CANADA'S

NATIONAL CIVIL AVIATION SECURITY PROGRAM

Canada

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INTRODUCTION

Transport Canada is the lead Government of Canada department responsible for aviation security and the national civil aviation security program "the Program". The Program's principal objective is to mitigate the risks related to acts of unlawful interference to the aviation system. This is accomplished through a comprehensive set of policies, regulations and security measures that work together to help protect air travel and trade.

Keeping Canada's aviation system secure is a shared responsibility. Transport Canada, other government departments and law enforcement agencies (whether federal, provincial or municipal), and industry each play important roles in helping to mitigate security risks.

This document delivers upon a key commitment in the Government's Air India Inquiry Action Plan.

This document explains the core elements of the Program and outlines implications for industry and other key stakeholders so that they clearly understand their regulated responsibilities. In doing so, this document:

- Describes the strategic objectives and guiding principles that underpin all aviation security program activities;
- Clarifies federal government and industry roles and responsibilities;
- Identifies lessons learned from the past decade that influence how Transport Canada will approach the Program going forward; and
- Provides specific examples of how the Program will adopt risk management approaches.

Canada's Aviation System and Economic Considerations

The vastness of Canada's geography and the dispersed nature of our population have directly contributed to the development of one of the largest civil aviation systems in the world. Canada is home to roughly 1600 airports and thousands of additional airstrips in both urban and rural areas. Of these airports, 207 are certified for commercial purposes.

Canada's aviation sector is a key contributor to our standard of living, economy, connectivity to the world and prosperity. Every year almost 80 million passengers travel within Canada and each day there are approximately 2,500 flights between Canada and international destinations, including the United States. The industry currently employs over 91,000 people and is critical to the operations of countless other industries that rely on aviation to transport over $110 billion worth of goods in international trade each year.

While Transport Canada recognizes that the Program must be strong enough to protect travellers and the Canadian economy from the catastrophic damage of

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National Civil Aviation Security Program

Objective

- Promote a clear understanding of the Aviation Security Program's guiding principles, and implications for industry and other stakeholders

Guiding Principles

- Balance security, efficiency, and costs
- Program grounded in risk management, holistic approaches, flexibility and continuous improvement, and international compatibility

Program in Practice

- Priority Setting
- Risk Management and Information Sharing
- Policy Development
- Approach to Instrument Choice
- Oversight Approach
- Emergency Preparedness and Management

Roles and Responsibilities

- Transport Canada
- Government Partners
- Industry

an attack, it must not harden the aviation security system to a degree that undermines the efficiency and competitiveness of the sector it is trying to protect. The Program must be reassessed over time to verify it is continuously improving and that areas of highest risk have the appropriate resources and measures in place. This will help stakeholders maximize the use of security investments and minimize inconvenience to travellers and businesses.

Program Focus: Acts of Unlawful Interference

The Program's principal objective is to mitigate risks related to acts of unlawful interference with civil aviation. This is supported by a comprehensive suite of legislation, policies, regulations and security measures. The International Civil Aviation Organization (ICAO) is a specialized agency of the United Nations, which sets out international standards and recommended practices for all international civil aviation, including security. Canada's principal security obligations under ICAO Annex 17 are to prevent:

- Unlawful seizure of aircraft in flight or on the ground;
- Hostage-taking on board aircraft or at airports;
- Forced-intrusion on-board aircraft, at an airport or aviation facility;
- Weapons or hazardous devices being brought to an airport or brought on an aircraft; and
- The spread of false information that would put the safety of people, aircraft, airports, or aviation facilities at risk.

While criminal acts such as smuggling contraband and/or people, and border security are issues of concern, they are not direct acts of unlawful interference, so are not the principal focus of the Program.

Aviation Security Legal and Regulatory Frameworks

- Aeronautics Act
- CATSA Act

- Canadian Aviation Security Regulations
- CATSA Aerodrome Designation Regulations
- Designated Provision Regulations
- Identity Screening Regulations
- Regulations Concerning Information Required by Foreign States

- Aerodrome Security Measures
- Air Carriers Security Measures
- Security Measures Respecting Air Cargo
- Screening Security Orders

Financial Framework

The Air Travellers Security Charge (ATSC) came into effect in April 2002 to fund the air travel security system, including the Canadian Air Transport Security Authority (CATSA), some elements of TC regulations and oversight functions, and the provision of RCMP officers on selected domestic and international flights. The ATSC is payable by air travellers, who principally and directly benefit from the Canadian air travel system. The charge falls under the purview of the Minister of Finance and is intended to provide revenues that are roughly equivalent to expenses for air travel security over time.

Industry is responsible for costs associated with meeting its regulatory obligations.

Finally, Transport Canada, CATSA, the Canada Border Services Agency (CBSA) and the RCMP mandated activities are funded from the fiscal framework (i.e. general revenues).
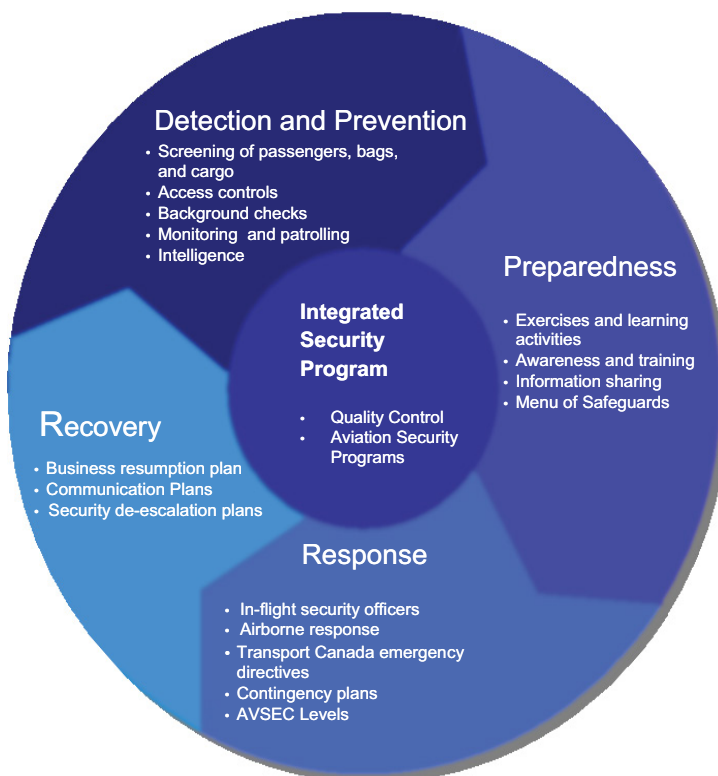
CORE AVIATION SECURITY ROLES AND RESPONSIBILITIES

Canada's aviation security system comprises 89 airports where the CATSA has a mandate to conduct passenger and baggage screening. It also includes hundreds of airlines and charter companies that serve air passengers. Countless other companies provide services at airports or are key parts of the cargo supply chain and handle goods destined to be shipped on aircraft. All are ultimately responsible for the security of their operations and for complying with Transport Canada regulations.

