



**Network Manager**  
nominated by  
the European Commission



# European Network Operations Plan 2018 - 2019/22

**Transition Plan for Major Projects in Europe  
Winter 2018/2019**



**Edition April 2019**

## DOCUMENT CHANGE RECORD

The following table records the complete history of the successive updates of the present document.

EDITION NUMBER	DATE	REASON FOR CHANGE
0.1	01/07/2018	1 <sup>st</sup> draft
0.2	28/09/2018	2 <sup>nd</sup> draft
0.3	01/10/2018	3 <sup>rd</sup> draft, proposed to NETOPS
0.4	22/10/2018	Proposed to NDOP
0.5	12/11/2018	Proposed to NMB
1.0	05/12/2018	Approved by NMB
1.1	12/02/2019	LTFM postponement; Bucharest ACC
1.2	20/02/2019	Bucharest ACC new dates
1.3	12/04/2019	Beograd ACC updates

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TRANSITION PLAN FOR MAJOR PROJECTS IN EUROPE  
WINTER 2018 / 2019

## CHECKLIST

Section	Date
<b>Background</b>	01/10/2018
<b>Chapter 1</b>	01/10/2018
1.1	01/10/2018
1.2	01/10/2018
<b>Chapter 2</b>	01/10/2018
2.1	01/10/2018
2.2	01/10/2018
<b>Chapter 3</b>	01/10/2018
<b>Annex A</b>	16/11/2018
<b>Annex B</b>	12/11/2018
Ankara ACC	25/02/2019
Beograd ACC	12/04/2019
Brussels ACC	16/11/2018
Geneva & Zurich ACCs	22/10/2018
Maastricht UAC	16/11/2018
Munich ACC	22/10/2018
Prestwick ACC (PLAS)	22/10/2018
Prestwick TMA (PLAS)	22/10/2018
Prestwick / London ACCs (Lightning)	22/10/2018
Sofia ACC	25/02/2019
Tbilisi ACC	22/10/2018
London ACC	12/11/2018
Bucharest ACC	20/02/2019
<b>Annex C</b>	22/10/2018
Langen ACC	22/10/2018
<b>Annex D</b>	20/02/2019
<b>Annex E</b>	22/10/2018

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## BACKGROUND

In response to the Commission Regulation (EU) No 677/2011 of 7 July 2011, amended by the Implementing Regulation (EU) No 970/2014 of 12 September 2014, (laying down the detailed rules for the implementation of air traffic management (ATM) network functions), and Commission Implementing Regulation (EU) No 390/2013, the Network Manager helps to ensure the achievement of European Union-wide performance targets during the implementation of system / airspace transition projects.

The Regulation 677/2011 requires the NM to include in the NOP the following elements relevant to the planning of major projects:

- A network forecast taking into account special events impact;
- A description of plans and actions at local and network level;
- An overview of special events with significant ATM impact;
- A description of individual special events and their handling from a network perspective;
- A consolidated forecast and analysis of the operational performance of the network, including the impact of special events.

## **1. INTRODUCTION**

The Transition Plan describes the processes, the activities, the plans and measures that will be applied by the Network Manager and the operational stakeholders, to minimise the impact on the network performance caused by major airspace or ATM system improvement projects. The Transition Plan is a living document, which forms part of the European Network Operations Plan (NOP).

The Transition Plan deals only with scheduled, planned, special events undertaken and managed by ANS, or ANS related entities, e.g. operational stakeholders that could lead to a temporary reduction of capacity and that may require mitigation measures agreed in a partnership approach at Network level. Examples of such events are: implementation of a new ATM system, move to a new ACC Ops room, major airspace reorganisation including change to the ACC area of responsibility, opening of a new airport, etc.

### **1.1 OBJECTIVE AND SCOPE**

#### **1.1.1. Objective**

The primary objective of the Transition Plan is to deliver the optimum ATM performance at European network level, taking into account temporary capacity limitations caused by the preparation and implementation of individual and combined major airspace and ATM system improvement projects.

Further objectives of the consolidated Transition Plan are:

- To ensure the coordination and synchronisation of major projects;
- To ensure an analysis of the resulting impact on network performance;
- To propose measures to mitigate capacity limitations;
- To ensure monitoring of individual project progress;
- To review the mitigation measures in the case of slippage or changes to the original plan;
- To ensure post-operations analysis;
- To document and share best practice.

#### **1.1.2. Scope**

The Transition Plan covers the following areas:

- Coordination among parties involved
- Capacity analysis and proposals;
- Airspace, sectorisation analysis and proposals;
- Detailed local transition plans;
- Consolidated Network transition plan;
- Local and Network measures and proposals.

## **1.2 ROLES AND RESPONSIBILITIES**

### **The Network Manager's role in the transition planning process is:**

- 1) to collect and consolidate all known information on major projects transition plans;
- 2) support the ANSPs in the preparation of their transition plans;
- 3) to analyse the effect, through simulation, of temporary capacity reductions or flight efficiency impact;
- 4) to analyse the impact at network level of individual and overlapping or consecutive projects;
- 5) to coordinate, agree and prioritise the strategic and tactical ATFCM mitigation measures;
- 6) to ensure optimum management of the Network, taking into account known limitations;
- 7) to perform post-operations analyses, documenting lessons learnt and making them available for future transition planning exercises.

### **The ANSP role is to provide the following information to the NM:**

- 1) early notification of planned project including expected capacity impact and timescale – as soon as project is confirmed;
- 2) planned dates for each phase of the project that may impact capacity or flight efficiency;
- 3) details of available sector configurations, opening schemes and default sector/ Traffic Volume (TV) monitoring values for each phase of the project;
- 4) notification, with as much notice as possible, of any changes to the timescales and/or capacity information;
- 5) work with NM and apply the agreed measures.

## 2. TRANSITION PLANNING PRINCIPLES AND PROCESS

### 2.1 MAIN PRINCIPLES

When preparing the consolidated Transition Plan, the Network Manager will apply the following main principles:

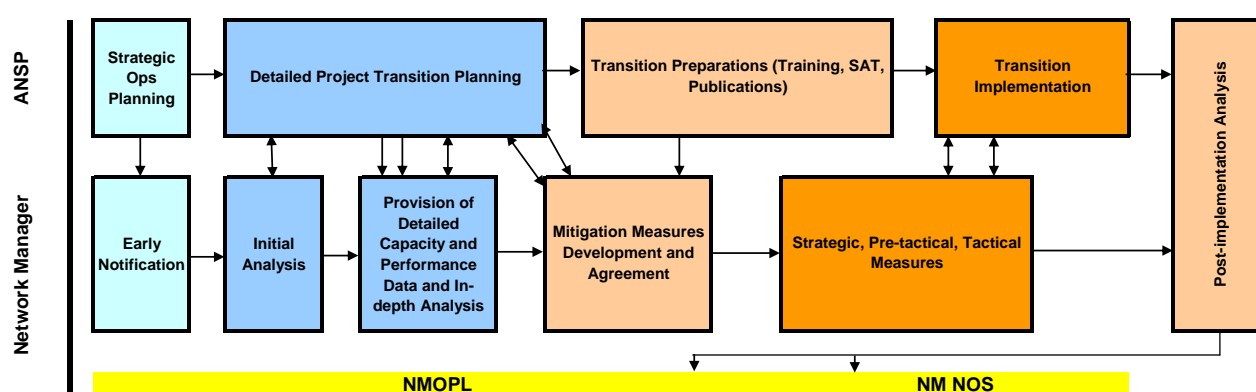
- Recognise airspace users' needs, both civil and military;
- Ensure a balance between capacity and flight efficiency;
- Ensure a balanced approach between European network, regional and local requirements;
- Ensure a coordinated and integrated approach for the collective benefit of airspace users, Air Navigation Service Providers, civil and military authorities through a collaborative planning process;
- Ensure notification of operational impact to all ACCs affected by the measures taken;
- Maintain regional interconnectivity between the affected airspace and adjacent areas;
- Apply a cost-effective solution;
- Consider the operational requirements and impact of a project;

### 2.2 TRANSITION PLANNING PROCESS

The transition planning is a joint activity between the ANSP(s) concerned and the Network Manager, which starts as soon as the ANSP decides to undertake a major improvement project which may temporarily affect the performance of the ATM network.

It is important that the planning process begins at the early stages of the project, leaving sufficient time for any adaptations in terms of capacity, airspace availability and procedures, to minimise the impact on the network performance during the transition phase.

The process needs to be conducted at the level of a single ACC, or an ATC unit, the principal bearer of the project activities.



**Transition Planning Process**



The Transition Planning process has the following stages:

1. Early notification of individual projects (ANSP);
2. Initial consolidation and analysis at Network level (NM);
3. High level synchronisation and coordination (NM);
4. Provision of detailed capacity and performance data for each phase of the project (ANSP);
5. In-depth impact analysis of individual and combined projects (NM);
6. Development and agreement of mitigation measures (NM and ANSP/FAB);
7. Transition plan implementation (NM and ANSP/FAB);
8. Post Implementation analysis (NM).

