European Commission – DG TREN •



Framework Contract n° TREN/A1/17-2003 Lot 2: Interim and Ex-Post Evaluations

Mission: TREN2-001

Ex Post and Mid Term Evaluation of COSCAP Programme in Asia (South, South-East, North)

Final Report

17 May, 2004

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Current abbreviations

COSCAP	Cooperative development of Operational Safety and continuing Airworthiness Programme
RAST	Regional Aviation Safety Teams
NARAST	North Asia Regional Aviation Safety Teams
	(China, DPRK, Mongolia and ROK)
SARAST	South Asia Regional Aviation Safety Teams
	(Bangladesh, Bhutan, India, the Maldives, Nepal, Pakistan and Sri Lanka)
SEARAST	South East Asia Regional Aviation Safety Teams
	(Brunei, Cambodia, Hong Kong, Macao, Indonesia, Lao PDR, Malaysia, Myanmar,
	Philippines, Singapore and Thailand)
СТА	Chief Technical Advisor (project coordinator)
ICAO	International Civil Aviation Organisation
FAA	Federal Aviation Authority (USA)
JAA	Joint Aviation Authority (European)
IATA	International Air Transport Association
ATC	Air Traffic Control
ATM	Air Traffic Management
USOAP	Universal Safety Oversight Assessment Programme
CAA	Civil Aviation Administration (general)
CASA	Civil Aviation Safety Authority (Korea)
DCA	Department of Civil Aviation (Thailand)
CAAC	Civil Aviation Administration of China

EXECUTIVE SUMMARY

The Cooperative Development of Operational Safety and Continuing Airworthiness Programme (COSCAP) is an international programme conducted by the ICAO, for improvement of air safety in designated areas of the world. The programme consists in regional COSCAP projects, grouping a number of States of the same area for promoting common solutions, regional cooperation, and developing a local core of know-how.

In Asia, there are 3 COSCAPs, covering the South Asia region (Bangladesh, Bhutan, India, the Maldives, Nepal, Pakistan, Sri Lanka), the South East Asia region (Brunei, Cambodia, Hong Kong, Macao, Indonesia, Lao PDR, Malaysia, Myanmar, Philippines, Singapore, Thailand), and North Asia (China, DPRK, Mongolia, ROK).

Since 2001, the EU contributes in the Asian COSCAPs, with a financial participation of 1.2 Million Euros, representing 31 % of their total budget.

At the request of the European Commission, COWI was contracted to carry out an ex-post and interim evaluation of the actions undertaken on the 3 Asian COSCAPs.

The evaluation mission was undertaken from March 30th to May 14th, in accordance with a methodology defined in the Inception report (dated April 9th). Basically, this consisted in reviewing the existing documentation (ICAO's reports, Grant agreements, related EU strategy communication, minutes of Steering Committee meetings), and conducting interviews of the different parties involved in the programme. For these interviews, a travel was organised to Asia during COSCAP regional meetings in Thailand and China, to take the opportunity of the presence of all participants for meeting the relevant parties (programme management, international organisations, local administrations and operators, industrial partners). In addition to informal meetings, a total of 19 interviews were conducted, involving 6 beneficiary states, and providing a balanced panel of all regions and all types of participating bodies.

All resulting data was analysed for evaluation and conclusions in terms of effectiveness, efficiency, impact, sustainability, and relevance.

From examination of the reports, and according to the general opinion expressed in the interviews, the Asian COSCAPs appear to be effective and efficient projects. By and large, the project objectives are achieved, with satisfactory results and time performance. The participant States are highly involved and cooperative, in terms of technical activities as well as for their financial contribution. The projects use a significant amount of contributions in kind, and in some cases regional synergy, which are positive factors of efficiency. However:

- Due to the existence of other related projects in the area (also co-funded by other EU programmes), vigilance is required to avoid the risk of duplicating activities.
- Review of the documentation shows that the progress reports are not sufficiently formalised, and that the programme monitoring means need to be improved.
- Attention must also be drawn to the insufficient visibility of the EU's effort, due to the relatively low level of presence and participation of European bodies in the regional meetings.
- On the Asian COSCAPs, the participant states are very responsive, and the project management quite efficient. In case of similar programmes in other regions of the world, a higher level of difficulty should be expected in some areas.

Concerning the programme impact, the objectives are considered achievable, realistic and practical. They contribute to the overall objective of regional air safety, while building up a regional capability. The presence

of the EU contribution specifically increases the available means, international credibility, balances influences on standards and industrial interests, and increases the programme efficiency (more action done, due to the international credibility brought by the European presence). Without the EU presence, at Steering Committee level, the programme would have less results, and would probably loose most of its international force and balance of influences.

Regarding sustainability, it should be noted that the participant states are visibly involved, in a cooperative project management, likely to be continued in the long run. Concerning perspective of short-term autonomy, there is visible progress, particularly in the South Asia region, where the project supervision was already taken over by a coordinator coming from the region. However, for long term sustainability, a usual opinion (from the interviews) is that reaching 100 % autonomy will take time, and that even then, it would be advisable for the EU to continue "keeping an eye" on the progress in the area (watchdog function).

Concerning the relevance aspects, the programme objectives clearly contribute to improvement of the air safety (for incoming & outgoing flights), with practical and visible results. From a more specific European point of view, there is some promotion of European standards, but still insufficient (low presence and activity from EU bodies in the meetings).

As a conclusion, the COSCAP can be described as a useful and successful programme. It provides visible results, related to practical realistic objectives, achievable but still ambitious.