Under the *Aeronautics* Act, the Minister of Transport is responsible for the development and regulation of aeronautics and the supervision of all matters connected with aeronautics, including promoting the security of Canada's aviation system.

As the lead federal department for aviation security, Transport Canada develops policies and regulations, and conducts oversight to verify that industry and CATSA meet their respective obligations.

Detection and Prevention
- Screening of passengers, bags, and cargo
- Access controls
- Background checks
- Monitoring and patrolling
- Intelligence

Preparedness
- Exercises and learning activities
- Awareness and training
- Information sharing
- Menu of Safeguards

Integrated Security Program
- Quality Control
- Aviation Security Programs

Recovery
- Business resumption plan
- Communication Plans
- Security de-escalation plans

Response
- In-flight security officers
- Airborne response
- Transport Canada emergency directives
- Contingency plans
- AVSEC Levels

Transport Canada is also responsible for verifying the compliance of Canada's aviation security regime with international obligations such as those set out by ICAO Annex 17 – *Security* – to the Chicago Convention of 1944. This has the added benefit of enabling Canadian air carriers to access international markets efficiently.

Other federal government departments, security and intelligence authorities, law enforcement, and industry partners have important roles to play in protecting the civil aviation system, as well.

With this in mind, it is important to take a holistic look at Canada's security regime and the wide range of government and industry actions that help prevent acts of unlawful interference on the system or limit their consequences when they occur.

A detailed outline of government and industry roles and responsibilities can be found in **Annex A.**

The Evolving Terrorist Threat

Aviation is a preferred terrorist target because it offers a large number of potential victims, a high economic impact and publicity value. History shows that the terrorist threat is not localized to one region or country, and that Canada is not immune from these acts. From a Canadian perspective, the most well known of these are the 1985 bombing of Air India Flight 182 and the terrorist attacks of September 11, 2001.
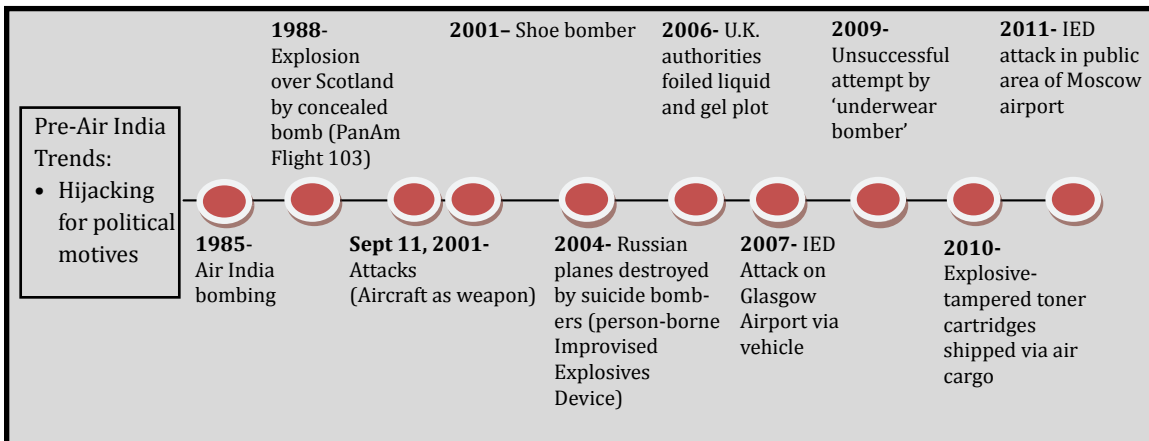
More recent aviation security incidents demonstrate that terrorists remain intent on attacking civil aviation systems. Even unsuccessful attacks meet many of their goals – Al Qaeda in the Arabian Peninsula voiced its satisfaction over the economic impacts western states suffered as a result of the unsuccessful air cargo plot originating in Yemen on October 29, 2010. This is indicative of a new strategy of low cost attacks designed to inflict broad economic damage. To that end, terrorists remain intent on understanding our security capabilities and actively seek to exploit gaps with new and evolving tactics.

It would be wrong, however, to focus exclusively on the activities of one group in understanding the threat. Acts of unlawful interference with the aviation system may be motivated by many factors. In fact, one of the greatest challenges to securing the system is the "lone-wolf" attacker. It is difficult for law enforcement, security and intelligence officials to detect those with no direct links to terrorist organizations.

Transport Canada, government partners, and industry work together to understand the most pressing risks facing the system and how threats evolve. In addition, the department has learned a number of valuable lessons in recent years, which have helped focus the Program and shape the full range of related activities.

Continuum of Major Aviation Terrorist Events: From Hijacking to Sophisticated Attacks

1988- Explosion over Scotland by concealed bomb (PanAm Flight 103)

2001– Shoe bomber

2006- U.K. authorities foiled liquid and gel plot

2009- Unsuccessful attempt by 'underwear bomber'

2011- IED attack in public area of Moscow airport

Pre-Air India Trends:
• Hijacking for political motives

1985- Air India bombing

Sept 11, 2001- Attacks (Aircraft as weapon)

2004- Russian planes destroyed by suicide bombers (person-borne Improvised Explosives Device)

2007- IED Attack on Glasgow Airport via vehicle

2010- Explosive-tampered toner cartridges shipped via air cargo

DRIVERS AND LESSONS LEARNED

The Aviation Security Program is a robust system built on multiple and complementary layers of security outlined in legislation, policies and regulations. Several significant enhancements have been made to Canada's aviation security system since 2001 including:

• The establishment of CATSA;

• Installing reinforced cockpit doors and advanced screening equipment to screen carry-on and checked baggage;

• Establishing Restricted Area Identity Cards at higher risk airports; and

• Developing an Air Cargo Security Program.

In many cases, Transport Canada programs and regulations were developed in response to specific threats or incidents. Over the years, Transport Canada has learned key lessons from third-party reviews, internal evaluations, international collaboration, and interactions with stakeholders, which have helped us shape our approach to securing Canada's aviation system.

