

Airspace Charter Sweden

for the formulation of the
Swedish Airspace Policy





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Abbreviations

AA	Approved Agency
AIRAC	Aeronautical Information, Regulation and Control
AIS	Aeronautical Information Service
AMC	Airspace Management Cell
AO	Aircraft Operator
ASM	Airspace Management
ATC	Air Traffic Control
ATS	Air Traffic Services
CADF	ECAC Centralised Airspace Data Function
CBA	Cross Border Area
CDR	Conditional Route
CFMU	Central Flow Management Unit
DAM	Dynamic Airspace Management
DOC	Document
ECAC	European Civil Aviation Conference
FUA	Flexible Use of Airspace
IA	Impact Assessment
ICAO	International Civil Aviation Organisation
LoA	Letter of Agreement
NASMAC	National Airspace Management Advisory Committee
NATO	North Atlantic Treaty Organisation
PCA	Prior Co-ordination Airspace
RCA	Reduced Co-ordination Airspace
TRA	Temporary Reserved Area
TSA	Temporary Segregated Area

1 Purpose

This Charter defines the authorities, responsibilities and principles by which the National High-Level Airspace Policy Body conducts the planning of airspace for decision by the regulatory authority. The document is describing the cooperation between civil and military authorities and is also intended to assist airspace users and ATC service providers by defining the framework for strategic airspace management.

The Charter incorporates as Annexes the processes used to provide a high quality service to airspace users and ATC service providers through the safe, accurate and timely planning, approval and promulgation of national airspace arrangements.

2 Role of the national high level policy body

The role of the National High-Level Airspace Policy Body chaired by the SCAA (The Swedish Transport Agency, Civil Aviation and Maritime Department), with membership from military- and civil aviation authorities is to ensure a safe and efficient use of the national airspace structure and ATS route network and to provide a continuum and transparency of operational handling at national boundaries based on harmonised agreements derived from collaborative airspace planning with neighbouring States. This is to be achieved through the development, approval and enforcement of common national policies for an effective airspace allocation and review process, taking into account the needs of all stakeholders, including national security and defence needs, environmental issues as well as any particular neighbouring States requirements.

Functional Airspace Blocks (FAB) that include also airspace of neighbouring states will be managed by a separate high-level body/group for each FAB, to be established in accordance with State Level Agreements, including agreed Terms of Reference, and with participation of civil and military representatives from each state.

3 Strategic objectives

The Strategic Objectives at level 1 for the National High-Level Airspace Policy Body are:

- a) To maintain and actively seek to improve safe and effective management of the airspace and its supporting infrastructure.
- b) To carry out fair and effective regulation of the airspace system.

- c) To build confidence and respect between airspace regulators and all other stakeholders through consultation and co-operation.
- d) To maintain and improve standards of service through effective planning and monitoring of processes and activities.
- e) To provide shared use of national airspace by all user groups.
- f) To harmonise airspace management procedures with neighbouring States.

4 Responsibilities

The National High-Level Airspace Policy Body is performing the following tasks:

- a) To formulate the national guidance for airspace management (Airspace Charter).
- b) To reassess the national airspace structure and ATS route network, at least once a year, with the aim of planning, as far as possible, for flexible airspace structures and procedures;
- c) To validate activities requiring airspace segregation and assess the level of risk for other airspace users;
- d) To plan the establishment of CDRs, TRAs, TSAs, PCAs and CBAs;
- e) To establish controlled airspace and airspace classifications taking into account the FUA concept;
- f) To ensure in the national AIP the status of airspace structures and ATS routes under its jurisdiction;
- g) To establish criteria allowing Level 2 and/or Level 3 to perform Dynamic Airspace Management;
- h) To ensure that co-ordination of major events planned well in advance of the day of operation, which require additional segregated airspace such as large scale military exercises, and notify these activities by AIS-publication;
- i) To periodically, at least once a year, review the national airspace needs and, where applicable, cross-border airspace utilisation;
- j) To periodically, at least once a year, review the procedures of FUA Level 2 operations, the submission of airspace requests and the negotiating procedures and priority rules for AMC airspace allocation;

- k) To periodically, at least once a year, review the procedures of FUA Level 3 operations, the prompt exchange and dynamic update of all necessary flight plan and radar data, and the use of adequate civil/military co-ordination facilities;

To provide a continuum and transparency of operational handling at national boundaries through collaborative airspace planning and harmonised airspace management procedures with neighbouring States.

