CIVIL AVIATION SECURITY
THE FRENCH APPROACH

4 Security: A Matter for Everyone
6 A Policy by Whom, for Whom and Why?
8 Remaining Vigilant in the Face of Changing Threats
10 Making Security an Aeronautical Value in its Own Right
12 Safety and Security: Two Complementary Facets
14 Effective Security based on Risk Awareness
16 A Robust System based on the Concept of Defence in Depth
18 Security: A Fundamental Right for both Passengers and Crews
22 Security: A Fundamental Right for Private Operators and Air Transport Stakeholders
24 Security: A Shared Value
26 The Cost of Security
28 From Effectiveness of Measures to Efficiency of the System

POLICY AND VALUES
Looking at the different security-related events which have occurred over the decades tells us that air transport is a favoured target for terrorists or those with malicious intent. Therefore the security of civil aviation is a major issue. But it cannot be built and put into place in an isolated way. It cannot be achieved effectively just by the Government and by applying laws. It requires a shared commitment from all stakeholders involved: airport operators, airlines, security companies, air cargo and postal service employees, passengers and equipment manufacturers – all playing their part, guided by their culture and procedures.

By determining what security measures are reasonable and appropriate to the threat, by the attention paid to implementing these measures, by detecting and monitoring faint early-warning signals, by everyone’s involvement and active acceptance of the measures in place, security becomes a matter for everyone, making it more effective and the constraints better accepted.
That is why it appeared important to draw up and share a common action framework for the various stakeholders involved on a daily basis in implementing security measures.

The framework must pave the way for future regulatory, organisational and even scientific developments while enabling all stakeholders to adopt a proactive approach, to prepare themselves and even implement development programmes and, if necessary, draw up plans of action for the areas they specialise in.

By highlighting several fundamental governing principles, this policy must also serve as a framework for international action by setting clear objectives and a proven methodology to achieve them. That is the purpose of this document which will be updated regularly and which will complement the regulations and methodologies of the French Civil Aviation Authority (Direction Générale de l’Aviation Civile - DGAC) by supplementing the national security programme and international strategy plan in the area of security which have been established by the DGAC.

The Secretary of State for Transport, the Sea and Fisheries
Alain VIDALIES
The minister responsible for civil aviation is the “Competent Authority” for security as defined by Annexe 17 of the international civil aviation agreement (Chicago Convention) and EC Regulation 300/2008 of the European Parliament and Council of 11 March 2008 relative to the enactment of common rules in the area of civil aviation security.

This responsibility is enacted by the French Code of Defence1 which requires the minister – who delegates this authority to the Director General of Civil Aviation – to represent France at ICAO and the European Commission in coordination with the permanent French representatives to these bodies, concerning any civil aviation security related work, particularly in discussions and processes for adopting European regulations.

The competent authority is also responsible for coordinating the actions of the various ministries concerned and applying national legislation which enacts European regulations, which can be summarised as the “National Security Programme”.

In addition to this responsibility, he is also in charge of putting forward a French policy for civil aviation security.

The security policy is first of all communicated to the Security and Defence sub-directorate (SRD) of the DGAC which is the organic unit responsible for implementing it and representing the director general of civil aviation under the authority of the Director of Air Transport. It is applied to various DGAC departments which are involved in security, such as the technical security division of the Civil Aviation Safety Directorate (DSAC/SUR), the security department of the Civil Aviation Technical Centre (STAC) and the security training department of the National Civil Aviation School (ENAC).

But it also concerns the different stakeholders involved in civil aviation security: relevant Government departments controlled by the regional Prefects and private operators such as airport operators, airlines, security companies and sub-contractors.

It determines the objectives that should be pursued for each action performed both internationally, nationally and at a European level.

---

1/Article D.1443-4 of the French Code of Defence.
THE INTER-MINISTERIAL AVIATION SECURITY COMMITTEE (CISA)

Chaired by the Prime Minister’s chief of staff, the CISA brings together the offices and principal general directors of the Ministries of the Interior, Foreign Affairs, Defence, Finance and Transport.

It is responsible for determining the strategic avenues in relation to civil aviation security which are to be applied to all the ministries concerned.

Its secretariat is provided by the Secretary General of Defence and National Security (SGDSN).

