



27th COSCAP-SA STEERING COMMITTEE MEETING

Update on E-South Asia Capacity Building Matrices (E-SACBM) Discussion Paper 6 (DP-6)

(Presented by the CTA)

SUMMARY

The objective of the Discussion Paper is to provide an update on the South Asia Capacity Building Matrix (SACBM) project and to obtain SC approval on the proposed State duties and responsibilities to keep the SACBM current on a regular basis.

1. Introduction

1.1 Capacity building within South Asia can be challenging at times. Recruitment and retention are major contributors (to this challenge). In addition, trying to identify and locate potential regional experts who could provide assistance to other States through regional cooperation can be difficult. Keeping a list of regional experts up-to-date is almost impossible without a sustainable system.

1.2 So begs the question: Would it be possible to build a capacity building tool that could identify regional experts with just a few clicks and a simple "push of a button"? Would it be possible to update the tool's expert database in less than a few minutes? Could this tool be easily accessible by all Member States at anytime? Hence, the concept and realization of the South Asia Capacity Building Tool (SACBM) had materialized.

2. Discussion

2.1 With the approval of the 24th COSCAP SA SCM, the South Asia Capacity Building Matrix (SACBM) project was launched in January 2016. The core objective of the SACBM was to identify inspectors/officers within South Asia Civil Aviation Authorities/DGCAs who could provide support in terms of training and technical assistance to other Member States within the sub region (South Asia). In addition, the SACBM would also identify retired inspectors/officers who could continue to provide support to Member States.

Note: At a later stage, it is also intended to include South Asian experts within the aviation industry on the SACBM. Those identified on the SACBM would be referred to as “Regional Experts”.

2.2 Active participation on the SACBM would also allow Member States experts to share their experiences and to learn and develop from other States "best practices" based purely on regional **cooperation**. One of the key goals is for the SACBM to mature and evolve to having higher levels of expertise. Additional training in the form of OJT and “Train the Trainer” courses will be provided to the SACBM experts in order to enhance their skills accordingly.

2.3 Expansion of the SACBM to other sub regions within the APAC regions would enhance Member State’s capacity building opportunities considerably.

2.4 Methodology

2.4.1 Phases of Development

The SACBM was developed in several phases as such:

2.4.2 Phase One: – Qualification Criteria and Basic Framework Development:

Six SACBM Qualification Criteria (QC) were developed within the areas of Flight Operations, Cabin Safety, Personnel Licensing, Airworthiness, Aerodromes and Air Navigation Service. Note that more areas of expertise may be added at a later time.

Final drafts were reviewed by Member State COSCAP SA National Coordinators (NCs) and then presented to the 25th Steering Committee Meeting (SCM) for approval.

DGCAs/Chairpersons of all Member States were present during the SCM, which was an essential requirement in getting a **standardized approach** across the **entire sub region**.

In addition to approving the QCs, several critical decisions in the administration of the SACBM were **unanimously** agreed upon as such travel arrangements including payment of DSAs, mission pre, on site and post preparations; mission tracking and Expert Performance Review and mission report writing requirements.

To maximize and recognize the level of knowledge and experience of SACBM experts, three different “Levels of Expert” categories were created as such:

- **Level 1:** Basic Expert who has established the minimum of 5 years experience in his/her area of expertise within a CAA/DGCA +USOAP*
- **Level 2:** Intermediate Expert who has established a minimum 8 years experience in his/her area of expertise within a CAA/DGCA + USOAP* + Train the Trainer + 10 SACBM Missions

- **Level 3:** Senior Expert who has established 10 years or more experience in his/her area of expertise within a CAA/DGCA + USOAP* + Train the Trainer + Accident Investigation + 20 SACBM Missions

Note: A unique SACBM ID number and a certificate will be provided to each expert to recognize their “SACBM Level of Expert” as they progress through the different levels.

In order to establish a level of standardization in the knowledge of the ICAO SARPs, experts are expected to undergo the ICAO USOAP* CBT training.