5 Principles

5.1 General

Principles sustaining the above Strategic Objectives and tasks of the National High-Level Airspace Policy Body are mainly related to safety, consultation, co-operation, notification and environment issues.

5.2 Safety

Safety is the paramount concern for the National High-Level Airspace Policy Body in carrying out its tasks. Safety performance levels shall be maintained or enhanced, and the planning of airspace arrangements shall take account of obligations imposed by higher authorities and safety regulation requirements.

The National High-Level Airspace Policy Body will conform to international best practices and will ensure that the Airspace Change Processes, procedures and instructions are compatible with appropriate Military and Civil Aviation safety procedures.

When considering and refining a proposal for an airspace change, the National High-Level Airspace Policy Body will review, the safety assessment of each case as supplied by the customer, to ensure that national and international plans evolve in an overall risk-reducing manner.

5.3 Consultation

Consultation with airspace users, service providers and other relevant bodies will be conducted with the aim of obtaining consensus, wherever possible, before making changes in the planning or design of airspace arrangements.

The National High-Level Airspace Policy Body is charged with reconciling civil and military operational needs, without affording preferential treatment to either, and ensuring that airspace planning takes into account all user interests.

5.4 Co-operation

Close co-operation will be maintained with national and international partners to ensure that national airspace planning and policies described in CAA airspace policy are consistent with national and international commitments and programmes.

5.5 Notification

The National High-Level Airspace Policy Body is required to ensure that the promulgation of airspace policy, the implementation of new airspace structures and procedures is notified within an adequate timescale allowing sufficient time to all airspace users and ATS providers to comply with the new requirements.

5.6 Environment

The environmental impact of airspace design and planning is to be taken into account at the earliest possible stage when revising airspace procedures and arrangements.

6 Working organisation

The National High-Level Airspace Policy Body is chaired by the SCAA, with membership from military- and civil Aviation authorities. The present membership is listed at Appendix B.

The tasks for the National High-Level Airspace Policy Body will include consultation with airspace users, and other parties affected, for advice and views on any major matter concerned with airspace management (see Appendix C). This consultation is to help in the development of airspace policies, configurations and procedures in order that due attention is given to the diverse requirements of all airspace users and ATS providers, civil and military.

Most of the consultation will be conducted by correspondence, but with the possibility to meet in a consultation session on request. A proposal, which may originate within the National High-Level Airspace Policy Body will be circulated as appropriate. If the proposal does not originate within the National High-Level Airspace Policy Body itself, then the National High-Level Airspace Policy Body's views need also to be circulated. The High Level Airspace Policy Body meets in Plenary Sessions on request by any member. The working level as described in appendix B meets in plenary sessions at least twice a year.

If the matter is straightforward, a consensus will easily emerge from which the National High- Level Airspace Policy Body will then frame associated changes to legislation and/or alternate airspace boundaries or associated procedures.

If the matter is more complex, then a task group may be initiated by the National High-Level Airspace Policy Body in which all interested parties may play a part in formulating a report. A consultation session will then be required to discuss the report.

7 Air space policy formulation and review process

The process for airspace formulation and review process defines and ensures that airspace policies are formulated and reviewed in accordance with the principles laid down in this Charter.

In the context of the Airspace Policy Formulation and Review Process, "*Policy*" refers to: "a standing decision rule which gives guidance on acceptable and unacceptable types of action to those with executive responsibility."

The Airspace Policy Formulation and Review Process falls into six stages:

- 1) identification of need for changes
- 2) analysis of the potential impact;
- 3) decision to proceed (by the national high level airspace policy body)
- 4) consultation;
- 5) approval (SCAA) and
- 6) publication.

The flowchart presented at Appendix D illustrates the activities, considerations and requirements of the Airspace Policy Formulation and Review Process.