This document which describes the security policy is part of the current governing framework, in the same way as security financing, and is not intended for proposing any changes in this area. It must be used as a framework for action by all French services working in the area of civil aviation security. It will be distributed widely. Its strategic directions will be broken down into objectives, tasks and action principles.
REMAINING VIGILANT
IN THE FACE OF CHANGING THREATS

While attempted terrorist attacks against air transport have been rare and mostly prevented since 11 September 2001, some external attacks targeting the public areas of airports or aircraft, using portable surface-to-air missiles or small arms have unfortunately succeeded. Some of these attacks targeting air cargo have confirmed the changing nature of the threat and therefore the need for continuous reviews to reduce vulnerabilities and their resulting risks. Given the terrorist threat in general and particularly the threats against French interests, there is no question of the Government lowering its guard.
8 STRATEGIC DIRECTIONS

MAKING security an aeronautical value in its own right,
ENSURING safety and security go hand in hand,
MAKING SECURITY more effective by developing a risk-based approach,
REINFORCING the concept of defence in depth,
REAFFIRMING the right of passengers and crews to be secure while respecting freedom and fundamental individual rights,
MAKING security professionals a source of progress,
DEVELOPING a security culture,
CONTROLLING security costs.

While security measures must be equitable and balanced so as not to interfere with the development of air transport, seeking this balance must not lead to reducing security levels for purely financial reasons. All those involved in civil aviation security must, both in the design of security measures and in their implementation and monitoring, seek a good balance between a very high level of security and social and economic acceptability of the necessary measures.
Security is a concept which has been introduced into the aeronautical lexicon more recently than safety, but which is an essential activity in the development of air transport. Just as with the very high level of safety achieved for this mode of transport, civil aviation must provide its users with the highest possible level of security without impeding its development. On the contrary, security must promote its development.

By ensuring effective security, favourable conditions are created for smooth and sustained development of air transport and associated economic activity. It completes the process started by assessing and controlling risks.
In 2014, more than 3 billion people travelled by aircraft. The vulnerability of this mode of transport to terrorist attack must be reduced to a minimum. In addition to the loss of human life and damage to the standing of the country the aircraft belongs to, and in addition to the political, social and economic consequences, the impact on traffic caused by a successful attack can be extremely high. The overall cost of the attacks of 11 September 2001 is estimated at 3 trillion dollars.
SAFETY AND SECURITY
TWO COMPLEMENTARY FACETS

Safety aims to reduce the risk involved in operating aircraft to an acceptable level and to control it. It involves prevention and protection against accidents, whether these are of a technical, structural, meteorological or unintentional human nature such as psychological incapacity by a crew member, design error in a component, incorrect maintenance work or flight crew error.

Security aims to protect civil aviation against deliberate malicious acts with very wide ranging motives such as terrorism, criminal behaviour, political activism or the individual psychological disturbance of a passenger.

While the end result of preservation of life and property is the same, the concepts of security and safety have their own separate logic in relation to causes and solutions. They must be considered together and coordinated for maximum effectiveness.
OFFICIAL DEFINITIONS

According to the International Civil Aviation Organisation (ICAO), safety is “The state in which risks associated with aviation activities, related to, or in direct support of the operation of aircraft, are reduced and controlled to an acceptable level” (Annex 19 to the Chicago Convention). Security is “Safeguarding civil aviation against acts of unlawful interference. This objective is achieved by a combination of measures and human and material resources” (Annex 17 to the Chicago Convention).

A complementary approach between safety and security must be sought for regulations as it is for operator management systems and in any technical or organisational project. The two fields can then mutually reinforce each other by taking account of their respective constraints as early as possible. The writing of security regulations must always be consistent with safety imperatives to avoid any contradictions or measures which prevent a particular safety problem from being addressed. Under all circumstances, since the risk of an accident is statistically higher than malicious intent, a security measure must never interfere with implementation of a safety measure. In such a situation the security objective must be achieved in another way which is compatible with the safety rules.
Threat and vulnerability levels (from which the level of risk is deduced) are not uniform and identical in all countries, at all airports or for all airlines or persons. Therefore it is necessary to put in place security measures which are appropriate to the level of risk while maintaining a core level of security which cannot be less than that defined by Annex 17 of the Chicago Convention, as specified in the ICAO security manual (DOC 8973).

This involves the development of an air transport related risk assessment and analysis capability at both national and local levels.

The DGAC has recently achieved this capability by creating an interministerial civil aviation risk analysis unit. The improved understanding of the actual risks facing civil aviation brought in by this unit will enable France to speak even more credibly and with authority on the international scene. It will also enable the DGAC to put forward a relevant strategy which is realistic and which respects the constraints of the air transport industry as well as the well-being of passengers.