### 2.2.1 Early Notification of Individual Projects (ANSP)

The planning for a large scale project can start several years ahead and must be included in the ANSP capacity plan shared with NM.

There will be only one focal point per project, nominated by the ANSP.

The project owner will notify the NM through the NOP development process as soon as the project is confirmed, together with an initial assessment of the impact.

	Capacity / Traffic density
<b>Low Impact</b>	<ul style="list-style-type: none"><li>• local impact with low prospect of affecting adjacent area or traffic at sub-regional level, and/or</li><li>• project is located in an area of low traffic density.</li></ul>
<b>Medium Impact</b>	<ul style="list-style-type: none"><li>• impact on adjacent area with prospect to affect traffic flows at sub-regional or regional level, and/or</li><li>• project is located in an area of medium traffic density.</li></ul>
<b>High Impact</b>	<ul style="list-style-type: none"><li>• impact at sub-regional or regional level, and/or</li><li>• project is located in an area of high traffic density.</li></ul>

This will ensure that all entities that may be affected will be notified in a timely manner, enabling coordination and synchronisation with other projects in the same or adjacent areas.

### 2.2.2 Initial consolidation and analysis at Network level (NM)

The NM will store the information provided by the ANSP on the NOP portal. A process will be introduced to ensure that all concerned stakeholders have full visibility and receive notification (preferably systematically) if there are changes. This information will be maintained and updated by the NM.

### 2.2.3 High level synchronisation and coordination (NM)

The NM will carry out an initial analysis of the impact of all the known projects during the relevant time period, based on the high level information provided by the ANSP/s concerned.

If this initial analysis indicates an unacceptably high negative impact on the network, the NM may propose changes to the transition plan. However, this cannot be done without the full agreement of the stakeholders concerned.

#### **2.2.4 Provision of detailed capacity and performance data for each phase of the project (ANSP)**

The ANSP shall provide the following details to the NM, as applicable, for each phase of the project:

- Planned start and end date;
- Information on major milestones (e.g. System Acceptance Test (SAT), training, shadow mode of operations etc.);
- The sectors that will be affected;
- Details of capacity reductions (dates and changes to default sector/ TV monitoring values);
- The configurations and opening schemes that will be available (max. peak/ off-peak periods);
- Details of any temporary changes to the airspace structure (route network and sectorisation);
- Proposed temporary measures to mitigate the impact of reduced capacity, e.g.:
  - removal or reduction in RAD restrictions;
  - changes to CDR status and/or availability;
  - proposed rerouting scenarios;
  - increased capacity in adjacent sectors.

The information delivered to the NM will be stored and used only for analytical and operational purposes.

#### **2.2.5 In-depth impact analysis of individual and combined projects (NM)**

The NM will make an assessment, through simulation, of the combined impact on the network of all relevant projects and identify potential operational bottlenecks. The analysis will be done from the following perspectives: capacity, flight efficiency (environment), route network, Airspace Management (ASM) and ATFCM. The analysis will cover adjacent areas affected by constraints in the transition area.

The evolution of capacity must be clearly planned and documented by the ANSP concerned, with all affected parties being fully informed. The Network Manager will analyse the effect of temporary capacity reduction during the phases for training, preparation and cutover and the subsequent return to normal operations.

The analysis will take into account simultaneous or overlapping projects, assessing the combined effect of all temporary capacity changes in the transition areas and in those adjacent. The NM will coordinate with the ANSPs directly or indirectly affected by a transition, aiming to jointly find mitigation solutions.

To the maximum extent possible, a balanced approach between capacity and flight efficiency will be ensured. Nevertheless flight efficiency could be reduced as users avoid capacity bottlenecks either by flight planning alternative routeings, or accepting rerouting proposals offered by the Network Manager.

The performance analysis will be based on the use of the NEST and SIMEX tools. The NM will provide expert support to the ANSPs should they need to carry out their own detailed analysis.

Potential risks associated with transition phase of a project will be evaluated with solutions to build the sustainable measures for minimising negative impact of a transition.

#### **2.2.6 Development and agreement on mitigation measures (NM, ANSP, Military)**

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In coordination with the ANSP/s concerned, the NM will develop a number of proposals to identify how to manage the transition through local measures (changes to opening schemes, rostering etc.), to limit major network impact. If measures at local level are not sufficient, network measures will be developed.

The NM will incorporate all known capacity and flight efficiency information (capacity reductions, where spare capacity can be made available, changes to route availability or sectorisation) and propose strategic rerouting options to be taken into account when deciding on the appropriate ATFCM measures to be used.

Airspace management processes will be used to the maximum extent possible, to ensure enhanced civil-military coordination for optimum airspace utilisation by all airspace users.

Enhanced ATFCM measures will be developed as required. These could include: short notice scenarios, driving down delay, delay sharing, mandatory cherry picking, dynamic delay mitigation, Flight Level adherence.

The result will be a toolbox of measures that should be prioritised in order of preference according to the requirements at network and local level.

### **Toolbox of Mitigation Measures**

- a. Proposals for alternative optimum sector configurations and opening schemes to manage unfamiliar traffic patterns;
- b. Rerouting proposals;
- c. RAD restriction reduction or removal;
- d. Temporary *increase* of adjacent sector/TV monitoring values;
- e. CDR category and availability modifications;
- f. Airspace structure adjustments;
- g. Proposal to reschedule military activity.
- h. Enhanced ATFCM measures;

### **Additional support to airspace users**

- a. Timely communication of restrictions and alternative routeings to the aircraft operators;
- b. Use of Route Availability Information Summary (RAIS) to increase awareness among the airspace users of expected airspace changes and their respective durations;
- c. Allow flexible, short notice flight plan amendments without penalty, to enable users to take into account short notice changes;
- d. Provision of alternative routeings in accordance with agreed measures, and when possible, offer a choice of re-routing options to enable airspace users to utilise the available airspace according to their preferences for minimum delay, shortest routing etc.

The above list of measures is not exhaustive; the NM, together with the ANSP(s), may propose other solutions or even a package of composite measures.

Depending on the type of measures agreed, verification may be necessary using simulation tools.

## **2.2.7 Transition plan implementation (NM, ANSP, Airspace users)**

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The Transition Plan will be developed and implemented using full cooperative decision making processes between the NM and all stakeholders, including the airspace users.

The ANSP(s) shall ensure that all staff involved in the transition, controllers, supervisors and FMPs, are fully familiar with the adopted measures so that the capacity critical situations during transition process can be handled satisfactorily.

Any deficiency during the implementation and execution of the transition plan must be immediately addressed through the implementation of additional measures.

Potential risks associated with transition phase of a project will be evaluated and solutions developed for minimising negative side effects.

#### **2.2.8 Post-ops analysis**

The purpose of this phase is to assess how the network performed during the relevant periods of the project, including the effectiveness of the implemented measures.

Understanding the deficiencies encountered during the implementation phase, their causes, and the lessons learned, will ensure that the best practice is carried through into the preparation of the future projects.

### **3. DOCUMENTATION**

The NM will record all activities throughout the entire process from notification to the post implementation analysis, including:

- Data and information delivered by the ANSP(s) including date of delivery and the purpose for which they have been used;
- Analyses, initial and detailed, including the results and proposed actions;
- Measures proposed agreed and implemented;
- Register of all measures, changes, and their status throughout the transition project, providing for traceability of each measure proposed and agreed;
- Available ATFCM reports (daily/weekly/monthly) during the implementation/transition phase;
- Yearly Network Operations Report.

The documentation will be stored in NMD/NOM/OPL and will be made available to the entities which participated in the project.

## **ANNEXES**

<b>Annex A</b>	<b>List of major transition projects</b>
<b>Annex B</b>	<b>Individual major projects – detailed information and analysis</b>
<b>Annex C</b>	<b>Individual (no impact) projects</b>
<b>Annex D</b>	<b>View on all projects</b>
<b>Annex E</b>	<b>Acronyms and Abbreviations</b>

## **ANNEX A. LIST OF MAJOR TRANSITION PROJECTS**

The nine-month period, from the autumn 2018 until spring 2019 will be affected by a number of system modernisation, and airspace projects across Europe.

Out of many projects, thirteen have been considered to have a potential impact on the Network (Annex B), while all the other projects have been considered by the respective project owners as no-impact projects. Some of the ANSPs affected are likely to generate increased delays during the winter season, which may mean they cannot meet their annual delay breakdown values. This could in turn impact the overall Network capacity performance. All of the transition projects involve lengthy training activities for operational personnel, which may as well affect the performance of the ACC concerned. Hence training may be included in the transition planning process.

Some of the “no-impact” projects, those for which both NM and the respective project owners agree that a close-up attention by the NMOC is recommended during their implementations, will be listed in Annex C of the Plan. At the time of this issue the only one project is described in Annex C.

The NM has a key role in the synchronisation, coordination and management of the Network to ensure that Network capacity remains in line with, or better than expected.

Very careful planning and synchronisation between the ANSPs and the NM is required. Some projects, even though locally implemented, may involve other ANSPs in the transition planning and coordination.

