The NOP will be updated on annual basis and the following calendar will be followed by the Network Manager in close cooperation with the ANSPs and the airports:

- **October of year x-1** – distribution of new capacity requirements based on the delay breakdown provided for the purpose of the first reference period of the Performance Scheme; new capacity requirements agreed bi-laterally with all ANSPs;
- **November of year x-1 – February of year x** – cooperative preparation of the local capacity plans with all ANSPs, including identification of additional measures; through bi-lateral meetings with a large number of ANSPs; new capacity plans agreed bi-laterally with all ANSPs;
- **February of year x** – the Network Manager consolidated the NOP (year x - x+2), including network actions, and included in it quantitative and qualitative evaluations of the expected performance over the period x - x+2;
- **Feb of year x:** NOP (year x - x+2) agreed by NETOPS to be presented to NDOP;
- **Feb – March of year x:** NOP (year x - x+2) agreed by NDOP to be presented to NMB;
- **March of year x:** NOP (year x - x+2) approved by NMB;
- **June of year x** – if required, any update before Summer submitted for approval to NMB.

10 European Route Network Design (ERND)

10.1 High level Process description

1. Preparation

- Input from NSP, previous NOP, NM Annual Report
- Input from all operational stakeholders and ICAO
- (D)NM to prepare ERNIP proposals
- All operational stakeholders to agree on ERNIP proposals
- NetOps substructure to review proposals
- (D)NM to prepare draft ERNIP

2. Consultation

- Network DOP, for any unresolved issues (if required)
- NetOPS to agree on draft ERNIP

3. Approval

- ERNIP Part 2 - ARN Version ARN Version 20xx-20(xx+3/5) will follow the NOP approval process and goes to ICAO for inclusion in ICAO EANP
- ERNIP Part 1 - Technical Specifications for Airspace Design, ERNIP Part 3 - ASM Guidance material and ERNIP Part 4 - RAD Manual will follow the NOP approval process.

10.2 ERND Process

In the execution of the European Route Network Design Function, the Network Manager has to develop, through a cooperative decision making process, the *European Route Network Improvement Plan*. The *European Route Network Improvement Plan* will be part of the *Network Operations Plan*.

The Part 2 of the ERNIP will be updated on an annual basis. Part 1, 3 and 4 will be updated as required.

The following calendar and CDM process was and will be followed by the Network Manager in close cooperation with the operational stakeholders for every update of the ERNIP Part 2:

October 20xx – Evaluation of the Summer 20xx situation and of the airspace design and utilisation related bottlenecks

October 20xx – Presentation of the first version of the ERNIP Part 2 – ARN Version 20xx-20(xx+3/5)

January 20xx+1 - distribution of the draft ERNIP Part 2 to RNDSG;

February 20xx+1 - discussion on the draft ERNIP Part 2 at RNDSG and NETOPS; further comments requested;

March 20xx+1 – comments received and incorporated in the ERNIP Part 2 and new versions distributed to RNDSG and NETOPS;

March 20xx+1 – progress report presented to NMB;

April-May 20xx+1 – agreement on final version for ERNIP Part 2 by RNDSG;

May-June 20xx+1 – seek approval by NETOPS and N-DOP for ERNIP Part 2;

June 20XX+1 – seek approval by NMB of ERNIP Part 2

The detailed description of the ERNIP deliverables is available under Attachment A of the CDM. The Terms of Reference of supporting working arrangements are available in the Attachment F of the CDM.

11 ATM (ATS/ASM/ATFM) Procedures

11.1 High level Process description

1. Preparation

- Input from existing ATS/ASM/ATFM procedures, NOP
- Input from all operational stakeholders
- (D)NM to prepare new ATM procedures proposals or amendments, prepare ATFCM Manual
- NetOps substructures (APDSG & ODSG) to review

2. Consultation

- NetOPS to agree on draft content of the procedures

3. Approval

- NetOPS and where appropriate NDOP, to approve
- When required, ICAO States through ICAO States letters approve the procedure

11.2 ATM Procedures Process

The ToR of the NETOPS Team and the two subgroups directly involved (APDSG and ODSG) reflect the responsibilities of these groups in the preparation, review and approval of the ATM procedures. These procedures will be aligned with the requirements coming from the NM Regulation but are not directly linked to a deliverable of the regulation.

