National Airspace Vision
Summary

The White Paper on Dutch Aviation ¹ (hereafter: White Paper) sets out the Dutch government’s vision for the future development of Dutch aviation. In order to ensure that the Netherlands remains accessible by air, a high-quality international network of connections is of major importance. Such a network, in combination with an aviation sector that is both competitive and sustainable, is crucial to a strong economy. The government recently issued an update letter ² outlining its plans to implement the policy measures announced in the White Paper. The issue of ensuring good accessibility by air is one of the focal points of this document, as it (increasingly) constrains further airport developments in the Netherlands.

This National Airspace Vision (Luchtruimvisie) outlines the national government’s future development plans and strategy for the organisation, management and use of Dutch airspace. The National Airspace Vision provides clarity to airspace users while offering air navigation service providers (ANSPs) a framework for tackling current bottlenecks and future challenges with regard to Dutch airspace. Finally, specific actions and measures are set out in the National Airspace Policy Agenda, a document providing guidance for further implementation of the Dutch ambitions.

Developments necessitating the modernisation of Dutch airspace

Various developments necessitate further modernisation of the organisation, management and use of Dutch airspace. Key developments are:

European developments imposing solid targets

In the late 1990s, the European Commission initiated Single European Sky (SES) in an effort to optimise the use of European airspace. By 2020, enhanced cooperation between European Member States in the area of safety, airspace use and technological developments should yield:

- a tripling of capacity ³;
- further improvement of ATM safety;
- a 10% reduction of the environmental effects of aviation;
- a 50% reduction in air traffic service provision costs.

In order to enable efficient use of the upper airspace in central Europe, the Netherlands—in cooperation with Belgium, Germany, France, Luxembourg and Switzerland—established the Functional Airspace Block Europe Central (FABEC). The FABEC member states have set targets for airspace performance and the cost-effectiveness of air traffic service provision. To a large extent, these targets will have to be achieved through the optimisation of airspace management and organisation.

³ This objective relates to en-route air traffic in upper airspace.
Cooperation within the FABEC is of great importance to the Netherlands. The Dutch airspace is small and characterised by high air traffic density. Cross-border cooperation is a prerequisite for enhancing network quality and improving the competitiveness of the mainport Schiphol and facilitating cross-border military exercise areas that will help improve military mission-effectiveness.

The impact of tasks and plans enshrined in policies and laws
The White Paper states that the mainport Schiphol and the regional airports of national importance will be enabled to become sustainable and competitive airports. Safety is an important general precondition in this respect. The development of these airports requires efficient and reliable accessibility by air. The simplification of the Air Traffic Management (ATM) system and airspace structure will help ensure that capacity can be increased within the framework of ATM safety.

The Ministry of Defence is responsible for safeguarding national security, the surveillance of Dutch airspace, international response in conflict situations and protection against terrorism and potential future threats. In order to perform this task in line with both national and international obligations (within the context of UN and NATO agreements), the Ministry of Defence lays down requirements for (the use of) Dutch airspace and the airside accessibility of military airports.

The growing demands and changing needs of airspace users
Various stakeholders have an interest in Dutch airspace. Each has its own airspace needs and/or requirements and preferences as regards the use and organisation of that airspace. We can distinguish between airspace users, air navigation service providers, airports and residents in the vicinity of airports. As a result of growing demands and changing requirements and preferences, a number of airspace users use the same parts of airspace at the same times. This is increasingly resulting in airspace scarcity and constraints.

Policy principles, strategy and main airspace structure
In this National Airspace Vision, the central government lays down a number of policy principles that are key to the future organisation, management and use of Dutch airspace. Subsequently, the National Airspace Vision describes how these principles are applied when developing solutions to the challenges and constraints involved in modernising airspace and the operational concept for air traffic management. The policy principles and strategy are subsequently translated into a future Dutch main airspace structure.

Policy principles
The policy principles for the further development of Dutch airspace are based on existing policy guidelines (White Paper on Dutch Aviation and the Update letter) and the obligations deriving from applicable international (ICAO, FABEC, NATO) and European (SES, EASA) instruments and legislation/regulations. The policy principles are briefly explained in Table 1.1 on the next page.

