

Minutes of The Taskforce-1 & 2 Meeting for “The Project for Capacity Development in Air Traffic Services” in Tajikistan

Dushanbe, 9 October 2017

The 8th TF-1 & the 7th TF-2 Meeting for “The Project for Capacity Development in Air Traffic Services” (hereinafter “the Project”) was held at 10:00-10:40 on 9 October 2017 in the Project office.

Mr. Watanabe (Chief Advisor), Mr. Shambiev (FDDG), Mr. Sheraliev (Project Manager), Mr. Davlyatov (TF-1 leader), Mr. Mansuri (TF-1 sub-leader), Mr. Ulugbek (TF-2 sub-leader), Mr. Sakae (AD simulator instructor training expert) attended this meeting.

This meeting was the reporting opportunity of implemented TF-1 & TF-2 activities by Expert and coordinate next mission schedule by TF accordance with the Sub-activity list and AWP.

I. Activity of both side from 25th September to 9th October 2017

During this period, the expert and Taskforce 2 team led by Mr. Bakhtiyor Sheraliev had a series of discussions and exchanged information on possible technical assistance to the Contingency Plan and Safety Management System part of the Project for Capacity Development of TAN.

The expert and Taskforce 1 team led by Mr. Davlyatov had a series of discussions and exchanged information on possible technical assistance to the Training on Air Traffic Control Officer part of the Project for Capacity Development of TAN.

- (1) The JICA expert has worked on the schedule as Attachment-1, Main activity as follow:
 1. To attend PCM for considering the Monitoring Sheets.
 2. To observe ATC facilities such as Tower, Approach, ACC at Dushanbe.
 3. To report result on the observation of ATC facilities.
 4. To review the progress on WG activities for operation manual.
 5. To review SMS manual after improved in TAN.
 6. To hold the seminar on Reporting System in Tajikistan.
 7. To conduct W/S on hazard identification in TAN.
 8. To conduct W/S on Runway Safety Program.
- (2) PCM/6 (6th Project coordination meeting) at 10:00-12:00 on 25th September in PM room for Monitoring on 1H 2017
 1. The agendas are follows.
 - 1) Result of joint monitoring for 1st half of 2017 by PC
 - 2) Revise the Sub-Activity Plan (AWP-2017) by TF Experts
 - 3) Explanation of TF-1 and 2 activities by TF Experts
 - 4) Administrative issues by PC
 2. Discussion and conclusion
 - 1) PC explained outline of Monitoring result on 1H 2017 such as Training abroad each TF total 31.
 - 2) Expert asked PC how to think about that monitoring sheet-1 is not mentioned the percentage of achievement in overall goal and project purpose. PC said that JICA HQ is considering it now, so

they do not decide how to calculate on that.

3) Expert explained the reasons for adding the seminar on the Reporting System to the Sub-activities on 2-2-3 and the detailed activities on the RSP on 2-2-4. At this meeting, we changed the way RSP's third activity was to create a hazard map by calling each airport staff to Dushanbe. The expert will supervise another three airport activities at Dushanbe.

(3) Observation of ATC facilities (Dushanbe Tower, Radar, Approach, ACC)

1. Expert visited to Dushanbe Tower, Radar, Approach and ACC to help review of the operation manual on 27th September 2017.
2. Expert found some issues or problems on ATC operation as follows;

<Tower>

- Tower controller give information of runway condition to the Radar controller.
- Radar controller issues a landing clearance to the aircraft.
- Light-gun is not installed in the tower.
- Follow-me-car operation is increasing controller's workload.
- The distance between the A/C and Follow-me-car is not enough.
- The taxiing speed of the follow-me-car is very slow.

<Radar, Approach, ACC>

- There is no VOR/DME only NDB in Tajikistan.
- Airways doesn't connect to Chinese area.
- They don't have any experience for using Speed control procedure.
- ILS runway 27 is still not use.
- They can see "Flight Radar 24" anytime they want.

3. Expert recommended as follows;

<Tower>

- The procedure of landing clearance issuance should be changed from Radar controller to Tower controller.
- Because Tower controller knows runway condition in real time.
- The operation manual, AIP and ATC structure (Tower and Radar) should be changed to improve safety operation.
- The current operation of follow-me-car should be stopped to decrease controller's workload.
- There is a possibility that the A/C and the car come into contact with each other because the distance between the A/C and the car is close and the speed of the car is slow.
- TAN requests the airport authority to stop leading short distance and to improve this operation.

<Radar, Approach, ACC>

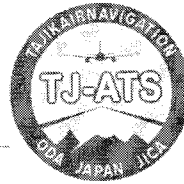
- TAN should be introduced a DME.
- TAN should consider a new route with China. If TAN make the new routes, the number of over flight in Tajikistan increases, and the navigation fee also increases. There is a possibility that the new route will bring new benefits to TAN.

4. Remarks

The expert would like to continue to observe ATC operation. PM will arrange radar data with voice because it will be needed pick up the traffic in mid night for English speaking airline. That is very reasonable plan for the expert.

(4) Review of the progress on WG activities for operation manual

1. Expert reported the observation of ATC facilities on Tuesday 26 2017.
2. PM pointed out that Since the follow-me-car is supposed to be used at night or poor visibility, it is necessary to return to the original operation procedure. But the airport authority doesn't have Low Visibility Procedure. And the procedure of issuing landing clearance required not only the manual change, but also AIP and organization change (tower, radar) are necessary.



3. Tower WG reported that one third of the review has been completed.
 4. Approach WG reported that three fifths of review have been completed,
 5. ACC WG reported that almost of the review has been completed.
 6. Each WG will continue to review the operation manual and report the progress to expert and PM via Head of ATS.
 7. WGs should be reported at reporting session in November 2017.
 8. Expert will improve English translation of the operation manual for reference.
 9. Expert will have reporting session of TF-1 and TF-2 activities on Monday 9 October 2017 at TF-1 and TF-2 meeting.
- (5) Review SMS manual after improved in TAN.
1. TF-2 requested Eurocontrol Generic Safety Management Manual (EGSMM) to Eurocontrol for reference own SMS manual.
 2. TF-2 improved the SMS manual according to Finding & Conclusion of SMM made by the expert.
 3. Expert and PM discussed the progress on SMS manual to improve it.
Progress on SMS manual as follows:
 - 1) Safety policy was deleted from the manual, it will be attached the manual and added some basic concept information input.
 - 2) Organization chart was founded it will be input the manual.
 - 3) Flow chart of reporting system was founded, it will be input the manual
 - 4) SPI will be attached the manual.
 - 5) The clearly condition of Safety-related investigation and illustration will be described in the manual.
 - 6) The staff of TAN in charge of SMS will have a training course, after that he will make Training schedule and curriculum in November or December 2017.
 - 7) Quality and Safety Committee was already approved by regulation of committee.
 - 8) TF-2 is coding ID numbering for SMS documents.
 - 9) TF-2 coordinated with Tajik AIR, Somon AIR and NSA for ERP but it is not finalized yet.
 - 10) TF-2 will request an order of SMS implementation and new version of Safety Policy to DG.
- (6) W/S on hazard identification in TAN
1. Expert lectured the overview of Hazard Identification and risk management.
 2. Expert provided information on the Hazard Map of two airports in Japan HZ and analysis results of voluntary reports, and considered it.
 3. PM commented that the Hazard Map is not related to us except for the runway. We need the Hazard map for ATC.
 4. Expert explained that ATC has been made the Hazard map of ATC for controllers at the airport, but it is not opened to the public.
 5. TF - 2 recognized the importance of hazard map and we need more information to continue study.
 6. Expert will look for that map of ATC in Japan.
- (7) Seminar on Reporting System in Tajikistan
1. Expert coordinated with Somon Air to present their Reporting System at the Seminar.
 2. TAN sent Invitation Letter to CAA, Airport Authority, Somon AIR, Tajik AIR.
 3. The expert and TAN prepared the presentation for the Seminar. (<http://www.tj-ats.com>)
 4. Thank Mr. Bakhtiyor for Interpretation from English to Russian.
 5. The seminar was done successfully to make Reporting System deepen stakeholder's understanding of each other.
 6. TAN and airlines' safety manager agreed to make a community to share the safety information.
- (8) W/S on Runway Safety Program (RSP)
1. Expert reported a case in Japan. It is only in Narita airport that we have just started in Japan, and

we only have Runway Safety Team (RST). However, there is not implemented it as an RSP in Japan, but the problem has already been addressed.