Proper co-ordination with the military during the Case Study is a critical element of the process as well as formal agreement after the external consultations.

An Impact Assessment (IA) describing the overall impact of a Regulatory Measure or Policy Change and including a safety case, an environmental assessment, a legal assessment and a cost benefit analysis will be initiated

and/or conducted, if required, by the National High-Level Airspace Policy Body when formulating Policy or initiating legislative change.

Policies are to be subject to periodic reviews. The criteria for review will be set out in the policy statement. The length of the review period shall take into account the scale of impact of the new or revised policy.

8 Airspace change process

The Airspace change process defines the process which ensures that proposed changes to airspace are initiated, considered, refined, approved and implemented in a safe and controlled manner, and in accordance with the policies and procedures laid down by the National High-Level Airspace Policy Body.

In the context of the Airspace Change Process, "*Clients*" refers to: "those allowed requesting changes to airspace" (e.g. civil/military airspace users, ATS providers, airport management etc.).

The Client, identifying a possible requirement to change airspace, will inform the National High-Level Airspace Policy Body, which will then be available to offer advice on aspects concerning the Guidelines, design, safety management and consultation exercise. Ownership of the proposal will always remain with the Client.

The Client will carry out, if required, initial informal consultation and in the event of a deadlock situation or undue delay may refer the problem to the National High-Level Airspace Policy Body for advice. The National High-Level Airspace Policy Body may then take a judgement, perhaps after further consultation, and how the event should be handled.

On completion of informal consultation, the Client will submit a formal proposal with full details of the change.

The National High-Level Airspace Policy Body will be responsible, where necessary, for conducting the case study, formal consultation, proposal refinement, approval and establishment phases of the process.

The flowchart presented at Appendix E illustrates the phases and activities of the Common Airspace Change Process.

On completion of the formal consultation and eventual refinement, the National High-Level Airspace Policy Body will formally accept the project and agree a target completion date with the Client. The Client will be responsible for developing and submission for subsequently publishing the ATC operational procedures, if so required.

For most airspace changes two AIRAC cycles are applied for promulgation. This means that the formal process may take seven months (which must be reflected in the target completion date). Some changes may be concluded in less than the stated period, but where such changes are subject to publication by AIRAC cycle, unless a full AIRAC cycle can be gained, no reduction can be initiated.

All significant airspace changes will be subject to review by the National High-Level Airspace Policy Body to ensure that they efficiently serve the purposes for which they were designed. The period between introduction and review will vary according to the complexity and purpose of the airspace. The time of the review will be agreed by the National High-Level Airspace Policy Body and the Client prior to introduction of the changes.

9 Dynamic airspace management

In order to comply with the Dynamic Airspace Management, the National High-Level Airspace Policy Body delegates its responsibility of conducting the planning of airspace and related arrangements to the Level 2 and/or Level 3.

Level 2 and/or Level 3 are allowed to delineate daily ad-hoc areas to better match the military requirements, and to allocate daily ad-hoc routing scenarios to better accommodate traffic flow requirements.

Letter of Agreement defining the criteria and process wherein the coordination procedures between the airspace users and ATS providers concerned will be subject for approval by the Swedish CAA

10 Cross-border operations

10.1 Cross-border area

In order to optimise the airspace structure in the area around the boundary, Cross-Border Areas (CBAs) may be established on both sides of the border allowing OAT operations without any boundary constraints. Diplomatic clearance is still necessary for cross border OAT operations. Permission on a yearly basis is desirable.

Letter of Agreement defining the criteria and process wherein the coordination procedures between the airspace users and ATS providers concerned shall be published and approved by the Swedish CAA.

LoA defining the criteria and process for handling military OAT flights wherein the coordination procedures between the airspace users and military controlling units, shall be published and approved by the appropriate military authorities

10.2 Cross-border CDRs

In order to optimise traffic flow requirements and to maintain flight consistency in the area around the boundary, Cross-Border CDRs may be established through the border allowing GAT operations without any boundary constraints.