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<tr>
<th>Policy principles</th>
<th>Explanation</th>
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<tr>
<td>Primary focus on the airspace user</td>
<td>• Preferences and needs of the various airspace users are the primary focus. The government aims to impose as few limitations as possible in terms of institutional and/or national borders. • Airspace organisation and management must be aimed at optimally accommodating airspace users’ requirements.</td>
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<td>The safe, efficient, cost-effective and environmentally-friendly use of airspace</td>
<td>• Airspace organisation and management must reflect the performance requirements set out in the SES and FABEC (regarding capacity, safety, the environment and cost-effectiveness). • Airspace is becoming an increasingly scarce commodity. For this reason, airspace will no longer be claimed more than is strictly necessary for civil and military needs. • In this context, efforts are being made to improve the planning of airspace needs for civil and military operations, thus facilitating the flexible and dynamic management and use of (parts of) the airspace. • The changes to the operational ATC concept as proposed by the ANSPs in order to meet performance requirements are always assessed in terms of their effects on capacity, safety, the environment, cost-effectiveness and military mission-effectiveness.</td>
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<td>Respecting arrangements with local residents</td>
<td>• The preferences and needs of the airspace users are assessed in terms of their compliance with arrangements with local residents regarding environmental quality (nuisance reduction and spatial planning on the ground), e.g. the Aldersroundtable groups or the Commissies Regionaal Overleg (regional consultative committees).</td>
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<td>Simple</td>
<td>• Airspace organisation and management must be elementary and unambiguous for both the airspace users and ANSPs in order to further enhance aviation safety. The harmonisation of airspace classifications can contribute to this objective. • A simplified, more predictable and reliable operational concept that reduces the complexity of the ATM system and the workload of air traffic controllers and pilots and thereby increasing ATM capacity while maintaining safety levels.</td>
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<td>Integral</td>
<td>• ATM system capacity is not exclusively determined by airspace organisation and management. Technical and operational enablers must thus be taken into consideration. • In order to achieve sustainable airspace organisation and management, a robust operational ATC concept must be developed by the ANSPs. This should provide clarity regarding the necessary enablers in terms of airspace organisation and management, technical and operational tools, etc. • The entire ATM chain must be assessed on the basis of a gate-to-gate approach, and examined from both a civil and military perspective.</td>
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4 Enablers are the steps or means required to reach a certain result.

Table 1.1: Detailed explanation of policy principles
In this context, hub and mainport-associated traffic is understood to refer to the traffic as defined in the Network Vision and Selectivity component of the Alders round-table opinion of October 2008. Based on a vision of the Schiphol and KLM networks and the position of the central government, the participants in the Alders round-table groups concluded that the core function of Amsterdam Airport Schiphol is the processing of hub and mainport-associated traffic flows. This has resulted in a subdivision and prioritisation on the basis of five traffic segments, as laid down and elaborated in the voluntary agreement on the maintenance and strengthening of the mainport function and network quality of Amsterdam Airport Schiphol (Convenant behoud en versterking mainport functie en netwerkkwaliteit luchthaven Schiphol) and the White Paper.

### Summary

**Policy principles**

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<td><strong>Prioritisation where needed</strong></td>
<td>• Government priorities are key: maintaining and enhancing network quality and military mission-effectiveness. • In the event of conflicting civil interests, the prioritisation set out in the White Paper applies: (1) traffic associated with Amsterdam Airport Schiphol as a mainport; (2) non-mainport-associated traffic at the regional airports of national importance as a component of the system of cooperating airports; (3) the other regional airports of national importance, and (4) the regional airports that mainly cater to General Aviation demand. • The traffic flows to and from the largest airports, including Amsterdam Airport Schiphol, are leading as regards the organisation and management of the FABEC airspace.</td>
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<td><strong>Together</strong></td>
<td>• Cross-border cooperation is essential (SES, FABEC, with adjacent FABs, member states and ATC centres). • A joint civil/military air traffic service provision for lower airspace and one single civil/military controlled airspace by 2020. • Joint processes involving the central government, ANSPs, airspace users and other stakeholders.</td>
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<td><strong>In line with Europe</strong></td>
<td>• The National Airspace Vision and its implementation must be in accordance with the arrangements, airspace policy, strategy and roadmaps developed at European/international level (ICAO, SES, SESAR, FABEC, Eurocontrol, EASA) to which the Netherlands has committed itself. • Any decisions regarding cross-border and large-scale national, airspace modifications and the implementation thereof will be taken at FABEC level.</td>
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### Strategy