2. Mr. Ulugbek requested the example of Hazard Map. Expert will prepare some Hazard Map in Japan.

After that, we considered the implementation plan of RSP in TAN.

3. Expert suggested that we will make Hazard Map manual first according to SMS manual, then go step by step.

4. TF-2 completed making the draft of implementation schedule of RSP in TAN.

5. TF-2 decided to continue studying the preparation of RST handbook/manual.

II. Next dispatch of the expert

(1) Experts proposed tentatively that the next dispatch of expert will be as follow;


/From 11th November to 26th November: Mr. SAKAE(TF-1)

/From 20th November to 1st December: Mr. WATANABE (TF-1 & 2)

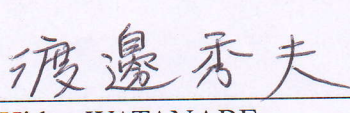
(2) TF-1&2 agreed the schedule of the next dispatch.

As a result of the activity, both sides confirmed the matters referred to in the documents attached hereto

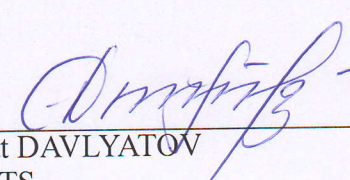
Dushanbe, Tajikistan
9 October 2017



Mr. Bakhtiyor SHERALIEV
Safety and Quality Manager
Project Manager
Leader of Task force 2
SUE "Tajikairnavigation"



Mr. Hideo WATANABE
Chief Advisor
JICA Expert team of the project
Japan International Cooperation Agency



Mr. Davlat DAVLYATOV
Head of ATS
Leader of Task force 1
SUE "Tajikairnavigation"

- Attachment-1: The schedule of the expert activity**
- Attachment-2: The activities report (2-1~2-13)**
- Attachment-3: Finding & Conclusion & progress of SMM**
- Attachment-4: Runway Safety Program Implementation Schedule**
- Attachment-5: The schedule of the next dispatch**

Attachment-1

TF-2 Activity Plan (25 Sep to 9 Oct 2017)Rev2

Date		AM	PM	Remarks
23 Sep	S			
24	S			Arriving Dushanbe
25	M	Project Coordination Meeting	TF2 Meeting	entering pass is required at 8:50
26	T	Observation of Tower, Approach, ACC for review of manual		
27	W	Report of monitoring results		
28	T	Checking the progress on WG Review of Operation Manual in TAN(TF-1 & WG Leaders)		
29	F	Checking the progress on WG Review of Operational Manual in TAN (TF-1 & WG Leaders)		
30	S			
1 Oct	S			
2	M	Review of SMS Manual in TAN (after Improvement in TAN)		
3	T	Seminar on Reporting System in TAN & VOICES in Japan		
4	W	W/S Hazard Identification in TAN		
5	T	W/S on Runway safety program (experience in Japan)		
6	F	W/S on Runway Safety Program (Implementation Plan in TAN)		
7	S			
8	S			
9		TF1& 2 Meeting / MM Signing	Report to JICA office	entering pass return
10				Departing Dushanbe

Attachment-4

Runway Safety Program Implementation Schedule (10052017)

Step 1				
#	Activities	Timeframe	Responsible Person/Organization	Status
1	W/S on RWY SP implementation Plan	5-6 Oct 2017	Watanabe/Bakhtiyor /Ulugbek	Done
Step 2				
#	Activities	Timeframe	Responsible Person/Organization	Status
1	Develop RST handbook in TAN	Jan 2018	Watanabe/Bakhtiyor /Ulugbek	According to plan
2	Coordination Meeting	Jan 2018	CAA/UTDD/Airline/TAN	According to plan
3	Make RWY Safety Team	Jan 2018	RWY Safety Team	According to plan
4	Make Hazard Map in UTDD	Apr 2018	RWY Safety Team/UTDL/UTDT/UTDK	According to plan
5	Seminar on completion of RST Handbook in TAN	August 2018	Watanabe/Bakhtiyor /Ulugbek	According to plan
6	Make Hazard Map in UTDT	Jun 2018	UTDT Team/SQM/Airline	According to plan
7	Make Hazard Map in UTDK	Jun 2018	UTDK Team /SQM/Airline	According to plan
8	Make Hazard Map in UTDL	Jun 2018	UTDL Team /SQM/Airline	According to plan
9	Review Hazard Map in 4 airports	Jun 2018	Watanabe/Bakhtiyor /Ulugbek	According to plan
Step 3				
#	Activities	Timeframe	Responsible Person/Organization	Status
1				
2				
3				
4				

SMS Manual analysis

Section	Finding	Conclusion	Progress
<u>Contents of manual</u>	(1) The contents items of the English version of the SMS manual were arranged according to the ICAO SMS Manual. (2) There is item related to SMS training, but no contents.		
<u>1. Document control</u>	(1) To describe approval and regulatory acceptance process	Already added QMS document standard 007 and 008.	
<u>2. SMS regulatory requirements</u>	(1) The requirement of regulations related to SMS is satisfied. (2) In the future, it is necessary to add or modify in accordance with the progress of the SMS implementation plan.	Agreed	
<u>3. Scope and integration the SMS</u>	(1) All criteria are satisfied		
<u>4. Safety Policy</u>	(1) There are descriptions of all	Deleted only the contents of safety	Safety policy was deleted from the

Attachment-3

	<p>items under the provisions of ICAO.</p> <p>(2) Describe regular review.</p>	<p>policy, input basic policy concept if needed. To check ICAO SMM and ANNEX19.</p>	<p>manual, it will be attached the manual. and instead of some basic concept input.</p>
<p><u>5. Safety objectives</u></p>	<p>(1) To describe the public relations activities of safety goals.</p> <p>(2) To take links with safety indicators.</p>	<p>To check the proposal and look for SPI on ICAO SMM and ANNEX19. We continue to consider whether it input a text of SMM or attachment.</p>	<p>Not yet</p>
<p><u>6. Safety accountabilities and key personnel</u></p>	<p>(1) To clarify the responsibility and accountability of the SMS system and establish.</p> <p>(2) To describe the organization chart, include Safety Committees and Action Groups.</p>	<p>To add the organization chart, if we can find or make the appropriate one.</p>	<p>Done.</p> <p>TF-2 made a draft of organization chart.</p>
<p><u>7. Safety reporting and remedial actions</u></p>	<p>(1) To use Illustration of the reporting system as easy to understand.</p> <p>(2) It is necessary to describe on periodic review.</p>	<p>To add flow chart of voluntary reporting system if necessary.</p>	<p>Flow chart of reporting system was founded, it will be input the manual.</p>
<p><u>8. Hazard Identification and</u></p>	<p>(1) To use Illustration of the flow</p>	<p>To add the organization chart, if we can</p>	<p>TF-2 made a draft of organization</p>