The table and the maps below show all major, capacity critical (expected or potentially), transition projects for the coming period.

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Major Projects / Special Events	2018		2019	
	07>09	10>12	01>03	04>06
<b>Belgium - Brussels ACC</b>				
CANAC 2 upgrade				
<b>Bulgaria - Sofia ACC</b>				
New Istanbul airport				
<b>EUROCONTROL - Maastricht UAC</b>				
FRAM2 Ph. 2 Night and weekends				
<b>Georgia - Tbilisi ACC</b>				
New ATM system				
<b>Germany - Langen ACC (no impact)</b>				
Langen 2.0 SF 10				
<b>Germany - Munich ACC</b>				
OASE Part 2				
<b>Romania - Bucharest ACC</b>				
New ATM system				
<b>Serbia and Montenegro - Beograd ACC</b>				
ATM system HW upgrade				
<b>Switzerland - Geneva &amp; Zurich ACCs</b>				
Virtual Center deployment ODS4.1				
<b>Turkey - Ankara ACC</b>				
New Istanbul airport				
<b>UK - London ACC</b>				
Interface with MUAC and Amsterdam ACC				
<b>UK - Prestwick ACC</b>				
PLAS Network 3b				
<b>UK - Prestwick TMA</b>				
PLAS TMA 5a				
<b>UK - Prestwick/London ACCs</b>				
Project Lightning				

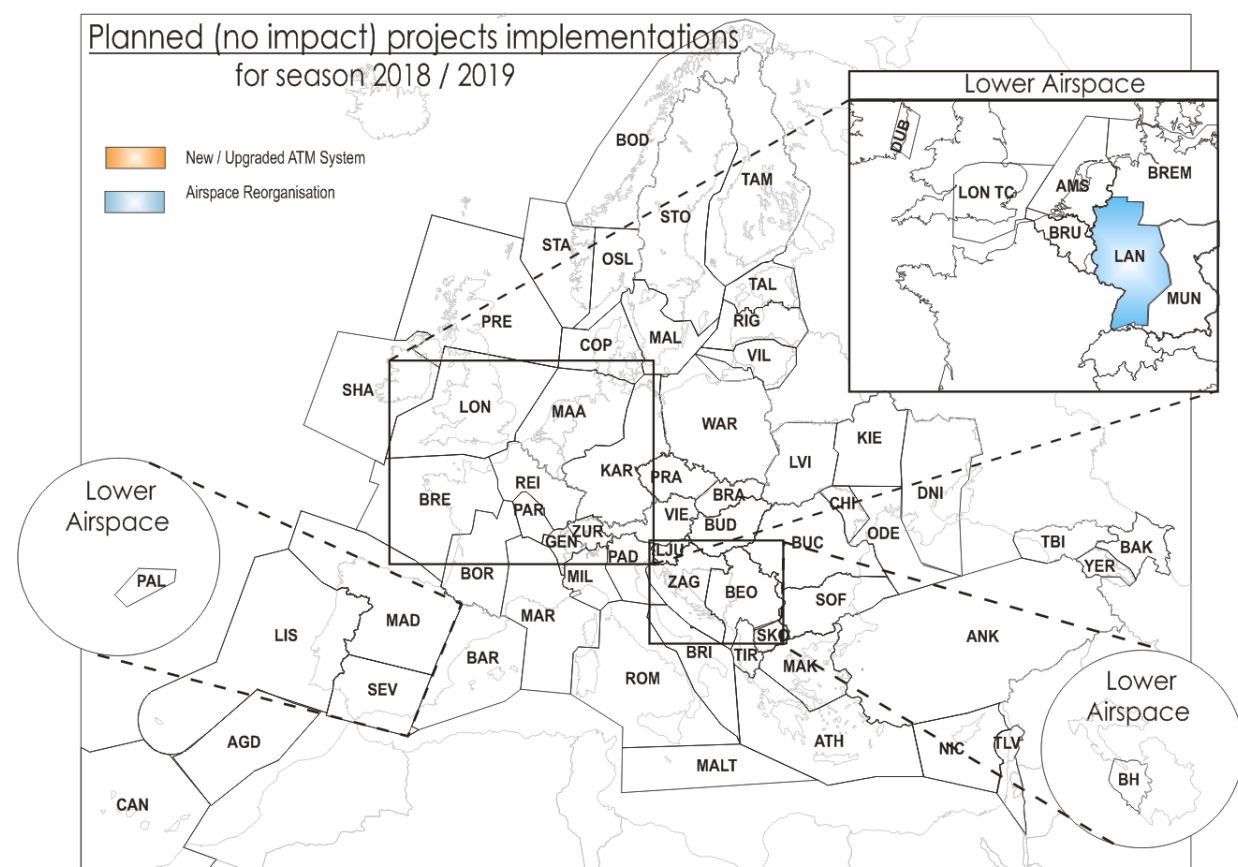
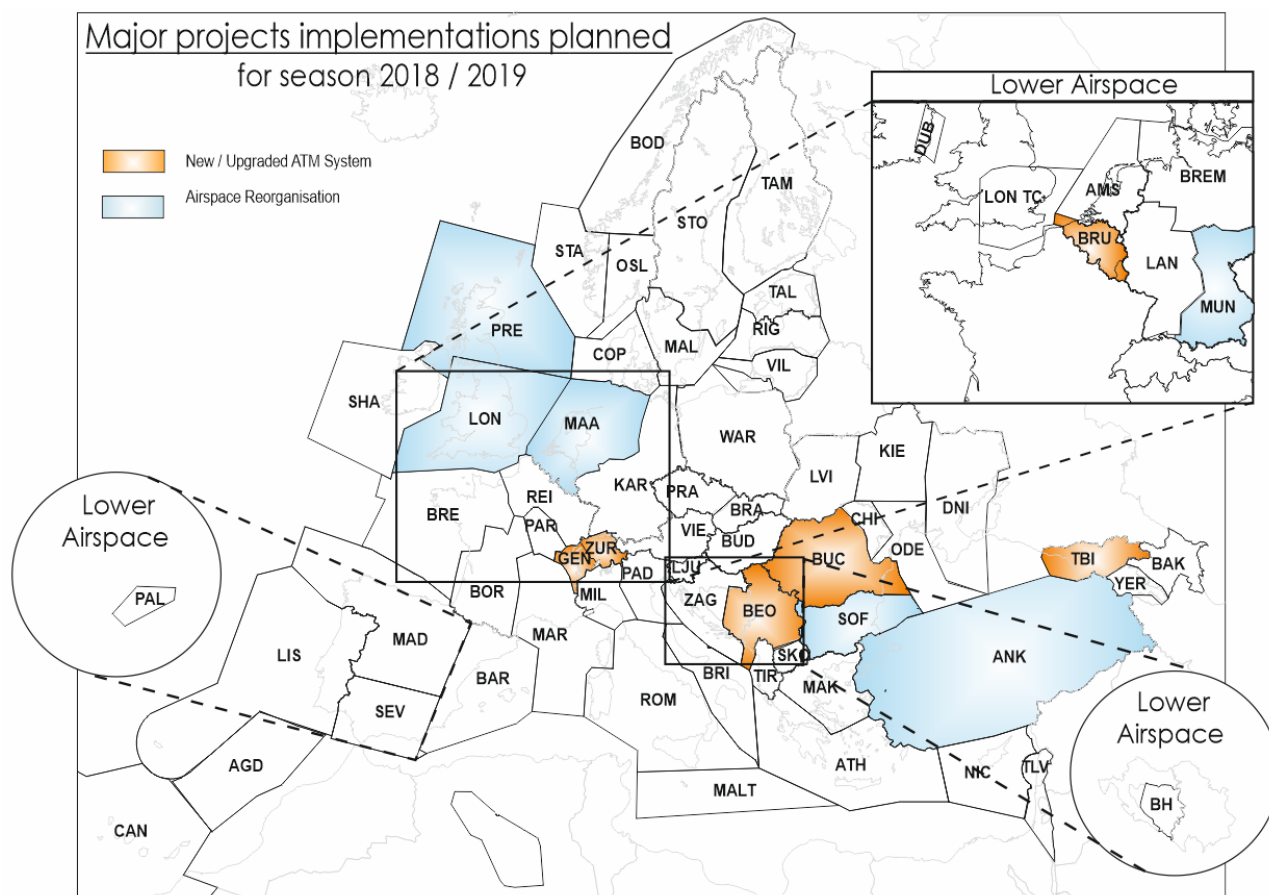
The details of all planned or confirmed projects can be accessed via the network events calendar on the strategic and pre-tactical portlets of the Network Operations Portal.

The transition projects pending confirmation will be described in the subsequent editions of the Transition Plan.

The maps below indicate the areas for which the transition plans have been already confirmed.



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**ANNEX B. INDIVIDUAL TRANSITION PROJECTS WITH POSSIBLE NETWORK  
IMPACT DURING IMPLEMENTATION**

The projects listed in this annex have been considered by the respective project owners, as to have a potential impact on the network performance.

