



2007 - 2008 the next steps

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2006 has been a good start for the DMEAN related activities in providing operational improvements. DMEAN has started delivering and there is more to come. It is estimated that capacity of the European ATM network has seen an effective increase of 5% in 2006. DMEAN is proud to have been part of the Agency contribution to the impressive efforts of the European ATM Service providers.

In the short term, the emphasis will remain on realising improvements from improved processes and associated agreement between the actors involved. The airspace management related trials are good examples of areas where we anticipate short-term, concrete results. Improved utilisation of CDRs and implementation of scenarios are other areas where short-term, concrete benefits are expected. (read more on trials on page 4).

The DMEAN Framework Programme is a collaborative network approach. It supports all partners in delivering operational improvements to unlock Europe's potential capacity.

The Network Operations Plan (NOP) Summer 2006 was an important first result. The first release was a success with more than 800 paper copies distributed and more than 2,500 downloads from the CFMU website. Unfortunately, a number of planned capacity enhancements, listed in the NOP, were not realized by the end of the year, indicating the need for implementation support and follow-up to complement the additional effort required by all stakeholders to ensure that planned activities are carried out within the timescale allocated.

A number of 2006 activities will materialize in 2007, such as the development and introduction of operational procedures that take advantage of the CFMU/11 upgrades (e.g. flight plan validation). Aircraft operators will have a special interest in these procedures.

The activities between the Agency and an increasing number of airports are encouraging. The trials demonstrating benefits, such as DPI/FUM trials and the work on slot swapping, should be the basis for implementing improvements at all those airports that impact the network. The active participation of airports in the development and implementation phases is essential and I encourage airports to become more involved in the various for a provided for stakeholder consultation.

Details of the DMEAN related short-term activities, as well as the longer term activities, have been compiled in the DMEAN 2007/2008 Action Plan. At the November session of the Provisional Council the stakeholders committed to the activities set out in this plan, aiming to meet the en-route delay targets.

DMEAN is the starting point for SESAR, ensuring a solid foundation and a viable operational concept for 2010 + in anticipation of the next ATM concepts and systems developed within the SESAR ATM Master Plan. With its partnership approach and short term operational deployment focus it will deliver the additional benefits needed awaiting SESAR.

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Planning Operational Improvements

First release of Network Operations Plan Summer 2006

The Network Operations Plan Summer 2006 was one of the first tangible deliverables achieved in 2006 in the context of DMEAN. Published as a single document, the NOP provided a consolidated view of the forecasted network situation and associated ATFCM measures for summer 2006. The first release was out in May 2006 and was distributed to all FMPs, working group members (incl. civil and military audience) and associations like IATA, IACA and ACI Europe.

The NOP Summer 2006 was designed as a living document and as such, was updated twice, in July and September, to reflect the latest planning information available. The amendments included updates on significant ATC/ ATFCM events, ASM/ ATFCM trials, latest actions in some airports, additional military exercises and follow-up of traffic growth and delays for each ACC.

The NOP was generally well received by the external stakeholders. In total, 850 copies of the document were distributed; the NOP file was downloaded more than 2,500 times from the CFMU website and 6,500 NOP pages were consulted since the first publication.

A review of the NOP Summer 2006 is in progress. At the request of ANSPs and aircraft operators, the release of the NOP Summer 2007 will be brought forward for an on-line publication at the end of March 2007.

The long-term objective is to provide Stakeholders with access to the NOP, in a fully electronic format, through the Network Information Management System (NIMS). This will enable stakeholders to query the NOP directly in support of their local operation plans.

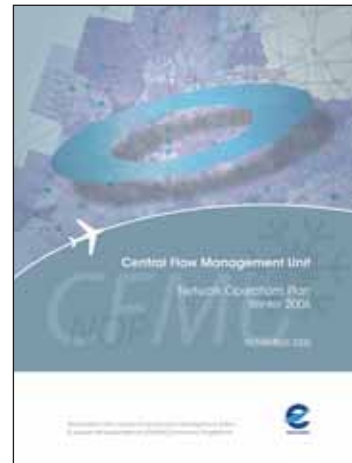
NOP Winter 2006

Following the successful first release of the Network Operations Plan (NOP) Summer 2006, the operational partnership approach involving the main ATM partners continues. The Network Operations Plan Winter 2006 was consolidated through the Autumn FMP regional meetings a.o. and was published on 15 November 2006.