Attachment-3

<p><u>Risk assessment</u></p>	<p>chart from hazard identification to risk assessment as easy to understand. (2) To describe the tools (work sheet, forms, software, etc.) used for risk assessment.</p>	<p>find or make the appropriate one. To input an example of work sheet and forms using QMS.</p>	<p>chart. Adding work sheet is ongoing.</p>
<p><u>9. Safety Performance Monitoring and measurement</u></p>	<p>(1) To describe the safety performance monitoring and measurement component of the SMS. (2) To describe the organization's SMS safety performance indicators (SPIs).</p>	<p>To separate a document from SMM, and check ICAO SMM and ANNEX19</p>	<p>SPI will be attached the SMS manual.</p>
<p><u>10. Safety-related Investigation and remedial actions</u></p>	<p>(1) To describe the conditions clearly under which internal investigation is carried out. (2) To use Illustration of the investigation process as easy to understand.</p>	<p>It is sufficient in this description.</p>	<p>The clearly condition of Safety-related investigation and illustration will be described in the manual.</p>
<p><u>11. Safety training and communication</u></p>	<p>(1) To describe the implementation of SMS training for staff. (2) To describe the method of</p>	<p>To add Training schedule and curriculum program of main contents on SMS.</p>	<p>The staff of TAN in charge of SMS will have a training course, after that he will make Training schedule and curriculum in November or</p>

Attachment-3

	maintaining the training record, the training plan and the preparation of the curriculum.		December 2017.
<u>12. Continuous improvement and SMS audit</u>	(1) To use Illustration of the internal audit process as easy to understand.	Quality and Safety Committee will review safety assessment reports.	Quality and Safety Committee was already approved by regulation of committee.
<u>13. SMS records management</u>	(1) To describe record lists such as hazard reports, risk assessment reports, minutes of meeting, SPI charts, etc.	All documents have ID number, so link it to e-library in TAN.	TF-2 is coding ID numbering for SMS documents.
<u>14. Management of change</u>	(1) To use Illustration of the management change process as easy to understand.	To add the management change process, if we can find or make the appropriate one.	Ongoing
<u>15. Emergency/Contingency Response Plan</u>	(1) To describe processing procedure for media. (2) To describe emergency preparation and response training for victims. (3) To describe processing procedures of accident aircraft and damaged equipment in consultation with airline companies, airport	We will coordinate with Airport Emergency Plan in UTDD, Emergency Response Plan in SomonAir and TajikAir, Contingency Plan in TAN.	TF-2 coordinated with Tajik AIR, Somon AIR and NSA for ERP. We know what to do, but it is not finalized yet.

Attachment-3

	management companies, etc. (4) To describe the method for recording		
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Report on Activity**General:**

TF and Activities	Taskforce-2, ATC, Activity 2-2-2
Title	W/S on Hazard Identification in TAN
Terms	6 October 14:00-16:00 (0.5 days)
Type	Workshop
Expert	Hideo Watanabe

Lists of participants:

Name	Position			
Mr. Bakhtiyor	PM			
Mr. Ulugbek				
Mr. Watanabe				

Input from Experts and Output from Activity:

Input based on agenda at notification letter	Output	Follow-up
Expert shows several methods to analyze safety data and provide guidance on analysis.	Expert also conduct studies on how to handle them jointly and advises them to lead to the establishment of that system.	Third country training

List of Presentation Material and Handout (Available in web-side)

Hazard ID and Risk assessment.pdf
 The example of Hazard Map.pdf
 Risk Check Sheet in Japan.pdf

Record of discussion

Expert lectured the overview of Hazard Identification and risk management.
 Experts provided information on the Hazard Map of two airports in Japan HZ and analysis results of voluntary reports, and considered it.
 Mr. Bakhtiyor commented that the Hazard Map is not related to us except for the runway. We need the Hazard map for ATC.
 Expert explained that ATC has been made the Hazard map of ATC for controllers at the airport, but it is not opened to the public.

Conclusion and Recommendations

TF - 2 recognized the importance of hazard map and we need more information to continue study.
 Expert will look for that map of ATC in Japan.

Report on Activity**General:**

TF and Activities	Taskforce-2, ATC, Activity 2-2-2
Title	W/S on Runway Safety Program
Terms	5 October 14:00-16:00 (0.5day)
Type	Workshop
Expert	Hideo Watanabe

Lists of participants:

Name	Position			
Mr. Bakhtiyor	PM			
Mr. Ulugbek				
Mr. Watanabe				

Input from Experts and Output from Activity:

Input based on agenda at notification letter	Output	Follow-up
Expert shows a back ground of ensuring runway safety and its basic knowledge based on examples in Japan. Expert also present ICAO documents and EUROCONTROLS countermeasures,	Pick up necessary working for introducing runway safety program in TAN.	

List of Presentation Material and Handout (Available in web-side)

RSP implementation plan.pdf
The current status of the Runway Safety Program in Japan.pdf

Record of discussion

Expert reported a case in Japan. It is only in Narita airport that we have just started in Japan, and we only have RST. However, there is not implemented it as an RSP in Japan, but the problem has already been addressed.
Ulugbek requested the example of Hazard Map. Expert will prepare some Hazard Map in Japan.
After that, we considered the implementation plan of RSP in TAN.
Bakhtiyor commented that RST Handbook is government level work, so it is out of our business.
Expert suggested that we will make Hazard Map manual first according to SMS manual, then go step by step.
TF-2 completed making the implementation plan of RSP in TAN.

Conclusion and Recommendations

TF-2 decided to continue studying the preparation of RST handbook/manual.

Report on Activity**General:**

TF and Activities	Taskforce-2, SMS, Activity 2-2-2
Title	Seminar on Reporting System
Terms	3 October 2017, 09:00-12:00
Type	Seminar
Expert	Hideo Watanabe

Lists of participants:

Name	Position	Daily attendance	Training abroad	Certificate
Mirzoev A.S.	CAA MT RT			N/A
Usmon Samiyev Femi Olowoyeye	Somon AIR Somon AIR			
Lorents A. Mirwamsov D. Khorkashov D. Sulaymonov Kh. Avazov A. Khatamov A.	Tajik AIR Tajik AIR Tajik AIR Tajik AIR Tajik AIR Tajik AIR			
Karimov S.S.	IAD			
Khussinov B.	NSA			
Mansuri M. Muzaffarov A. Alimardanov R. Suleymanov A. Adilov N. Kurbanov S.	TAN TAN TAN TAN TAN TAN			
Sheraliev B. Toshmatov U. Kasirov A. Aliev S.	TAN TAN TAN TAN			
Orita T. Watanabe H.	JICA JICA			

Input from Experts and Output from Activity:

Input based on agenda at notification letter	Output	Follow-up
Expert shows the Voluntary reporting system (VOICES) in Japan to understand each other regarding the outline of the reporting system and difficulty of implementation for facilitating the introduction of a voluntary reporting system.	Deepen stakeholder's understanding of each other to facilitate the subsequent approval process.	

