

SPEAKING NOTES

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Thank you for the invitation to be here today and to speak on the evolving relationship between the authorities and the industry – partnerships in regulation. Safety management systems are very much based on a partnership between the operator and the regulator. This partnership is essential in further strengthening our programs over the coming years.

Establishing new partnerships, maintaining the ones we have already forged as well as keeping lines of communication open brings us closer to our goals.

Outline

Today, I plan to briefly speak about Transport Canada's policy on safety and security management and our top priorities for the Civil Aviation safety program. Then I'll move right into discussing our progress with the implementation of SMS and our experiences to date, best practices and lessons learned specifically in the areas of regulatory development, accountability, policy development, evaluation, as well as the importance of the data for the future of aviation safety.

Safety and Security Management Policy

In April of this year, the Minister of Transport, Infrastructure and Communities launched *Moving Forward - Changing the safety and security culture*. This document articulates a safety and security management system approach as policy for all modes of transport.

Many of the concepts in this document are not new. Although, what is new is that the requirement for cultural change has been widely recognized and encompasses all modal plans. While the modes are all at different stages of safety and security system implementation, aviation is on the cutting edge.

Civil Aviation's Top Priorities

Our strategic plan, *Flight 2010*, charts the flight plan for Canada's aviation safety program, articulates a direction for the years ahead and identifies goals and objectives as priorities towards achieving the SMS-based safety framework.

Priority 1: Safety Management Systems. As companies evolve from compliance to safety risk management thinking through the implementation of safety management systems, regulators will transform from regulatory compliance auditors into system evaluators. This philosophy engages industry in the aviation safety management framework as it shifts the onus for proving or disproving adequate safety performance from the regulator to the organization.

Priority 2: Integrated Management System – IMS. In keeping with the systems approach to managing risks for aviation organizations, Transport Canada Civil Aviation has begun to institute a formal framework for our own management system through an Integrated Management System (IMS). This framework describes how the organization supports the strategic direction with a focus on the management of key processes to optimize resource utilization, while assuring results for Canadians. The performance goals, the processes, and the accompanying cultural changes necessary for a successful IMS are, for all intents and purposes, the same as those of a sound SMS.

With these two priorities in mind we remain focused on our two key results for continued improvement on the high level of aviation safety in Canada and a high level of public confidence in our Civil Aviation safety program.

SMS Implementation: Progress Report

Almost 7 years ago, Transport Canada committed to the implementation of safety management systems in aviation organizations. At that time, we realized the industry was at different levels of understanding with respect to the concepts of SMS. Therefore, before beginning regulatory development, we launched an educational campaign to increase the industry's knowledge of concepts and principles of SMS through seminars and workshops. The result was a common knowledge baseline that facilitated the work that lied ahead.

Continuing to involve industry in the early stages proved to be one of the keys to successful regulatory development. It is interesting that the first set of SMS regulations took more than five years from concept to promulgation following intensive consultations with the industry. However, subsequent regulatory development for other sectors has taken much less time and involved less debate. The development of guidance material appropriate to the size and complexity of an organization is also an important step towards successful implementation.

We've come along way from concept to implementation. SMS regulations for airlines and aircraft maintenance organizations providing service to airlines became law in June 2005.

Implementation is proceeding using a four-step process over three years and at each phase organizations are required to meet process milestones. A phased-in approach provides a manageable series of steps for organizations to follow, as well as permits Transport Canada to make the necessary adjustments to our oversight program.

The first major milestone was October 1, 2006, when operators were required to demonstrate to Transport Canada that the organization's SMS included a safety management plan, a risk analysis process, a root cause analysis process, a process for reporting risk and the ability to formulate and implement appropriate corrective actions.

Evaluation of the documentation provided by operators to meet the requirements of this milestone demonstrated that in many cases the procedures supporting the policies for components such as training and management review had not reached their full potential to improve safety performance. Nonetheless, the organizations, for the most part, demonstrated a good understanding of risk management requirements and have well documented procedures.

Another milestone was reached earlier this month, when in addition to the components already demonstrated during the previous phase, operators were required to demonstrate that they have a process for the proactive identification of hazards and associated methods of collecting, storing and distributing data and a risk management process.

SMS regulations for other parts of the industry appropriate for the size and complexity of the organization will be implemented over the coming years. Proposed regulations for air navigation service providers and the international airports were made public for consultation on July 7, 2007. And before regulations for the air taxi sector are finalized, a practical implementation plan will be developed, which will include tools to assist small operators with implementation and provide opportunities for air taxi operators to learn more about SMS regulations and their impact on their operations.

The development of an accountability framework for aircraft certification has also been central to SMS implementation. The framework introduces an operating certification for the designers of aeronautical products and clarifies the roles and accountability for design approvals of industry, applicants and the Minister. We have had a strong partnership with our delegates in the past and we look to the accountability framework and SMS to further strengthen and enhance this partnership as well as to promote a shared understanding of what an accountability framework with a strong SMS can bring.

While the authority for safety management system regulations is valid under the existing *Aeronautics Act*, we presented to Parliament amendments to the Act in April 2006.

Amendments related to management systems are intended to maximize the effectiveness of the SMS safety framework and to facilitate implementation for certificate holders by allowing the Minister of Transport to require, by order, certificate holders to enhance their SMS or take corrective measures when these systems are considered deficient.

On the international front, we have been working with the ICAO on standards and recommended practices as guidance for member states to establish an SMS regulatory framework. This is a significant step towards improving aviation safety performance globally.

We are proud of ICAO's public recognition of Canada as the world leader in establishing a SMS regulatory framework, but we at Transport Canada know we have much to learn. This is why we value participating in international seminars and working directly with our many foreign stakeholders to promote a shared understanding of SMS as well as to share our experiences.