The further recommendations resulting from the evaluation are the following:

- Improve the programme monitoring by introducing scheduled milestones (outputs, agreements, remarkable events, ...), so that intermediate & final reports refer to pre-agreed objective verifiable indicators.
- Improve visibility of the European effort by more presence and participation of European bodies in the regional meetings
- Maintain presence at the Steering Committee, and closely monitor/control the definition and follow up of the programme objectives, to avoid risks of duplicating activities in the region, and to guarantee sufficient balance of international influences.

1 INTRODUCTION

1.1 Background

The Cooperative Development of Operational Safety and continuing Airworthiness Programme (COSCAP) is a series of world-wide initiatives, conducted with the International Civil Aviation Organisation (ICAO), with the objective of assisting the beneficiary countries to improve the Air Transport Safety.

These initiatives have a regional dimension insofar as they group a number of States of the same geographical region, propose common solutions, whenever possible, and encourage them to cooperate.

In Asia, the COSCAP regional groups are:

 COSCAP South Asia: Bangladesh, Bhutan, India, the Maldives, Nepal, Pakistan and Sri Lanka
 COSCAP South East Asia: Brunei, Cambodia, Hong Kong, Macao, Indonesia, Lao PDR, Malaysia, Myanmar, Philippines, Singapore and Thailand
 COSCAP North Asia: China, DPRK, Mongolia and ROK

Since 2001, the EU has been involved in the COSCAP, in providing significant funding for specific parts of the programme, mainly in Asia. Following this involvement, it is now proposed to conduct an ex post & mid term evaluation of the COSCAP projects presently in progress or completed in Asia

The purpose of this evaluation is to make an assessment of the actions already undertaken, in order to direct the choices in the selection of new projects, and/or decisions regarding possible continuation/extension of these initiatives.

1.2 Present situation

There are 3 COSCAP projects concerned by the present evaluation, with a total community funding of 1.224.600 EUR.

COSCAP South Asia project (Phase I):

Total cost:	1 373 200 EUR
EU support:	400 000 EUR
Start date:	January 2001
Duration:	30 months (24, + 6 months extension)
Status:	Completed
	Final report issued Aug-2003
	The project was completed in its so-called "Phase 1", for initiating the COSCAP actions in
	the region. It is now continuing under a 2 nd phase, where the project coordination was taken
	over by a CTA from the region, replacing the former Western CTA. EU contribution for this
	2 nd phase was not included. and is presently under discussion.

COSCAP South East Asia project:

Total cost:	990 300 EUR
EU support:	325 300 EUR
Start date:	January 2001

Duration :	3 years (2, +1 year extension)
Status:	Completed
	Final report issued Feb-2004
	The project was completed in its "Phase 1. It is now continuing under a 2 nd phase, with a
	Western CTA. No EU contribution was included for this 2 nd phase.

COSCAP North Asia project:

	1 0
Total cost:	1 591 800 EUR
EU support:	499 300 EUR
Start date:	January 2003
Duration:	3 years
Status:	Ongoing
	Interim report issued Jan-2004

Each COSCAP is coordinated by ICAO, through a Chief Technical Advisor based in the region on a long-term basis:

- After recent changes, a new CTA (American) is now installed in Bangkok for the South-East Asia project
- The North Asia project is coordinated from Beijing by a Canadian CTA (previously heading the South Asia project)
- The South Asia project is now coordinated in Kathmandu by a CTA from the region (Pakistani), who replaced the former Canadian CTA.

1.3 Related programmes and other donor activities

In the area of Air Safety, other related programmes were identified on the basis of:

- other programmes in the same region (AIDCO programmes)
- other COSCAP or similar programmes in different regions.

Programmes in the same region - Asia

In Asia, the EU also contributes in bi-lateral agreements with China, India, and "Other Asian" states (AIDCO programme – Contractor: AECMA).

- Bi-lateral agreement EU – China (EU support = 14.2 M EUR, out of a total budget of 28.3 M EUR)

This agreement is a wide scale programme for developing industrial cooperation between Chinese and European civil aviation industries, as well as assisting Chinese responsible parties in their efforts towards a safe development of the Chinese civil aviation sector.

- Bi-lateral agreement EU – India (EU support = 18 M EUR, out of 32)

This agreement is intended to stimulate cooperation between the EU and Indian aerospace industries in order to strengthen civil air safety and related procedures in India, through actions in the fields of:

- Airworthiness and Safety Oversight
- Airline Management
- Air Traffic Management
- Production Management
- Customer Support
- Pilot Instructor Training

- Airport Activities
- Bi-lateral agreement EU Other Asia (EU support = 15 M EUR, out of 30)

This agreement covers several countries of the COSCAP SA and SEA regions, but with a different geographical coverage (India in a separate project). It is intended to enhance air safety and to increase EU-Asian cooperation in the aerospace sector, through actions including:

- airworthiness, safety regulations and standards
- development of the future air traffic management
- development of airport infrastructure
- product support, maintenance and overhaul techniques

Programmes in different regions

Central and South America:

- ACSA (JAA programme)
- PAAST (FAA)
- SRVP (COSCAP type programme by ICAO in South America)

Africa:

- Air Traffic Control in Central and Western Africa (Organisation settled by ASECNA with assistance of the French DGAC, and supported by the European Commission)
- ICAO programme in Francophone Western Africa (COSCAP UEMOA, in its launching phase)
- ICAO programme in Anglophone Africa (South Africa SADC states)

Pacific:

- PASO (out of ICAO)

COSCAP specific features

Compared to these programmes, COSCAP remains with specific features:

- Its regional dimension, creating a core of know-how in each region, with the objective of initiating local regulations, policies, and procedures and common capability on a permanent basis.
- Its high devotion to involvement of the participant states, in a cooperative programme management.
- Its positioning as an international programme, where the management combines efforts from the EU, USA, and Canada.
- The type of cooperation developed, with strong commitment to local authorities and regulatory aspects.

