The Industry Safety Strategy Group (ISSG) Global Aviation Safety Roadmap provides a valuable plan for data-driven safety improvements, but as with all good plans, the test comes in turning ideas into reality.

Flight Safety Foundation and its regional affiliate in East and Southern Africa, the AviAssist Foundation, in 2007 were the first to dedicate a think tank meeting to the application of the Roadmap, where participants looked at the Roadmap in relation to the African region, which perhaps needs it most.

The Roadmap, launched in 2006, still is far from being commonly known and applied. Further, the African region faces an extra difficulty in accessing information that is readily available elsewhere on the Internet, as Internet access in the region is still very limited.

Workshops and political persuasion are early but important steps.

BY TOM KOK
However, the International Civil Aviation (ICAO) African Comprehensive Implementation Program (ACIP) is assisting. With the launch of ACIP, ICAO is making a genuine effort to go beyond mere consultancy. ACIP requires countries to attend a regional Roadmap workshop to harvest further benefits from ACIP in improving their safety. Once a country has attended a Roadmap workshop, ACIP can conduct a gap analysis to define the work that needs to be done, again based on the Roadmap. In turn, that analysis becomes the basis for further assistance under the umbrella of ACIP.

In 2008, ACIP has conducted two regional workshops on the use of the Roadmap. Those workshops are critical in making the Roadmap accessible. A third regional workshop is planned for Mozambique in December 2008. ACIP has conducted Roadmap-based gap analysis for the seven African states that are signatories to the Banjul Accord, plus the Seychelles. Further gap analyses are planned in the region. Once ACIP has started training national experts to provide safety management system (SMS) and state safety program (SSP) training, the same pool of experts can possibly provide training on the use of the Roadmap.

The challenge will be to sustain the momentum, presently building, once the temporary ACIP ceases to exist in a few years. This is even more complicated in the African region where changes in directors general of civil aviation and other industry and policy leaders are much more frequent than, for example, in Europe and the United States. This will mean the institutional memory on safety issues at the highest management levels may be much shorter. These regular changes also lead to a state of mind that “no condition is permanent,” which is not an environment conducive to sharing information that may be used differently by the next group of managers.

An important achievement of the Roadmap is that it is slowly starting to close the gap between industry and governments. Traditionally, ICAO certainly consulted stakeholders in its work in Africa, but that may have mainly meant working with the International Air Transport Association (IATA) offices in Montreal and Johannesburg, South Africa. Very little direct, regular interaction with operators took place. This is important in a region where the majority of operators are small or medium-sized, and may not even be IATA members.

The ICAO audits include visits to the industry, visits primarily designed to get an impression of a state’s safety oversight. Under the Roadmap gap analysis, the team visits the industry in sessions that enable the national industry representatives to get their views across on required improvements. That is a constructive and critical step in beginning a genuine culture change to properly implement safety management and a just culture. The performance expectations of which the Roadmap speaks — and that will be a crucial part of the safety oversight audit programs of the future — cannot function without data shared in a just culture.

ACIP held its first SSP meeting in Ethiopia Sept. 23–26, 2008. The SSP highlights a number of elements that can be clearly recognized in the Roadmap. This allows the development of SSPs and the Roadmap to move in sync. The Roadmap further provides clearly defined best practices that can be used by African countries.
to prioritize their activities in implementing their SSPs.

The SSP introduces the need for states to collect data to establish the basis for an agreement on acceptable levels of safety performance. The SSP will insert quality assurance components into a state’s safety oversight role and should do away with merely prescribing regulations in favor of a more interactive approach to setting safety targets. Such an interactive approach will work best in a generative organizational culture in the regulator (Table 1). It could play an important role in bridging the gap between the regulator and the industry. Making that gap smaller will be a critical element of changing a safety culture.

A problem with the Roadmap is its complexity, which makes it less than ideal for drumming up political understanding and support. On the surface, it is a document written by technical experts for technical experts. If a greater political understanding and increased political will are to be mobilized to support aviation safety, the aviation community needs to learn from innovative companies like Philips Electronics and Apple that focus on simplicity and ease of use and access. Roadmap-based work will have to embed those concepts to secure the much-desired political support in a region where aviation must compete for funding with primary needs such as education and healthcare. Moving up aviation safety on the political agenda will require political leaders to absorb the essence of the message from plain-language documents.

Flight Safety Foundation and AviAssist Foundation are working to issue such plain-language informational leaflets on states’ international responsibility for aviation safety and the role of a civil aviation authority. In the first quarter of 2009, the AviAssist Foundation will begin its second parliamentary information campaign in the African region to sensitize communities beyond aviation to the importance of just culture.

Informational leaflets are distributed to parliamentary transport committees that play a vital role in enacting new aviation safety regulations. They will also be distributed to new ministers and permanent secretaries of transport and to the news media in the East and Southern African countries.

Though safety data collection is very limited in Africa, the Roadmap is the first plan that provides clear leads about data analysis on which national aviation safety policies may be based. Many, if not most, African operators use aircraft that cannot economically be retrofitted with quick access recorders for digital data collection. Nonetheless, a tradition of safety data collection can begin with flight safety event reporting and analysis, which is generally the first type of analytical tool that an airline will acquire.

Even the air safety reports that are the basis for those systems are uncommon in sub-Saharan Africa so far. But with the help of fairly simple and readily available computer applications such as Microsoft Excel, safety trend analysis can begin. Initially, occurrence reports may have to be mostly in-company, because the legal regimes in many African countries do not foster non-punitive information sharing. Going forward, it will be important to map the legal obstacles to a just culture in the East and Southern African region.

The Flight Safety Foundation and the AviAssist Foundation remain committed to supporting two of the four main components of the rollout of SSP and SMS: safety assurance and safety promotion. Tom Kok is director of the AviAssist Foundation.