Aims regarding safety, capacity, cost-effectiveness, the environment and the elimination of constraints could be realised in various ways. One initial strategy would involve increasing airspace management efficiency by improving the operational concept for ATM. In the event that improved management proves inadequate, efforts can be made to improve airspace organisation and design. The airspace can also be used more efficiently by means of flexible and dynamic management and usage. If these three strategies prove to be inadequate, constraints can ultimately be eliminated at a tactical and/or operational level by air traffic controllers.

The four strategies are explained below. In all cases, resolving the constraints will require an integral approach. The nature and seriousness of the constraint will determine which of the four strategies are to be applied. In the process, which will be iterative, all four strategies will be analysed and assessed in terms of their feasibility and the various pros and cons involved.

1. **Modernisation of the operational concept for ATM through optimal application of new technological and operational developments**

   Technological innovations offer new opportunities in the area of ATM, enabling air traffic controllers to accommodate more airspace user needs safely and efficiently in future, thus preventing or eliminating (capacity) constraints. In many cases, this will allow for the optimisation of air navigation service provision and quality within the existing airspace design. New opportunities must also be viewed in the context of airspace design and control; changes in this area will be necessary in order to make the most of technological innovations and operational concepts for air traffic management.

   The optimal utilisation of these new opportunities will require improvements in the area of navigation, communication and surveillance infrastructure and should be supported by improvements in terms of system support for controllers, such as arrival (AMAN), departure (DMAN) and cross-border arrival management (XMAN).

   ANSPs have worked together at international level to develop the outlines of the future operational concept for ATM. This has resulted in the ICAO Global Air Navigation Plan, the SESAR Master Plan and the SESAR Operational Concept. In the years to come, these concepts will be developed in further detail, validated and implemented.

2. **Optimisation and simplification of airspace organisation**

   If air traffic is to be handled safely, airspace must be organised effectively and transparently. Airspace organisation is determined by the allocation of air traffic areas for specific functionalities and the rules governing such areas (through the allocation of airspace classifications, for example). Modifications to the airspace organisation and design can help resolve constraints by structurally separating traffic flows in the airspace design or establishing additional requirements for airspace users with regard to the use of specific airspace zones.
It is essential to mitigate any constraints and potentially conflicting issues during the strategic phase of the airspace design process. By taking these aspects into account when designing the airspace and routes, the number of constraints may be minimised, ensuring a safe and efficient airspace design. As regards constraints that cannot be resolved in the airspace design, we must subsequently assess to which degree these constraints can be mitigated through one of the other strategies.

3. Improved performance through the flexible and dynamic management and use of airspace
The flexible and dynamic use of airspace allows for various airspace needs to be combined within the same airspace zone, and optimally harmonised. In cases where multiple airspace users are claiming the right to use the same airspace zones — also known as ‘shortage constraints’ — more efficient coordination of airspace use can help to accommodate the various needs. The factor of time can be applied to harmonise airspace needs and divide them over various periods of the day, week or month.

4. Tactical/operational elimination of bottlenecks
The ANSP can prevent or eliminate bottlenecks by intervening during the tactical phase. As a flight is being carried out, air traffic will receive cruising speed and height instructions and multiple ANSPs may coordinate their activities. While tactical intervention may eliminate a bottleneck, it simultaneously intensifies the coordination effort and increases the controller’s workload, which could reduce the capacity of the ATM system. The extent to which this strategy can prevent or resolve constraints is therefore limited. A large number of tactical interventions by the ANSP can result in a significant increase of the workload. This increase will subsequently result in a decrease of ATM system capacity. For this reason, this is not the preferred option for eliminating bottlenecks.

Main airspace structure
The central government has drafted a vision on the development of the main airspace structure of Dutch airspace based on the aforementioned policy principles and strategy. In accordance with developments within the FABEC, the central government distinguishes between three airspace volumes and corresponding operational concepts.

1. Upper airspace volume (FABEC North-West UTA): free-route
In the upper airspace UTA FABEC North-West, air traffic is handled by means of the free-route airspace concept. This implies that the current fixed ATS route structure no longer applies, enabling pilots to use the most direct route and optimum flight profile. The central government thus endorses ongoing European developments.