List of Presentation Material and Handout (Available in web-side)

RS TAN seminar.pdf Seminar on Reporting system in Tajikistan (VOICES).pdf Reporting System for JICA Ru.pdf
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Questions & Answers:

Question by participants	Answers
How many reports did you receive?	First month was nothing, after three months was 2~3 reports, then currently 50 reports more we have received. (Somon AIR)
Could you share of it to ATS side?	We have the mail address " safety@somonair.com ", you can send a report and get an information. (Somon AIR)
How to confirm the information from reporter?	The administrator has responsibility to coordinate with the reporter for protection of the reporter. (Mr. Watanabe)
Should NSA and CAA be implemented voluntary reporting system with 3 rd party? (Tajik AIR)	CAA even does not properly handle mandatory reporting. Voluntary reporting system should be managed by an independent third-party organization. Aviation Safety Foundation in Russia provides independent analysis of voluntary reports. Last year, they proposed to use them as third-party organization for Voluntary reporting system at Coordination Council of "Eurasia".

	(Mr. Bakhtiyor)
TAN has been studied the experience of Japan but not Russia. Russia is closer to Tajikistan regarding the rules. (Tajik AIR)	Russian' experience is almost the same as other post-Soviet Union countries. they have implemented SMS, but it is not working well. (Mr. Bakhtiyor)
How long does it take to implement SMS? We still don't have SSP.	It depends on organizational structure of the company. But we cannot wait until CAA approves or provides us with SSP. it takes years to implement SMS and the most important thing is just culture. (Mr. Bakhtiyor)

What participants have learned

They understand Reporting System on aviation in Tajikistan and Japan.

TAN and airlines' safety manager agreed to make a community to share the safety information.

Report on Activity**General:**

TF and Activities	Taskforce-2, ATC, Activity 2-2-2
Title	W/S on Developing SMS manual
Terms	2 October 2017 14:00-16:00 (0.5days)
Type	Workshop
Expert	Hideo Watanabe

Lists of participants:

Name	Position			
Mr. Bakhtiyor	PM			
Mr. Watanabe	Expert			

Input from Experts and Output from Activity:

Input based on agenda at notification letter	Output	Follow-up
Expert work in collaboration with counterpart to discuss improvement points and additional items for making it possible to improve the q u	Evaluating the completeness of the TAN side draft version analyzed. Developed plan of further activity to improve SMS manual	Approval process in TAN

List of Presentation Material and Handout (Available in web-side)

Finding & Conclusion, progress of SMM.pdf
PCYБП TAH v 18(SMS Manual).pdf

Record of discussion

TF-2 requested Eurocontrol Generic Safety Management Manual (EGSMM) to Eurocontrol for reference own SMS manual.
TF-2 improved the SMS manual according to Finding & Conclusion of SMM made by the expert.
The expert and PM discussed the progress on SMS manual to improve it.
Progress on SMS manual as follows;
Safety policy was deleted from the manual, it will be attached the manual and added some basic concept information input.
Organization chart was founded it will be input the manual.
Flow chart of reporting system was founded, it will be input the manual
SPI will be attached the manual.
The clearly condition of Safety-related investigation and illustration will be described in the manual.
The staff of TAN in charge of SMS will have a training course, after that he will make Training schedule and curriculum in November or December 2017.
Quality and Safety Committee was already approved by regulation of committee.
TF-2 is coding ID numbering for SMS documents.
TF-2 coordinated with Tajik AIR, Somon AIR and NSA for ERP but it is not finalized yet.

Conclusion and Recommendations

TF-2 will request an order of SMS implementation and new version of Safety Policy to DG.

Report on Activity**General:**

TF and Activities	Taskforce-1, ATC, Activity 1-4
Title	Review the progress on WG activities for operation manual
Terms	28 September 2017, 14:00-16:00
Type	Review
Expert	Hideo Watanabe

Lists of participants:

Name	Position
Mr. Bakhtiyor	Project Manager
Mr. Davlyatov	Head of ACC
Mr. Mirzoev Firuz	Tower WG leader
Mr. Payrav Najmidinovich	Approach WG leader

Input from Experts and Output from Activity:

Input based on agenda at notification letter	Output	Follow-up
Review the progress on WG activities for operation manual	TF-1 & review operation manual WG confirms the review situation at the current WG and decides the future activity.	WG reporting session in November 2017

List of Presentation Material and Handout (Available in web-side)

Observation on ATC facilities.pdf

Record of discussion

Expert reported about the observation of ATC facilities on Tuesday 26 2017.

PM pointed out that Since the follow-me-car is supposed to be used at night or poor visibility, it is necessary to return to the original operation method. But we don't have Low Visibility Procedure And the procedure of issuing landing clearance required not only the manual change, but also AIP and organization change are necessary.

Tower WG reported that one third of the review has been completed.

Approach WG reported that three fifths of review have been completed,

ACC WG reported that almost of the review has been completed.

Conclusion and Recommendation

Each WG will continue to review the operation manual and report the progress to expert and PM via Head of ACC.

WGs should be reported at reporting session in November 2017.

Expert will improve English translation of the operation manual for reference.

Expert will have reporting session of TF-1 activities on Monday 9 October 2017 at TF-1 meeting.

Report on Activity**General:**

TF and Activities	Taskforce-1, ATC, Activity 1-4
Title	Expert Reporting Session for Operation Manual Review
Terms	14-15 August 2017, 09:00-16:30
Type	Others
Expert	Hideo Watanabe

Lists of participants:

Name	Position	Daily attendance	Training abroad	Certificate
Mr. Mirzoev Firuz Mr. Payrav Najmidinovich Mr. Odil Adylov Mr. AbdurakhmonErgashev Mr. Akbarzdhon Tadzhibaev Mr. Abdulmutolib Nishonov Mr. Satybaldyev Sergey Mr. Shonazarov Shakhboz Mr. Sheraliev Bakhtiyor Mr. Orita Mr. Safo				N/A

Input from Experts and Output from Activity:

Input based on agenda at notification letter	Output	Follow-up
Operation Manual Review	To consider the Operation Manual in TAN by three WGs. Reflect them in Operation Manual in TAN if necessary.	Next W/S on Operation Manual Review

List of Presentation Material and Handout (Available in web-side)

Operation Manual Review.pdf

Record of discussion

- Mr. Shambiev agreed the finding of 4 differences from ICAO Doc. 4444, and he will request to change the rule of air in Tajikistan to CAA regarding on this because it is included our regulations. He also requested for the expert's support continuously.
- The expert promised that he is keeping in touch with Leader of WG by e-mail for a progress of reviewing Operation Manual. He will check the progress at next dispatch in September 2017.
- Some attendant request to consider their working shift especially night shift, what does the expert think?
- The expert said that it is the management issue, could you ask your management side?

Conclusion and Recommendations

- This session decided that 18 ATCO trained at Malaysia were divided to three WG such as Tower WG, Approach WG, ACC WG.
- Each WG selected the leader of WG such as Mirzoev Firuz (Tower), Payrav Najmidinovich (APP), Satybaldev Sergey (ACC).
- Three WG will consider the 4 differences from ICAO Doc. 4444 and other issues until November 2017.
- WG Leader will report the progress on reviewing of the operation manual to the expert by e-mail.
- The expert will support above all continuously.
- The expert will check the progress of the reviewing at next dispatch in September 2017.

Report on Activity

General:

TF and Activities	Taskforce-1, ATC, Activity 1-4
Title	Reporting session on observation of ATC Facility
Terms	27 September 2017, 09:00-16:30
Type	Observation
Expert	Hideo Watanabe

Lists of participants:

Name	Position
Mr. Bakhtiyor Mr.	Project Manager

Input from Experts and Output from Activity:

Input based on agenda at notification letter	Output	Follow-up
To report on observation of ATC Facility	To find an issue or a problem at ATC facilities such as Tower, Radar, Approach and ACC. To reflect them in reviewing Operation Manual in TAN if necessary.	