Risk-Based Approaches Yield more Effective Security

One hundred per cent security does not exist and it is impossible to guarantee that all acts of unlawful interference to the aviation system can be prevented. Because resources are finite, risks must be managed. An assessment of risk demonstrates that the likelihood of acts of unlawful interference vary widely across the system. For example, the risk level at small and remote airports cannot be compared to the risk at larger, high-volume airports.

Applying a risk-based approach means that Transport Canada, CATSA and industry should dedicate comparatively more time, resources, and energy to areas of the system with greater risk. Over time, Canada's Program must be reassessed to verify that it remains focused upon the highest risks to the system. In doing so, the application of risk management principles will allow the Program to maximize the security value of resources invested and provide the greatest security outcome to the system as a whole.

Risk management and risk-based approaches are part of the foundation of Canada's national civil aviation security program and, as such, are applied to the full range of policy, regulatory and oversight activities. This risk based approach is consistent with recommended aviation security practices and guidance provided by ICAO.

Industry is a Mature Security Partner

Canada's aviation security program has matured and become more comprehensive over the past decade, as have stakeholders' security expertise and capacity. And while Transport Canada is responsible for regulating and overseeing the security of the aviation system, industry is responsible for the security of its assets and operations and for complying with Transport Canada regulations. Airlines, airports, CATSA, and others recognize the importance of security and often exceed regulatory requirements. They are increasingly capable of developing flexible ways to meet their regulatory requirements, thereby protecting the civil aviation system.

Transport Canada recognizes that the Program must keep industry expertise and local operating conditions in mind as we develop policies, propose regulations and engage in oversight activities.

Prescriptive Rules Are Not Always the Best Solution

Historically, Transport Canada adopted a prescriptive approach to regulating aviation security, which was appropriate while the system was in development. However, experience has shown that it is extremely difficult to establish an efficient and effective regulatory regime based exclusively on prescriptive security rules given that industry is often more familiar with local operating conditions.

Prescriptive regulations and "one-size fits all" solutions may not always account for the wide variability in industry operations and skills, and can place unnecessary burdens on stakeholders resulting in ineffective security outcomes. Therefore, the most effective way to address security gaps is often through outcome-based rules.

While prescriptive rules continue to be appropriate in some instances (e.g. to meet some international standards), Transport Canada recognizes that outcome-based approaches are preferable, where appropriate.

Engaging Industry Promotes More Effective and Efficient Security

The effectiveness of the Program depends on maintaining a constructive dialogue with industry, other government departments and key stakeholders. Traditionally, Transport Canada led these discussions, which focused on developing regulations, through the Advisory Group on Aviation Security (AGAS).

While AGAS remains the principal forum for consulting stakeholders on the regulatory process, engaging industry subject matter experts early in policy and program development will help Transport Canada promote coordination and the exchange of security expertise, which will help make the aviation security program as effective as possible. Transport Canada recognizes that industry has unique perspectives and expertise on security gaps, potential mitigations, international practices, and operational considerations.

It is also important for Transport Canada to coordinate its aviation security actions across the department, and with other federal departments and agencies. Coordination amongst government departments is integral to aligning programs, eliminating unnecessary duplication, and permitting the full range of perspectives to be taken into account in future policy and program development.

STRATEGIC OBJECTIVES AND GUIDING PRINCIPLES

In light of these lessons learned, Transport Canada has identified a set of strategic objectives and guiding principles that inform how the Program functions today and how it will evolve over time.

Each decision about the Program including regulations, policy, oversight, and stakeholder engagement is informed by the *strategic objectives and guiding principles* depicted in the figure below.

Strategic Objectives

To **strengthen the security** of Canada's civil aviation system, recognizing that Transport Canada actions must provide a strong contribution to the security of the North American and global aviation security system.

To **promote efficiency** as good security allows aviation industries and those that rely upon them to maximize economic potential, while verifying that Canada's regime remains compatible and interoperable worldwide so travellers and goods reach markets as efficiently as possible.

To manage the Program in a **fiscally responsible** way, keeping in mind that resources are finite for both governments and industry, and therefore actions must maximize the security value for dollar spent.

While security remains the principle objective, Transport Canada recognizes the need to strike an appropriate balance - in the aviation security program as a whole - among security, efficiency, and fiscal responsibility, while also ensuring the program is aligned with risk.

Guiding Principles

The guiding principles shape how Transport Canada approaches the full range of activities and will guide how the department approaches security issues and emerging threats in the future.

Risk Management:

Risk management is at the core of the Aviation Security Program. Transport Canada applies risk management principles to a wide range of program-related decisions, including how it sets priorities, allocates resources, evaluates instruments (e.g., regulations), and conducts oversight.

This allows Transport Canada to make systematic, measured, and consistent decisions on a wide variety of program issues. For example, risk management helps Transport Canada decide where to focus elements of the Program and allocate resources (i.e., areas of higher risk), assess flexible and performance-based regulatory approaches, determine international equivalencies and give industry greater accountability in managing its own security.

Layers of Canadian Aviation Security

Taking a risk management approach comes with the understanding that risks cannot be eliminated, so accepting risk is an important part of Transport Canada's decision-making processes.
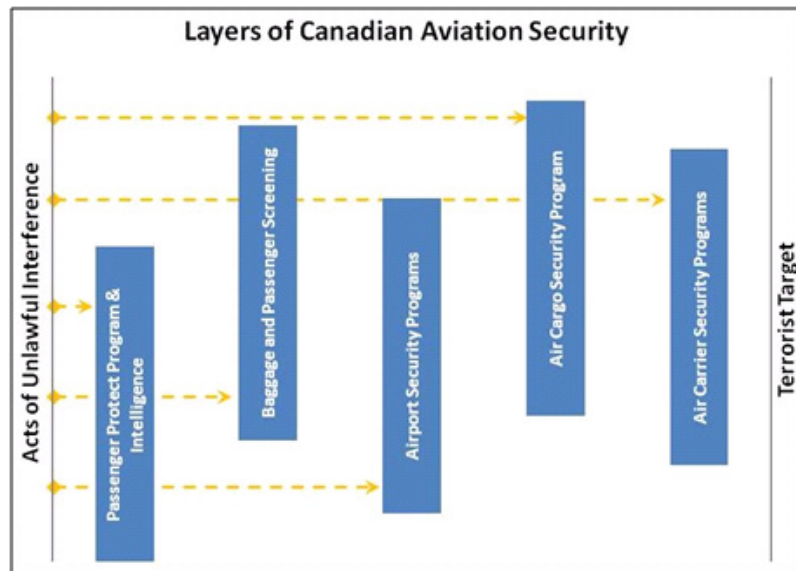
Holistic Approach to Security:

The Aviation Security Program takes a holistic approach to how security is conducted and programs are designed. The Program is made up of a set of complementary security layers. CATSA, airports, air cargo companies, air carriers, and others are responsible for their programs, consisting of a range of security activities that together help secure the aviation

system. No single layer can be 100 per cent effective, so if one layer is breached, others exist to prevent or reduce the impact of an attack.