2. Lower airspace volumes
The central government is drafting a vision on the development of the lower airspace volumes, which are distinguished in three parts: CBA Sea, CBA Land, and CBA Europe. Each volume has a specific operational concept and is managed by different ANSPs.

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If specific (often military) activities need to be separated from other air traffic within this airspace, a ‘segregated airspace’ will be activated temporarily and locally.

4 Figure 1.1 is a conceptual representation of the main components of the general airspace structure and the specific operational concepts within that structure. It is not a definitive design or exhaustive representation of components in various operational concepts.

Figure 1.1: Components of the main airspace structure and characteristics of the operational concept for ATM within this organisational structure.

Figure 1.2: Structure of the future Dutch main airspace structure.
2. Transitional airspace volume
(CTA Holland): arrival and departure management

If, for operational reasons, the fixed route structure around an airport cannot be immediately linked to the free-route airspace, a transition airspace volume can be established. In the Dutch main airspace structure, this volume is known as CTA Holland. This airspace volume is characterised by a hybrid operational concept focussing on controlling inbound and outbound traffic flows by means of arrival and departure management. Air traffic is handled by means of an integrated civil/military air navigation service. A cross-border military exercise area (CBA Land) will be established. This development is linked to the introduction of a fourth initial approach fix (IAF) for the mainport Amsterdam Airport Schiphol, enabling the improvement of airside accessibility of TMA Schiphol from the south-east.

3. Airspace around the airports (TMAs): fixed ATS route structure

The airspace around airports is characterised by a fixed route airspace volume, which ensures the safe and efficient handling of departing and arriving traffic while taking account of the surrounding area. The central government has decided to separate all mainport-associated air traffic in the lower airspace volume (the TMA) from other air traffic not associated with mainport Schiphol. Separating these air traffic flows allows for distinctions in the operational concept for both air traffic flows. This enables air traffic service provision to meet the requirements of the different airspace users more effectively. The central government and ANSPs agree that this will facilitate the further development of mainport-associated air traffic and planned growth of the regional airports of national importance as a component of the system of cooperating airports (Eindhoven, Lelystad and Rotterdam) whilst ensuring military mission-effectiveness. In addition, the needs of other airspace users and stakeholders can be accommodated and balanced more effectively.

In addition to the separation of air traffic flows, the current airspace design will be simplified by reducing the existing four civil and six military controlled TMAs to three (integrated civil/military) TMAs: TMA Schiphol, TMA Holland Regional and TMA Liège-Maastricht (LIMAS). The main airspace structure is based around a single civil/military controlled airspace established no later than 2020, in which airspace management and air traffic services are jointly provided within TMA Holland Regional and CTA Holland. This will allow for the operational concept to be optimally adapted to actual airspace use.

3.1. TMA Schiphol

TMA Schiphol is primarily used for the handling of air traffic associated with mainport Schiphol. TMA Schiphol’s airspace use is characterised by an almost continuous air traffic flow that requires a high standard of reliability and predictability in order to ensure the quality of the passenger transfer process. The safety, capacity, efficiency and environmental requirements are key to the ANSPs operational concept. In future, the focus will be on an operational concept with fixed departure and approach routes and optimum flight profiles. With the support of advanced tools, tactical intervention (vectoring) by the air traffic controller can be scaled back, enabling aircraft to fly a predictable and fixed route with optimum take off and landing profiles to the benefit of both the airspace user and those living in the vicinity of an airport. Modernisation of the operational concept for air traffic management is expected to result in adjustment of TMA Schiphol’s dimensions, which will then take on the form of an upside-down wedding cake. In the long term, this will offer more space and options for the handling of other traffic not associated with the mainport Schiphol outside TMA Schiphol.

3.2. TMA Holland Regional

Instead of the current separation into civil and military TMAs, the central government has decided to reorganise this airspace into a simplified single TMA Holland Regional. Service provision in the TMA Holland Regional will thus primarily focus on optimising the accessibility of regional airports as part of the system of cooperating airports (Eindhoven, Lelystad and Rotterdam), regional airports of national importance and military airports, and improving the performance of military activities. TMA Holland Regional will also accommodate other airspace users, i.e. users of other airports, foreign airports located in the border area and General Aviation activities. This air traffic mix requires an operational concept for ATM that is characterised by a high degree of flexibility and optimally harmonises civil and military airspace use. In order to achieve...
this goal in a safe and efficient manner, integrated civil/military air traffic services must be provided by one joint civil/military ANSP.