List of Presentation Material and Handout (Available in web-side)

Observation of ATC Facility.pdf

Finding

<Tower>

- Tower controller give information of runway condition to the Radar controller.
- Radar controller issues a landing clearance to the aircraft.
- Light-gun is not installed in the tower.
- Follow-me-car operation is increasing controller's workload.
- The distance between the A/C and Follow-me-car is not enough.
- The taxiing speed of the follow-me-car is very slow.

<Radar, Approach, ACC>

- There is no VOR/DME only NDB in Tajikistan.
- Airways doesn't connect to Chinese area.
- They don't have any experience for using Speed control procedure.
- ILS runway 27 is still not use.
- They can see "Flight Radar 24" anytime they want.

Recommendations

<Tower>

- Landing clearance procedure should be changed to improve safety.
- Tower controller has to issue landing clearance because he knows runway condition in real time.
- Follow-me-car operation should be stopped to decrease the controller's workload.
- There is a possibility that the A/C and the car come into contact with each other because the distance between the A/C and the car is close and the speed of the car is slow. TAN needs to stop or improve this operation.

<Radar, Approach, ACC>

- TAN should be introduced a DME.
- TAN should consider a new route with China. If TAN make the new routes, the number of over flight in Tajikistan increases, and the navigation fee also increases. There is a possibility that the new route will bring new benefits to TAN.

Conclusion

PM pointed out some words should be changed.

The expert would like to continue to observe ATC operation. PM will arrange radar data with voice because it will be needed pick up the traffic in mid night for English speaking airline. That is very reasonable plan for the expert.

Report on Activity**General:**

TF and Activities	Taskforce-2, ATC, Activity 2-2-2
Title	W/S on Developing SMS manual
Terms	31 July 2017, 09:00-16:30
Type	Workshop
Expert	Hideo Watanabe

Lists of participants:

Name	Position			
Mr. Bakhtiyor	PM			
Mr. Watanabe	Expert			

Input from Experts and Output from Activity:

Input based on agenda at notification letter	Output	Follow-up
Expert work in collaboration with counterpart to discuss improvement points and additional items for making it possible to improve the q u	Evaluating the completeness of the TAN side draft version analyzed. Developed plan of further activity to improve SMS manual	Approval process in TAN

List of Presentation Material and Handout (Available in web-side)

Finding & Conclusion of SMM.pdf
PCYБП TAH v 16(SMS Manual).pdf

Record of discussion

Expert proposed some amendment and addition for the draft of SMS manual based on the result of analysis.
Expert: Safety policy is too large volume, so it should be small and describe only basic policy concept.
PM: We should be checked ICAO SMM and ANNEX19.
Expert: Safety training and communication are not included SMS training program.
PM: We will add the SMS training program in SMS manual.

Conclusion and Recommendations

TF2 improved the draft of SMM in TAN.
Expert and PM will look for an organization chart and a flow charts regarding on SMS.
TAN will add the training program on SMS manual.
TF 2 will continue to study and improve SMS manual.

Report on Activity**General:**

TF and Activities	Taskforce-2, ATC, Activity 2-2-1
Title	Study on SMS Implementation
Terms	26 July 2017, 10:00-12:00
Type	Study
Expert	Hideo Watanabe

Lists of participants:

Name	Position	Daily attendance	Training abroad	Certificate
Mr. Bakhtiyor				N/A

Input from Experts and Output from Activity:

Input based on agenda at notification letter	Output	Follow-up
Review on SMS implementation plan	The progress table on SMS implementation plan	

List of Presentation Material and Handout (Available in web-side)

The progress table on SMS implementation plan.pdf

Record of discussion

The expert and TAN discussed the progress of SMS implementation plan in TAN.

Phase 1 is completed and Phase 2 has started.

TF-2 checked each item on SMS implementation and made the progress table of the implementation plan in TAN.

If SMM is approved by DG, many items related to SMM is completed.

Conclusion and Recommendations

This activity clarified the situation of SMS implementation plan in TAN and help to understand further activities in the Project.

TF-2 will continue to review the SMS implementation plan in TAN.

Report on Activity**General:**

TF and Activities	Taskforce-2, ATC, Activity 2-2-1
Title	Follow-up training on SAF-SA2 at EUROCONTROL on 3-7 July 2017)
Terms	26 July 2017, 10:00-12:00
Type	Lecture
Expert	Hideo Watanabe

Lists of participants:

Name	Position	Daily attendance	Training abroad	Certificate
Mr. Bakhtiyor				N/A
Mr. Orita				N/A

Input from Experts and Output from Activity:

Input based on agenda at notification letter	Output	Follow-up
Review training contents	Reflect them in SMS introduction and SMS training program.	

List of Presentation Material and Handout (Available in web-side)

Overview of SAF-SA2 course at EUROCONTROL.pdf

Record of discussion

Mr. Sheraliev presented overview of SAF-SA2 course at EUROCONTROL.

The expert commented that his presentation was very good, and a meaningful explanation.

This course did not use paper-base, so used big screen for the exercise. The exercise was done in brainstorming, and we discussed the case study such as new ATM system crash down, cross border operation. It was meaningful and useful for future activities.

Conclusion and Recommendations

Mr. Sheraliev is conducting safety assessment using the knowledge already acquired in the training of SAF-SA2.

In this training, he could learn how to respond to real problems, so more practical activities became possible.

Expert believe that this training is very effective and will greatly contribute to the implementation of SMS.

Report on Activity**General:**

TF and Activities	Taskforce-2, ATC, Activity 2-2-1
Title	Follow-up training on SAF-INV at EUROCONTROL on 20-24 Mar 2017)
Terms	7 April 2017, 10:00-12:00
Type	Lecture
Expert	Hideo Watanabe

Lists of participants:

Name	Position	Daily attendance	Training abroad	Certificate
Mr. Ulugbek				N/A
Mr. Orita				N/A
Mr. Safo				N/A

Input from Experts and Output from Activity:

Input based on agenda at notification letter	Output	Follow-up
Review training contents	Reflect them in SMS introduction and SMS training program.	

List of Presentation Material and Handout (Available in web-side)

Training session for SAF-INV at EUROCONTROL.pdf

Record of discussion

Training session for SAF-INV at EUROCONTROL was held from 10 o'clock. Ulugbek started with an overview of the course using PowerPoint and explained about Human Error and how to interview, mainly on analysis method of SOAM (Safety Occurrence Analysis Methodology). The presentation was well organized, and it was easy to understand contents. Expert asked about how to introduce Safety Culture to TAN. He answered that it is quite difficult. Expert agreed that it is not going to progress quite well in Japan. However, under circumstances in which the mandatory report is not satisfactorily raised at present, it is worrying that there will be a scene where this training can be utilized.

Conclusion and Recommendations

TAN is already preparing to introduce the Voluntary Reporting System. This is in line with the SMS implementation plan. These contents have connection with Human Factors' training starting next week. It is good to merge well.

Report on Activity**General:**

TF and Activities	Taskforce-2, ATC, Activity 2-2-1
Title	Monitoring for Contingency Plan (CP) approval process
Terms	25 July 2017, 10:00-12:00
Type	Monitoring
Expert	Hideo Watanabe

Lists of participants:

Name	Position	Daily attendance	Training abroad	Certificate
Mr. Bakhtiyor				N/A

Input from Experts and Output from Activity:

Input based on agenda at notification letter	Output	Follow-up
Review CP and approval process	Receive government orders for CP	

List of Presentation Material and Handout (Available in web-side)

CP approved by MOT in Tajikistan.