The COSCAP is basically oriented towards joint work with the local administrations, rather than operators or industry. In this way, the target groups differ from those concerned by the other related projects in Asia. Nevertheless, a risk of duplicating activities in Asia may exist, particularly for technical assistance and training initiatives. Presently, this risk is minimised, by contacts for coordinating the actions at the level of the local offices (AECMA & COSCAP coordinators in Asia). It is also controlled by constant monitoring of the COSCAP objectives, at the level of the Steering Committee.

2 EVALUATION STEPS AND METHODOLOGY

2.1 General

The evaluation was performed according to the methodology defined in the Inception Report (cf. Annex 1).

Basically, this consisted in:

- 1. Review of the existing administrative and technical documentation. More specifically:
 - The Final reports for the South and South-East Asia COSCAP (dated Aug-2003 and Feb-2004) provide valuable information on actual achievements and status of completion for each planned output/immediate objective.
 - The Interim report dated Jan-2004 provides, to a lower extent, the same information for the North Asia COSCAP.
 - The Grant agreements between the EU and ICAO provide the initial definition of each planned output/immediate objective, for detection of possible deviations during implementation. (ref.: agreements dated 29.12.2000 for the South and South-East Asia COSCAPs, and 10.12.2002 for the North Asia COSCAP).
 - The Document "Communication from the Commission A European Community contribution to World Aviation Safety Improvement" provides background information and the Commission's strategy / global objectives related to aviation safety. This was used in the evaluation mainly for appreciating the relevance of COSCAP outputs/immediate objectives.
 - The Minutes of the Steering Committees meetings provide additional information, particularly on the involvement and financial capacity of the participating states.
- 2. Mission travel to Thailand and China, to take advantage of the presence of the RAST participants for meeting all relevant parties. In this way, we participated in the RAST meetings, and organised informal meetings and individual interviews with:
 - ICAO's representatives and the 3 project co-ordinators
 - Participant states regulators (Civil Aviation Administrations)
 - Participant states operators (Airlines)
 - Western & International organisations (FAA, JAA, IATA)
 - Industrial partners / donors (Airbus, Boeing)
- 3. Methodology followed for analysis of the collected data for conclusions and findings

Question (from ToR)	Related criteria	Deducted from	
		Reports	Interviews
Resources used and results	EFFICIENCY	Х	
Value-for-money rating			
Results achieved, compared to specific objectives	EFFECTIVENESS	Х	
Statement in terms of added value	IMPACT		Х
Criticality (consequences of non-intervention)	IMPACT		Х
Sustainability	SUSTAINABILITY	Х	Х
Contribution to achievement of the programme global objectives	IMPACT	Х	X
Improvement of air safety			Х
Achievements in line with EU objectives/strategies	RELEVANCE	Х	Х

2.2 Locations and dates

Evaluation start:	March 30 th , with kick off meeting in Brussels
Mission travel:	April 12 th to 23 rd , including 14 th to 16 th : NARAST meeting in Kunming (China) 19 th to 20 th : SARAST meeting in Bangkok (Thailand) 21 st : Joint SARAST / SEARAST meeting in Bangkok (Thailand) 22 nd & 23 rd : SEARAST meeting in Bangkok (Thailand) During these meetings, the participant states were represented (with few exceptions). Individual interviews were conducted with representatives of Thailand, Philippines, Singapore, Thailand, Pakistan, ROK, China, and Western organisations.
Analysis & reporting:	April 26 th to May 14 th , including meeting in Brussels for presentation of a draft final report on April 30 th .

2.3 Interviews

The purpose of the interviews was to get the opinions of all parties involved on the COSCAP programme: general, roles, strengths, weaknesses, present and future expectations..

All participants in the RAST meeting were very co-operative, and accepted quite easily to dedicate some of their time for our evaluation.

The interviews were conducted on an individual basis, supported by a questionnaire (cf Annex 2). The questions were kept open and flexible, in order to get as much as possible spontaneous answers.

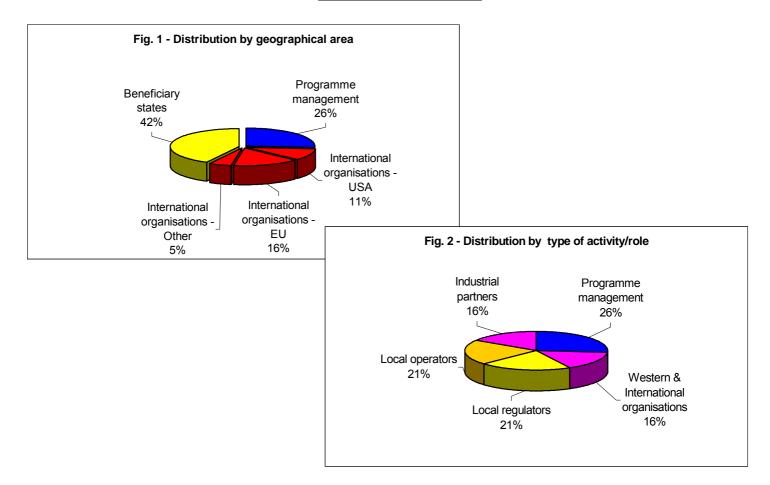
The choice of persons to be interviewed was made on site, according to the person's own involvement in the meetings, and in order to get a balanced and comprehensive panel of opinions (in terms of regions, and of activity/role). This resulted in interviews with the following persons:

Name	Country	Organisation	Title
1 Kyle Olsen		FAA	Manager Continued Operational Safety
2 Bryan Eanor	Thailand	Orient Thai Airlines	Director Flight Operations
3 Reuben Sternberg	Philippines	Philippine Airlines	VP Environment & Safety Department
4 Henry Deed		Boeing	Manager International Safety Programs
5 Eugene Antoni	Singapore	Singapore Airlines	Flight operations safety manager
6 Vutichai Singhamany	Thailand	DCA	Flight standards bureau
7 Tahir Saddiqui	Pakistan	CAA Pakistan	Flight standards / Flight inspector
8 Fareed Ali Shah		ICAO	COSCAP-SA co-ordinator
9 Gerard Guyot		Airbus	Consultant - Product Integrity Division
10 Larry Meacham		ICAO	Asia Pacific office
11 Len Cormier		ICAO	COSCAP-NA co-ordinator
12 Ron Allendorfer		ICAO	COSCAP-SEA co-ordinator
13 Choi Chul Young	ROK	CASA	Assistant Director & Flight standards division
14 Neil Jonasson		IATA	Safety Operations & Infrastructure office Asia Pacific
15 Chong Tae Bae	ROK	Korean Air	Flight safety fleet manager
16 PH de St Aulaire		JAA	JSSI co-ordinator
17 Michel Beland		ICAO	Technical officer operations (Montreal)
18 PH Depigny		Airbus	VP Customer service - Airbus China
19 Ma Tao	China	CAAC	Deputy Chairman

This represents a total of 19 interviews, distributed as follows:

Distribution by region:		Distribution by activity/role:	
Programme management (Canada, Thailand, SA, NA, and SEA regions)	, 5 persons	Programme management	5 persons
International organisations - USA	2 persons	Western & International organisations (JAA, FAA, IATA)	3 persons
International organisations - EU	3 persons	Local regulators	4 persons
International organisations - Other	1 person	Local operators	4 persons
Beneficiary states	8 persons	Industrial partners	3 persons

Figures: Panel of opinions



3 <u>RESULTS AND FINDINGS</u>

The following is the result of the evaluation, applied to the 3 COSCAPs, in terms of Effectiveness, Efficiency, Impact, Sustainability, and Relevance.

3.1 Effectiveness

Results achieved, compared to specific objectives

Initially composed of 2 objectives, the **COSCAP South Asia project** was subjected to 3 amendments. As a result, the project at its final completion stage included 3 objectives. Their status as deducted from the terminal report is:

Objective 1: Establishment of a regional capability to conduct flight operations and airworthiness certification	Achieved
Objective 2: Assist participant states in developing their air legislation and regulations and to improve their independent oversight capabilities and their ability to fully participate in the regional cooperative organisation	Modified by amendments. Diminished objective achieved
Objective 3 (added by amendment 1): Assist participating states in meeting their obligations in regard to the certification of aerodromes	Achieved. Further assistance still needed

As a whole, the effectiveness on this project is rated from excellent to good, in sense that all objectives were achieved, but on a modified basis (though agreed), and limited effects on objective 3.

For the **COSCAP South East Asia project**, the status of completion deducted from the Terminal report is:

Objective 1: Establish a dedicated forum to facilitate a continuing dialogue on safety related matters among Member Administrations, promote regional solutions to common problems, and to provide a vehicle for the harmonisation of regulations, policies, and procedures related to safety oversight	The terminal report indicates: "Achieved to a large extent"
Objective 2: Establish a coordinated, cost-effective approach to all forms of technical assistance related to flight safety by minimising duplication of effort and sharing resources to the maximum extent possible	Partially achieved
Objective 3: Using both project personnel and personnel seconded from Member Administrations on a temporary basis, establish a systematic interim programme of operator inspections and follow-up actions, on behalf of those Member Administrations which currently lack the capability to do so independently	Modified. Modified objective partially achieved
Objective 4: Using project personnel and personnel seconded from Member Administrations on a temporary basis, increase the resources of those Member Administrations which currently fulfil their oversight responsibilities without outside assistance, on an ad-hoc basis during periods of high demand or when special expertise is required to address a unique circumstance	The terminal report indicates: "Achieved to a limited extent"

Objective 5: Enhance the knowledge and skills of the professional staff	The terminal report
employed by the safety oversight organisations of the Member Administrations	indicates:
through a variety of formal training courses and on-the-job training which will	"Achieved to a large
have been conducted by project personnel and through provision of training	extent"
courses by donor organisations	

As a whole, the effectiveness on this project is rated as satisfactory, in sense that 2 of the 5 objectives are perfectly achieved, but the 3 others led to partial results only.

For the **COSCAP North Asia project**, still ongoing, the following information is available from the Interim Report:

Objective 1: Ensuring that safety oversight capabilities of Member Administrations meet international requirements and that all deficiencies identified by the ICAO Universal Safety Oversight (USOAP) Audit Reports have been fully corrected	USOAP audits performed. Additional audits planned. For some states, assistance provided by the project
Objective 2: Establishing a dedicated forum for coordination and cooperation among the Civil Aviation Administrations of Member States, with the aim of harmonisation of regulations, policies and procedures related to safety oversight, improving safety standards, and applying accident prevention measures	2 meetings held. Priorities discussed with Steering Committee. Draft regulation forwarded by the project.
Objective 3: Establishment of a systematic programme for inspection of air operators and maintenance organisations in Member States whose Civil Aviation Administrations currently lack the capability to do so independently	Varying needs from member states. Formal training policy and further assistance to states planned.
Objective 4: Enhancing qualification of safety oversight inspectors and technical personnel in North Asian Member States for undertaking surveillance, inspection, testing, certification and regulation of flight operations, airworthiness and personnel licensing through recruitment and training	State specific training conducted. Additional training planned.
Objective 5: Establishment of aerodrome certification capability and related management system in Member States	Expertise provided. Additional training requirements identified.