**BELGIUM**

**BRUSSELS ACC**

**CANAC 2 hardware upgrade**

**Q4 2018**

End of 2018, CANAC 2 system will be upgraded.

Point of contact:

BELGOCONTROL – Bart Maes - [Bart.Maes@belgocontrol.be](mailto:Bart.Maes@belgocontrol.be)

Project description:

Hardware upgrade of the ATM system at CANAC.

The cutover will be done during a SAT/SUN night between 23:00 Local and 05:00 Local time.

During the cutover Belgocontrol can handle a minimum of 20 ac / 60 minutes for ESC and 20 ac/60 minutes for WSC.

During the cutover all estimates will be done by verbal coordination.

After the cutover a protection will be put in place allowing approx 75% of the capacity for all Elementary sectors with a protection of approximately 36 arrivals maximum for EBBR/EBMB.

The estimated duration of this reduced capacity is 10 days.

During the transition period the capacity will be increasing to 100%

More information will follow as soon as the operational transition plan is developed and approved.

Project phases:

	Dates	Sector capacities	Max sector openings
Training			
Cut over	17/11/2018	ESC : 20 flt/hr WSC : 20 flt/hr	
Transition period	18/11/2018	75% for all elementary sectors and max 36 arrivals/hr at EBBR until 20/11/2018 80% for all elementary sectors and max 36 arrivals/hr at EBBR until 24/11/2018 85% for all elementary sectors and max 40 arrivals/hr at EBBR until 27/11/2018	
Normal operations	27/11/2018	Not reduced	

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**Cut Over: 17/11/2018 – SAT/SUN 23:00LT-05:00LT**

Description & areas impacted	The Entire ATM system will be switched to the new hardware. En-Route, terminal and towers are impacted
Milestones and dates	
Sector capacities	ESC: 20 flights/hour WSC: 20 flights/hour
Configurations	CE1W1
Expected network impact	tbc
Possible bottleneck sectors	tbc
Mitigation measures	Restriction on traffic and availability of extra staff
Remarks	

**Transition period: 18/11/2018 (10 days)**

Description & areas impacted	Hypercare period allowing for quick reaction if required
Milestones and dates	
Sector capacities	75% for all elementary sectors and max 36 arrivals/hr at EBBR until 20/11/2018 80% for all elementary sectors and max 36 arrivals/hr at EBBR until 24/11/2018 85% for all elementary sectors and max 40 arrivals/hr at EBBR until 27/11/2018
Configurations	Normal
Expected network impact	tbc
Possible bottleneck sectors	tbc
Mitigation measures	Second platform on hot stand by
Remarks	

**Normal operations: 27/11/2018**

**BULGARIA**

**SOFIA ACC**

**New Istanbul airport**

**05 April 2019**

Sofia ACC will address changes to the interface with Turkey in the light of the new airport in Istanbul and the introduction of the associated arrival and departure procedures.

Point of contact:

Mr. Petar Danailov, Director Sofia ATCC, peter.danailov@bulatsa.com

Project description:

The operations at the new Istanbul airport are scheduled to commence on 01 March 2019, affecting the interface with the AoR of Sofia ACC. ETC.

Project phases:

Phase	Period	Impact on network performance	Mitigation measures
Training	01-29 October 2018	None	Training is done in simulated environment. Training program and schedule have been recently approved
Cutover	05 April 2019	None / Low	
Transition Phase	According Transition Plan developed by DHMI	None / Low	Close coordination and/or teleconferences held by NM
Normal operations	According Transition Plan developed by DHMI	None / Low	Applicability of modified occupancy counts. Routine Monitoring by FMP/Shift supervisor

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**Cut Over:**

Description & areas impacted	End of active operations at Istanbul Ataturk Airport
Milestones and dates	05 April 2019
Sector capacities	Standard Occupancy Counts – No Change
Configurations	Adaptable – to cover traffic demand
Expected network impact	NONE
Possible bottleneck sectors	For Sofia Family Sectors: LBSRSDEF* For Varna Family Sectors: LBSRVCD A0
Mitigation measures	Apply lower division FL; Apply layered sector configuration (3/4); Apply ARR/DEP split configuration (LBSRSBEF* and LBSRSD* ) (LBSRVAC* and LBSRVD*)
Remarks	During the cut over phase the number of the available park stands on all Bulgarian international airports will be exchanged on tactical basis. The total number of park stands is as follows:  LBBG - 28 LBGO - 3 LBPD - 19 LBSF - 55 LBWN - 31

**Transition period:**

Description & areas impacted	Start of Operations at LTFM
Milestones and dates	05 April 2019
Sector capacities	Adapted sector occupancy counts of all sectors neighbouring Istanbul TMA, based on LoA FLAS.
Configurations	Adaptable – to cover traffic demand
Expected network impact	NONE
Possible bottleneck sectors	For Sofia Family Sectors: LBSRSDEF* For Varna Family Sectors: LBSRVCD A0
Mitigation measures	Apply lower division FL; Apply layered sector configuration (3); Apply ARR/DEP split configuration (LBSRSBEF* and LBSRSD* ) (LBSRVAC* and LBSRVD*)
Remarks	

**Normal operations:**

**The applicability of the adapted occupancy counts shall be monitored and evaluated by FMP manager and /or shift supervisor.**

## EUROCONTROL

## MAASTRICHT UAC

### FRAM 2 Phase 2

06 December 2018

To further improve the Free Route Airspace operations within Maastricht UAC.

Point of contact:

Name and e/mail: HUURDEMAN Roel <roel.huurdeman@eurocontrol.int>

Project description:

To expand existing **Free Route Airspace** above **FL245** to **NIGHT and Weekends** within the Maastricht UAC AoR.

Project phases:

Phase	Period	Impact on network performance	Mitigation measures
Cut over	06/12/2018	Low	
Transition period	06-17/12/2018	Low	
Normal operations	17/12/2018		

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**Cut Over: 06 December 2018**

**Transition period: 06 - 17 December 2018**

Description & areas impacted	
Milestones and dates	
Sector capacities	-10% during the weekends only
Configurations	
Expected network impact	Low
Possible bottleneck sectors	
Mitigation measures	
Remarks	Possible capacity reductions may occur during the weekends falling in the transition period.

**Normal operations: 17 December 2018**



## New ATM system implementation

**September 2018 - February 2019**

The new ATM system in Tbilisi ACC is planned to be implemented, starting from September 2018.

Point of contact:

“SAKAERONAVIGATSIA” LTD – ATS Manager – Mr. David Kadzanaia

d.kadzanaia@airnav.ge

Project description:

The implementation of the new system and ops room will include:

- 2 ACC sector positions
- New ATM system
- Enhanced Functionality

Expected benefits:

- Increased ACC capacity
- Possibility to open additional sector
- Airspace structure optimisation

Implementation phases:

Phase	Period	Impact on network performance	Mitigation measures
Training	September 2018 – January 2019	None	No
Cutover	18 January 2019	None	No
Transition Phase	January – February 2019	None	No
Normal operations	12 February 2019	None	No

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**Training: September 2018 – January 2019**

<b>Description &amp; areas impacted</b>	Training
<b>Milestones and dates</b>	
<b>Sector capacities</b>	No reduction of sector capacities
<b>Configurations</b>	No reduction of maximum sector configuration
<b>Expected network impact</b>	None
<b>Possible bottleneck sectors</b>	
<b>Mitigation measures</b>	None
<b>Remarks</b>	

**Planned Cutover Date: 18 January 2019**

**Transition phase: 18 January 2019 – 11 February 2019**

<b>Description &amp; areas impacted</b>	Operations on the new system
<b>Milestones and dates</b>	
<b>Sector capacities</b>	Sector Capacity will not be reduced
<b>Configurations</b>	Maximum configuration: 2 ACC sectors
<b>Expected network impact</b>	None
<b>Possible bottleneck sectors</b>	None
<b>Mitigation measures</b>	None
<b>Remarks</b>	We will take two days for review and further action planning, if needed according to analysis shown on transition phase

**Normal operations: 12 February 2019**

## GERMANY

## MUNICH ACC

### OASE Project (Part 2) Munich ACC

#### December 2018

##### Introduction

OASE project is the restructuration of sector family East in Munich ACC.