3.3. TMA Liège-Maastricht
The border region in the south-east of the Netherlands has a complex airspace structure in which German, Dutch and Belgian airspace and air traffic flows within this airspace meet. In addition to being used intensively by several civil and military airports located relatively close to one another, several civil and military ANSPs are also active in this area. Considering the complex airspace structure, the intensity of cross-border traffic flows in the south-east of the Netherlands and the number of airspace infringements around Maastricht Airport, the central government has opted for a cross-border airspace design and air traffic service provision through the establishment of TMA Liège-Maastricht (LIMAS).

Significance of the main airspace structure for airspace users
The decision to opt for a main airspace structure is based on the aforementioned policy principles, and preferences and needs of the various airspace users. This main airspace structure and the policy strategies will have a number of consequences for airspace users, which can be broadly outlined. Applying the National Airspace Policy Agenda as a guideline, the central government will assign the ANSPs to further elaborate the main airspace structure by developing an operational concept for the various components of the main airspace structure. This process will yield insight into the resulting specific consequences and requirements affecting airspace users, controllers, technological systems and tools.

FABEC North West Upper Control Area (UTA)
An operational free-route airspace concept will be gradually implemented in the upper airspace, allowing airlines and military en-route traffic to fly their most optimal routes. This will result in a more efficient use of airspace, ensuring the optimal accessibility of Amsterdam Airport Schiphol and accommodating the planned growth of regional airports of national importance. The abolition of a fixed ATS route structure for civil airspace users in the UTA implies that service provision for civil and military traffic will have to be harmonised even more effectively. The option of temporarily segregating certain parts of the UTA for specific military purposes on the basis of flexible airspace use will remain in place. Cross-border cooperation will be essential in order to establish a harmonised operational concept in aid of an optimum free-route airspace concept in the UTA.

Holland Control Area (CTA)
Where possible, air traffic flows to and from Schiphol will be separated from other traffic in the CTA Holland in order to accommodate optimal flight profiles and ensure that air traffic can be transferred as close to the TMA border as possible. Depending on the final dimensions of the main airspace structure, a large portion of military use will take place within the borders of CTA Holland. The CTA Holland operational concept must be designed explicitly to accommodate military operations in this area which can be planned and executed on the basis of flexible airspace use, and military traffic flying from or to exercise areas or airports. However, this will require precise planning and harmonisation on the part of all the airspace users involved. This could decrease the high degree of flexibility with which tasks can currently be performed.

Many of the fixed parachuting areas will be located in CTA Holland due to height restrictions set out in the Parachuting Regulation 4. If Schiphol traffic does indeed continue to grow, high-altitude parachuting in the Utrecht and Oostelijk Flevoland cluster, but more specifically at the Rhoo site, will not be sustainable in the long term due to interference with traffic to and from mainport Schiphol. Pursuant to the arrangements laid down in the Regulation, sustainable parachuting locations will be sought in close cooperation with the sector. The objective is to reduce the number of sites, thereby increasing efficiency and safety. Furthermore, the aim is to impose as few (height-related and operational) restrictions as possible and ensure that the sustainable parachuting sites are distributed across the Netherlands as effectively as possible. Efforts will also be made to find a site with a central location in the Netherlands.

A limited number of (existing) parachuting sites will also continue to offer jumps from heights not exceeding FL 150 (Hoogeveen, Oostwold, Texel).

Terminal Manoeuvring Area (TMA) Schiphol
In the future, TMA Schiphol will be reserved exclusively for IFR flights, and more specifically for the handling of air traffic associated with the mainport Schiphol. An exception will be made for (civil or military) flights of public interest and flights performed in the interests of national security authorised within TMA Schiphol. At present, exemptions are issued for VFR survey flights, glider flights and parachute jumps within TMA Schiphol. If air traffic at Amsterdam Airport Schiphol continues to grow at a pace that causes capacity constraints, the central government will place further restrictions on VFR recreational activities in TMA Schiphol, in accordance with the White Paper. Measures will also be taken to enable the restriction of survey flights while minimising the negative impact of necessary survey flights on Schiphol operations.