Finally the DGAC now has the ability to inform security officials in the air transport community of the actual level of risk being faced at any time.
RISK ANALYSIS

Knowing how to analyse risks is fundamental to protecting oneself from them. Such an analysis consists of comparing general and specific threats against civil aviation, sent to the DGAC by the intelligence community, with the vulnerabilities of the sector determined by civil aviation specialists. It is a synthesis of information of all types sent in by different people involved in security, from Government departments to private operators. Due to this, the risk analysis only makes sense if it is widely shared with all these partners so that each one of them can make a security-related contribution within their field of expertise.

This approach requires the usual procedures and organisational culture of all the bodies concerned to be rethought. Protection of civil aviation must be improved by matching the security measures in place more closely to the reality of the threat and the vulnerabilities of airport activities. It must take all aspects into account such as a high level of security, acceptability and cost to continuously support the development of air transport.

On the other hand it involves accepting a residual risk which, while it may be minimal due to the measures put in place, can never be reduced to zero. Recognition and acceptance of this residual risk is essential to avoid the temptation to over-react following each alert, imposing new and very visible measures immediately but which are costly and extremely restrictive for air transport and its users. Finally, it relies on a security culture which is shared and embodied by all stakeholders, both public and private sector, and on a constant search for effectiveness based on voluntary reporting of any deficiencies found without fear of punishment, aiming for continuous improvement (see below).
The combination of measures and means which make up the concept of civil aviation security integrated into a system of
defence in depth goes well beyond the regulatory framework governing security. It covers:

- The work of the intelligence services to assess threats, monitor the activities of malicious groups and individuals as well
  as neutralising them or arresting them when an offence is committed.
- Continuous analysis of the risks affecting civil aviation.
- Access control measures on products and substances used to make home-made explosives as well as markers on industrial
  and military explosives.
- Periodic background checks on personnel with access to controlled-access security zones.
- Boundary fences and physical protection of controlled-access security zones as well as the access control itself to such
  areas.
- Peer monitoring and checks.
- Implementation of systems to screen passengers, carry-on luggage, hold baggage, persons who are not passengers, air
  cargo and post, airport supplies and airline equipment.
- Airport monitoring and security such as patrols, video surveillance and intruder alarms.
- Establishment of a robust and secure logistics chain.
- Monitoring and protection measures for baggage, freight and aircraft and searching of aircraft.
- Capability for preventing external attacks such as surface-to-air missiles or direct gunfire against aircraft and to mitigate
  the effects.
- In-flight security measures such as denial of entry to the cockpit, cabin monitoring, air marshals, crew training and invol-
  vement and passenger involvement.
- Government ability to control and monitor effectively the implementation of regulations and ensure the effectiveness of
  security measures.
- Government ability to innovate and adjust their requirements to the reality of the threat and vulnerabilities.
DEFENCE IN DEPTH

This concept involves the implementation of numerous independent but mutually interlocking lines of defence. Its effectiveness cannot be assessed by testing a single component but only the entire system. None of the defence in depth measures by themselves can guarantee that an illegal act against civil aviation will fail. Each measure only makes sense as part of a series of measures which make up a global, consistent and robust system.

- Government ability to apply measures to limit the risks from aircraft entering national airspace from sensitive areas.
- Active air security measures such as the Air Police.
- The capacity of specialist ground units to take action.
- Stakeholder and Government resilience after an illegal act has been committed.
- and so forth.

Any real overall security improvement to the system’s effectiveness, efficiency, realism or acceptability can therefore only be achieved using a global and systemic approach. Moreover, since civil aviation operates in a system of cross-border communications, international cooperation, particularly with the more vulnerable countries, is essential for strengthening its overall reliability.
The search for optimum security is a mark of trust for both air transport users and staff. It is also proof of the durability of air transport overall as long as it is proportionate, reasonable and acceptable for everyone.

THE RIGHT OF PASSENGERS TO SECURITY

The air passenger is at the heart of the system. Therefore he or she must also be the centre of interest for both airlines and the authorities. Their first fundamental right is to be transported in complete safety and be protected against any deliberate or accidental violation of their physical integrity.

Air passengers should not be considered as suspects in a doctrinal way. Above all they are citizens and customers of an air transport system who deserve respect and consideration by the authorities, economic operators and security providers. The respect which passengers are owed is shown by the reception they receive, the way staff listen to their questions and requirements and the ability to explain the security measures passengers have to undergo and why they are used, in so far as possible without damaging their effectiveness.