##### Point of contact:

Project leader: ernst.potzel@dfs.de

ATFCM: ernst.potzel@dfs.de

##### Project description:

As of AIRAC1813 (06DEC2018) the second part of the project will be set in place: the new sectors MEI (Meissen), HAL (Halle) and GER (Gera) will replace SASH (Sachsen high), TRGHN (Thuringen High North) and TRGHS (Thuringen High South)

##### Expected benefits:

- Capacity increase: 1%

##### Implementation phases:

Phase	Period	Impact on network performance	Mitigation measures
1 <sup>st</sup> week after implementation	06DEC-12DEC2018	Planned capacity reduction of 20%	Maximum staffing Pre-tactical measures
2 <sup>nd</sup> week after implementation	13 DEC-19 DEC 2018	Optional capacity reduction of 10% (if required)	Maximum staffing Pre-tactical measures
Normal operations	20 December 2018		

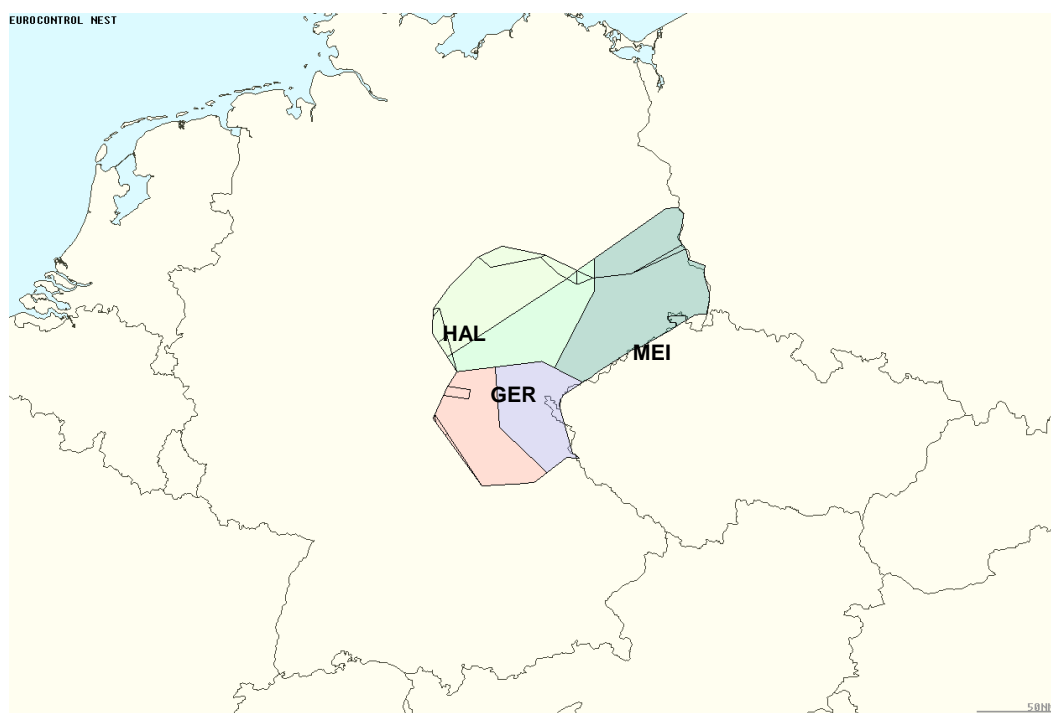
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**First week after implementation: 6<sup>th</sup> - 12<sup>th</sup> December 2018**

<b>Description &amp; areas impacted</b>	EDMMMEI, EDMMHAL and EDMMGER
<b>Milestones and dates</b>	6 <sup>th</sup> - 12 <sup>th</sup> December 2018
<b>Sector capacities</b>	The sector capacities will be reduced by 20%
<b>Configurations</b>	Maximum configuration
<b>Expected network impact</b>	None
<b>Possible bottleneck sectors</b>	None
<b>Mitigation measures</b>	Maximum staffing; pre-tactical measures

**Second week after implementation: 13<sup>th</sup> - 19<sup>th</sup> December 2018**

<b>Description &amp; areas impacted</b>	EDMMMEI, EDMMHAL and EDMMGER
<b>Milestones and dates</b>	13 <sup>th</sup> - 19 <sup>th</sup> December 2018
<b>Sector capacities</b>	Capacity reduction by 10%, if needed.
<b>Configurations</b>	Maximum configuration
<b>Expected network impact</b>	None
<b>Possible bottleneck sectors</b>	None
<b>Mitigation measures</b>	Maximum staffing; pre-tactical measures



## ROMANIA

## BUCHAREST ACC

### New ATM SYSTEM – ATM 2015+

#### Spring 2019 – implementation of new ATM system – ATM 2015+ - Phase 1

##### Point of contact:

ROMATSA - Andreea Strat – andreea.strat@romatsa.ro

##### Project description:

The “ATM2015+ System” addresses the flight data processing systems, surveillance data processing systems, human-machine interface systems and the introduction of CPDLC capability. The system is a distributed one, covering Bucharest ACC, TMA Bucharest, TMA Napoc, TMA Arad, TMA Constanta and 15 TWR units. In Otopeni TWR a different system (A-SMGCS component) composed of a surveillance subsystem and an electronic flight strips subsystem will be interfaced via OLDI with the ATM2015+ System.

The operational concept of ATM2015+ System relies on a trajectory-based approach in which the user agrees to fly a trajectory, facilitated by the ANSP, ensuring that changes to the trajectories are kept to a minimum to achieve the best outcome for all users. A flexible and dynamic sectorisation of the airspace will improve the capacity adjustment and the economic use of resources.

The ATM2015+ System will provide improved functions:

- Safety Net tools (STCA, MSAW, APW, APM) and the related control tools - NTCA (Phase 2) and Multi-VERA (VERification and Advice) - that are not by definition safety nets, but included here as they often prevent related incidents. The main purpose of the Safety Nets function will be to act as a last resort for alert generation to ATCOs calculating possible conflicts between tracks or between tracks and defined areas in the airspace within the near future or flight process through algorithms.
- Correlation Management: the system tracks are correlated to the eligible SFPLs by matching the PSSR or the NSSR or MODE S flight ID and by verifying that the track position is within a 3D tolerance of the SFPLs predicted position at the corresponding time (Volume of expectation).
- Code Management: the system supports the management of conspicuity Code (A1000) management, assignment of SSR Codes in accordance with ORCAM as described in EUR DOC 023, and also by means of CCAMS.
- Flight Data Processing is trajectory-based, as opposed to the classical route-based systems. This means that, since all route and profile changes are updated automatically and dynamically, controllers have the most accurate information at all times. Co-ordination of flights requires less verbal actions, as most of the coordination processes are assisted by silent-electronic coordination. More flexible management of controlled airspace is implemented. Operational configuration management can support more complex and dynamic concepts (ranging from variable-division flight levels between low and high sectors to sectors with variable geographical boundaries). Increased system flexibility will improve performance by keeping down flight delays.
- Conflict Management: MTCD is an essential part of the system. Conflict prediction also allows controllers to rapidly assess and probe trajectory interactions and issue timely responses. MTCD does include the “what-if” functionality. Context Traffic is available also, MTCD available for planned trajectory, observed trajectory, cleared tactical trajectories.
- Monitoring Aids: automatic monitoring of aircraft clearances is in place, providing a warning to controllers if the aircraft leave their cleared flight level or route, or deviate from the assigned vertical speed. In addition, ATM2015+ supports the automatic-rerouting facility.
- Controller Human Machine Interaction Management: the CWP provides a user interface for En-Route and TMA control positions to enable the provision of an air traffic control service through the provision of the specific functionalities. The CWP configuration Tool (CCT) software provides an HMI that enables users to define or configure parameter in a very easy way. The CCT Defined Parameters (Display Settings) are bound in groups according to various criteria such as the kind of the parameters, the configuration file where they are saved, their functionality within the system, etc.  
For TWRs, the system offers FDO and EFS positions able to present the flight data of concerned flights.
- Supervision (central and local):

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- Operational Supervision is able to quickly and easily reconfigure any CWP to undertake any sector tasking. Any position can acquire supervisor privileges, but a dedicated position for those tasks is available.
- Technical Supervision: all functions used for System configuration, control and monitoring, and the management of data recording and distribution. These functions will be classified into these groups depending on their functionality: System configuration, control and monitoring functions (to monitor, control and configure application components, either technical or operational), Data Recording and Storage Function (to perform the retrieval and storage of system information and manage the distribution of recorded information to users on request),
- Support Functions:
  - Maintenance of environmental information (aeronautical and meteorological).
  - Video Recording and Playback Facility (VRPF) generates and maintains the legal recording of the image displayed at the CWPs.
  - Data recording and archiving for incident replay, statistical analysis and route charging,
  - Interactive Playback is planned for ATM2015+ (phase 2).

Air-Ground Datalink Management: the system supports CPDLC over ATN and FANS. The following ATN services are supported: Data Link Logon Service (DLL) AGDL service, ATC Clearances and Information Service (ACL), ATC Communications Management (ACM), ATC Microphone Check (AMC).

#### Expected benefits:

- Increased ACC capacity
- Increased flexibility
- Possibility to open additional sectors
- Airspace structure optimisation

#### Project phases:

The roadmap of the project includes the following stages of development:

- STEP 1: The baseline system - phase 1 shall be operational in April 2019. Phase 2 which will include enhanced functionalities will to be operational in April 2020.
- STEP 2: An upgraded version of the baseline system which will include enhanced capabilities (e.g. ADQ, initial 4D capabilities).

STEP 3: An upgraded version of the system implemented after Step 2, which will include enhanced capabilities to be specified during Step 2 implementation (e.g. full compliance with SESAR performance objectives).