2.4.3 Phase Two: Assessment of Inspectors/Officers

An assessment of inspectors/officers (vis a vis the SACBM QC), as applicable, in each Member State was conducted in 2017-2018. Those who met the **core elements (K&E)** of the qualification criteria and had **5 years or more experience with the CAA/DCGA in their area(s) of expertise** were placed on the matrix (SACBM). The matrix not only identified the inspectors/officers who meet the QC requirements but also collected data points on the **specific type of qualification/experience** they each possessed (i.e. # of years with the CAA, Type Endorsements, EDTO, CAT II/III, Reliability, PANs Ops, SAR etc.).

2.4.4 Phase Three: Implementation

The SACBM was implemented in March 2017 on a trial basis with Bhutan being the first host State to request assistance through the SACBM. An expert from Sri Lanka was deployed to Bhutan for a PEL mission and was concluded successfully. Currently, five States are actively engaged in the utilization of the SACBM. Four SACBM missions have been successfully completed, with three more in the works.

2.4.5 Phase Four: Computerization of the SACBM into an E-SACBM

Phase four involved moving from a paper based (Excel Sheets) to an electronic version of the SACBM called the E-SACBM. The primary purpose of the E-SACBM was to ensure the **sustainability and accessibility** of the SACBM at all times.

The Civil Aviation Authority of Bangladesh (CAAB) provided the much needed IT programming support to the COSCAP SA. The support was greatly appreciated and the hard work duly recognized.

2.4.6 E-SACBM Standard Operating Procedures (SOPs) Manual and Training for Member States Administrators

A Standard Operating Manual (SOP) is currently being updated to incorporate procedures for usage of the electronic version of the E-SACBM. In addition, an SOP training programme is

being developed to train State SACBM administrators accordingly. The CTA will conduct the training in conjunction with her 2019 visits/missions with Member States.

2.4.7 Expansion of the E-SACBM to other sub regions (Transition of the E-SACBM to a E-CCBM)

During the 55th APAC DGCA Conference in Fiji, which was held in October 2018, during the Joint COSCAP Meeting chaired by the ICAO Secretary General, a request was made to expand the E-SACBM to include North Asia and South East Asia.

As a result, two additional “sub-pages” have been added to the E-SACBM to include the two additional sub regions, which will be named as NASCM and SEACBM. Additional sub regions can be easily added in the future as required. Once the two additional sub regions have been added, the E-SACBM will be referred to as the E-COSCAP Capacity Building Matrices (E-CCBM). This term will incorporate the three APAC COSCAP Capacity Building Matrices.

2.5 Management of the COSCAP Capacity Building Matrices (E-CCBM) – SACBM, NACBM and SEACBM

2.5.1 Access to the Matrices

Member States will have access to the E-CCBM through a restricted user/password provided by the COSCAP CTA – Super Administrator (currently the CTA of COSCAP SA). The user/password will be issued to an approved State administrator (s) nominated by the State.

Access to the matrices primarily allows Member States to search (directly from their computers) for potential experts to provide them with the required assistance, and secondly, to keep their own respective State matrix “expert database” **current** by regularly updating the qualification/experience of their experts (who are already on their respective matrix), and also to add “new experts” who meet the qualification criteria (for entry into their respective matrix).

2.5.2 COSCAP CTA – Matrix Contact/Focal Points

To manage the Matrices, the three APAC COSCAPs CTAs would be the contact/focal points in their respective sub regions. They would undertake the **coordination** required between Member States and other sub regions when regional expert assistance is requested. For example, the CTAs would assist the Member States in finding an expert (through the search function of the E-CCBM), and initiate coordination activities between Member States to acquire the expert accordingly. Note that expert services from retired and/or other organizations/industry would be contracted out by the respective COSCAPs and/or directly from the Member State requesting assistance.

When requesting assistance from a regional expert, Member States will follow the procedures located within the E-CCBM SOPs. Note that when a Member State is requesting assistance through the E-CCBM, a detailed Terms of Reference (i.e. date, duration, type of work, location, etc...) will be required as outlined with the E-CCBM SOPs.

The COSCAP SA CTA would be responsible for the overall E-CCBM infrastructure, IT programming support, and Super Administration accordingly.

Details of the COSCAP CTA E-CCBM roles and responsibilities will be outlined in the revised SOPs.