There is also a point where the security performance of a specific measure cannot be improved by dedicating more resources to it. A holistic approach means recognizing there is an optimum value for each measure and there are diminishing returns on investments past this point.

Adopting a holistic approach also requires recognizing that the work of many other government departments, the Canada Border Services Agency, law enforcement agencies, and industry help provide a more secure aviation system. A holistic approach accounts for the security value of their activities and adjusts programs accordingly.

> **Trusted Traveller CATSA Security Line**
>
> - Canada and U.S. background checks and risk assessments conducted on NEXUS members (i.e. trusted travellers).
>
> - Expedited CATSA screening for members in recognition of security value of NEXUS background checks

Flexibility and Continuous Improvement:

The Program supports flexibility and continuous improvement. Since threats continue to evolve, countermeasures must be flexible, unpredictable, and adjustable so that gaps are closed when risks become unacceptable.

In practice, this means giving industry and CATSA some flexibility in how they achieve compliance through performance and outcome-based approaches, where appropriate.

Adopting a flexible approach to the Program also includes a focus on streamlining programs and improving regulations. The principal objective for these changes will always be the security of the aviation system. However, adding new programs or requirements on top of existing ones can lead to unnecessary costs and confusion. As such, existing regulations will continue to be made more user-friendly and streamlined by eliminating outdated measures due to advanced technologies or changes in risk.

> **Transport Canada's Role in Technology Development**
>
> **International Partners**
> - Transport Canada works and liaises, through agreements, with international partners to harmonize and develop flexible performance standards adapted to the Canadian aviation security context.
>
> **CATSA**
> - Transport Canada establishes performance standards for aviation security equipment and processes procured and used by CATSA.
> - Transport Canada collaborates closely with CATSA to support technology performance testing and screening procedures development to ensure that effective technologies and process are deployed to address current and emerging threats.
>
> **Cargo**
> - Transport Canada undertakes projects and conducts research to collect data on screening technologies for air cargo security. Data supports development of screening methodologies and performance standards.
> - Transport Canada approves technologies for use in air cargo security.
>
> **Industry**
> - Transport Canada provides guidance and information to industry on approved technologies and best practices, as well as information on qualifying new security screening equipment.

The continuous improvement of regulations may also provide opportunities to adjust requirements to make air travel and trade more efficient. Transport Canada will look to industry to identify and prioritize facilitation initiatives so that resources can be dedicated effectively.

International Compatibility:

International compatibility of Canada's aviation security regime is essential to enabling goods and travellers to reach foreign markets efficiently. A compatible aviation security program is fundamental to the health of Canadian industry and avoids additional security requirements resulting from an incompatible system.

Transport Canada recognizes that we cannot make security decisions in a vacuum. Verifying that Canadian standards stay aligned with international partners is essential to enabling efficient travel, trade, and competitiveness. Incompatible security programs can result in other countries imposing extra measures that can have significant operational and financial impacts on Canadian airlines or airports. Not meeting international standards risks introducing barriers to Canadian businesses trying to reach foreign markets cost-effectively and undermines productivity.

Similarly, efficient and secure cross-border air travel and trade with the United States is integral to the health of our aviation system and those that rely upon it. The integration of our economies demands that security must not unnecessarily impede the smooth flow of legitimate travellers and goods across our common border.

This is why Canada's Program and any future aviation security measures, policies or regulations must help maintain efficient access to North American and international aviation networks. In order to do so, Transport Canada pursues mutual recognition of security frameworks with key trading partners and plays a leadership role at ICAO so international standards reflect the guiding principles of the Program.

> **Beyond the Border Action Plan**
>
> - Trusted traveller and trader programs
> - Mutual recognition of Canadian and United States Baggage Screening and Air Cargo Security Programs
> - Integrated inbound cargo strategy

PRINCIPLES IN PRACTICE

The following section provides an overview of the implications for core Program elements and activities such as priority setting, risk management, information sharing, policy development instrument choice, oversight, and emergency preparedness. The aim is to develop a common understanding of how the principles outlined above will be applied across the Program.

Setting Aviation Security Priorities

Transport Canada recognizes that industry and government partners benefit from clarity on the Program's future. The principal factors that the department considers when setting and addressing aviation security priorities include:

- Alignment of program, policy or regulatory options with risk and the guiding principles described above;
- Taking a risk-based approach and applying guiding principles when responding to new and emergent threats;

- Pursuing opportunities to better align security programs with those of other government departments as a way of eliminating duplicate or unnecessary rules; and

- Meeting international obligations and requirements.

Transport Canada provides industry and other stakeholders with an overview of its priorities wherever possible to provide greater predictability and coordination. It is important to realize that Transport Canada, like all Government of Canada departments, is bound by acts and policies, such as the Government Security Policy, which define the way in which it can share information.

Managing Risk and Sharing Information

In recent years, Transport Canada has developed risk management tools to help it make regulatory and policy decisions more consistently, and for a wider range of issues. They include tools that help the department set priorities by assessing and monitoring strategic risks to the aviation system. This has allowed Transport Canada to gain a thorough understanding of how risks compare between important program areas such as passenger and baggage screening, cargo security, non-passenger security, general aviation and others.

Transport Canada has traditionally engaged federal security and intelligence partners in these processes, and recognizes that including stakeholders further enriches risk analysis and management.

Transport Canada also applies risk-management approaches to making program-specific decisions. In each case, the policy direction, regulatory approach and overall structure of programs are informed by risk. Transport Canada's approach to assessing and designing major program areas, such as passenger and baggage screening, air cargo supply chains, and non-passenger security each reflect risk-based approaches.

Finally, effectively managing the risks related to the Program requires action at the local level. Transport Canada understands that while it has an important role to play in setting rules and conducting oversight, industry is best placed to manage local risks. Airports, airlines, freight forwarders, CATSA, CBSA, and others are on the front-lines every day, and are responsible for the security of their operations. Since they are most familiar with the characteristics of their business and security programs, it is appropriate that members of the aviation industry assess, manage, and implement measures to address the unique risks to their operations while meeting regulatory obligations.

Transport Canada Primer on Risk

Risk is generally determined as a function of threat, vulnerability, and impacts.