#### Implementation phases:

Phase	Period	Impact on network performance	Mitigation measures
Training	Jan - March 2019	None	None
Transition	01/04/2019 – 26/04/2019	None	None
Cut over	12/04/2019		
Normal ops	27/04/2019		

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**Phase: Refresher training From January 2019 – To March 2019**

<b>Description &amp; areas impacted</b>	Refresher Training for ATS units concerned
<b>Milestones and dates</b>	
<b>Sector capacities</b>	No reduction of sector capacities
<b>Configurations</b>	No reduction of maximum sector configuration
<b>Expected network impact</b>	None
<b>Possible bottleneck sectors</b>	None
<b>Mitigation measures</b>	None
<b>Remarks</b>	None

**Phase: Shadow mode From 01/04/2019 – To 12/04/2019**

<b>Description &amp; areas impacted</b>	Shadow Mode Operations – Ops room (during limited periods daily)
<b>Milestones and dates</b>	
<b>Sector capacities</b>	No reduction of sector capacities
<b>Configurations</b>	9 sectors
<b>Expected network impact</b>	
<b>Possible bottleneck sectors</b>	
<b>Mitigation measures</b>	
<b>Remarks</b>	

**Cut over on 12/04/2019 at 00:01 UTC**

**Phase: Operational monitoring period 12/04/2019 – To 26/04/2019**

<b>Description &amp; areas impacted</b>	Operations
<b>Milestones and dates</b>	
<b>Sector capacities</b>	No reduction of sector capacities
<b>Configurations</b>	11 sectors
<b>Expected network impact</b>	
<b>Possible bottleneck sectors</b>	
<b>Mitigation measures</b>	
<b>Remarks</b>	

**Normal operations: 27/04/2019**

## SERBIA and MONTENEGRO

## BEOGRAD ACC

### ATM system hardware upgrade

**May 2019**

In May/2019 ATM system at Beograd ACC will be upgraded.

Point of contact:

SMATSA – Mirjana Vasiljevic, mirjana.vasiljevic@smatsa.rs

Project description:

Hardware and software upgrade of the ATM system at LYBA ATCC, LYBE TWR and LYPG TWR/APP.

Step 1.2 of SUSAN Modernisation Program foresees installation and implementation of the new hardware and software of the TopSky-ATC System.

According to the plan agreed between SMATSA and system manufacturer (Thales) transition is planned from 06 - 19. May 2019.

There are 14 (fourteen) En-route and 2 (two) TMA sectors available in the ATCC Beograd for the ATS provision when the operations are normal. Half of them will be operational and other half in shadow mode as described in the table below. Same applies to LYBE TWR and LYPG TWR/APP.

Project phases:

	Dates	Sector capacities	Max sector openings
Training	<i>Spring 2019</i>	<b>No impact</b>	9
Cut over	06 May 2019	-	-
Transition period 1	<i>06 – 14 May</i>	<b>No reduction</b>	7
Transition period 2	<i>14 – 19 May</i>	<b>No reduction</b>	7
Normal operations	20 May	<b>No reduction</b>	10



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**Cut Over: 06 May 2019 at 00:01 UTC**

**Transition period 1: 06-14 May 2019**

Description & areas impacted	Migration to the upgraded HW & SW of the ATM system of the Beograd CTA
Milestones and dates	06 May start 14 May 2019 finish
Sector capacities	No reduction
Configurations	Max 7 sectors
Expected network impact	Regulation on one or two sectors
Possible bottleneck sectors	Will be decided on tactical basis
Mitigation measures	On pre-tactical basis regulation on sectors will be coordinated between FMP Beograd and NM
Remarks	No impact on LYBE TWR and LYPG TWR/APP capacity

**Transition period 2: 14-19 May 2019**

Description & areas impacted	Service provision from the upgraded HW&SW of the ATM system in full configuration of Beograd CTA
Milestones and dates	14 May start 19 May 2019 finish
Sector capacities	No reduction
Configurations	Max 7 sectors
Expected network impact	Regulation on one or two sectors
Possible bottleneck sectors	Will be decided on tactical basis
Mitigation measures	On pre-tactical basis regulation on sectors will be coordinated between FMP Beograd and NM
Remarks	No impact on LYBE TWR and LYPG TWR/APP capacity

**Normal operations: 20 May 2019. It is very likely that normal operations may commence from 15 May 2019.**

## SWITZERLAND

## GENEVA & ZURICH ACCs

### Virtual center ODS4.1

02-05 October 2018

Point of contact:

Skyguide, Ms. Lorna Herda, [lorna.herda@skyguide.ch](mailto:lorna.herda@skyguide.ch)

Project description:

Deployment of another step of the Virtual Centre program in Geneva and Zurich ACCs.

Project phases:

<b>Description &amp; areas impacted</b>	Operation with the first part of the fourth operational deployment step of the virtual centre. Mainly including preparatory steps for upcoming technical adaptations.	
<b>Milestones and dates</b>	<i>LSAGUTA + CTA</i>	<i>LSAZUTA + CTA</i>
	02 OCT – 05 OCT 2018	04 OCT – 05 OCT 18
<b>Sector capacities</b>	Reduced by 10%. No reduction at LSGG.	Reduced by 10%. No reduction at LSZH.
<b>Configurations</b>	Maximum configuration: - 3 sectors LSAGCTA - 6 sectors LSAGUTA According configurations in ETFMS	Maximum configuration: - 4 sectors LSAZCTA - 6 sectors LSAZUTA According configurations in ETFMS
<b>Expected network impact</b>	Low	
<b>Possible bottleneck sectors</b>	LSAGL5	LSAZM4, LSAZM5
<b>Mitigation measures</b>	CP, STAM, RR/ FL Scenarios according standard procedures.	
<b>Remarks</b>	Pre-cautionary capacity reduction.	

**TURKEY**

**ANKARA ACC**

**Istanbul New airport**

**05/06 April 2019**

Point of contact:

Name and e/mail

Project description:

Project phases:

Phase	Period	Impact on network performance	Mitigation measures
Training			
Cut over	05/06 April 2019	<b>None</b>	
Transition period 1			
Transition period 1			
Normal operations			

**Transition described in Turkey AIC A10/19 of 25 February 2019**

## **SYSTEMS PROGRAMME:**

### **SAIP AD4**

### **Project Timeline: AIRAC 13/2018**

**6<sup>th</sup> December 2018**

In partnership with Eurocontrol (MUAC) and LVNL (Amsterdam ACC) NATS will implement system changes to support introduction of new COPS on the interface boundary with the AC CLN sectors.

#### **NM Point of contact:**

NATS – Stuart McBride - [Stuart.Mcbride@nats.co.uk](mailto:Stuart.Mcbride@nats.co.uk)

#### **Project description**

The introduction of new and revised ATS routes, and revised STARs, for westbound traffic through LAC Sector 13 and 14 and LTC East. Revised SID and ATS routes for eastbound traffic via LAC Sector 12.

- New COPS to replace GORLO. North to south these are NOGRO, ABNED and GALSO
- RNAV1 traffic will be split between these COPS depending on destination
- RNAV5 traffic will not be able to enter UK airspace via these COPS
- The Gatwick CLN SID will be truncated north of DET
- ATS route structure to exit UK airspace via REDFA, SOMVA and LEDBO will be enhanced to reduce track mileage.

CAA ACP approval granted therefore all expected in service 6<sup>th</sup> December 2018.

#### **Expected benefits:**

- Increased systemised separation for westbound traffic.
- Reduction in controller workload
- Increase in S13/S14 capacity – to be confirmed after post implementation analysis
- Reduction in flight-plannable track mileage for traffic via S12
- Overall network enabled fuel saving

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**Training phase – November 2018 – December 2018**

<b>Description &amp; areas impacted</b>	Training (Real Time) Simulations AC CLN and TC East
<b>Milestones and dates</b>	Self-briefing in watch time before real time sim training of 1 day (AC CLN) or 1/2 day (TC EAST). Train the trainer activities completed by 31 <sup>st</sup> October. Main OCT 06/11 – 05/12
<b>Sector capacities</b>	No reduction
<b>Configurations</b>	Normal
<b>Expected network impact</b>	Nil
<b>Possible bottleneck sectors</b>	None identified
<b>Mitigation measures</b>	Not required
<b>Remarks</b>	No delay expected

**Implementation phase: 6<sup>th</sup> December 2018 + 10 days**

<b>Description &amp; areas impacted</b>	AC CLN and TC EAST
<b>Milestones and dates</b>	Go-Live Date: 6 <sup>th</sup> December 2018 (AIRAC 132018)
<b>Sector capacities</b>	No change expected. The affected sectors will be monitored closely by flow. Depending on the situation (staff experience of the new airspace, mix of traffic between new and existing routes and any prevalence of flight planning issues etc) a regulation that equates to an MV -10% <b>may</b> be used.
<b>Configurations</b>	Normal
<b>Expected network impact</b>	None Identified
<b>Possible bottleneck sectors</b>	None identified
<b>Mitigation measures</b>	Reroute scenarios may be considered at D-1 and potentially used throughout the implementation phase as required
<b>Remarks</b>	The NATS Team will work in conjunction with customers to ensure Flight Planning systems are updated correctly and address any specific feedback accordingly. Specific recording of issues will be in place for 10 days post deployment and reviewed daily, followed by referral to standard reporting processes after the implementation phase is complete.