Otherwise, the hindrances arising from these measures such as longer queues, having to remove shoes and partially disrobe or being patted down may be experienced as irritating or annoying and lead to specific security measures, or even air transport security in its entirety being felt to be unacceptable.

Acceptance of security measures by passengers is a mark of their cooperation and therefore also of the overall effectiveness of the system.

Finally it is of fundamental importance to note that in the last resort passengers can play a decisive role alongside the crew in resolving a security incident which occurs on board an aircraft.
ACCEPTABILITY OF SECURITY MEASURES

To be acceptable, security measures must:
- ENSURE passengers enjoy the best level of security while respecting their rights and dignity;
- REPRESENT a controlled cost;
- be PROPORTIONATE and reasonable and
- be EXPLAINED and prepared.

How quickly passengers get through the security gate and its performance in terms of security are mainly governed by how well passengers are prepared. Such preparation is quicker and easier if passengers have been properly informed and are fully aware of their role and to what purpose good preparation serves them and the security officials. This means there must be a strong focus on communication by the Government and air transport operators to explain, justify and get as many people on board as possible. Without trying to do the job of the security personnel, passengers must understand and feel that security is a matter for everyone. If they feel involved passengers become a stakeholder in their own security, they become responsible and their contribution is appreciated.
SECURITY – A FUNDAMENTAL RIGHT
FOR BOTH PASSENGERS AND CREWS

**THE RIGHT OF AVIATION PROFESSIONALS TO SECURITY**

Civil aviation professionals are particularly involved in security. They experience it every day due to where they work and are frequently subject to security checks themselves. Some of them are exposed to specific risks, particularly flight crews. Just like passengers they may be the victims of a terrorist act. Such personnel must be shown respect in their professional life, protected against any attacks and considered as an integral part of the security chain.

But the fact cannot be ignored that their knowledge of the airport environment and the access facilities they use could be used to transform crew members into vectors for illegal acts. This position may make them an attractive target for terrorists looking to force crew members to cooperate with them inside an aircraft or airport. Therefore it is essential that a capable system is used to protect them.

The security measures applied to them must be consistent with their professional responsibilities and match the risk. Strict application of exactly the same security measures as those applied to passengers would be very restrictive and does not make a lot of sense. By adopting a risk based approach security measures should correspond to professional needs and operational realities.

Professionals are essential players in a security environment which can only be effective if it is deeply anchored into their daily life. That is why they cannot be kept out of the loop of security measures put in place.
FLIGHT CREW

Flight crews make an active and essential contribution to civil aviation security. They are part of the security mechanism and have proven to be one of the fundamental last lines of defence in the aircraft itself in the event of an attack and when faced with certain types of illegal act. Because of this they must be protected against malicious attempts to misuse their professional position, possibly under duress against them or their colleagues. The particular position of flight-crews justifies giving them special security treatment. Some measures which are applied to them are obviously ill-suited such as searching them for prohibited items like scissors or penknives and do not meet a proven need for protecting civil aviation.

However completely removing all security checks would create an unacceptable risk by enabling them to freely carry any object whatsoever into a controlled-access security area without fear of discovery. This would constitute a definite vulnerability since it would be liable to be exploited by terrorists.

Even more so than passengers, flight crews have a major interest in contributing to improved security by maintaining vigilance and setting an example in complying with the measures they are subjected to. The ethics and integrity of such personnel must be exemplary. They must be aware of their leading role and trained to be able to integrate the package of security measures – how to understand threats and vulnerabilities, knowledge of regulations and reasons for them, their exact position in the security chain and so forth.
The air transport industry is both flourishing and fragile. It creates employment and wealth but can very quickly feel the negative effects of an attack or even an attempted attack.

All companies working in the area of air transport such as ground handling agents, suppliers and security companies also need and have a special right to security. The consequences of an attack can be particularly disastrous for this community and can completely wipe out entire sectors of economic activity, with particularly heavy social consequences.

Faced with determined aggressors on the lookout for any weaknesses that they can exploit against the security system put in place to protect civil aviation, technological improvements are essential. However this is not enough since no protective system against malicious intent can be boiled down to just an arsenal of technologies, no matter how sophisticated. Such technology must be used to serve mankind and complement his intelligence and adaptive capabilities.