- **Threat** is *any hazard that has the potential to cause harm to people, property and/or the environment*
- **Vulnerability** is degree to which *security controls are likely to prevent an attack*
- **Impact** is *a combination of human losses, economic consequences, and loss of public confidence in the aviation system,*

Transport Canada applies different tools to assess, prioritize and manage risk at multiple levels:

- **Strategic level** (risks to the national system)
- **Operational level** (risks across specific program areas such as cargo)
- **Tactical level** (risks specific to infrastructure such as airports)

Examples of Risk-Based Program Design

Cargo: Industry can screen cargo where it is the most efficient and cost effective

Passenger & Baggage Screening: Expedited screening for lower risk Trusted Travellers

Aviation Security Programs: Flexibility for industry to assess and manage its own risks while meeting regulatory requirements

Aviation Security Programs are a good example of how Transport Canada intends to provide industry with the flexibility required to manage local risks more effectively while meeting regulatory obligations. These programs promote outcome-based -based regulations that require industry to establish and document proactive approaches to managing security risks.

Managing risk at the local level is supported by effective coordination and information sharing amongst airports, federal partners, Transport Canada, and law enforcement where authorized by law.

While each of the above risk-assessment processes is important in its own right, they must function as part of an integrated risk management regime supported by regular performance monitoring.

Put simply, risk management becomes more effective by incorporating a solid accounting of the effectiveness of our security regime. Transport Canada has developed an Aviation Security Logic Model (Annex B) to help it monitor the impacts of its programs and is working towards applying a greater range of operational performance data to support decision making.

Management Framework for Civil Aviation Threats, Risks and Regulatory Performance
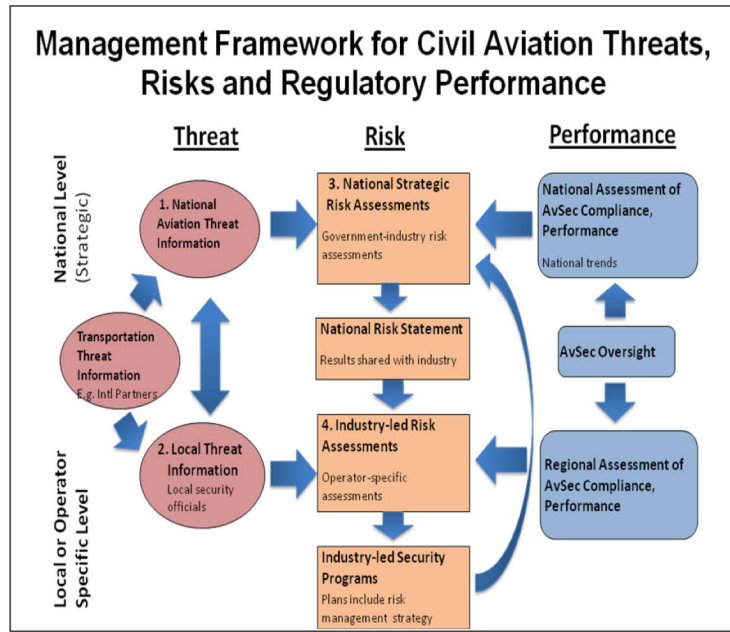
Implications for Stakeholders

Information sharing is a key element to systematically assessing and managing risk. This is why Transport Canada will include industry in its risk assessment activities and share findings wherever possible. Likewise, to manage risk effectively, it is essential that industry stakeholders contribute their operational knowledge, data, views on local gaps and vulnerabilities, and the challenges they face on a day-to-day basis.

Transport Canada, other federal departments and agencies, and industry decision makers require timely, relevant security information to assess risk and adjust security regimes accordingly. While this is especially important during an incident, it is equally important that industry is kept abreast of longer-term aviation security trends.

The following features make up the risk management and information sharing components of the Program:

Transport Canada Information-Sharing Regime

Objective

- Ensure stakeholders have timely security information to help them enhance the security of their operations and manage risk effectively

Actions

- Aviation Security Operations call-outs to stakeholders (incident, threat of interest to Transport Canada)
- Security bulletins and notices
- Secret Clearances for key stakeholders
- Secret-level communications equipment for industry
- National Risk Statement
- Regular threat picture

- Establishing a regular government-industry national risk assessment cycle and providing a national risk statement to industry stakeholders;

- A need-to-share philosophy by Transport Canada with respect to security issues as well as facilitating security clearances where warranted to allow for sharing sensitive information as authorized by law; and

- Providing stakeholders with regular threat pictures as well as issue-specific briefings on an as needed basis.

Aviation Security Policy Development

The policy development process helps Transport Canada assess, understand and develop options to make the system more secure, efficient, and fiscally responsible. Policy work can translate into a range of actions including identifying best practices, developing guidance material, pursuing regulatory change, and creating or re-orientating programs.

In the past, Transport Canada took a more traditional approach to aviation security policy development, where the department identified and assessed security problems, and developed policy options largely on its own. Other government departments, industry, and other stakeholders were often brought into the discussion at later stages in the process to provide their views and input on specific options.

Transport Canada favours an inclusive aviation security policy development process, which engages stakeholders, federal partners, and those with subject matter expertise as early as possible. Industry partners offer important insights and expertise on security gaps, potential mitigations, international practices, and operational considerations.

Early engagement also allows for more complete analysis and more informed policy options. With this in mind, Transport Canada will coordinate its actions across the department and with external partners. Coordination among government departments makes it possible to align programs, eliminate unnecessary duplication, and allows for the full-range of perspectives to be taken into account.
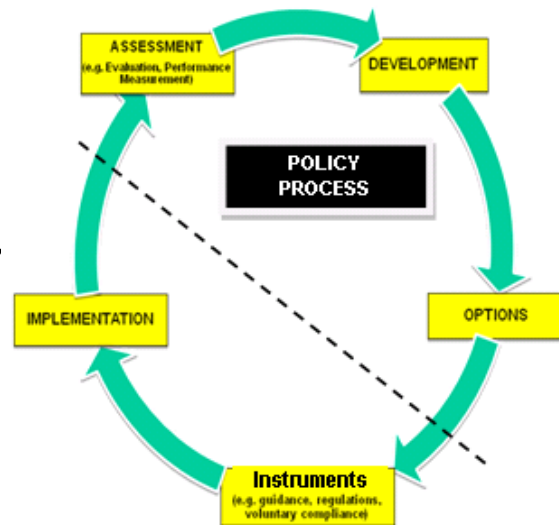
Implications for Stakeholders

Transport Canada will give stakeholders the opportunity to provide their input into the policy development process at multiple stages. In practice, this means:

- Industry and other stakeholders with subject matter expertise are engaged early in the policy development process;

- Transport Canada will coordinate its aviation security actions across the department and with other departments to engage aviation stakeholders effectively;

- Stakeholders will have the opportunity to contribute their input at the appropriate time during the policy development process; and

- Transport Canada will seek to engage other countries and international organizations to:

- promote risk management;

- develop a common understanding of issues; and

- advocate positions consistent with the Program's guiding principles.