The NOP Winter 2006 mainly covers network measures and activities such as:

- Winter scenarios covering the ski traffic flow and the Santa flights flow
- Special events
- Network measures including availability of new training packages, and
- individual ACCs situation

The winter 2006 release is a paper version, downloadable from the CFMU website: www.cfm.eurocontrol.int/cfm and from the DMEAN website: www.eurocontrol.int/dmean.



Preparing Action Plan 2007/08

The 2006/07 Operational Improvements Action Plan was considered as the first incremental implementation within the DMEAN context. Agreed only in November 2005, this plan included quick wins that were considered relevant from an operational perspective, and the actions were reflected in the NOP Summer 2006. Those actions have resulted in associated network performance improvements, including ARN V5 airspace design improvements addressing specific bottlenecks, ANSP and CFMU system upgrades enabling ATM enhancements, and airport operation related improvements through the implementation of collaborative decision making (CDM) processes at key airports.

2006 has been a good start as the DMEAN approach has resulted in improvements that benefit network performance. But 2007 will have to go further, and the approach will have to result in significant operational network enhancements to ensure the Provisional Council targets for en-route delay are met (1 minute en-route delay average).

Based on the DMEAN approach (agreed at the April 2006 Provisional Council meeting), the 2007/2008 Action Plan was developed in consultation with the stakeholders through the DMEAN Steering Committee and the latest Provisional Council meeting in November 2006. The 2007/08 Action Plan takes on board the experience of 2006, updates the already agreed actions for 2007, and addresses the next steps on the path towards the full DMEAN concept of operations by 2010. The plan includes the detailed implementation actions per stakeholder for 2007/08, with emphasis on 2007.

The incremental operational improvements approach, by annually developing a 2-year plan, will be the vehicle for implementing the full DMEAN Concept of Operations. Hence its acceptance and validation by all stakeholders, civil and military, is a key element to make things happen.

2007 2008

PC commits to capacity initiatives

The EUROCONTROL Provisional Council agreed on 9-10 November 2006 to ensure that ANSPs provide improved local capacity plans for Summer 2007, and implement those plans prior to the Summer 2007 season, as set in the DMEAN consolidated network planning process. Those local capacity plans will include commitments on staff availability, involvement in network ATFCM actions together with the CFMU, increased reliability of ATC systems and improved airspace structures.

Further, the PC committed to the capacity and flight efficiency enhancement initiatives set out in the DMEAN 2007/ 2008 Action Plan, to ensure that the PC en-route delay target is met and maintained.

On the final day the PC concluded its session by approving the roadmap for the future European ATM. The document focuses on 4 major functions, one of them is the network planning and design including civil / military coordination, to which DMEAN fully contributes.

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More Airspace Scenarios to address bottlenecks

In addition to the six existing scenarios published in the NOP Summer 2006, eleven more scenarios will be developed, validated and implemented in 2007. Together with the continuing implementation of national airspace design improvements from ARN V5, significant contributions will be made to airspace capacity. It is evident however, from 2006, that an improved process for implementing scenarios, operationally, is required, in order to utilise the capacity enhancements on the day of operations.

Airport Operations – further cooperation with key airports in areas of capacity and integration into network operations

An Agency approach involving CFMU and the EATM Airports Unit addresses those airports that are, or could become, most constraining to the European network. Activities include the coordination of airport action plans (to improve airport airside capacity); the provision of airport capacity information by airports (to improve network planning operations); the widespread implementation, at airports, of Collaborative Decision Making, CDM; the exchange of Flight Update Messages (FUM) and Departure Planning Information (DPI). These activities are essential steps in integrating airports into the network. The experience with specific airports in these activities, and through dedicated trials e.g. on slot swapping (currently at EHAM and EGLL), will be used in cooperation with other European airports, towards meeting the DMEAN objectives as regards airport-network integration.

Moving from Pre-tactical to Day of Operations

Moving the pre-tactical process to the day of operations as well as better coordination between the operational partners is a set of activities which will receive major attention from DMEAN in 2007 in order to more dynamically take advantage of changing airspace availability.