12 Radio Frequency Function (RFF)

12.1 High level Process description

1. Preparation
 - Input from National Frequency Managers and ICAO
 - (D)NM develop draft frequency management procedures
 - NFM Coordination Group to review proposals
2. Consultation
 - ICAO to comment
 - NMB to review draft CDM Arrangements for Frequency Management
3. Approval
 - NMB approval on CDM Arrangements (12 months after approval of Regulation 677/11) after positive opinion of SSC
 - On States request could go to ICAO for global application.

The CDM for the RFF has been developed with the National Frequency Managers through dedicated workshops, including the ICAO Paris Office.

12.2 RFF Process

The Radio Frequency Function (RFF) Cooperative Decision Making (CDM) arrangements describe the processes by which the RFF decisions will be made, based on a constant interaction and consultation with Member States, operational stakeholders and other actors as appropriate such as ICAO.

The RFF CDM provides the rules of procedure of the consultation and working groups that will support the RFF work, which are:

Group	Role
Radio Frequency Function group (RAFT)	RAFT is the main consultation group for the radio frequency function. It is composed by the National Frequency Managers nominated by the European States. The RAFT will express positions and opinions, and make decisions on all aspects of the radio frequency function. The RAFT will report to DNM who will report to the NMB. The RAFT planning schedule will be coordinated with ICAO.
Aeronautical Radio Interference Analysis group (ARIA)	ARIA manages the processes for the analysis of interference reports, the identification of interference causes, the agreement of mitigation actions and the follow-up of those actions.
Operational and Technical Request Analysis group (OTRA)	OTRA is an expert group that supports the RAFT in defining rules, procedures and tools, as well as performing detailed operational and technical assessment of frequency requests.

The RFF CDM Processes defined in the document are:

Process	Objective
RFF Frequency Coordination	To ensure that the information recorded in the central register of aeronautical frequency assignments is complete, correct and agreed by all States concerned.
Radio Frequency Evaluation	To analyse the contents of the central register of frequency assignments in order to assess how well agreed best practices are being followed.
Radio Frequency Monitoring	To perform monitoring of aviation frequency bands and frequency assignments based on transparent procedures in order to ensure their correct and efficient usage.
Radio Frequency Interferences	To ensure the systematic reporting and timely assessment and mitigation of aeronautical radio frequency interferences with a safety or network impact.
Automated Support Development	To ensure the timely availability of automated support tools for the Radio Frequency Function. These tools will be developed under the steering of the RAFT.
KPIs Assessment and Reporting	To ensure that the RFF Key Performance Indicators are accurately measured, in a timely manner and appropriately reported.
NSP, NOP and NM work programme contribution	To ensure the timely availability of the RFF contribution to the NSP, NOP and NM work programme.
RFF Improvement	To ensure the correct deployment of the processes listed above, assess their effectiveness and implement agreed improvements identified during the assessment.

The detailed descriptions of the RFF CDM and deliverables are available in Attachment B.

13 Transponder Code Function (TCF)

13.1 High level Process description

1. Preparation

- Input from NOP
- All SG to advise on code allocation and code usage arrangements (input from States and ANSPs)
- (D)NM and SSR Code Planning Group prepare
- (D)NM develop and maintain SSR Transponder code allocation list

2. Consultation

- NM to ensure impact for third countries and compatibility with ICAO Regional ANP – coordination with ICAO
- Input to NSP and NOP
- Surveillance Steering Group and CNS Team information
- Aircraft Identification Implementation Support Group (AIIISG) – input from States and ANSPs

3. Approval

- Approval by NMB and ICAO EANPG of the SSR Transponder code allocation list

The CDM for TCF has been developed through the working arrangements currently supporting the transponder code management for Europe, including the ICAO Paris Office.

13.2 TCF process

The Transponder Code Function (TCF) Cooperative Decision Making (CDM) arrangements describe the processes by which the TCF decisions will be made, based on a constant interaction and consultation with Member States, operational stakeholders and other actors as appropriate such as ICAO. The TCF CDM also describes all processes related to transponder code allocations to States and/or their operational stakeholders.

The TCF CDM provides the structure of the working groups that will support the TCF work and which are:

Group	Role
Transponder Code Function Group (TCFG)	TCFG is the competent forum of the ICAO EUR Region and the Network Manager covering aspects related to the allocation and co-ordination of operational use of (SSR) transponder codes. The TCFG will express positions and opinions, make decisions on all aspects of the transponder code function and will be the body responsible for the timely delivery of the Code Allocation List (CAL). The TCFG will report through DNM to the NMB and to the ICAO EANPG.
SSR Code Planning Group (SCPG)	SCPG will be the technical forum that will, under the TCFG supervision and steering, prepare detailed proposals related to the allocation and co-ordination of operational use of (SSR) transponder codes for the ICAO EUR Region. At the same time SCPG will fulfil the tasks of the SSR Code Secretariat on behalf of the ICAO EANPG.