Letter of Agreement defining the criteria and process wherein the coordination procedures between the Military authorities and ATS providers concerned will be subject for approval from the SCAA and military authorities when necessary.

10.3 Lead AMC

In order to have a single point of contact for the CFMU/CADF for each single CDR extending through the area of responsibility state may agree to delegate their responsibility for the co-ordination of the harmonised availability of an individual CDR on a route by route basis and for the co-ordination of CBA allocation to one AMC acting as Lead AMC.

Coordination procedures between the AMC's will be conducted according to LoA between the ANSP and military unit.

11 Airspace delineation

In order to ensure more transparency and predictability of airspace management measures and to reconcile contrary requirements in airspace utilisation between Civil Aviation and Military Aviation, it is necessary to establish objective criteria for the design of airspace.

The present Charter is based on the guidelines and criteria for an uniform airspace design and change process established in the "Eurocontrol Manual for Airspace Planning".

In addition to the Eurocontrol Manual for Airspace Planning and in order to take into consideration specific national airspace structures and ATS procedures, the Charter also refers to the airspace policy defining national airspace guidance materials.

12 Publication

The Swedish Airspace charter is notified to military authority and appropriate users and published on website;
<http://www.transportstyrelsen.se/sv/Luftfart/Flygplatser-och-flygtrafiktjanst/Flygtrafiktjanst/Luftrum/>

The decision in this matter has been made by head of Infrastructure unit Andreas Holmgren and Director Military Aviation Authorities Col Anders Janson. Mathias Elofsson, and Lars-Eric Blad, the latter submitting the report, took part in the final handling of the matter.

Norrköping 2020-03-31

Stockholm 2020-03-31

Andreas Holmgren
Head of Infrastructure unit

Anders Janson
Director Military Aviation Authorities

Appendix A - Reference documents relating to airspace management and design

ICAO documents

- Annex 2 Rules of the Air
- Annex 6 Operation of Aircraft
- Annex 11 Air Traffic Services
- Annex 15 Aeronautical Information Services
- Annex 16 Environmental Protection
- Doc. 4444 Rules of the Air and Air Traffic Services
- Doc. 7754 EUR Air Navigation Plan
- Doc. 8126 Aeronautical Information Services Manual
- Doc 8168 PANS-OPS Vol 2 : Procedures for Air Navigation Services
- Doc. 9426 Air Traffic Services Planning Manual
- Doc. 9554 Manual Concerning Safety Measures Relating to Military Activities Potentially Hazardous to Civil Aircraft Operations

EU-regulations

Regulation (EC) No549/2004 amended by (EC) 1070/2009 of the European Parliament and of the council laying down the framework for the creation of the single European sky

Regulation (EC) No 550/2004 amended by (EC) 1070/2009 of the European Parliament and of the council on the provision of air navigation services in the single European sky

Regulation (EC) no 551/2004 amended by (EC) 1070/2009 of the European Parliament and of the council on the organisation and use of the airspace in the single European sky

Regulation (EC) No 2150/2005 amended by (EC) 1070/2009 Laying down common rules for the flexible use of airspace

Regulation (EU) No 677/2011 amended by (EU) No 970/2014 and (EU) 2017/373 Laying down detailed rules for the implementation of Air Traffic Management (ATM) network functions



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Regulation (EU) 2017/373

laying down common requirements for providers of air traffic management/air navigation services and other air traffic management network functions and their oversight, repealing Regulation (EC) No 482/2008, Implementing Regulations (EU) No 1034/2011, (EU) No 1035/2011 and (EU) 2016/1377 and amending Regulation (EU) No 677/2011