Figure 1.5: Three TMAs in lower airspace: TMA Schiphol, TMA Holland Regional and TMA Liège-Maastricht.

Gazette No. 11733 of 26 July 2010.

Terminal Manoeuvring Area (TMA) Holland Regional
Air traffic to and from the regional airports of national importance and military airports will primarily be handled by TMA Holland Regional. Traffic associated with the mainport Schiphol will generally not be present in this airspace. TMA Holland Regional will also handle military air traffic to and from the military exercise areas. In addition, various General Aviation user groups are present in this TMA. This mix of civil and military user groups also exists under the existing airspace organisation. Due to the wide variety of activities conducted within TMA Holland Regional, certain activities must be separated in order to ensure safety levels. The flexible airspace use concept allows for such separation to be applied on the basis of time and place, and serves as a springboard for accommodating the expansion of airports of national importance such as Eindhoven and Lelystad on the one hand and the execution of military exercise flights on the other. Here too, precise planning and harmonisation between the airspace users involved will be necessary. The current high degree of flexibility in terms of task execution will remain virtually identical. As regards Lelystad Airport and Eindhoven Airport specifically, TMA Holland Regional will have the following consequences:

- According to the central government and ANSPs, further development of Lelystad Airport will be possible, provided that a number of conditions are met. The central government and the ANSPs jointly conducted a preliminary study to determine how airside accessibility can be established within the framework of the White Paper on Dutch aviation, the Alders round-table opinion on Lelystad Airport and the current National Airspace Vision. The realisation of a joint ATM system and an integrated civil/military approach control is an important precondition for the safe and efficient handling of air traffic to and from Lelystad Airport, without any negative interference with mainport-related air traffic. This, in combination with efforts by central government to compensate for the loss of military exercise areas elsewhere in the Dutch airspace, will also help to safeguard military mission-effectiveness. Air traffic to and from Lelystad airport will be primarily handled within TMA Holland Regional. Where possible, such traffic will not be routed through TMA Schiphol in order to ensure safety and prevent interference with Schiphol operations. This will have to be further elaborated when developing an ‘upside down wedding cake’ for TMA Schiphol. Close coordination with and dependence on Schiphol operations will continue. These aspects must be emphasised when elaborating the operational concept for ATM.

- The airside accessibility of Eindhoven Airport can be improved for incoming and outbound air traffic from the south and south-east through the integration of civil/military air traffic service provision within TMA Holland Regional. In view of the geographical location, coordination with military operations at and around the military airport of Volkel will remain necessary.

This aspect will also remain key to the further development of civil air traffic at Eindhoven Airport. In order to ensure the safe handling of air traffic, it may be necessary to impose restrictions on General Aviation activities in the vicinity of Eindhoven Airport.

National Airspace Policy Agenda
The policy principles, strategy and the current vision on the main airspace structure comprise the starting point for the National Airspace Policy Agenda. This document relates both to the actions to be taken by the ANSPs (e.g. within the framework of modernising operational ATC concepts) and the measures which fall under the responsibility of the central government. The National Airspace Policy Agenda thus serves as a guiding document and focuses on the actions to be taken up until 2020-2025. The document also outlines the conditions and considerations to be taken into account by the ANSPs when elaborating the operational ATC concepts for the various components of the general airspace structure. Definitive airspace designs can subsequently be drafted on the basis of these ATC concepts.

As regards the five airspace components of the main airspace structure (UTA FABEC North West, Holland CTA, TMA Schiphol, TMA Holland Regional and TMA Liège-Maastricht), the ambitions and policy choices are individually elaborated in greater detail. The document also defines the necessary actions with regard to the operational concept for ATM, potential cross-border cooperation, the development of dynamic and flexible airspace management and the optimisation of airspace organisation.

Joint implementation of the National Airspace Vision
Although the ANSPs will play a key role in implementing the National Airspace Vision and the National Airspace Policy Agenda, other stakeholders also have a responsibility to jointly develop and provide the desired airspace services.