The TCF CDM Processes defined in the document are:

Process	Objective
Periodic Code Allocation Process	To coordinate and agree, on a periodic basis, the SSR transponder codes allocations to Member States and third parties.
Resolution of Unplanned Code Allocations Shortfalls	To implement resolutions for unplanned code allocations shortfalls that may impact safety and ATC capacity.
Resolution of Unplanned Conflicts between Assignments of SSR Transponder Codes	To implement resolutions for unplanned conflicts between assignments of SSR transponder that may have a safety impact.
Resolution of Wrong Assignments of SSR Transponder Codes	To implement corrective actions for wrong assignments of SSR transponder codes that may generate unnecessary code changes or code conflicts.
Release of SSR Transponder Codes	To release previously allocated transponder codes that are no longer justified by the operational needs in view of redistribution.
Provision of Data	To collect data that impacts the SSR transponder code use in order to allow an efficient allocation of codes.
NSP, NOP and NM Work Programme Contribution	To ensure the timely availability of the TCF contribution to the NSP, NOP and NM work programme.
KPIs Assessment and Reporting	To ensure that the TCF Key Performance Indicators are accurately measured, in a timely manner and appropriately reported.
Monitoring and Reporting Tools Development	To ensure the timely availability of monitoring and reporting tools for the Transponder Code Function. These tools will be developed under the steering of the TCFG.

The detailed descriptions of the TCF CDM and deliverables are available in Attachment C.

14 Crisis Management

14.1 High level Process description

1. Preparation

- Input from NMF IR and existing EACCC ToRs and experience from 2010 and 2011 crisis
- (D)NM to prepare EACCC draft RoP
 - Input from all operational stakeholders, from specialised organisations, experts related to specific events
 - (D)NM to collect, analyse and disseminate information related to a potential crisis
 - (D)NM to contact the EC, EASA, affected State Focal Points, adjacent regions and those potentially at risk,
 - If crisis confirmed, (D)NM to call for EACCC meeting

2. Consultation

- EACCC membership
- NMB to review EACCC Draft RoP
 - N DOP involvement
 - ICAO European & NAT Office
 - State Focal Points and corresponding national crisis management structures
 - EACCC permanent members + affected states
 - EACCC to give recommendations to Transport Ministers and EUROCONTROL PC

3. Approval

- NMB to approve EACCC RoP after positive opinion of SSC.
 - NM
 - EC and EASA
 - Affected States
 - Council of European Transport Ministers

The CDM for the Crisis Management has been developed and reviewed together with the Rules of Procedure of the EACCC.

The EACCC Rules of Procedures are available under Attachment D.

14.2 Crisis Management Process

Introduction

Crisis situations are characterised by the unexpected and “abnormal” nature of the event. Aviation crises are also likely to be fast moving and requiring knowledge based decisions at short notice. Escalation of a disruption to a crisis level is normally linked to the extent of the seriousness of potential/actual disruptions and should be the result of well established cooperative decision making process.

The cooperative decision making process for the EACCC is described in the Rules of Procedures of the EACCC and will be kept updated together with the revision of the RoP of the EACCC when required.

Preparation

Preparation for measures of the EACCC is part of the modus operandi and specifics of a crisis and the mitigation options available. Whenever possible the Network Manager and the EACCC will prepare in advance some measures for crisis response and mitigation, taking inputs from operational stakeholders and relevant experts and in consultation with EC, EASA, affected State Focal Points and where applicable adjacent regions and ICAO European and NAT Office.

In a crisis situation, the Network Manager, in consultation with the EACCC, shall:

- *obtain input from all operational stakeholders, specialised organisations, and experts related to the specific event;*
- *collect, analyse and disseminate information related to a potential crisis;*
- *contact European Commission, EASA and affected State Focal Points, and those potentially at risk.*

Consultation

In a crisis situation, the Network Manager shall:

- *contact EACCC permanent members and affected State Focal Points;*
- *activate EACCC;*
- *inform ICAO;*
- *in consultation with EACCC, ask State Focal Points to liaise with their corresponding national crisis management structures;*
- *in consultation with EACCC, give recommendations to EU Transport Council Ministers and non EU EUROCONTROL Provisional Council members.*

Decision

Agreed mitigation measures will first be proposed by EACCC. Where appropriate, decisions will be taken at EUROCONTROL, EC and EASA structures, including Transport Ministers.