Therefore security must be a professional value in its own right for all entities using or working in and around air transport. Training and explaining the issues involved in air security are of fundamental importance.
THE SECURITY OFFICER

Given his or her function, qualifications and skills, the airport security officer is a key component around which a complete and consistent security system must be built. As a source of progress, security officers must be validated and encouraged to pass on suggestions for improving the security process. They should also be involved in reviews aimed at improving the system.

Security officers must continuously improve and specialise. By developing their professional skills, they will gain everyone’s trust and respect. They will be recognised as a key component of the system.

The daily work of these officers is essential for continuously maintaining a high level of security. They must be trained, managed, recognised and remunerated appropriately for the commitment which is expected of them.

Maintaining a secure logistics chain, just as creating and maintaining a strong security culture in all companies who are an air transport stakeholder, is essential to the long term success of these activities.
So that security really becomes part of the DNA of all stakeholders, a security culture must be developed throughout the air transport community. Such a culture can only be developed with full awareness of the threats and vulnerabilities affecting civil aviation and by accepting reasonable and proportionate security measures specifically matched to those threats. The first part of that is the responsibility of the competent authority. They must ensure that regulations match known threats and risks and anticipate them effectively without impeding transport operations. They must also be in harmony with economic reality to facilitate this.

Government departments in charge of overseeing implementation of regulations must have a balanced approach and initially prioritise explaining things and winning people over rather than punishment, even if the latter is the ultimate sanction for ensuring regulations are correctly applied by those who refuse or are unwilling to do so.

Similarly, businesses must integrate security and make it visible in their own company culture and in their values. Integrating it in this way will strengthen everyone’s vigilance and so increase the overall level of security. By not restricting security to a few specialist professionals, the costs incurred to achieve greater effectiveness will be reduced.

Finally, an effort must be made so that flight crews, passengers and air transport users also fully take on board this essential aspect of air transport. That is why open communication is essential.
THE IMPORTANCE OF COMMUNICATION

Communication is a major strategic focus which enables the imperatives of civil aviation security to be explained to air transport professionals and users and to motivate them to apply them.

Without revealing essential or sensitive details on how a security system operates, balanced and reasoned communication can make as many people as possible adhere to security principles. It must be part of a shared security culture which respects the rights and duties of all civil aviation stakeholders. This means accepting debate and confronting ideas so that communication is not seen to just being used to present a “fait accompli”.

A shared security culture involves listening to observations, opinions or recommendations from air transport professionals and users and taking them into account. However a shared culture does not mean the Government will abrogate its responsibilities. At the end of the day, even in a shared culture, security remains the full and entire responsibility of the Government particularly in its governing functions of producing standards and exercising oversight.
THE COST OF SECURITY

Security is an intrinsic component of air transport which must be accompanied by its development and not restrict or limit it. This means the costs incurred must be controlled by a continuous search for improved efficiency.

Airport security is an activity provided by a service provider essentially based on specially trained, qualified and certified labour who represent a very high part of the cost. It is financed by an airport tax paid by air transport users and returned by the Government to airport operators.

Finance of security measures by the airport tax does not cover the costs of enacting legislation and monitoring implementation of these measures by Government departments (civil aviation, police and customs). The Government allocates significant resources to civil aviation security. The resources required to fulfil these functions are covered by the general budget in most cases or the DGAC’s air operations and control supplementary budget (BACEA, financed by air navigation fees). These resources complement those financed by the airport tax implemented by airport operators under government authority.
Airport operators which are required by the legislative branch to implement security measures under the control of the Government are responsible for proper use of the airport tax. They must continuously seek the best balance between compliance with regulatory requirements and optimum airport operation. The tax is strictly only used for security measures. However they are responsible themselves for improvements in terms of facilitating as well as physical or logical protection of their intellectual or material property if this only has an indirect connection to Government mandated security requirements.

In its capacity as monitoring authority, it is the French Civil Aviation Authority, and particularly its Civil Aviation Safety Directorate on the ground and the Air Transport Directorate, which is responsible for overseeing proper use of the airport tax.
The competent authority responsible for public policy in terms of security is henceforth adopting a new approach. They will no longer consider the effectiveness of each security measure taken in isolation but will assess the security system in its entirety, particularly concentrating on its efficiency (relationship between its effectiveness and costs generated in terms of financial resources, impact on industrial processes and the general comfort of passengers and crew). In this way security will support the development of air transport in a sustained manner.

Before any significant regulatory development, it must be known how to measure the performance of the system already in place to be able to predict the overall results expected from the planned change, using models and then an impact study.