International Civil Aviation Organization

WORKING PAPER

ASSEMBLY — 36TH SESSION

TECHNICAL COMMISSION

Agenda Item 25: Follow-up of the DGCA/06 Conference on a Global Strategy for Aviation Safety

SHARING AN EFFICIENT TOOL FOR MANAGING COMPLIANCE WITH ICAO STANDARDS AND RECOMMENDED PRACTICES

(Presented by the Republic of Korea)

EXECUTIVE SUMMARY
This paper presents actions taken by the Republic of Korea in following up to the DGCA/06-WP/37 – *An efficient tool for regulators to manage compliance with SARPs*, and further progress that has been made to the system and suggests coordinated and collective efforts to ensure global implementation of SARPs.
Action: The Assembly is invited to take note of the contents of this paper and consider the suggestions in paragraph 6.

Strategic Objectives:	This working paper relates to Strategic Objective A by contributing to enhancement of global compliance with ICAO Standards and Recommended Practices.
Financial implications:	No additional resources required.
References:	Doc 9866, *Report of the Directors General of Civil Aviation Conference on a Global Strategy for Aviation Safety*

1.   **INTRODUCTION**

1.1   Recognizing a need for a sustainable management tool to manage overall process of compliance with Standards and Recommended Practices (SARPs) and to well prepare for the comprehensive systems approach to the ICAO USOAP, the Republic of Korea developed a management tool called SARPs Tracking System in 2005.

1.2   In order to avoid duplication of efforts to be made by the ICAO Contracting States and to help enhance the level of implementation of SARPs worldwide, the Republic of Korea first introduced and extended an offer to provide the system to the international aviation community at the 2006 Director General of Civil Aviation (DGCA) Conference on a Global Strategy for Aviation Safety. The tool was well received by the Conference and a number of participants expressed their interest in using the system.

1.3   This paper provides information on the efforts made by the Republic of Korea to share the tool with ICAO Member States, achievements resulting from the operation of the SMIS in the Republic of Korea, and discusses the progress to be made to have it become more efficient and instrumental tool for regulatory authorities.

2.   **IMPROVEMENT OF THE SYSTEM FOR**
       INTERNATIONAL USE

2.1   For the system to be shared with other Contracting States, it needed to be transformed to be an international version since it was originally designed for domestic use and required certain specifications of hardware and software for its operation.

2.2   Taking into consideration the diverse operating environment of different user States, the Republic of Korea developed an English version of the system called SARPs Management and Implementation System (SMIS) with higher operability and upgraded functions.

2.3   And as a way of practical assistance to the SMIS user States, it was accompanied with the development of a User Manual, which describes the functionality of the system and modalities of operation and a Management Standard which provides direction for the system users to maintain the integrity of the database.

3.   **PROMOTION AND DISTRIBUTION OF THE SMIS**

3.1   Upon launching international version of the SMIS, delivery of SMIS started from introduction and demonstration of the SMIS at various international aviation events; COSCAP-NA Steering Committee Meeting (August 2006, Mongolia), LACAC Assembly (November 2006, Panama), COSCAP-SA Steering Committee Meeting (November 2006, Nepal), Asia-Pacific DGCA Conference (December 2006, Indonesia), AFCAC Assembly (July 2007, Kenya). The Korean delegation was invited on certain occasions as well to introduce the system on the request of individual States or regional cooperative entities.

3.2   A SMIS Package (Installation CD, User Manual, and Management Standard) has been shared with more than fifteen States in the continents of Asia, Africa, and South America. Most importantly, the SMIS was provided free of charge since the aim of the delivery is to enhance world's aviation safety and to avoid duplication of efforts by those who have mutual goal.

3.3   For efficient delivery of the system, the Republic of Korea sends its technical staff to assist the user States in installing the SMIS and to provide training. Further, it set forth signing of the Memorandum of Understanding with user States in order to ensure continued cooperation and technical assistance.