Approach to Instrument Selection

Canada's aviation security regulatory framework is robust, comprehensive, and serves as the back-bone of the aviation security program. Transport Canada regulations and security measures set out specific obligations for airports, air carriers, CATSA, freight forwarders and others, and are intended to establish an appropriate level of security while meeting international obligations.

Canada's aviation security regime is among the most secure in the world, but we have learned much over the years. Incidents and near misses all over the world have resulted in aviation security regimes constructed largely in reaction to past events and characterized by prescriptive rules and regulations, in addition to many 'one size-fits all' approaches to security.

Transport Canada now adopts a more rigorous approach to selecting instruments for regulating aviation security. As a result, Transport Canada has focused on streamlining key elements of the aviation security regulatory framework by aligning rules with risk, promoting outcome-based approaches, making the framework more user-friendly, and maintaining international compatibility. Regulatory initiatives, including the broad-based review of the aviation security regulatory framework, aviation security programs and the air cargo security program implementation, each put these principles into practice.

Taking a risk management approach has implications for the decision to regulate, and in some cases, where to regulate. For example, a risk-based approach helps Transport Canada carefully consider whether or not regulatory or alternative actions are best. This approach limits unnecessary regulatory burdens on industry, as "red tape" only restricts security innovation, productivity and competitiveness.

Transport Canada Aviation Security Regulatory Principles

- Transport Canada will regulate aviation security activities only when necessary
- Decisions to regulate and rules themselves will be based on risk
- Regulatory language will be as precise as possible
- Regulations will adopt outcome-based-based and flexible approaches where appropriate
- Regulations will be revoked when they become outdated and have no value
- Transport Canada will aim to align regulations with other government programs, international standards and key partners.

Transport Canada works actively with its government partners to identify opportunities to coordinate programs. For example, many customs rules applied to goods or people contribute significant security value. Since it makes little sense for the same shipment of goods to and from the United States to be screened for both customs and aviation security reasons, Transport Canada is working with its partners, such as CBSA, to align requirements, reduce duplication, and enhance efficiency.

Clearly, not all regulated airlines, airports, and others have the same expertise. Industry capacity varies widely, including its ability to evaluate and implement outcome-based compliance options or sophisticated risk management processes. This is why Transport Canada will carefully assess the appropriateness of adopting outcome-based approaches and will provide guidance material, assistance, and prescriptive regulatory alternatives as appropriate.

The Aviation Security Program must be updated periodically, keeping in mind that its principal objective is countering acts of unlawful interference. Transport Canada recognizes that while aviation security activities are focused primarily on security issues, there may be opportunities to support facilitation and enhance international compatibility. Industry is encouraged to identify opportunities for regulatory change and prioritize requests related to facilitation because open dialogue is essential for the effective use of resources.

Implications for Stakeholders

Transport Canada recognizes the importance of continually evolving instrument choices in keeping with the following principles:

- Regulate based on a thorough assessment of risks;
- Employ outcome-based regulations where appropriate to allow for effective industry innovation and efficient security;
- Propose regulations that will help to clarify and articulate industry accountability in aviation security;
- Pursue mutual recognition with other government departments and international partners with commensurate regulatory requirements;
- Continuously improve the aviation security regulatory framework by removing regulations that are no longer effective;
- Consult with stakeholders on the selection of instruments and development of regulations through the Advisory Group on Aviation Security and its technical committees; and
- Look to stakeholders to prioritize regulatory change requests related to facilitation initiatives.

Aviation Security Oversight

Following the September 11, 2001 terrorist attacks, Transport Canada rapidly tripled the number of aviation security inspectors. The department also asked inspectors to focus almost exclusively on enforcement duties and to use their physical presence at the airport as a deterrent.

This oversight function made sense at the time, given the limited levels and layers of security in place, and the time required to design and implement the many planned enhancements to the aviation security system.

The situation today is different. The Program consists of several well-established layers of security. Industry and other partners are engaged and capable of managing the risks they face. Given these realities, Transport Canada employs a more comprehensive approach to regulatory oversight to enhance security while employing resources more effectively. This approach focuses on building security expertise and promoting compliance, conducting inspections and tests, and escalating enforcement actions when required.

Building Expertise and Promoting Compliance:

Transport Canada is helping industry operators and stakeholders better understand their security risks and build their capacity to identify assets and manage security risks; and thereby meet regulatory requirements. This enables industry to identify systemic security gaps and manage risks more proactively.

Conducting Aviation Security Inspections:

Taking a risk-management approach to aviation security inspections means conducting more targeted and focused oversight activities. While all regulated entities are subject to oversight, Transport Canada focuses aviation security inspection and testing activities based on risk assessments, compliance results, and threat information. Inspectors conduct a variety of targeted covert and overt inspections including, for example, those designed to test the performance of one layer of the system across the country. In addition, targeted oversight activities are conducted to verify compliance of higher-risk operators or those that are less compliant.

Carrying Out Enforcement:

Enforcement actions remain an integral part of Transport Canada's aviation security oversight regime. The department's philosophy on aviation security enforcement is to offer assistance and advice, and exhaust less punitive enforcement actions before moving to monetary penalties (fines) or other more severe options. When a regulated entity is willing to correct an issue and has not had a pattern of similar deficiencies, it is in the best interest of security to take this approach. This approach provides flexibility for regulated entities to take responsibility for their security, while at the same time permitting the Minister of Transport to enforce security regulations through a variety of mechanisms.

> ### Comprehensive Oversight
> ### =
> ### Stronger Security
>
> - Help industry to better understand its security environment and its particular security needs.
> - Promote a security culture within industry, as well as identify and encourage the development of pro-security behaviour, practices and innovations.
> - Promote voluntary industry compliance with regulations.
> - Build trust and collaboration (e.g. sharing of best practices, information and experiences) between the various security partners.

When enforcement actions are required, Transport Canada recognizes it must take a consistent approach. Enforcement actions – whether letters, monetary penalties or otherwise - should be escalated according to a common decision-making process reflecting criteria related to the seriousness of the contravention, potential consequences, and compliance history of the regulated entity.