NB: NATS will periodically update NM regarding transition plan details as they mature.

**SYSTEMS PROGRAMME:**

**PLAS Network 3b**

**Project Timeline: AIRAC 13/2018**

**6<sup>th</sup> December 2018**

In conjunction with airfields NATS will implement system changes to support introduction of new SIDs and STARS as detailed below.

NM Point of contact:

NATS – Stuart McBride - [Stuart.Mcbride@nats.co.uk](mailto:Stuart.Mcbride@nats.co.uk)

Project description

Introduction of SIDs and STARS as shown below:

- Newcastle - Introduction of a new RNAV 1 STAR (RNAV 1 arrival transitions will also be introduced by the airfield)  
RNAV 5 arrivals will use existing airways structure
- Doncaster – RNAV 1 replication of existing UPT SID. Introduction of a new RNAV 1 ROGAG SID replacing existing SOC (Standard Outbound Clearance).
- Doncaster – RNAV1 replication of existing STARS. RNAV 5 arrivals will use existing airways structure
- Birmingham – Introduction of a new RNAV1 SID which replaces existing WHI & TNT SID

**Subject to CAA ACP approval all expected in service 6<sup>th</sup> December 2018.**

Expected benefits:

- Alignment with PLAS & overall FAS for modernisation of airspace
- Introduction of enabled fuel benefits for airspace users
- Reduction in controller workload

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**Training phase – November 2018 – December 2018**

<b>Description &amp; areas impacted</b>	Training (briefing) for SE, North & East Controllers
<b>Milestones and dates</b>	On-Watch briefings during watch time – tactical controller release.
<b>Sector capacities</b>	No reduction
<b>Configurations</b>	Normal
<b>Expected network impact</b>	Nil
<b>Possible bottleneck sectors</b>	None identified
<b>Mitigation measures</b>	Not required
<b>Remarks</b>	No delay expected as minimal training required

**Implementation phase: 6<sup>th</sup> December 2018 + 1 week**

<b>Description &amp; areas impacted</b>	PC Sectors Impacted: SE , North & East sectors
<b>Milestones and dates</b>	Go-Live Date: 6 <sup>th</sup> December 2018 (AIRAC 132018) + 1 week post implementation monitoring and reporting.
<b>Sector capacities</b>	No planned sector capacity reductions as part of transition or Implementation Phase
<b>Configurations</b>	Normal
<b>Expected network impact</b>	None Identified
<b>Possible bottleneck sectors</b>	None identified
<b>Mitigation measures</b>	None required-minimal change
<b>Remarks</b>	The NATS Team will work in conjunction with the Airports involved and also Customers to ensure Flight Planning systems are updated correctly and address any specific feedback accordingly. Specific recording of issues will be in place for 1 week post deployment and reviewed daily, followed by referral to standard reporting processes after the implementation phase is complete.

**NB: NATS will periodically update NM regarding transition plan details as they mature.**

**UK**

**PRESTWICK ACC**

## **SYSTEMS PROGRAMME:**

### **PLAS ScTMA 5a**

**Project Timeline: AIRAC 03/2019**

**28 February 2019**

In conjunction with airfields NATS will implement system changes to support introduction of new SIDs and STARS and Holds as detailed below.

#### NM Point of contact:

NATS – Stuart McBride - [Stuart.Mcbride@nats.co.uk](mailto:Stuart.Mcbride@nats.co.uk)

#### Project description

Introduction of SIDs and STARS as shown below:

- Prestwick Airport ACP– RNAV1 replication of 4 existing SID's. 3 new RNAV1 SID's. Inbound RNAV1 transitions from existing Holds, and GNSS approaches to 3 runways.
- Prestwick Centre ACP– Replacement of the LANAK hold with the RULUR hold, which moves approx. 4nm further South East. Replacement of existing STAR's to LANAK with RNAV5 STAR's to RULUR (5 STAR's). New RNAV1 route to link to the end of Edinburgh's MAVIX SID. Moving the Talla/Galloway Sector boundary. Amendment of one STAR inbound to Edinburgh Airport (amendment to the Edinburgh ACP).
- Edinburgh ACP – Replacement of the TWEED Hold with the EDIBO Hold which moves slightly South East. Replacement of Existing STAR's to TWEED with RNAV5 STAR's to EDIBO (4 STAR's) and replication of the existing STAR to STIRA to RNAV5. Two new RNAV1 inbound transitions from the EDIBO Hold and GNSS approaches for either end of the runway. Introduction of 10 new RNAV1 SID's, which include usage based on type, time and day of the week. Several SID's climb to FL's (FL100/ FL150). New SID's can provide reduced departure separations dependant on aircraft type and routing.

**Subject to individual CAA ACP approval all expected in service on 28<sup>th</sup> February 2018.**

#### Expected benefits:

- Alignment with PLAS & overall FAS for modernisation of airspace
- Introduction of enabled fuel benefits for airspace users (EGPH ACP)
- Increased runway capacity at Edinburgh Airport
- Removes reliance on DVOR's for Edinburgh and Prestwick Airports.
- Safety benefit related to move of the LANAK hold to RULUR



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**Training phase – January 2019 – February 2019**

<b>Description &amp; areas impacted</b>	Talla, Galloway, Deancross, Westcoast, Tay
<b>Milestones and dates</b>	Training requirements vary per sector affected by the change. LNA's ongoing currently
<b>Sector capacities</b>	No reduction expected at this time (Training impact currently being worked on)
<b>Configurations</b>	Normal
<b>Expected network impact</b>	None Expected at this time (Training impact currently being worked on)
<b>Possible bottleneck sectors</b>	TBC following validation simulation
<b>Mitigation measures</b>	TBC following validation simulation
<b>Remarks</b>	

**Implementation phase: 28<sup>th</sup> February 2019 + 1 week**

<b>Description &amp; areas impacted</b>	Talla, Galloway, Deancross, Westcoast, Tay
<b>Milestones and dates</b>	28 February 2019 live date
<b>Sector capacities</b>	Unknown at this time, but expected reductions in capacity in Talla and Galloway sectors during implementation
<b>Configurations</b>	Normal
<b>Expected network impact</b>	TBC following validation simulation
<b>Possible bottleneck sectors</b>	TBC following validation simulation
<b>Mitigation measures</b>	TBC following validation simulation
<b>Remarks</b>	<p>The NATS Team will work in conjunction with the Airports involved and also Customers to ensure Flight Planning systems are updated correctly and address any specific feedback accordingly. Specific recording of issues will be in place for 1 week post deployment and reviewed daily, followed by referral to standard reporting processes after the implementation phase is complete.</p> <p>NATS will request delay simulation by NM following internal analysis of potential delay during implementation phase.</p>

**NB: NATS will periodically update NM regarding transition plan details as they mature.**

**UK**

**PRESTWICK/LONDON ACCs**

**SYSTEMS PROGRAMME:**

**Project Lightning (Introduction of a Re-Designed EGD323 Complex to Meet Military Requirements)**

**Project Timeline: AIRAC 03/2019**

**28 February 2019**

As a result of Military airspace requirements associated with the introduction of new aircraft types requiring larger portions of segregated airspace to be introduced; NATS, at the direction of the CAA, has sought to mitigate the effects of the re-design of EGD 323 to the maximum extent possible.

NM Point of contact:

NATS – Stuart McBride - [Stuart.Mcbride@nats.co.uk](mailto:Stuart.Mcbride@nats.co.uk)

Project description

Introduction of new RNAV 5 Routes within UK Upper Airspace. Re-designation of portions of existing Upper Routes as CDR 1 and 3 affected by the re-design of EGD 323:

Introduction of revised dimensions to D323.

Introduction of new reporting points ERKIT, BAVDO, UNTAL DOKEN, PITAT, ODMOS, NOBDO, ABTOS, ODNEK.

Removal of Reporting points UMBEL and RIKUD

Introduction of new route N66.

Introduction of new route N44.

Introduction of New route N110.

Realignment of L602 between NALAX and TLA.

Introduction of CDR1 and 3 H24 status to L602 between NALAX and ERKIT.

Introduction of Level restriction on L602 between ERKIT and TLA Not below FL290.

Revised routing for ScTMA in / out bound traffic via N110 between ERKIT and AGPED.

Changes to P58 availability; CDR1 and 3 H24 between PELET and GIVEM.

Changes to UP59 availability; CDR1 and 3 H24 between ASKAM and NAVEL.

Revision to N97 to route additionally NATEB TLA MAC to replace L602 and UN552.

Change to UL975 routing orientation between ROVNI and ROPAL.

Removal of UK Orbit Area 4

Introduction of Lobe 2 to UK Orbit Area 5

**Subject to CAA ACP approval all expected in service on 28 February 2019.**

Expected benefits:

- Mitigation of expanded D323 by implementation of new routes for civil air traffic.