4.   **ACHIEVEMENTS OF THE SMIS USE IN THE**
        REPUBLIC OF KOREA

4.1   More than 10,000 SARPs used to be manually managed in hard copies but switchover to the database and on-line management made it possible to monitor all working processes in real time, leading to fast and accurate decision making, also reducing the workload of responsible personnel.

4.2   The SMIS has facilitated the sharing of aviation safety information and made the process for all the amendments of regulations transparent. In the past, only the persons concerned were aware of their safety related tasks, but now anyone interested can refer to the status of compliance with the SARPs in all the safety related fields, not just limited to the scope of their own work.

4.3   The SMIS also has increased the reliability and accountability of aviation standard work in the civil aviation authority. Persons in charge, who are clearly named, are assigned to each SARP and its related tasks with a due date. All safety related measures that are undertaken are recorded in the database, facilitating the verification and use of past materials/records.

4.4   Moreover, the monitoring function of the SMIS has ensured that new or amended SARPs are timely reflected in the national regulations, thus leading to timely implementation of the international standards. Such responsiveness is very important to keep up with the rapid changes in aviation industry and application of new technologies.

5.   **FURTHER DEVELOPMENT OF THE SMIS**

5.1   While in operation in the Republic of Korea, the SMIS has continued to be adjusted to the satisfaction of users with enhanced efficiency of the system. To provide all the civil aviation entities, other than CAA (e.g. Accident Investigation, MET and SAR service authorities) with an access to the system, the operating environment of the SMIS is to be changed from the intranet to the internet. Such change will make it possible for all the entities in charge of sixteen safety-related Annexes to cross-refer each other's work, thus leading to the development of harmonized national regulations.

5.2   Given the fact that SAAQ and Protocols, in addition to the Compliance Checklist, are main tools for conduct of the USOAP as well as good indicators to assess the health of State's civil aviation safety oversight system, new features to manage SAAQ and Protocols are to be added to the SMIS so that the SMIS could be used as a tool to continue to monitor the level of implementation even after the conduct of USOAP.

5.3   The Republic of Korea is also planning to include some functions to manage information on the implementation of national regulations by operators and service providers, which means that SMIS will be able to provide not only compliance with the SARPs but also implementation of national regulations. And it will serve as an efficient tool to facilitate two-way communications between regulator and operator/service providers regarding the amendment to the national regulations or difficulties in implementing certain requirements.

5.4   The ICAO Safety Oversight Audit (SOA) website is a very efficient tool for States to file their differences as required by Article 38 of the Convention and enables all Member States to monitor differences to SARPs on a global basis. It is recognized that ICAO USOAP requires States to update Compliance Checklist on a regular basis in order that the audit process can be effectively completed. However, it cannot be used as a tool for Senior Managers of regulatory authority to monitor and control the whole progress of implementation of ICAO SARPs.

5.5   In line with this, the Republic of Korea is of the view that it will be highly beneficial if a system interface can be achieved between the SMIS and SOA database, which enables States to export the required data to the ICAO website as well as to utilize the management features of the SMIS. And the latest SARPs in the ICAO database can be easily transmitted to the database of the SMIS. It is important that the system compatibility must ensure that the data need to be entered only once and the full features of both systems can be utilized, which will contribute to reducing a great number of man-hours by CAA staff and efforts by ICAO.

6.   **CONCLUSION**

6.1   As identified in the results of the USOAP, many States have experienced failure to implement ICAO SARPs systematically, and a lack of sustainable systems for overseeing safety standards of national regulations and its implementation. ICAO and States should make a collective and individual effort to ensure the global implementation of the existing SARPs.

6.2   The Contracting States are invited to utilize the SMIS and provide the most valued feedback for further improvement of the system. And ICAO is requested to consider the possible benefits of the SMIS for both ICAO and the SMIS user States when the SMIS is interoperable with the ICAO USOAP database system. The SMIS might be regarded as a mere computer database system at this moment. But the valued inputs from ICAO and the user States will result in the SMIS becoming a strong and sustainable measure to enhance the global implementation of the SARPs, thus contributing to international aviation safety.

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