2.5.3 Member State E-CCBM roles and responsibilities

The successful usage and sustainability of the E-CCBM is very depended on Member States participation in keeping their individual Matrix **current/updated** by adding new regional experts and updating current experts who are already on the matrix. This would entail the following three key activities from Member States:

1. Member State to nominate E-CCBM administrator(s). Each E-CCBM administrator will receive a restricted user/password for access.
2. E-CCBM administrators will be able to enter and modify **their State specific** data within the E-CCBM, and search the entire E-CCBM for experts. In addition, Member States will be able to view all E-CCBM expert Mission Reports and also Performance Evaluations of Expert.
3. Member States to develop an internal methodology on how to keep their State specific E-CCBM data current. Some methods could involve the following:
 - Updated by the State E-CCBM Administrator in conjunction with the State periodic employee performance appraisal cycles.
 - Allow individual inspectors/officers to enter and update their own files within the E-CCBM, then forwarding the request to the State E-CCBM administrator. The State administrator would do a QA and then, if satisfactory, would approve the entry/update accordingly.
 - The CTAs will discuss this with their individual Member States as States may wish to customize their procedures with already existing systems in place. Note that State data should be updated at least **twice a year** in order to ensure accuracy.

2.5.4 Quality Assurance of the E-CCBM

The CTAs would conduct period Quality Assurance reviews of their respective sub region E-CCBM in order to ensure that the data is being kept current (data currency) and also to ensure that the data entered reflects the actual qualifications of the experts (data integrity).

2.5.5 Database and IT support for the E-CCBM

Since the SACBM is being expanded to include North Asia and South East Asia sub regions, (thus transitioning into the E-CCBM), it is absolutely essential that the E-CCBM database/programme be kept in a **very secure site**. The data must be protected at all times and safe from potential cyber attacks (i.e. hacking) as much as possible. In addition, professional IT support must be readily available to handle technical difficulties and/or introduce modifications/improvements to the programme as time evolves.

Currently the Civil Aviation Authority of Bangladesh provides IT support and the server where the data is stored. Considering the expansion, the SCM should consider proposals to move the database/programme over to a professionally IT/Server service provider. However the current CAAB IT programmer could do the management/supervision (i.e. as the E-CCBM IT Project Manager) of the E-CCBM in order to retain expertise and continuity. This would relieve pressure from the CAAB considering the significant expansion of the E-SACBM into a E-CCBM by providing additional resources. Note that it is envisioned to further expand the E-CCBM to the Pacific Islands, Australia and New Zealand. The E-CCBM would then evolve into an E-APAC-CBM accordingly.

2.6 Summary of Decisions Required by the SCM

Based on the information provided above, the following decisions are required by the SCM:

I) Member State Roles and responsibilities towards the SACBM (portion of the E-CCBM)

1. Member States should appoint a SACBM Administrator who will be responsible to ensure that the SACBM is current
2. In conjunction with the State appointed SACBM administrator(s), Member States shall develop a procedure/methodology to ensure that the SACBM is kept up to date within their respective States at least twice a year minimum. Note that the CTA may provide assistance as requested.
3. State appointed administrators should attend the SACBM Training sessions

4. State administrators should keep their SACBM user ID and password protected at all times
5. Member States should follow the SACBM SOPs when requesting and/or receiving assistance through the E-CCBM. Note: the SOPs will be amended with the SCM input as deemed applicable.

II) IT Support for the E-CCBM

1. A secure and professional IT service provider should be contracted in order to provide the required services to keep the E-CCBM updated and secure.
2. The management/supervision of the E-CCBM can be done by the current IT programmer from CAAB (i.e. E-CCBM IT Project Manager)
3. The costs associated with the contracting of the above could be split among the 3 APAC COSCAPs. Note that the procurement of the IT service(s) would be done in accordance with ICAO/UN procurement rules and procedures.
4. Final costs would be presented to each SCM and approved prior to any contracting accordingly.

2.7 Action of the Steering Committee:

The SC is invited to:

1. Review the Discussion Paper
2. Review the Summary of Decisions Required in 2.6 above and approve accordingly
3. The CTA will amend the E-SACBM/CCBM programme as requested by the SC.