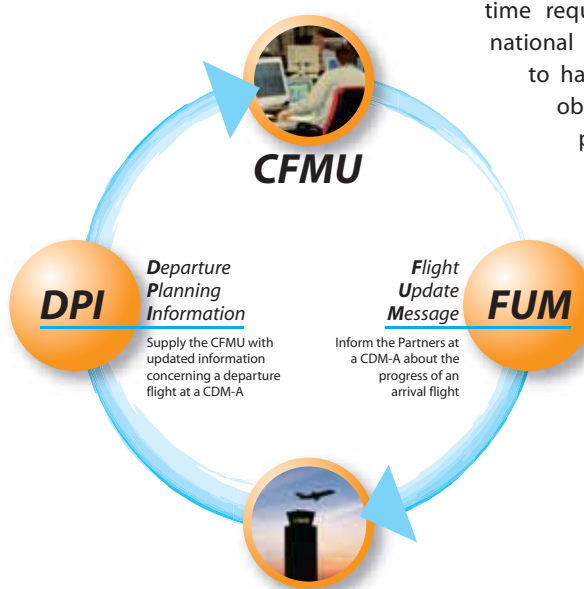
CFMU Release 11 was a first response to these objectives and was successfully introduced in May 2006 with a number of important upgrades, including the detection of flight plans becoming invalid following route availability changes. Operational procedures are being developed to take advantage of changes to the ATFCM, ASM or efficiency scenarios and to allow for the correction of invalidated flight plans. This will result in flight plans being better aligned with actual airspace availability.. The preparation of the airspace management related trials is moving forward.

Several meetings took place since September for further arrangements for the ASM/ATFCM trial, led by the CFMU, and the trial on improved usability of UM622, led by ENAV in Italy.

Trial CFMU/AMC/ANSP(FMP)

The trial to address improvements in coordination between ANSP/FMP and AMCs and CFMU is now in the preparatory phase. The geographical area encompasses the east of UK, Belgium, west of Germany, north & east of France and Switzerland and could consider the Lower and Upper Airspace. The preparation for the trial phase has been extended into the autumn and the execution phase of the trial is now scheduled for May-June 2007. This delay of the execution phase is due to the complexity of the roles and responsibilities in the airspace allocation process, time required to reconcile differing national practices, and the need to harmonize procedures and to obtain agreement between the players.

In preparation for the execution phase, the participants are developing and refining scenarios which could offer extra capacity through a better usage of CDRs as well as more flexibility to military users.

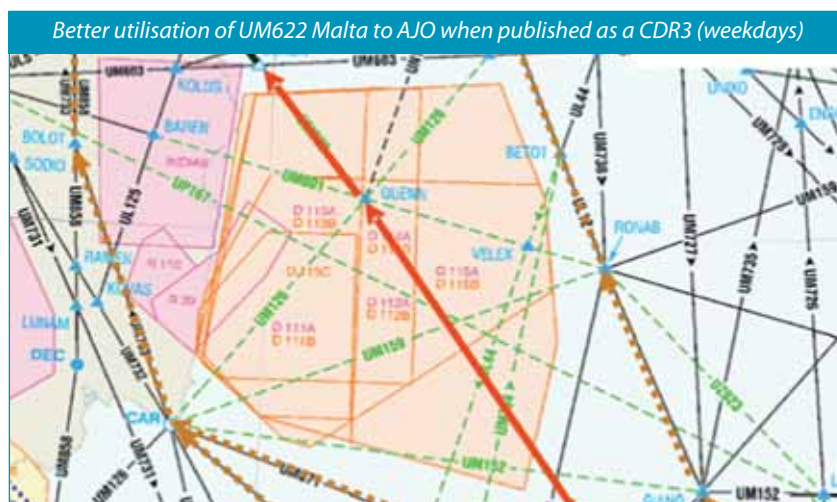


The DMEAN focus in 2007

Trial UM622

The trial tests the operational procedures for the tactical management of UM622 [KAPIL – SUKUN]. It seeks to determine the amount of advance notice required by operators so they can take advantage of shorter route (up to 17nm's) benefits at the flight planning stage. Additionally, it seeks to determine the capacity benefit of airspace allocation decisions made closer to the time of operations.