Implementation and coordination of response and mitigation measures will then be the responsibility of the Network Manager, in close cooperation with State Focal Points, Director of Operations of ANSPs, airspace users and airports, as applicable.

The EACCC will not duplicate the role of other National or European bodies, but rather coordinate between them and add value by focusing at the strategic level.

Monitoring

The EACCC shall monitor the situation closely in order to ensure a swift response, if necessary.

The Network Manager, in his role of EACCC chairperson, shall update the NMB chairperson on the crisis.

Recovery and Follow up

When the crisis cause is over, the Network Manager will coordinate the recovery towards normal operations with operational stakeholders.

When, at the end of a crisis, it is decided to stand down the EACCC, a debriefing EACCC session shall be held to address the lessons-learned and remaining actions.

The lessons-learned report shall be submitted to the NMB.

Based on lessons learnt in the crisis the Network Manager in conjunction with the EACCC will identify follow up actions, in which all stakeholders concerned will be expected to participate. EACCC will monitor the progress of these actions and make recommendations, as required.

15 ATFM

15.1 High level Process description

The NM IR article 5 defines the following function for the Network Manager:

- *The Network Manager shall also perform the ATFM function referred to in Article 6(6) of Regulation (EC) No 551/2004 and Regulation (EU) No 255/2010.*

The ATFM IR article 14.2 requires that:

Member States shall take the necessary measures to ensure that parties referred to in Article 1(3) with responsibilities for ATFM functions:

- (a) develop and maintain operations manuals containing the necessary instructions and information to enable their operations personnel to apply the provisions of this Regulation;*
- (b) ensure that these manuals are consistent, accessible and kept up-to-date and that their update and distribution are subject to appropriate quality and documentation configuration management;*
- (c) ensure that the working methods and operating procedures comply with this Regulation.*

In the execution of the ATFM function, the Network Manager develops, through a cooperative decision making process, the appropriate procedures and processes for the execution of the ATFM function. The procedures are defined in 3 documents:

- Responsibilities Document for the application of Air Traffic Flow Management (ATFM) representing the CDM process for ATFM and included in the Annex E of the CDM
- ATFCM User Manual
- ATFCM Operating Procedures for FMPs

The cooperative decision making process includes appropriate working arrangements for the network functions, including ATFM.

15.2 Responsibilities Document for the application of Air Traffic Flow Management (ATFM)

In order to provide details of responsibilities and requirements for the implementation and application of air traffic flow management a document “Responsibilities Document for the application of Air Traffic Flow Management (ATFM)” has been developed by the Network Manager.

The document identifies the key responsibilities contained in, or resulting from, the EUROPEAN COMMISSION REGULATION (EC) No 255/2010 in order to provide guidance to stakeholders as to how they might comply with the Regulation.

The ATFM responsibilities document shall be applicable to those civil and military entities responsible for air traffic management that operate in the Network Manager area of responsibility.

Approval Process – Responsibilities Document: The Responsibilities Document is adopted in accordance with the Network Manager Cooperative Decision-Making Process approved by the Network Management Board. The provisions of this Responsibilities Document became effective after the approval by the Network Management Board (NMB). This Responsibilities Document is kept under review to ascertain required amendments or technical corrigenda.

15.3 Description of ATFM Procedures Documents

A set of procedures governing the execution of ATFM are contained in the Network Operations Handbook that is published by NM. Two manuals describe the ATFM procedures.

- ATFCM User Manual

Purpose: The ATFCM Users Manual has been prepared with the main object of providing in one document an operational description of the NM ATFCM procedures and of the related actions, information and message exchange.

Applicability: The ATFCM Users Manual is aimed at all those likely to be involved in the ATFCM process including Aircraft Operators (AOs) and those manning Flow Management Positions (FMPs), Air Traffic Services Reporting Offices (AROs), aerodrome and en-route ATS Units operating within the NM Area of Operation.

- ATFCM Operating Procedures for FMPs

Purpose: The purpose of the document is to provide the Flow Management Positions (FMPs) and the NM with common understanding of their roles in delivering the most effective Air Traffic Flow and Capacity Management (ATFCM) services to Air Traffic Control (ATC) and Aircraft Operators (AOs).

Applicability: The scope of this document concerns the roles and responsibilities of FMPs and the NMOC (Network Manager Operations Centre) and corresponding procedures in the delivery of ATFCM services.