Record of discussion

The expert confirmed the approval process with the documents, such as Application forms, Letter from MOT.
The change in Draft is to add a mobile phone number on Emergency Contact Network.

Conclusion and Recommendations

TAN received a government orders (No.166 "25"07 2017) of MOT signed by Ministry regarding on CP.
TAN will start coordination with adjacent FIR for CP.

Report on Activity**General:**

TF and Activities	Taskforce-2, ATC, Activity 2-1-2
Title	W/S on CP improvement
Terms	19 April 2017, 09:00-12:00
Type	Workshop
Expert	Hideo Watanabe

Lists of participants:

Name	Position			
Mr. Bakhtiyor	PM			
Mr. Ulugbek				

Input from Experts and Output from Activity:

Input based on agenda at notification letter	Output	Follow-up
Expert evaluates the completeness of the TANs draft version	Expert and TAN counterpart discuss improvement points and additional items to make it possible to improve the quality to obtain TAN approval and CAA approval organize in the table.	Monitoring on approval process for CP

List of Presentation Material and Handout (Available in web-side)

План мероприятий на случай непредвиденных обстоятельств в связи с нарушением ОВД в ВП РТ в5 (CP draft).pdf
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Record of discussion

<p>TAN made a new version of CP according to Asia/pacific Region ATM contingency plan. Expert translated the new version CP to English and checked it. Expert did not find any necessary amendment in draft of CP. TF-2 decided to implement exercises with this CP. 3rd Meeting for CP exercise was held on 17th April and prepared for the exercise. The CP exercise will be conducted at class room of Training Center at 11:00. The meeting considered the scenario and the emergency contact network. Those were finalized for conducting CP exercise. CP exercise was conducted by TAN on 18th April 2017. Expert supervised the exercise and evaluated it by the checklist. The exercise was done successfully.</p>
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Conclusion and Recommendations

<p>Expert advised that the draft of CP is no need to change at present time based on the result of CP exercise. TAN will request approval of CAA on CP.</p>
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TF-1 Activity Plan (20 Nov to 1 Dec 2017)

Date		AM	PM	Remarks
18 Nov	S			Arrive at Dushanbe
19	S			
20	M	W/S on OJT-I Material & Training Plan Development		entering pass is required at 8:50
21	T	W/S on OJT-I Material & Training Plan Development		
22	W	W/S on OJT-I Material & Training Plan Development		
23	T	W/S on OJT-I Material & Training Plan Development		
24	F	W/S on OJT-I Material & Training Plan Development		
25	S			
26	S			
27	M	Review of Operation Manual in TAN (improvement of English translation)		
28	T	Review of SMS Manual in TAN (improvement in TAN)		
29	W	WG reporting session for Operation manual (TWR WG, APC WG)		
30	T	WG reporting session for Operation manual (ACC WG, Expert Review)		
1 Dec	F	TF1 Meeting / MM signing	Report to JICA office	entering pass return
2	S			
3	S			Depart from Dushanbe

Minutes of The Taskforce-1 & 2 Meeting for “The Project for Capacity Development in Air Traffic Services” in Tajikistan

Dushanbe, 2 February 2018



The 11th TF-1 & the 8th TF-2 Meeting for “The Project for Capacity Development in Air Traffic Services” (hereinafter “the Project”) was held at 14:30-16:00 on 2 February 2018 in the Project office.

Mr. Watanabe (Chief Advisor), Mr. Sheraliev (Project Manager), Mr. Davlyatov (Head of ATS), Mr. Davron (TF-1 leader), Mr. Ulugbek, Mr. Payrav, Mr. Orita (Project Coordinator) attended this meeting.

This meeting was the reporting opportunity of implemented TF-1 & TF-2 activities by Expert and coordinate next mission schedule by TF accordance with the Sub-activity list and AWP.

I. Activity of both side from 22th January to 2nd February 2018

During this period, the expert and Taskforce 2 team led by Mr. Bakhtiyor Sheraliev had a series of discussions and exchanged information on possible technical assistance to the Contingency Plan and Safety Management System part of the Project for Capacity Development of TAN.

The expert and Taskforce 1 team led by Mr. Davlyatov had a series of discussions and exchanged information on possible technical assistance to the Training on Air Traffic Control Officer part of the Project for Capacity Development of TAN.

- (1) The JICA expert has worked on the schedule as Attachment-1, Main activity as follow:
 1. To conduct ATS system capacity W/S data verification
 2. To hold on meeting of the expert reporting session of review operation manual in TAN.
 3. To hold on follow up Training Manual/Plan Dev W/S
 4. To hold on W/S of ATS system capacity
 5. To attend Runway Safety Team/ Plan coordination meeting.
 6. To hold on W/S Making Hazard Map procedure development
 7. To discuss further activities TF-1 and TF-2
- (2) TF-1 & TF-2 meeting on 22 January
 1. TF - 1 meeting and confirmed the schedule. TF-1 confirmed sub-activities 1-4 and 1-5.
 2. TF - 2 meeting, TAN planned to establish RST on the activities of RSP, but it became difficult as the authorities did organization reform. Therefore, we gathered the stakeholders and explained the role of RST and the procedure of creating a hazard map in a W/S.
- (3) ATS system capacity W/S data verification
 1. Expert held a briefing session on data collection to calculate control work load and explained it.
 2. TAN has launched Capacity Team and is in charge of this activity.
 3. At this briefing, discussion focused on how to select control events and how much data to collect.
 4. Ultimately, it was decided to select according to the control task of TAN.
 5. We used a radar simulator to evaluate newly selected events. Expert himself also made the conclusion that it is easy to describe survey items in order according to the flow of control.
 6. Also, in order to reduce the burden on the controllers in the field, we decided to investigate the time of each event by examining the radar data and the communication record regarding the typical event.



7. We decided to investigate and fill out special events on site. We agreed to carry out from today.
- (4) Expert reporting session for O/M review (result of study)
 1. Experts held a reporting session on the operation manual review.
 2. WG members of the operation manual participated in the session.
 3. Expert explained the efforts so far and reported on the analysis results of TAN operation manual. Among the 35 documents reviewed, there were 29 Findings such as the difference with ICAO PANS-ATM in 8 documents. Its contents are the separation on the VFR, the lateral separation, etc. In addition, regarding the items pointed out by the ICAO audit, expert reviewed focusing on RT-21 and reported the results.
 4. Finally, expert performed Recommendation based on this analysis. Recommendation are changing the procedure of landing clearance, introducing light gun, improving operation of follow-me-car, deleting separation on VFR, introducing MSAW, creating MVA map, and so on.
 5. The management side participated in the second half of the reporting session and expert again explained the recommendation.
 6. Management side instructed the members of WG necessary work for manual review. Basically, it showed an understanding to the Recommendation. After reconfirming the contents, TAN decided to proceed with considering revising necessary rules and to prepare for introducing light-gun, MVA map.
- (5) Follow up Training Manual/Plan Dev W/S
 1. Expert explained the purpose of this follow up training.
 2. Expert again confirmed what we are doing as the follow up of W/S, the purpose is to gather training materials and create a training material for OJT-I training.
 3. Team OJT-I considered the necessary documents for theoretical training.
 4. The tower, radar, approach, and ACC's training items are almost the same, so we focused on the ACC training items.
 5. After that, regarding other work, we reviewed and made necessary correction. This work was completed in the morning. From the afternoon we collected these documents.
 6. Since it is difficult to print all the documents after collection, we made it as a PDF for the time being, making one file for each job and putting it in it. These tasks ended in a day because the Team OJT - I everyone worked well.
 7. Again, we considered the contents of the training material by all member. We confirmed that there are no documents to add at the present time.
 8. The training material for OJT-I training to be submitted as a sample to Davlyatov was set as ACC and considered printing work.
 9. ACC's training material has 1,700 pages, considering issues such as a matter of time, printers for work, etc., we decided to request printing to the outside.
 10. Next, the OJT Annual Training Plan was considered. OJT instructor prepared for A draft training schedule for trainees.
 11. Expert received a report on the schedule of each instructor and described it on the sheet of 2018 Annual Training Plan for OJT.
 12. We submitted completed materials (PDF and printed ACC's) and a draft of 2018 Annual Training Plan for OJT to Mr. Davlyatov.
 13. Mr. Davlyatov signed 2018 Annual Training Plan for OJT.
- (6) W/S of ATS system capacity.
 1. The person in charge brought the most important collected data.
 2. Expert printed data collection sheet, distribute it to the team, and explain what to fill in.
 3. They collected data of 37 for ACC, 9 for APP and 8 for radar in the week of 22 to 28.
 4. We calculated probability of occurrence of control event and average work time of each event