Lastly, adopting a risk-based approach to oversight also affects how Transport Canada conducts oversight of CATSA. CATSA is unique among regulated-entities, in that it is a Crown Corporation answerable to Parliament through the Minister of Transport, while also subject to Transport Canada regulations. CATSA must submit to the Minister of Transport corporate plans and annual reports, and shares performance reports (approved by Treasury Board), as well as management controls that verify that assets are safeguarded, resources are managed efficiently, and operations are effective.

Implications for Stakeholders

Transport Canada can achieve assurance of regulatory compliance most effectively by applying a broad set of oversight tools. The core elements of Transport Canada's aviation security oversight regime include:

- A risk management approach to oversight that dedicates comparatively greater attention to areas and operators of higher risk;
- Multi-faceted oversight that includes activities focused on increasing stakeholder capacity to assess and manage risks;

- Clear expectations, consistent enforcement actions across the country, and non-punitive actions before more severe actions, except in cases of emergency;

- Industry fully engaged in security by bringing issues and regulatory concerns to Transport Canada's attention so they can be addressed; and

- Holistic and performance-based oversight of CASTA.

Emergency Preparedness and Response

While Canada's national civil aviation security program is one of the strongest in the world, Transport Canada recognizes that it is impossible to prevent all deliberate acts of unlawful interference against the aviation system. This is why it is important to work with stakeholders to prepare for and be able to effectively respond to any incident that impacts the aviation system.

To help prepare effective incident responses, Transport Canada works internally and externally to fulfill its delegated responsibilities under Canada's *Emergency Management Act* and security policies. Activities include advanced planning, training and exercising on situations that impact the Department and the national transportation system. Since an effective response to aviation security incidents requires coordination and collaboration between Transport Canada and industry, key industry stakeholders are engaged in these exercises where possible.

The Department has combined several existing procedures, plans and arrangements to create the Aviation Security Incident Management Plan. The Plan strengthens Transport Canada's emergency management capacity and provides a framework for responding to an aviation security event.

Maintaining strong working relationships with other federal government departments, agencies, the transportation industry, as well as provincial, territorial and international partners, allows us to prepare for large-scale emergencies. For example, Transport Canada participates in developing and updating federal plans, such as the Federal Emergency Response Plan, an all-hazards plan for a coordinated federal response to emergencies, and plays a key coordinating role with the transportation sector.

When incidents do occur, Transport Canada shares information with stakeholders and issues emergency directions outlining how CATSA, airports, airlines and others should enhance security.

Transport Canada recognizes that there are more effective and proactive alternatives to "one-size fits all" responses in times of emergency. Transport Canada's AVSEC Response Levels (part of Aviation Security Program requirements) will clearly indicate the level of threat to Canada's aviation system. When threat-levels change, industry will have the responsibility to respond by selecting the most appropriate means of mitigating risk from a pre-approved menu of safeguards.

> **Benefits of AVSEC-Levels & Flexible Industry Response**
>
> - Acknowledges industry is in the best position to assess its vulnerabilities
> - Increased flexibility and effectiveness for operators and Transport Canada
> - Puts industry in a better position to respond quickly to an emerging threat
> - Implementation costs for industry may be lower than for directed national responses

Implications for Stakeholders

The degree to which Transport Canada, other government departments, and industry, are prepared to respond to an incident, directly influences the ability to minimize consequences and maintain public confidence in the aviation system. Transport Canada's approach to coordinated emergency preparedness for aviation security includes:

- Holding learning activities and exercises with other government departments and industry stakeholders to help prepare for future incidents;

- Developing a process and procedures to apply AVSEC-Levels;

- Providing flexibility for industry to manage risk when responding to AVSEC-levels; and

- Enhancing resilience by establishing a dialogue with industry on approaches to communications and messaging during incidents.

CONCLUSION

Canada has one of the strongest aviation security programs in the world, and Transport Canada is committed to promoting the security of air travel and trade. Actions must focus on areas of the system where risks are greatest so we realize the maximum security value from each dollar we invest. At the same time, Canada's regime must allow aviation businesses to thrive by providing for international compatibility and not placing unnecessary burdens on industry.

To succeed, Transport Canada, industry and other stakeholders must work together to manage risks, reassess programs, and continuously improve the system to stay ahead of evolving terrorist threats.

Annex A: Detailed Aviation Security Roles and Responsibilities

Government and Law Enforcement

- **Transport Canada:** Under the *Aeronautics Act*, the Minister of Transport is responsible for the development and regulation of aeronautics and the supervision of all matters connected with aeronautics, including promoting the security of Canada's aviation system. As the lead Government of Canada department for aviation security, Transport Canada develops policy, regulations, and conducts oversight to verify that industry and CATSA are meeting their obligations. Finally, Transport Canada is responsible verifying the compliance of Canada's regime with international obligations such as those set out by ICAO Annex 17 – *Security* – to the Chicago Convention of 1944.

- **Canadian Air Transport Security Authority:** CATSA was created in 2002 as a Crown Corporation responsible to Parliament through the Minister of Transport. CATSA's core legislated mandate is to screen air passengers and their baggage effectively, efficiently, and consistently. It is also responsible, through Ministerial-direction, to screen non-passengers (such as airport workers) as well as manage and administer the Restricted Area Identity Card Program (RAIC).

- **Public Safety Canada (PS):** As the lead federal department for public safety, PS coordinates federal security and emergency management policies, regulations and operations. PS also plays a lead role in administering the Passenger Protect Program by determining whether there are reasonable grounds to suspect that an individual poses a threat to aviation security.

- **Canada Border Services Agency (CBSA):** CBSA facilitates legitimate cross-border traffic and supports economic development as well as stops people and goods that pose a potential threat to Canada. At airports CBSA is also responsible for administering Customs Restricted Areas.

- **Royal Canadian Mounted Police (RCMP):** The RCMP conducts national security investigations within the aviation system, and places highly-trained RCMP covert In Flight Security Officers on board certain Canadian-registered flights on the basis of risk. The RCMP is responsible for conducting law enforcement records checks in support of the Transportation Security Clearance Program, and is the lead federal entity in the event of a terrorist related airborne incident.

- **Local Law Enforcement:** Local police provide police presence and incident response at airports. Local police also play a particularly important role as emergency response and law enforcement partners for individual airports. In some cases, this may by the RCMP.

- **Canada's Intelligence Community:** Canada's intelligence community plays an important role in detecting and preventing aviation security threats by collecting and disseminating intelligence, conducting threat assessments, and contributing to risk assessments.