Eurocontrol documents

ECTL specification for the application of FUA 10/012009

Eurocontrol Route Network Improvement plan part 3 Airspace Management Handbook

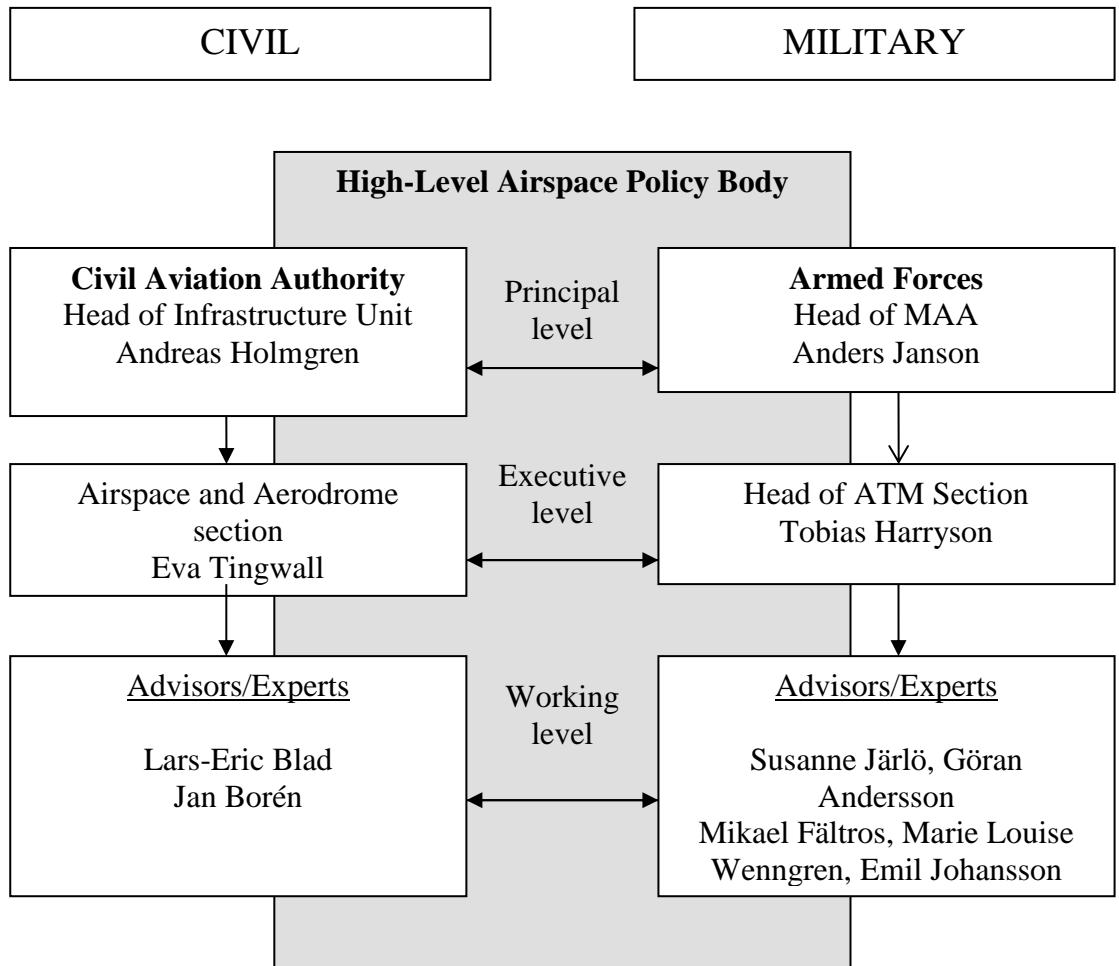
EUROCONTROL Airspace Strategy for the ECAC States.

ECAC Airspace Planning Manual, (EUROCONTROL Document ASM.ET1.ST03.4000.EAPM.02.02)

National documents

Transportstyrelsens Författningssamling TSFS 2018:98 serie GEN
Transportstyrelsens föreskrifter och allmänna råd om användning och utformning av luftrum och flygprocedurer.

Appendix B – Structure of the high-level airspace policy body



Appendix C - National High Level Airspace Policy Body supplementary function

The working level of National High-Level Airspace Policy Body has a supplementary function to be a consulting body for advice and views on any major matter concerned with airspace management.