- based on the data.
5. The results were entered into the capacity calculation matrix for each control system of ACC, APP, and Radar. The workload of the controller was calculated for each flight type such as arrival, departure, and overflight. It was necessary to decide the degree of difficulty for each event before this calculation.
 6. Expert displayed a sheet of Excel on a big display, input while looking at it, and work progressed. There was an obvious leak in the collected data, we also examined it and input the appropriate value.
 7. We confirmed the control processing capacity value we created yesterday. But, we concluded that the amount of data is not enough for the calculation work.
 8. We decided to pick up one foreign airline company to collect control work time from the radar data and communication record.
 9. The results were compared, particularly with regard to Radar position, there was an event missing in the actually collected data, so we tried to add it properly. Capacity team decided to collect the data of all scheduled flights for one day from the radar data and communication record.
 10. After collecting the data for one day, we compared with the already calculated data.
 11. Experts calculated control work load values based on new data (54 for ACC, 40 for APP, 29 for Radar) collected by Capacity Team.
 12. Capacity Team proposed a draft of ATC capacity in Dushanbe to Davlyatov.
- (7) RST coordination meeting and W/S making hazard map procedure development
1. Bakhtiyor and Expert reviewed the agenda and presentation materials of RST coordination meeting on 31 January.
 2. We carried out preliminary survey using car with the airport safety manager and his staff in for preparing a hazard map of Dushanbe Airport from 10 am to 11:30 am.
 3. We started from around the terminal building, then turned around the bypass road and gathered what seems to be a hazard.
 4. There were considered to hazards such as flow lines of pedestrians in restricted areas, animals' nests in drains, obstacles near helicopter parking areas.
 5. Mr. Bakhtiyor explained the ICAO standard based on the presentation using the Japanese side at East Mekong and the contents of the RST handbook at the RTS coordination meeting.
 6. Expert explained how to find a hazard in what viewpoint and make it as a map using concrete examples for airport (Matsuyama airport) and ATC hot spot (Sendai airport) respectively.
 7. After that, divided the member into two groups, use the grid map of Dushanbe Airport in W/S format, find a hazard, fill in the contents in post it and paste it. In other groups, risk assessment and occurrence frequency were examined for each hazard.
 8. The meeting started at 2 pm, W/S completed until 4:30 pm. It was a pretty hard day, but it was a meaningful day.
 9. The meeting agreed that Airport Safety Manager is a chairman of RST in Dushanbe. RST consists of pilot of the Somon Air and Tajik air, ATC supervisor of the TAN, airport engineer of the DIA, representatives from CAA. First RST in Dushanbe meeting will be held on 5th March.

II. Next dispatch of the expert

- (1) Experts proposed tentatively that the next dispatch of expert will be as follow;
/From 30th April to 11th May 2018: Mr. WATANABE (TF-1 & 2)
- (2) TF-1&2 agreed the schedule of the next dispatch.

As a result of the activity, both sides confirmed the matters referred to in the documents attached hereto



Dushanbe, Tajikistan
2 February 2018

Mr. Bakhtiyor SHERALIEV
Safety and Quality Manager
Project Manager
Leader of Task force 2
SUE "Tajikairnavigation"

Mr. Hideo WATANABE
Chief Advisor
JICA Expert team of the project
Japan International Cooperation Agency

Mr. Davron RAJABOV
Head of ACC
Leader of Task force 1
SUE "Tajikairnavigation"

- Attachment-1: TF-1 & 2 Activity Plan**
- Attachment-2: The activities report (2-1~2-5)**
- Attachment-3: 2018 Annual Training Plan for OJT**
- Attachment-4: OJT-I Training material lists (4-1~4-4)**
- Attachment-5: ATS system capacity calculation result**
- Attachment-6: Next TF-1 & 2 Activity Plan**

Attachment-1

Date		AM	PM	Remarks
20 Jan	S			Arrived by OZ202
21	S			
22	M	TF 1 & 2 meeting	ATS system capacity W/S data verify	entering pass is required at 8:50
23	T	Expert Reporting Session for O/M Review (result of study)		
24	W	W/S Operation Manual Review (improving O/M for 4 airports)		
25	T	F/U Material / Plan Dev W/S (training material and plan for 4 airports)		
26	F	F/U Material / Plan Dev W/S (training material and plan for 4 airports)		
27	S			
28	S			
29	M	W/S ATS system capacity in TAN (calculation methodology)		
30	T	W/S ATS system capacity in TAN (assessment for Dushanbe airport)		
31	W	Runway Safety Team / Plan coordination for 4 airports		
1 Feb	T	Making Hazard map procedure development		
2	F	TF1 & 2 meeting and MM signing	Report to JICA office	entering pass is returned
3	S			
4	S			Departed by OZ201

Report on Activity**General:**

TF and Activities	Taskforce-1, ATC, Activity 1-5
Title	ATS system capacity WS verification
Terms	22 January 2018 (0.5 day)
Type	Others
Expert	Hideo Watanabe

Lists of participants:

Name	Position			
Mr. Gulomjon,				
Mr. Pairav , ,				
Mr. Abdurakhmon				
Mr. Abdukhailil,				
Mr. Sergey,				
Mr. Abdumutolib				
Mr. Hideo Watanabe				

Input from Experts and Output from Activity:

Input based on agenda at notification letter	Output	Follow-up
Expert explain how to collect the data for calculation ATS capacity.	Capacity team collect the data for calculation of ATS capacity.	W/S ATS system Capacity.

List of Presentation Material and Handout (Available in web-side)

Calculation work flow.pdf
ATS system Capacity in TAN.pdf
ACC & APP example of survey form.pdf

Record of discussion

Expert held a briefing session on data collection to calculate control work load and explained it. TAN has launched Capacity Team and is in charge of this activity. At this briefing, discussion focused on how to select control events and how much data to collect. Ultimately, it was decided to select according to the control task of TAN. We used a radar simulator to evaluate newly selected events. Expert himself also made the conclusion that it is easy to describe survey items in order according to the flow of control. Also, in order to reduce the burden on the controllers in the field, we decided to investigate the time of each event by examining the radar data and the communication record regarding the typical event.