On this project, the effectiveness is rated from excellent to good, as all objectives show actions in progress. However, the information provided in the report refers to criteria attached to day-to-day management of the outputs. For reporting purpose, pre-agreed objective verifiable indicators should be recommended (e.g.: end of scheduled activity, delivery of outputs, results of training evaluation, milestones, remarkable events).

Combining these results, all 3 projects appear to have an efficiency above average, qualified as <u>Good</u>. One of the major difficulties in achieving this result is that each region includes countries with very different development levels, which confirms the need for COSCAP's regional dimension.

This efficiency rating is generally confirmed by the opinions expressed during the interviews (questions 5, 6, 10, 15, 19, 24, 26), where people express their confidence in the progress achieved, and usually consider that COSCAP "has already led to visible results".

3.2 Efficiency

Timely achievement of planned results & value-for-money rating

3.2.1 Timely achievement

Derived from the Terminal Reports, the time performance criteria are:

- COSCAP South Asia project:
- Objective 1 On time
- Objective 2 On time
- Objective 3 On time (but continuing/ follow-up? action still needed)

COSCAP South East Asia project:

- Objective 1	On time
- Objective 2	Partially achieved
- Objective 3	Partially achieved
- Objective 4	Partially achieved
- Objective 5	On time

COSCAP North Asia project:

- All Objectives In progress. The general impression is favourable, but there is still insufficient objective scheduling information in the interim report for a detailed assessment of the progress. Nevertheless, sufficient information on each activity is transmitted to the donors as well as to all participants, on a day to day basis(confirmed in interviews, questions 5 & 26).

As a whole, the time performance can be considered as satisfactory, in spite of lower performance on objectives 2 to 4 on the South East Asia project. This area may require a higher level of effort, due to the number of countries involved, with the highest range of diversity in the level of development.

3.2.2 Cost performance

The present evaluation relies only on the interviews and discussions with ICAO, as no financial audit is included as part of this mission. However, concerning the contribution from the EU, no extra cost was reported, compared to the initial budget.

For efficiency in terms of cost, there are several favourable indications:

- The programme benefits from a large amount of contributions in kind: free training sessions, conferences, facilities, air tickets. This allows to undertake a certain volume of activities, while keeping the expenses as low as possible.
- In some cases, the regional dimension already allowed to solve training or assistance problems at the regional level, rather than Country level.

There are also several unfavourable factors:

- Particularly for actions at Country level, a risk of duplication may exist with the other related projects in the area (cf. section 1.3 above). This risk was not identified for actions as "creation of a regional forum", but may have to be taken into account for training / technical assistance actions, or for actions in other areas of the world.
- Although the EU is the largest contributor in cash, little communication is made about its contribution (some participants were not even informed of it), and European organisations are insufficiently active /

represented in the regional meetings. Some kind of incitement would be desirable for encouraging European organisations to provide better attendance and more presentations in the work sessions.

3.2.3 Resulting efficiency rating

Unless more detailed information resulting from a separate financial audit demonstrate the contrary, the efficiency can be evaluated as follows:

- For timely achievement of planned results, the performance is considered as **satisfactory**. Further plans must include a certain level of flexibility, in order to take into account the fact that some countries progress slower than others.
- The cost performance also seems **satisfactory**, due to more favourable factors than unfavourable. However, attention must be given to avoid duplication when defining objectives / outputs for country level actions. Attention must be given also to assure a better representation of European bodies in the meetings (JAA, EASA, Airbus & suppliers, ...).

3.3 Impact and criticality

Contribution to improvement of air safety, and consequences in case of non-intervention

The impact and criticality assessment result from the interviews, and more specifically through questions 2, 3, 13, 22, 29, 30.

Concerning the contribution of COSCAP to the overall objective of Air Safety:

- The programme objectives are considered adequate for the 3 projects, in sense that they are "achievable, and very result oriented". They already led to visible results, such as measures already implemented by the operators (Ex.: deployment of FOQA Flight Operations Quality Assurance at Korean Air). During the interviews, the IATA representative (Singapore office) declared that the rate of incidents decreased in Asia. Nevertheless, no figures were provided to support this trend.
- Training was provided, building up an acceptable core of specialists and trainers (over 3000 persons trained in the South Asia region).
- The Regional Aviation Safety Teams contribute to build up a regional safety forum. The regularity of attendance to the RAST meetings, and active participation of the attendees, show a high level of involvement of the Beneficiary States. These meetings proved to be quite helpful to open discussion bridges between members of countries, which would have no dialogue at the political level.

Concerning the specific aspects of the EU contribution to COSCAP:

- For the Beneficiary States, the level of understanding of the EU contribution is often low. However, the local administrations consider this contribution as a factor of credibility for the programme management, in sense that is shows a European involvement not only at industrial level, but also at the highest administrative level. Some of the local operators also expressed their interest on more practical aspects, such as:
 - a) Credibility brought by the fact that European bodies have "experience in managing regional matters with different countries / languages / cultures" (useful for the RAST development)
 - b) Credibility brought by the quality of the European air safety system compared to the North American, which (according to one captain) provides "better training effort, aeroplanes 1 step above in general, and better working environment and conditions".
- For the European industrial partner, balancing the presence of the competitor's state is an absolute necessity, for a question of image and potential markets. Furthermore, the European contribution allows

an active presence at the Steering Committee meetings, for monitoring and controlling the programme objectives and actions.