The scope, objectives, procedures, and duration of the trial were agreed through coordination between the involved Agency Units, ENAV and the Italian Air Force. The adjacent ACCs (Malta & Marseille) were also involved in the preparatory planning and Aircraft Operators concerned were consulted to ensure their participation in the trial. The Trial started on 23rd November 2006, for a 3 month period (AIRAC effective date).



In the longer term the results of the trial could potentially lead to a re-examination of the current 3 CDR categories to a more simplified available/not available for GAT. The trial can be considered as an

initial step towards a more dynamic approach to airspace use in Europe and a test-bed for enhanced FUA processes and more generally for evaluating the DMEAN principles and network processes.

Make a success of **DMEAN** Spread **Best Practices**

Best Practices

Already well in hand in the airport operations area, there is a lot to be gained here. Progress on "Best Practices", one of the elements of the DMEAN approach to support network operational improvements based on existing procedures already in use locally, has been limited in 2006. A mechanism is now required to ensure good practices are captured and taken on board by the operational partners for operational improvement in their area. Two proposals have been



received that are being followed up (CDR2-utilisation by AOs and the management of airport slots). Nevertheless, a fresh impetus on best practices is

necessary and the DMEAN Framework Programme will proactively seek to complement and reinforce the identification and distribution of best practices.

Managing Phases 3 & 4 Development and Implementation

The development and implementation activities towards the required operational improvements are structured in the DMEAN Phase 2 Report and broken down into 6 main components:

- Consolidated Capacity Planning Process
- Consolidated Airspace Design, Airspace Management, and ATFCM
- Airport Operations in the Network
- Flight Planning
- Network Information Management System
- Network Performance Assessment

The summer period was dedicated to the definition and setting-up, in consultation with the Agency Units involved, of a set of dedicated projects which are now the guideline to manage phases 3 and 4.

Currently 30 projects exist to cover all requirements. Each project has an objective towards the implementation of operational improvements or towards enabling operational improvements, in line with the DMEAN Phase 2 Report. The projects will provide the basis for the 2-yearly Action Plans.

The DMEAN Framework Programme Team, (FPT) has collected from each project leader the detailed planning activities for 2007 as well as a broad description of the activities scheduled for the period 2008-2010. The preparation of detailed actions lists is part of an annual process. The lists include activities under Agency and/or Stakeholders responsibility and are in turn consolidated into the DMEAN Master Plan for Phases 3 & 4, from which the 2-yearly

Action Plan derives. The FPT will also address the deliverables that consider the DMEAN impact in the areas of safety, human factors, environment, etc.

Working together under one umbrella

For each project, an Agency Project Leader has been nominated from the Agency Unit most closely related to the project activities. The responsibility of the project leaders includes internal Agency co-ordination and consultation with the external stakeholders.

Stakeholder involvement in the period for 2007 falls in many cases into 2 generic activities. Firstly, participation in the development of projects through attendance at the various working groups and participation in trials which may require limited staff training. Secondly, the provision of information such as military exercise activity, capacity plans and the experiences of Summer 2006 etc.

In support to the role fulfilled within the Agency and in co-ordination with external stakeholders, the Agency also invited the Member States to nominate DMEAN Co-ordination Contacts at expert level to improve awareness and co-ordination. Currently 12 States are represented: Austria, Denmark, Estonia, Finland, France, Germany, Ireland, Italy, Malta, the Netherlands, Switzerland and UK.