The organisation, management and oversight of Dutch airspace is increasingly determined by EU legislation. The European Union is overseeing the creation of a Single European Sky, in which the FABEC airspace plays a central role. In view of the increasing intensity of cross-border cooperation in the area of airspace organisation and management and the choices and considerations involved, the EU Member States will have to play an active role and provide further guidance. The growing need for active government management and involvement in airspace changes at European level impacts the government’s decision-making processes with regard to airspace and procedural changes. The ongoing need for a more efficient use of airspace increasingly requires a trade-off between various interests. In order to be able to make such a trade-off, the central government deems it necessary to clarify the relevant effects in terms of performance as well as the costs and benefits of any airspace changes.

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2 Letter from the State Secretary for Infrastructure and the Environment, the Lelystad airspace question, June 2011, Lower House of Parliament, 31 936, parliamentary paper No. 77 - 2010-2011 Session.
Decision-making procedures relating to airspace changes must take account of the requirements of the FABEC Airspace Policy and the working practices of the FABEC governance structure and FABEC Airspace Committee. The central government will review existing national procedures for establishing airspace changes on the basis of FABEC Airspace Policy, and make amendments where necessary in order to ensure seamless coordination with the decision-making processes at FABEC level. This applies in particular to cross-border airspace changes as well as national airspace changes that could affect activities in the FABEC airspace and the European network. In addition to the necessary national procedures, such airspace changes require approval at FABEC level from the FABEC Airspace Committee.

One of the most important developments contributing to the more efficient use of Dutch and European airspace is the enhancement of civil/military cooperation in the area of airspace management and air traffic service provision. The central government and ANSPs are striving to create a single integrated civil/military airspace and integrate service provision in the lower and upper airspace. Efforts to achieve this ambition are currently underway, but will require close cooperation between the stakeholders and effective supervision from the responsible ministries.

In addition to performance management and activities relating to civil/military cooperation, the cabinet members of both the Ministry of Infrastructure and the Environment and the Ministry of Defence have entrusted the Dutch ANSPs with the task of diligently implementing the National Airspace Vision. As regards the Dutch ANSPs, this implies the joint development of an operational ATC concept for the various components of the main airspace structure, the development, validation and implementation of airspace design and procedure, the modification of systems and the provision of ATCO training.

To this end, the central government will instruct the ANSPs to prepare an overarching joint roadmap in which both ongoing and new activities can be integrated in a single timetable. In the process of establishing this roadmap, the stakeholders will need to jointly decide which components can be implemented at which time, schedule decision-making processes and assess the impact on legislation and regulations. Once the roadmap has been established, the ANSPs will need to align their organisational strategy and priorities in order to ensure diligent implementation of the National Airspace Vision.

The implementation of the National Airspace Vision will be monitored by the Luchtverkeerscommissie (LVC) [Air Traffic Commission], the advisory body on airspace matters for both the Minister for Infrastructure and the Environment and the Minister of Defence. The (interim) results of the various study, development and implementation processes will have to be discussed. This will be done on the basis of the annual plans to be prepared by the ANSPs. The central government deems this necessary in order to enable the LVC to serve as an effective advisor to the competent authorities. The LVC will arrange regular consultation meetings to discuss how the implementation of the National Airspace Vision is progressing. Progress will also be periodically discussed by the two ministries and the ANSPs within the framework of the existing quarterly consultations, the Maastricht Coordination Group (MCG) or the Secretary-General’s consultative civil/military cooperation. Finally, the National Airspace Vision will be updated every ten years, or sooner if necessitated by developments.
Overview of abbreviations

ANSP  Air Navigation Service Provider
ATC   Air Traffic Control
ATM   Air Traffic Management
CBA   Cross-Border Area
CTA   Control Area
EASA  European Aviation Safety Agency
FAB   Functional Airspace Block
FABEC FAB Europe Central
GA    General aviation
IAF   Initial Approach Fix
ICAO  International Civil Aviation Organisation
LIMAS Liège-Maastricht
LVC   Luchtverkeerscommissie
SEESingle European Sky
TMA   Terminal Manoeuvring Area
UTA   Upper Control Area
XMAN  Cross-Border Arrival Manager

PRO Viso
Please note that, although every effort has been made to ensure this informal translation is accurate and consistent, it is for informational purposes only. In case of any dispute or inconsistencies, the original Dutch version prevails.

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