- The programme management at ICAO also declares his attachment to an international image, which gives a better credibility and easier involvement of the Beneficiary States.
- More generally, all questioned Western parties concur in saying that the EU contribution provides larger means for achieving the common goal of air safety, while bringing international credibility. One FAA member declared: "Lot of times, you are faced to people prejudiced against the USA. The presence of the EU brings some balance, in sense that they can follow either way, but always western. Without the EU participation, we would not have achieved so much presently".

3.4 Sustainability

Autonomy and durability over time (Interviews, questions 4, 9, 14, 17, 21, 25, 27)

The minutes of the regional meetings, and attendance list, show a regular attendance to the regional meetings, and good level of participation. This indicates a good involvement of the participant states. Almost all the participant states were present at the meetings in Kunming and Bangkok, an no country was kept to a minor role. All participated in the decisions, in a cooperative management way.

Their possibilities of financial contribution varies from one country to the other, but on this point also the participant states prove their involvement. In North Asia, for example, Korea provided its 4 years contribution in the first 2 years, and China provided 3 years in the same period. In South East Asia, due to the number of countries, the process was slower, but ICAO reported that all countries have now paid their contribution.

In the South Asia region, which is ahead in terms of years of COSCAP experience, the project coordination was taken over by a CTA from the region, replacing the former Western CTA. Contacts are still maintained with the former CTA, but the region shows a good level of autonomy for continuing the programme with large use of regional resources. The same approach is considered for the 2 other regions, but with large differences in the timing for transition, according to the countries different capabilities.

Globally, the sustainability of the programme can be qualified as follows:

- Involvement: All regions & countries show a high level of involvement, likely to be sustainable in time.
- Short term autonomy: progress is visible, particularly in South Asia, and some North Asia members. But time for reaching autonomy will be very variable from a country to another, and particular effort is required for the weakest states.
- Long term sustainability appears as a probably achievable goal, but still requiring time (at least 2 to 5 years). Furthermore, the level of autonomy may not be 100 %. Several western interviewees consider that they should continue "keeping an eye" on the regional works, and that the international dimension of the RAST should be maintained.

3.5 Relevance

Conformity to overall objectives and strategy (Interviews, questions 2, 11, 16)

The programme objectives, and particularly those related to the regional safety forum, and to establishment of a regional core of trained people, allow improvement of air safety:

- Safety of the local operators, allowing safer use of international air companies from the region (in-coming and out-going flights)

- Safer regional air space, allowing safer flights in the region by European / Western airlines (in-coming flights)

The promotion of European standards is not included as such in the objectives, which are presented as international / universal safety matters. However, the presence and participation of European bodies practically result in promoting a European point of view, taken into account for the regional decisions.

3.6 Summary of results

Assessment of the resources used / results / value-for-money rating, (i.e. Efficiency):

- For efficiency in time used for the results achieved, the performance is satisfactory.
- For efficiency in cost, the result is also satisfactory (subject to possible findings from a separate financial audit), but requires vigilance or can be improved by:
 - a) Closely monitor in Steering Committee the definition or amendments of objectives, to avoid duplication with other related projects
 - b) For future or extended projects, facilitate programme monitoring by introducing milestones, so that intermediate report(s) refer to predefined objective verifiable indicators.
 - c) Incite European bodies to assure more presence and participation in the meetings and presentations.

Identification of the results achieved, compared to specific objectives, and statement in terms of added value, criticality (consequences of non-intervention), and sustainability:

- The effectiveness in achieving the planned objectives is Good. The results are obtained, with good participation and involvement of the member states.
- In terms of added value, the quality of the programme relies on its achievable and practical aspects, and cooperative management method.
- From the opinions expressed in interviews, the EU contribution gives more means and credibility to the programme. Without it, achievements would be lower and slower, and the programme management would probably loose most of its international aspect, as well as its balance of the influences regarding standards, solutions, and industrial interests.
- Concerning sustainability, encouraging indications result from the countries involvement and progress. However, it seems that 100 % autonomy is not probable nor desirable. A high level of autonomy can be reached, but still requires time.

Identification of COSCAP contribution to achievement of the programme global objectives and improvement of air safety,

- Due to its practical aspect, and regional adhesion, the impact of COSCAP ranks from Good to Excellent.

Assessment of whether achievements are in line with EU objectives and strategies, and hereunder whether the EU assistance has contributed to the promotion of European standards

- The COSCAP achievements clearly participate in improving the Air Safety overall objective.
- Promotion of European standards and point of view is also present, but can be largely improved by getting more presence and involvement of European bodies.

4. <u>CONCLUSIONS AND FURTHER RECOMMENDATIONS</u>

As a first general statement, COSCAP can be qualified as a very good and successful programme, considering that:

- Visible results are achieved, compared to practical realistic objectives. These objectives contribute to improve the safety of the local airlines in their international operations, as well as all other airlines in their operations to and over Asia.
- The participating states show a high level of involvement, and participate actively in the process of decision. This involvement is visible not only in the working sessions, but also confirmed in the financial contribution (in spite of some existing difficulties for certain countries).
- The programme coordination uses and stimulates this involvement by a very cooperative management, implying and/or consulting each of the participant states.
- There is visible progress in results, as well as in autonomy, with the perspective of long term sustainability, although time is still needed, and a 100 % autonomy is not considered as probable nor perhaps desirable.

In this way, participating in the COSCAP programme is participating in a useful and successful programme. The European contribution allows augmented means for actions, increases the programme credibility and volume of achievements, while allowing a constant presence at the Steering Committee for monitoring and controlling the programme. This presence is essential to guarantee the international aspect of the programme, and a fair balance of international influences and interests.