  - **The Canadian Security Intelligence Service (CSIS)** produces intelligence and advises the government on security threats to Canada. This includes giving advice about general threats to aviation security and security assessments on airport employees.

- **Canadian Forces (CF) and the Department of National Defence (DND):** DND is the lead department for coordinating a response with the North American Aerospace Command (NORAD) to non-terrorist airborne threats to North America, and supports the RCMP in responding to terrorist threats.

- **Department of Foreign Affairs and International Trade (DFAIT):** Canada's foreign affairs department negotiates international transportation security agreements and bilateral air agreements with foreign partners. It also manages the Counter Terrorism Capacity Building Program, which provides funding for Transport Canada's international aviation security capacity building initiatives.

Industry Partners

- **Airport Operators:** Airport operators are responsible for the security of their airports. This includes, for example, activities such as access controls for airport restricted and sterile areas, perimeter security, incident and emergency management, as well as other responsibilities outlined in the *Canadian Aviation Security Regulations* and *Aerodrome Security Measures.*

- **Airport Tenants:** Tenants at airports must comply with security regulations and measures, verify the security of their operations, and follow any security measures or protocols enacted by aerodromes. Tenants may include businesses such as catering companies, general aviation facilities, or aircraft service providers. Because some tenants occupy an area on an aerodrome's primary security line that includes a restricted area access point, they play a role in access control and perimeter security.

- **Air carriers**: Air carriers are responsible for the security of their operations. Their roles and responsibilities include verifying that aircraft, passengers, and baggage are secure by preventing unauthorized access to aircraft, and allowing on board only persons and baggage that have been security screened. Airlines vet passengers according to the *Identity Screening Regulations* before boarding. More of their responsibilities are outlined in the *Canadian Aviation Security Regulations* and the *Security Measures Respecting Air Cargo.*

- **Air Cargo Supply Chain:** Transport Canada has adopted a secure supply chain model that allows screening at the most cost-effective point along the supply chain as determined by industry, while verifying that screened cargo remains secure until an air carrier places it on board an aircraft. Shippers and freight forwarders enrolled in Canada's Air Cargo Security Program must develop plans, conduct employee background checks, control access, and maintain chain-of custody in accordance with the *Security Measures Respecting Air Cargo*.

- **NAV Canada:** NAV Canada is a private sector not-for-profit corporation that provides national air navigation services in Canada. NAV Canada plays a key role in air traffic control, and as such, is involved in any air incident response coordination.

Other Stakeholders

- **Employees:** The effectiveness of aviation security in practice is determined in large part by the commitment of aviation workers on a day-to-day basis. Since rules, measures, and procedures are only as effective as the people who carry them out, employees working in the aviation system or in the supply chain are fundamental to Canada's system remaining secure. They must follow security protocols or procedures (e.g. established by employers such as airports or air carriers) and are key to establishing a strong security and awareness culture.

- **Travelling Public:** It is important to recognize the relevance of the travelling public to the national civil aviation security system. As is the case with employees, having the travelling public engaged in security further enhances the security awareness of industry and government agencies on the front lines while helping to deter would be attackers.

Annex B: Transport Canada Aviation Security Logic Model

Activities	Direction Setting (Policy and Programs)	Regulation	Technological Infrastructure	Oversight and Monitoring
Sub-Activities	• Develop and implement aviation security priorities and policies	• Develop and implement regulations governing aviation security • Promote and implement canadian aviation security equivalents to international agreements and standards	• Develop performance and training standards for screening technologies and processes	• Implement and maintain a clear and well understood Oversight Program • Maintain an integrated program management framework
Outputs	• Aviation Security policies, priorities, directives and standards	• Aviation Security Regulatory Framework • Bilateral and multilateral agreements on aviation security	• Performance and training standards for screening technologies and processes • Research data on best practices for technologies	• A regulatory oversight program which is continuously improving, results oriented and risk based • Incident management procedures, plans and tools • A standardized and measurable, performance-based information program
Immediate Outcomes	• Stakeholders in the Canadian Aviation system have the direction they need to manage security risks		• Stakeholders have access to standards and best practices that enable effective threat identification, research, prototype development and deployment of technology commensurate with the threat to aviation	• Stakeholders are aware of their obligations with respect to aviation security
Intermediate Outcomes	• Stakeholders operate in a manner that is performance-based (where appropriate) and compatible with international partners • Stakeholders in the Canadian Aviation system manage aviation security risks consistently, appropriately and effectively • Stakeholders understand their obligations with respect to aviation security • Stakeholders respond to security incidents effectively			
Ultimate Outcomes	• Canadians and industry have confidence in aviation security • Strong security management culture of industry and government stakeholders			
Strategic Outcome	**A Secure Aviation Transportation System**			

Annex C: Glossary of Terminology

- **Aviation Security Program:** The sum total of the legislation, policies, regulations, and measures Transport Canada and other federal departments apply to help prevent "unlawful acts of interference with civil aviation".

- **Criminality:** Offences under the Criminal Code of Canada. Criminal offences related to the aviation system may not necessarily constitute an immediate threat to civil aviation or acts of unlawful interference of civil aviation.

- **Stakeholders:** Airport tenants and other entities (regulated or otherwise), including industry associations with an interest in the aviation system.

- **Industry Partners:** The airport authorities, air carriers, air cargo regulated by key instruments and/or with responsibilities for owning / operating aviation infrastructure or operations.

- **Risk:** The chance of something happening that will impact objectives (i.e. the security of Canada's aviation system). Risk is generally determined as a function of threat, vulnerability, and impacts.

- **Risk Management:** The systematic and coordinated application of management practices aimed at identifying, understanding, assessing, acting on, monitoring, and communicating risk issues. Risk management provides a systematic approach to setting the best course of action under uncertainty.

- **Risk-Based:** The concept of basing sound decisions on a clear understanding and evaluation of hazards, risks, threats, vulnerabilities, and impacts.

- **Outcome-based/Performance-based regulations:** Regulations focusing mainly on the desired outcome-based/result. In other words, defining what the regulatory objective is, but not how the regulatory objective is to be achieved

- **Threat:** Anything that has the potential to prevent or hinder the achievement of objectives or disrupts the processes that support them (i.e. an Act of Unlawful Interference).

- **Vulnerability:** The effectiveness (or inadequacy) of security controls that could permit a threat to occur.

- **Impact:** A combination of human losses, economic consequences, and political repercussions.

- **Resilience:** The ability to resist, absorb, recover from or successfully adapt to, adversity or a change in conditions.

- **Security Value:** The quantifiable impact or value of a certain security policy, measure, program, or technology.