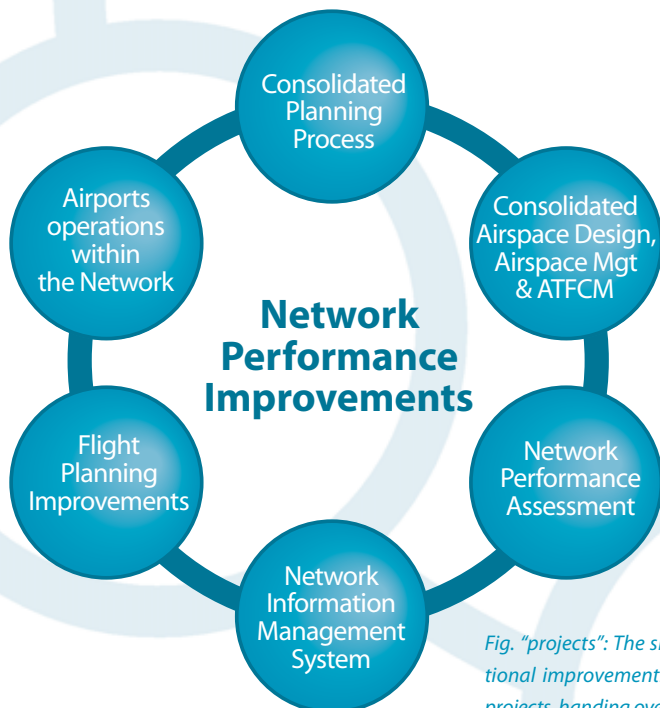


Fig. "projects": The six components for operational improvements have been split into 30 projects, handing over leadership to the various Units involved.

EATM Adaptation and DMEAN Framework Programme

Early July, the Agency implemented the EATM adaptation and as a result, DMEAN has been given more visibility by becoming a separate function with strong links to the other units such as the CFMU.

As DMEAN has now entered into Phases 3 & 4, the governance of DMEAN must address the coherent development and overall implementation plan in a balanced manner with participation of all partners involved, the main actors being the ANSP(s), military authorities, State airspace regulators, Airlines and Airports associations.

Within this context, the DMEAN Steering Committee will be merged within the Operations Coordinating Group (OCG) and the governance of DMEAN will be handled by OCG, which ensures that the stakeholders, acting in partnership with the Agency, participate in the definition and coordination of the deployment of safe and optimised operations of the European ATM network (including the most effective utilisation of available airspace, airports and ATC capacity). The OCG also maintains the broad senior representation from the former DMEAN Steering Committee and even expands it to all ECAC states.

The detailed oversight of the DMEAN Framework Programme, strengthening stakeholder commitment and supporting stakeholder implementation of operational improvements will be delegated to the existing DMEAN Working Group. The latter will in turn evolve into a DMEAN Implementation Support Group working with ANSPs and civil and military airspace users to apply the DMEAN concept in the most effective manner.

This DMEAN Implementation Support Group will facilitate stakeholders input on ensuring that DMEAN operational improvements can and will be realised, e.g. by considering short term pragmatic solutions. In this respect the Group will also play a key role in identifying 'best practices', which can be assessed and developed in the appropriate DMEAN projects, for subsequent distribution to other Stakeholders for the benefit of the network.



DMEAN System Coordination Task Force

The proposed architecture of the Network Information Management System including its tools is based on the assumption that the existing CFMU systems, operated by EUROCONTROL, will be expanded accordingly to meet objectives of minimum change and minimum impact to stakeholder systems.

The Agency established a DMEAN Systems Co-ordination Task Force (DSTF) to address the impact of the NIMS on stakeholder systems and to further investigate and consider alternative options. Member States nominated technical experts to actively take part in this work, which started with a kick-off meeting in September 2006.

The Task Force addresses technical aspects of the DMEAN Network Information Management System, particularly as regards the flight planning aspects, the interface between the CFMU databases and the national databases and the impact on Stakeholder systems.

February 2007

ATC Maastricht

The DMEAN Framework Programme will be present at ATC Maastricht exhibition from 13-15 February 2007. DMEAN is based on an agreed concept of operations implementable within the short-medium term (2010). It will bring together the various elements which address improvements in capacity and efficiency of the pan-European network and will meet the demand when implemented in a coordinated manner. Come and visit us on the EUROCONTROL stand N° 760.

April 2007

Flight Planning in a Dynamic Airspace Environment

A workshop will be held on 17 April 2007 at EUROCONTROL HQ in Brussels. Managing flight planning in a dynamic environment work is one of the major objectives of DMEAN to unlock capacity and respond to short-term issues. The workshop is an advantageous rendezvous for Airlines and flight planning organisations to discuss key items such as pre-determined scenarios, better use of CDRs, AO system and system interface aspects. Book your agenda now, there is a limited number of seats. Agenda and registration form will be soon on the DMEAN website.

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