In spite of these positive aspects, several recommendations or improvement can be included in the short term:

- For a better image and efficiency, some kind of incitement is desirable for encouraging European organisations to provide better attendance and more presentations in the work sessions.
- Although the programme management is rather satisfactory, a certain level of vigilance is recommended in definition of the programme objectives, and possible further amendments. This requires close monitoring and participation in all Steering Committee meetings.
- For monitoring and reporting purpose, more formal progress indicators are recommended, such as measurable outputs and milestones, so that intermediate and final report(s) refer to predefined objective verifiable indicators.

And finally, for possible future extensions, lessons can be taken from the 3 COSCAP in Asia. On these projects, the regions have been quite responsive, and the project coordination cooperative and satisfactory. The same approach may be considered for different areas of the world, but perhaps with more difficulty for getting a good involvement in some areas, which will confirm then the need for close and strict monitoring.

ANNEXES

ANNEX 1 - METHODOLOGY

The approach and evaluation concept basically consists in:

- 1. Review of the existing administrative and technical documentation
- 2. Mission travel to Thailand and China, to meet ICAO's COSCAP leaders, aviation industry, and beneficiary organisations (local Civil Aviation Authorities, Airlines, ...).
- 3. Analysis of the so collected data for conclusions and findings.
- *1 Review of the existing documentation*

There is a considerable volume of documentation presently available.

After first reading, the following documents were identified as of major interest for the evaluation:

- Document "Communication from the Commission A European Community contribution to World Aviation Safety Improvement"
- Grant agreements, between the EU and ICAO, dated 29.12.2001 for the South and South-East Asia COSCAPs, and 10.12.2002 for the North Asia COSCAP.
- Final reports for the South and South-East Asia COSCAP (dated Aug-2003 and Feb-2004)
- Interim report for the North Asia COSCAP, dated Jan-2004
- Minutes/reports on the Steering Committees meetings
- Agendas, lists of participants, minutes and related organisation correspondence for the regional RAST meetings

Particularly:

- The "Communication" document provides a presentation of the EU strategy related to international air transport safety, and involvement in the programme
- the Grant Agreements provide the description of the start situation, in terms of immediate objectives, budgets, and implementation schedule
- the final/interim reports detail the results achieved in terms of immediate objectives, output, activities, as well as the existing deviations from the start agreement.

More generally, to facilitate detailed processing of the documentation, the Consultant will list all the documents in an organised documentation scheme. This will facilitate further "navigation" through the documents, in providing a comprehensive view of a global documentation plan.

The documents will then be reviewed in more detail, giving priority to the final / intermediate reports, to result indicators, and to information showing links and progression between the successive regional RAST meetings.

2 Mission travel to Thailand and China

The purpose of this mission is to take opportunity of the presence of a significant number of COSCAP actors in Kunming & Bangkok, while they attend the 2nd NARAST and combined SA/SEARAST meetings.

This will provide an opportunity for the Consultant to meet

- ICAO's representatives and project co-ordinators
- General Directors of member administrations
- Associate members representatives
- Regional Civil Aviation Authorities and officials
- Industry Partners and users (Constructors, & Airlines)

Due to the tight schedule of the RAST meetings, no pre-arranged meeting was organised. The contacts will be taken on site, in view of getting a complete panel of opinions.

The interviews will be conducted on an individual meeting basis, according to a pre-defined questionnaire. They will include a first part as a free discussion, followed by a series of more precise questions. However, the list of questions remains open and flexible, to allow adaptations by the Consultant according to the first results and local conditions. The proposed support for these interviews, with its list of questions, is given in **Annex 2 – Questionnaire for Interviews**.

The mission plan is defined as:

-	12-13/4:	Flight to Bangkok
-	13/4 a.m.:	Initial meeting with ICAO regional office in Bangkok
-	13/4 p.m.:	Flight from Bangkok to Kunming
-	14-16/4:	Participation in Steering Committee Meeting in Kunming
-	17-22/4:	Discussion and fact-finding in Bangkok
		Participation in Steering Committee meetings 19-22/4
-	23/4:	Return flight

3 Analysis for conclusions and findings

For the present evaluation, the Consultant will qualify the following criteria on a scale of Excellent, Good, Satisfactory, Poor, Unacceptable:

- Assessment of the resources used and results, and value-for-money rating,
- Identification of the results achieved, compared to specific objectives, and statement in terms of added value, criticality (consequences of non-intervention), and sustainability,
- For each project, identification of its contribution to achievement of the programme global objectives and improvement of air safety,
- Assessment of whether achievements are in line with EU objectives and strategies, and hereunder whether the EU assistance has contributed to the promotion of European standards,

In the Conclusions & Findings, special attention will be given to the lessons learnt and further recommendations for improvement, if any.

4 Data sources and analysis

The evaluation criteria, as listed in the previous paragraph, are characteristic of Efficiency, Effectiveness, Impact Sustainability, and Relevance.

- *For assessment of the resources used / results / value-for-money rating, (i.e. Efficiency):* The information required can be deducted from the reports, where the resources used and results achieved are clearly indicated

- For identification of the results achieved, compared to specific objectives, and statement in terms of added value, criticality (consequences of non-intervention), and sustainability:
 The reports clearly indicate the results achieved (i.e. Effectiveness).
 They also provide some indication on sustainability. However, due to the importance and difficult apprehension of this point, cross-checking through interviews is considered.
 The added value and criticality aspects (i.e. Impact) will be obtained through the interviews.
- *For each project, identification of its contribution to achievement of the programme global objectives and improvement of air safety,* Also related to Impact, this type of identification will also be obtained through the interviews
- Assessment of whether achievements are in line with EU objectives and strategies, and hereunder whether the EU assistance has contributed to the promotion of European standards Related to Relevance aspects, this point is mentioned in the reports. However, due to its importance and difficult apprehension, cross-checking through interviews is considered.