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**Training phase – December 2018 – February 2019**

<b>Description &amp; areas impacted</b>	Humber, Tyne, Montrose, Deancross, Tay, Talla East, Sector 10 and 11.
<b>Milestones and dates</b>	Training requirements vary per sector affected by the change.
<b>Sector capacities</b>	Unknown at this time
<b>Configurations</b>	Normal
<b>Expected network impact</b>	Unknown
<b>Possible bottleneck sectors</b>	
<b>Mitigation measures</b>	
<b>Remarks</b>	

**Implementation phase: 28 February 2019**

<b>Description &amp; areas impacted</b>	Humber, Tyne, Montrose, Deancross, Tay, Talla East, Sector 10 and 11.
<b>Milestones and dates</b>	28 February 2019 live date
<b>Sector capacities</b>	Potential reduction in Montrose South Sector capacity when overland portions are activated.
<b>Configurations</b>	Normal
<b>Expected network impact</b>	To be assessed following final validation simulation.
<b>Possible bottleneck sectors</b>	Montrose South
<b>Mitigation measures</b>	Agreed subject to confirmation during validation simulation.
<b>Remarks</b>	May request delay simulation from NM in early October

**NB: NATS will periodically update NM regarding transition plan details as they mature.**

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**ANNEX C PROJECTS WITHOUT NETWORK IMPACT DURING IMPLEMENTATION –  
AUTUMN 2018 / SPRING 2019**

No capacity reductions are foreseen for the projects listed in this annex.

**GERMANY**

**LANGEN ACC**

**Langen 2.0 SF 10 in Langen ACC**

**December 2018**

Point of contact:

Project leader: frank.wetzel@dfs.de

ATFCM: christian.boehmer@dfs.de

Project description:

In the frame of Langen 2.0, the alignment of the upper division flight level in Sector Family 10 (Frankfurt Approach) at FL135 is planned to be implemented on 6 December 2018 (AIRAC 1813).

This measure aims to support the implementation of further steps in the frame of Langen 2.0.

Expected benefits:

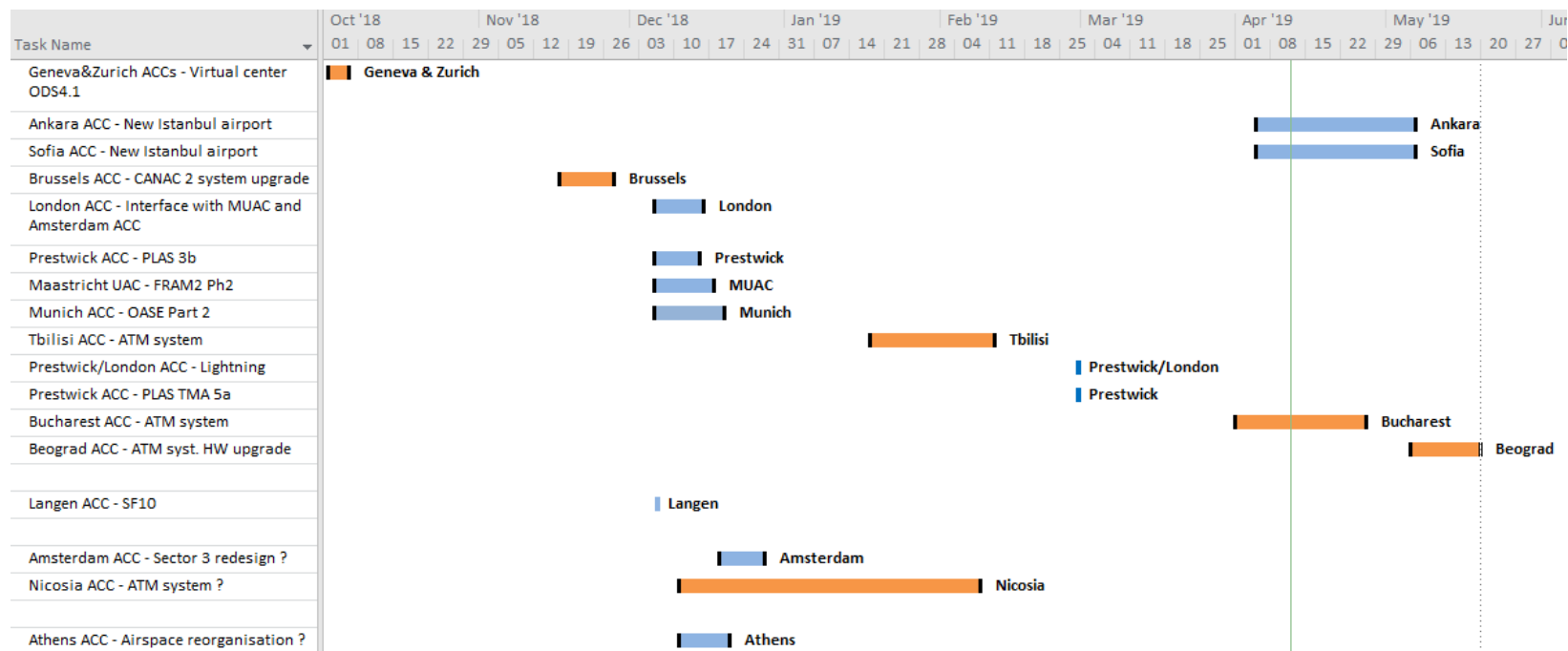
- Preparation of further implementation steps within Langen 2.0 in the future.

Implementation phases:

	Dates	Sector capacities	Max sector openings
Implementation	6 <sup>th</sup> December 2018	<b>Not reduced</b>	Normal configurations

# TRANSITION PLAN FOR MAJOR PROJECTS IN EUROPE WINTER 2018 / 2019

## ANNEX D VIEW ON THE TRANSITION PROJECTS – AUTUMN 2018 / SPRING 2019



### Legend:

- ATM systems, new OPS room
- Airspace reorganisations (en-route, TMA, new RWYs, TWYs, etc.)

## ANNEX E ACRONYMS AND ABBREVIATIONS

<b>ACC</b>	Area Control Centre
<b>AIP</b>	Aeronautical Information Publication
<b>AIRAC</b>	Aeronautical Information Regulation and Control
<b>ANSP</b>	Airspace Navigation Service Provider
<b>AO</b>	Aircraft Operator
<b>ARN</b>	ATS Route Network
<b>ARR</b>	Arrival
<b>ASM</b>	Airspace Management
<b>ATC</b>	Air Traffic Control, Air Traffic Control Domain
<b>ATFCM</b>	Air Traffic Flow and Capacity Management
<b>ATFM</b>	Air Traffic Flow Management
<b>ATM</b>	Air Traffic Management
<b>ATS</b>	Air Traffic Services
<b>AUP</b>	Airspace Use Plan
<b>CBA</b>	Cross-border Area
<b>CDA</b>	Continuous Descent Approach
<b>CDM</b>	Cooperative Decision Making
<b>CDR</b>	Conditional Route
<b>NMOC</b>	Network Manager Operations Centre
<b>DCT</b>	Direct
<b>DEP</b>	Departure
<b>e-AMI</b>	Electronic ASM Information
<b>ERNIP</b>	European Route Network Improvement Plan
<b>EU</b>	European Union
<b>EUROCONTROL</b>	European Organisation for the Safety of Air Navigation
<b>FAB</b>	Functional Airspace Block
<b>FIR</b>	Flight Information region
<b>FL</b>	Flight Level
<b>FPL</b>	Flight-Plan
<b>FUA</b>	Flexible Use of Airspace
<b>GAT</b>	General Air Traffic
<b>IACA</b>	International Air Carrier Association
<b>IATA</b>	International Air Transport Association
<b>ICAO</b>	International Civil Aviation Organisation
<b>IFPS</b>	Initial Flight planning Processing System
<b>IFR</b>	Instrument Flight Rules
<b>LoA</b>	Letter of Agreement
<b>min</b>	Minute/s
<b>N.A.</b>	Not applicable



TRANSITION PLAN FOR MAJOR PROJECTS IN EUROPE  
WINTER 2018 / 2019

<b>NEST</b>	Network Strategic Tool
<b>NM</b>	Network Manager
<b>NMD</b>	Network Manager Directorate
<b>Nm / nm</b>	Nautical Mile
<b>OAT</b>	Operational Air Traffic
<b>RAD</b>	Route Availability Document
<b>RAIS</b>	RNDSG Implementation Summary
<b>RNDSG</b>	Route Network Development Sub-Group
<b>SAAM</b>	System for traffic Assignment and Analysis at Macroscopic level
<b>SES</b>	Single European Sky
<b>SID</b>	Standard Instrumental Departure
<b>SRD</b>	Standard Routing Document
<b>STAR</b>	Standard Arrival Route
<b>TAS</b>	Terminal Airspace System
<b>TMA</b>	Terminal Control Area
<b>TRA</b>	Temporary Reserved Area
<b>TSA</b>	Temporary Segregated Area
<b>VFR</b>	Visual Flight Rules
<b>WE</b>	Weekend
<b>UAC</b>	Upper Area Control Centre
<b>UFN</b>	Until Further Notice
<b>UIR</b>	Upper Flight Information region



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