Lessons Learned

Relatively speaking, setting up the infrastructure for an SMS is a fairly simple process. Sustaining effectiveness is much more complex. The key is incorporating continuous improvement into all aspects of operations and viewing this approach to risk management as an opportunity to continuously improve rather than a journey with an end point.

A key requirement of effective SMS implementation is well-defined accountabilities both inside the regulatory authority and inside the regulated enterprise, as well as between the regulatory authority and the partnering enterprise. An appropriate accountability framework is critical to understanding where the accountability for safety performance resides within a company and how those accountable relate to the regulator.

This required a re-alignment of the Civil Aviation organization to ensure we could identify a single person responsible for service to and oversight of an aviation organization. When our reorganization is complete, headquarters will continue to be responsible for the development of policy, regulations and standards and the delivery of specific centralized operations. Regions will continue to be responsible for implementing the majority of the Civil Aviation program. This model will allow further flexibilities to share expertise and maintain technical competencies as well as deliver the required level of service to the industry by delivering our program using multidisciplinary teams responsible for the oversight of enterprises within the industry.

The regulations require companies to appoint executives who are accountable for the safety performance of the enterprise, and responsible for establishing and maintaining the over all risk management framework and its supporting safety culture. Cultural change requires a sustained effort and focus over a long period of time, and this has to be generated by senior management.

Experience to date shows that where the accountable executive has fully accepted their accountabilities and has highlighted SMS as the way of doing business, implementation has been more effective. Specifically, the cultural transition to a state where all decision-making takes into consideration the impact on safety performance of that decision has been more readily apparent.

In addition to the development of a clear accountability framework, the promulgation of a proactive enforcement policy is critical to the development of a reporting culture. This requires a cultural change and it also requires involving employees and their representatives in the development of policies to encourage buy-in and demonstrate that management is interested in the concerns and needs of their employees.

This approach fosters a collaborative relationship based on a clear understanding of the SMS goals and objectives. Experience has shown that without appropriate policies, voluntary reporting of hazards is severely curtailed and developing an effective reporting culture virtually impossible. However, if the policy provides appropriate protections to reporters who voluntarily submit reports, the system will reach its full potential.

If the industry is willing and able to identify and address safety hazards, then the authority must have the patience to let the industry attempt to deal with the issues and, only if they fail, step in with enforcement action. This policy approach, of course, does not apply where we are dealing with willful non-compliance or criminal activity.

SMS implementation will likely generate a 400 to 500 percent increase in the number of reports. This data will become very important for conducting business in the future.

It is expected that the number of statutory reports will initially increase as an SMS becomes more effective because operators will be reporting more at the minor occurrence end of the spectrum before the hazard grows and is manifested in a major occurrence report. There should also be a corresponding decrease in the number of occurrence reports. This result should not be misinterpreted to mean safety performance has diminished. It is actually an indication of increased safety performance.

Ensuring that the information continues to be generated is critical to the optimization of the safety benefits of SMS. This means that individuals need protection from prosecution for making mistakes. Inside companies this protection is found in the company's reporting policy, which has the sole purpose of creating a blame-free reporting environment to create a reporting culture. Reports must be followed up on and corrective actions identified where required or reasons provided where there is no corrective action. Employees need to know that reporting is worthwhile – that there is an obvious benefit to all in reporting. Inside government, this means the development of reporting cultures and systems within the authority and the creation of legal protections where appropriate.

Work is also underway to develop a method of measuring the state of a safety culture, which will be incorporated into oversight methodologies that will involve monitoring indicators to determine if behaviours are changing – if an organization is progressing towards implementing a sound safety culture. The results will determine if changes are required to the way things are done to provide for continual improvement in risk management in the organization.

We have also determined that traditional oversight methodologies are not sufficient for SMS evaluation from a regulator's perspective. Current audits focus on compliance and conformance to a given standard and are based on factual verification of non-conformance.

Depending upon the state of transition within the organization, different oversight scenarios are currently available including: assessments for companies that have a complete SMS; acceptance validations for companies in the process of implementing an SMS; and program or process validations for companies not subject to the SMS regulatory requirements or where a portion of an SMS is being validated.

Under SMS, Transport Canada will assess safety performance by evaluating systems that operators put in place to ensure that employees are following procedures, that there is compliance with regulations, that aircraft and aviation infrastructure are properly maintained, and that safety practices and procedures remain among the best in the world.

The assessment process focuses on the effectiveness of the system and makes judgments on performance. The process is defined by component and the elements that comprise that component, for example a reactive reporting process. Components will be evaluated according to the timetable for implementation and once an SMS is fully implemented a periodic evaluation will be conducted.

An important point to note, however, is the traditional oversight methodology can still be applied where there is insufficient information to determine if the SMS or a component of the SMS is working effectively.

Final Thoughts

With the expected global shift to more open markets and fewer regulatory resources, SMS has turned into the most important safety framework initiative, not only in Canada, but worldwide. Management systems open the door for the growing involvement of industry associations in further delegation, and is an important strategy to address future challenges.

Our regulatory approach is a set of performance-based rules operating under a mandatory SMS, which is the key to success. This concept reflects a desire to provide the aviation community with additional flexibility and operating efficiencies, with the potential for operators to play a more direct role in managing their own safety systems, where appropriate, and relies on the willingness of the aviation community to assume a greater responsibility for its safety performance.

And, on that note, I am proud to introduce Don McLeay of Air Canada who will provide his views on Canada's journey towards implementing SMS nationally.

Thank you.