	Relates to	Deduct	ed from
		Reports	Interviews
Resources used and results	EFFICIENCY	Х	
Value-for-money rating,			
Results achieved, compared to specific objectives	EFFECTIVENESS	Х	
Statement in terms of added value	IMPACT		Х
Criticality (consequences of non-intervention)	IMPACT		Х
Sustainability	SUSTAINABILITY	Х	Х
Contribution to achievement of the programme global	IMPACT	X	Х
objectives			
Improvement of air safety			Х
Achievements in line with EU objectives/strategies	RELEVANCE	Х	Х

Table 1 - Summary of Data sources

Ex Post and Mid Term Evaluation COSCAP Programme in Asia

ANNEX 2 - Questionnaire

Questionnaire for interviews

Date:	Location:
Person met:	
Country:	
Organisation:	
Title / role in the programme:	

1^{RST} PART: OPEN DISCUSSION (MAXI ½ HOUR)

General comment about the COSCAP programme, role of all parties involved, and EU contribution

Strengths

Weaknesses

Present situation, results, expectations

Personal statement in terms of vision of the future

Open discussion: General, roles, strengths, weaknesses, present, expectations, future ...

2ND PART: QUESTIONNAIRE

Objectives & actions

- 1. For how long have you been involved in the COSCAP initiative?
- 2. Do you consider that the programme objectives are adequate for your country / region needs?
- 3. Do you consider that they have already led to visible results?
- 4. How would you define your present priorities? What about their long term evolution?
- 5. Do you have sufficient information on the progress of on-going actions & achievements?
- 6. The objectives & actions are they defined clearly enough?
- 7. Are you satisfied with the present achievements? Suggestions for the future?
- 8. Do you have further expectations or suggestions?

Training & Technical Assistance

9. Is there a training plan clearly defined for the coming years?

10. At present date, what training actions were most useful?

11. Were they adequate for your country / region needs?

12. How would you define their quality? What indicators are available?

13. What would you say about the quantity of persons trained in your country / region?

14. What is the post-training stability of the trainees in their position?

15. At present date, were the technical assistance actions useful?

16. Were they adequate for your country / region needs?

17. For further steps, how would you define your priorities at country / region level?

18. Do you have expectations / suggestions for the future?

Phasing

19. Is the Phase 1 - Phase 2 transition clearly defined for your country / region?

20. Do you consider that this transition was well prepared / organised?

21. Do you consider the timing planned for this transition as adequate?

RAST meetings

22. Can you formulate a general statement about the RAST meetings?

23. For how long has your organisation been involved in these actions?

24. Are there any difficulties for regular participation to these meetings?

- 25. Are you satisfied with their frequency?
- 26. Do you have sufficient information on the resulting actions?
- 27. Has your organisation further contacts at regional level between the meetings?
- 28. Do you have expectations / suggestions for the future?

EU contribution

29. How would you qualify the specific interest of EU contribution in the programme?

30. Do you consider that the objectives / actions should be differentiated?

31. Do you have expectations / suggestions for the future?

ANNEX 3 - Interview results: Guideline for analysis

	Questions & related criteria	Efficiency	Effectiveness	Impact	Criticality	Sustainability	Relevance
	Objectives & actions						
1	For how long have you been involved in the COSCAP initiative ?						
	Do you consider that the programme objectives are adequate for your country / region needs ?			Х			X
	Do you consider that they have already led to visible results ?			Х			
	How would you define your present priorities ? What about their long term evolution ?	Х				Х	
	Do you have sufficient information on the progress of on-going actions and achievements?		Х				
	The objectives & actions are they defined clearly enough?		Х				
	Are you satisfied with the present achievements? Suggestions for the future?	Х					
8	Do you have further expectations or suggestions?						
	Training & Technical Assistance						
	Is there a training plan clearly defined for the coming years?					Х	
	At present date, were the training actions useful?		Х				
11	Were they adequate for your country / region needs?						Х
	How would you define their quality? What indicators are available?	Х					
	What would you say about the quantity of persons trained in your country / region?			Х			
	What is the post-training stability of the trainees in their position?					Х	
	At present date, were the technical assistance actions useful?		Х				
	Were they adequate for your country / region needs?						Х
	For further steps, how would you define your priorities at country / region level?					Х	
18	Do you have expectations / suggestions for the future?						
	Phasing						
19	Is the Phase 1 - Phase 2 transition clearly defined for your country / region?		Х				
	Do you consider that this transition was well prepared / organised?	Х					
	Do you consider the timing planned for this transition as adequate?					X	
	RAST meetings		1	1		1	
	Can you formulate a general statement about the RAST meetings?			Х		1	
	For how long has your organisation been involved in these actions?	Х		1		1	
	Are there any difficulties for regular participation to these meetings?		Х				
25	Are you satisfied with their frequency?					Х	
	Do you have sufficient information on the resulting actions?		Х				
0 -	Has your organisation further contacts at regional level between the meetings?					Х	
28	Do you have expectations / suggestions for the future?						
	EU contribution	1	1		1	1	
29	How would you qualify the specific interest of EU contribution in the programme?				X		
30	Do you consider that the objectives / actions should be differentiated?	I	1	1	Х	1	
	Do you have expectations / suggestions for the future?						