Compliance with ICAO Provisions: In accordance with article 3 of the ATFM IR ATFCM procedures, roles and responsibilities in the above documents have been established in line With **ICAO** procedures as defined in the ICAO Doc. 4444, EUR SUPPs Doc 7030 and **ICAO** Doc. 7754, vol. II.

Approval Process – ATFCM Manuals: The ATFCM manuals are approved by the ODSG acting on its mandate from NETOPS. Agreed timetables for the proposals of amendments, review by stakeholders, and approval by ODSG and advance publication have been adopted by ODSG and are respected by NM.

15.4 Description of CDM Processes – Operational level

The Network Operations Plan (NOP) process details the main ATFM developments that will take place during the duration of validity of each NOP issue.

The ATFM function is supported by a wide range of operational CDM processes that are described in the ATFCM manuals.

Operational regional subgroups are created based on operational needs. They meet on a biannual level to review operational issues encountered during the previous six months and to carry out strategic ATFM planning for the coming year. Representative of the airspace user actively participate in these processes.

Similar CDM operational processes exist for the strategic operational planning of all major events in ATFM (threats of industrial action or other disruptions, major ATM transitions etc.).

The pre-tactical ATFM process takes into account all inputs from operational stakeholders and culminates in the publication of a pre-tactical plan on a daily basis describing the likely ATFM scenario for the following day and all potential ATFM measures to be applied.

Operational procedures describe the CDM processes to be followed in the implementation, monitoring and adjustment of all ATFM measures in the tactical phase.

Daily and event driven post operational analysis is carried out by NM and the results are shared with operational stakeholders and lessons learnt defined and implemented.

The outcome of the ATFM operational processes is fully reported in monthly and annual Network Operations reports and submitted to NDOP and NMB.

16 3rd Country ANSP Arrangements

Annually, the NM will present an assessment of the prevailing traffic flows, predictions for how these are expected to evolve over the subsequent 5 years and an assessment of the impact that these changes are expected to have on European network performance.

On the basis of this assessment work and supported by guidance from the NDOP for priorities from an operational and cost benefit perspective, the NMB will decide upon the need for arrangements with particular 3rd country ANSPs. The NMB will agree the priority for pursuing such arrangements, set the timescales for action and grant a mandate for the NM to pursue specific arrangement. The NMB will ensure alignment with the EU aviation policy.

All final draft arrangements will be presented to the NMB for review and comment; the NMB will be required to give its approval for each arrangement prior to the NM undertaking the formal signature process.

The Director NM will sign the 3rd country arrangements relating to Network activities covered by the NMF IR.

The NM will maintain a record of all arrangements held which will be available to the NMB upon request. Copies of all 3rd country arrangements will be retained on the One Sky Online web portal.

The NM will ensure that regular monitoring of the arrangements takes place in order to gauge the actual benefits delivered against the benefits anticipated. Any updates to these arrangements that may be required must be approved the NMB.

Pre-existing 3rd country arrangements that have been signed by the EUROCONTROL Agency should be subject to a review at appropriate intervals.

Where these arrangements contain a mixture of NM related activities and wider EUROCONTROL Agency tasks, the review activity will provide the opportunity to restructure them in order to ensure clear separation between NM data exchange agreements and wider EUROCONTROL Agency service provision agreements.

Any revised arrangements relevant to the NM must be submitted to the NMB for review, comment and approval as per the process for establishing 3rd country arrangements as outlined above, prior to signature by the NM.

17 Summary table

	CDM Process	Consultation (ToR - RoP)	Approval Bodies (ToR - RoP)
1	NSP	NDOP	NMB SSC
2	NPP	Operational Stakeholders through NDOP PRB NM social Partners FABs through NMB	NMB SSC
3	Multi Annual Work Programme	NMB	NMB
4	NM annual budget	NMB	NMB SSC PC
5	NM Annual Report	NDOP NMB	NMB
6	NOP	NDOP NetOps	NMB
7	ERND	NDOP NetOps RNDSG ASMSG	NMB
8	ATM Procedures	NetOps APDSG ODSG	NetOps NDOP
9	RFF	RAFT ARIA OTRA	NMB
10	TCF	TCFG SCPG	NMB
11	Crisis Management	EACCC	NMB
12	ATFM	NetOps APDSG ODSG	NetOps NDOP
13	3 rd Country ANSP Arrangements	NDOP NMB	NMB

18 List of attachments

Attachment A	ERNIP CDM
Attachment B	RFF CDM
Attachment C	TCF CDM
Attachment D	EACCC RoP
Attachment E	ATFM CDM