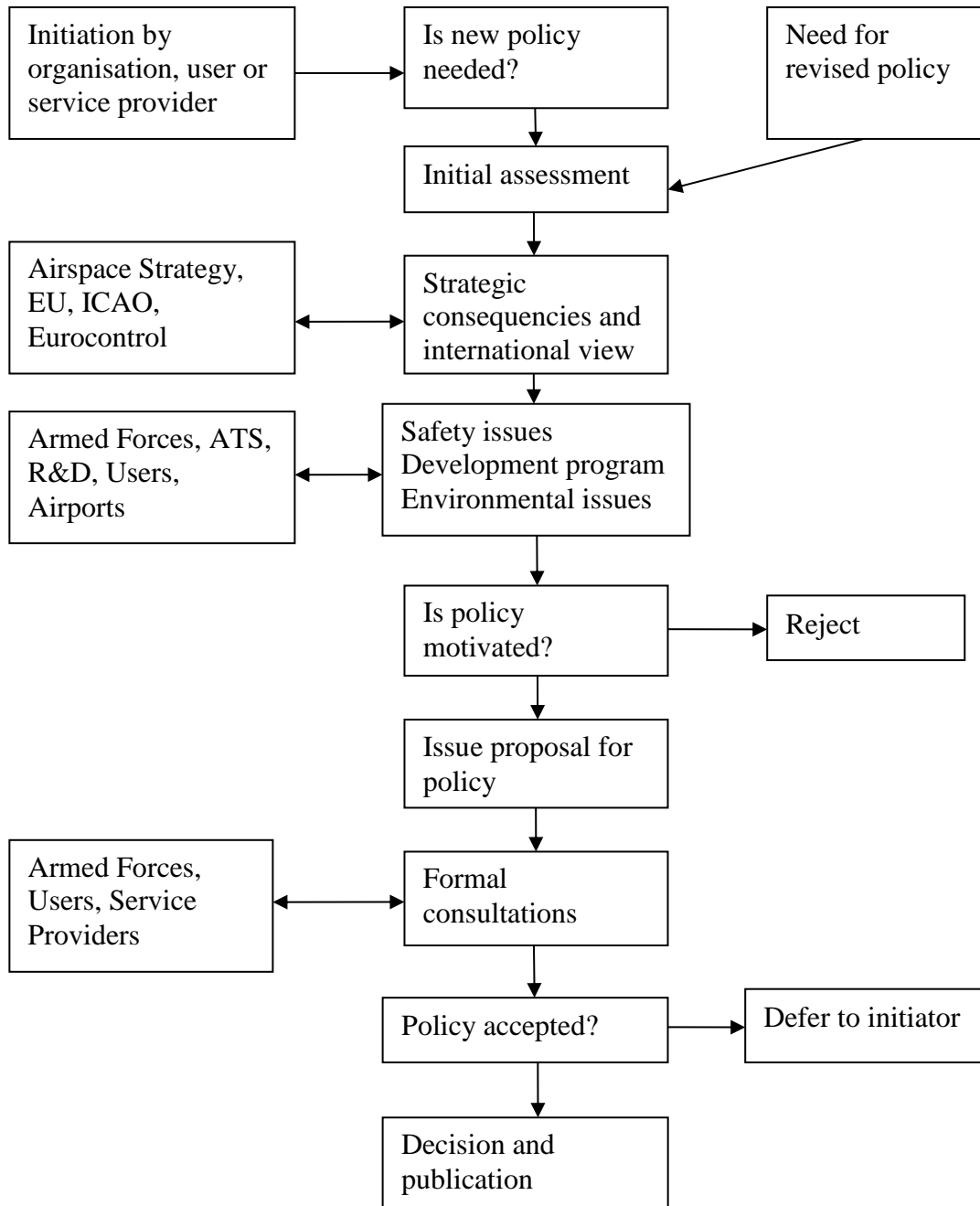
Terms of Reference working level

The working level is to assist the High level Airspace Policy Body in the development of airspace policies, configurations and procedures in order that due attention is given to the diverse requirements of all users of Swedish airspace, civil and military. SCAA arrange consulting meetings with all airspace users at least twice a year with participation from working level.

Constitution

Working arrangement is described under chapter 6 and organised as described in Appendix B

Appendix D - Airspace Policy Formation and Review Process



Appendix E – Airspace Change Process