Conclusion and Recommendations

We decided to investigate and fill out special events on site. We agreed to carry out from today.

Report on Activity

General:

TF and Activities	Taskforce-1, ATC, Activity 1-4
Title	Expert Reporting Session for Operation Manual / W/S operation manual review (improving O/M for 4 airport)
Terms	23 January 2018, 08:30-15:00 (1 days)
Type	Others
Expert	Hideo Watanabe

Lists of participants:

Name	Position	Daily attendance	Training abroad	Certificate
Mr. Mirzoev Firuz	WG Leader of Tower control			N/A
Mr. Payrav Najmidinovich	WG Leader of Approach control			
Mr. Satybaldyev Sergey	WG Leader of Area control			
Mr. Shambiev	FDDG			
Mr. Davlyatov	Head of ATS			
Mr. Sheraliev Bakhtiyor	Project Manager			
Mr. Davlon	Head of tower			
Mr. Watanabe	Chief Advisor			
Mr. Orita	Project coordinator			

Input from Experts and Output from Activity:

Input based on agenda at notification letter	Output	Follow-up
Expert reported Operation Manual Review	To consider the Operation Manual in TAN by three WGs. Reflect them in Operation Manual in TAN if necessary.	

List of Presentation Material and Handout (Available in web-side)

Expert Reporting Session for OM review.pdf

Record of discussion

Experts held a reporting session on the operation manual review.
 WG members of the operation manual participated in the session.
 Expert explained the efforts so far and reported on the analysis results of TAN operation manual.
 Among the 35 documents reviewed, there were 29 Findings such as the difference with ICAO PANS-ATM in 8 documents.
 Its contents are the separation on the VFR, the lateral separation, etc.
 In addition, regarding the items pointed out by the ICAO audit, expert reviewed focusing on RT-21 and reported the results.
 Finally, expert performed Recommendation based on this analysis.
 Recommendation are changing the procedure of landing clearance, introducing light gun, improving operation of follow-me-car, deleting separation on VFR, introducing MSAW, creating MVA map, and so on.
 The management side participated in the second half of the reporting session and expert again explained the recommendation.
 While confirming the contents one by one, they asked the grounds for the content of the recommendation.

Conclusion and Recommendations

Management side instructed the members of WG necessary work for manual review. Basically, it showed an understanding to the Recommendation. After reconfirming the contents, TAN decided to proceed with considering amendment necessary rules and to prepare introducing light-gun, MVA map.

Report on Activity

General:

TF and Activities	Taskforce-1, ATC, Activity 1-5
Title	F/U Manual/Plan Dev WS
Terms	25-26 Jan.2018, 08:30-17:00 (2 days)
Type	Others
Expert	Hideo Watanabe

Lists of participants:

Name	Position			
Mr. Gulomjon				
Mr. Umedjon				
Mr. Hotamjon				
Mr. Shuhrat				
Mr. Nizomjon				
Mr. Makhsudjon.				
Mr. Watanabe				

Input from Experts and Output from Activity:

Input based on agenda at notification letter	Output	Follow-up
Expert explain how to make training material (training handbook)	OJT-I team make the training Handbook for tower, radar, approach, ACC.	

List of Presentation Material and Handout (Available in web-side)

training material lists for ACC.pdf
 training material lists for Approach.pdf
 training material lists for Radar.pdf
 training material lists for Tower.pdf

Record of discussion

Expert explained the purpose of this follow up training.
 Expert again confirmed what we are doing as the follow up of W / S, the purpose is to gather training materials and create a training handbook.
 Team OJT-I examined the necessary documents for theoretical training.
 The tower, radar, approach, and ACC's training items are almost the same, so we focused on the ACC training items.
 After that, regarding other work, we reviewed and made necessary correction.
 This work was completed in the morning. From the afternoon we collected these documents.
 Since it is difficult to print all the documents after collection, we made it as a PDF for the time being, making one file for each job and putting it in it.
 These tasks ended in a day because the Team OJT - I everyone worked well.
 Again, we confirmed the contents of the handbook by all member.
 We confirmed that there are no documents to add at the present time.
 The handbook to be submitted as a sample to Davlyatov was set as ACC and considered printing work.
 ACC's handbook has 1,700 pages, considering issues such as a matter of time, printers for work, etc., we decided to request printing to the outside.
 Next, the OJT Annual Training Plan was considered.
 OJT instructor prepared for A draft training schedule for trainees.
 Expert received a report on the schedule of each instructor and described it on the sheet of OJT Annual Training Plan 2018.

Conclusion and Recommendations

We submitted a completed handbook (PDF and printed ACC handbook) and a draft of OJT Annual Training Plan 2018 to Davlyatov.

Report on Activity

General:

TF and Activities	Taskforce-1, ATC, Activity 1-4
Title	W/S ATC capacity calculation
Terms	29-30 January 2018 (2 days)
Type	workshop
Expert	Hideo Watanabe

Lists of participants:

Name	Position			
Mr. Gulomjon,				
Mr. Pairav , ,				
Mr. Abdurakhmon				
Mr. Abdukhalil,				
Mr. Sergey,				
Mr. Abdumutolib				
Mr. Hideo Watanabe				

Input from Experts and Output from Activity:

Input based on agenda at notification letter	Output	Follow-up
Expert explain how to calculate ATC capacity	Capacity Team make ATC capacity for ACC, APP and Radar	

List of Presentation Material and Handout (Available in web-side)

ATS system capacity calculation result.pdf
 Calculation work flow.pdf

Record of discussion

The person in charge brought the most important collected data.
 Expert already sent sheets to use it yesterday, but there was not printed it yet. Expert printed it here, distribute it to the team, and explain what to fill in.
 In the week of 22 to 28, they collected data of 37 for ACC, 9 for APP and 8 for radar.
 Based on the data, probability of occurrence of control event and average work time of each event were calculated.
 The results were entered into the capacity calculation matrix, and for each control system of ACC, APP, and Radar, the workload of the controller was calculated for each flight type such as arrival, departure, and overflight.
 It was necessary to decide the degree of difficulty for each event before this work.
 Based on the case of Japan, I reviewed the team and decided the immediate value.
 Expert displayed a sheet of Excel on a big display, input while looking at it, and work progressed.
 There was an obvious leak in the collected data, we also examined it and entered the appropriate value.
 Somehow, we were able to calculate all the workload at 17 o'clock.
 Tomorrow, I decided to calculate this value again and confirm it.
 We confirmed the control processing capacity value we created yesterday. Again, we concluded that the amount of data is small.
 We picked up one foreign airline company and decided to calculate the workload from the radar data and communication record.
 The results were compared. Particularly with regard to Radar, there was an event missing in the actually collected data, and we decided to add it. However, as a team, we decided to check the data of all scheduled flights for one day.
 After collecting the data for one day, we compared with the already calculated data.
 Experts calculated control work load values based on new data collected by Capacity Team.

Conclusion and Recommendations

Capacity Team proposed a draft of ATC capacity in Dushanbe to Davlyatov.

Report on Activity**General:**

TF and Activities	Taskforce-2, ATC, Activity 2-2-4
Title	RST coordination meeting and W/S making hazard map procedure development
Terms	31 January 2018 (1 days)
Type	workshop
Expert	Hideo Watanabe

Lists of participants:

Name	Position			
Mr. Khasan Saidov				
Mr. Femi Olowoyeye				
Mr. Davlatov S.S.				
Mr. Davlyatov				
Mr. Bakhtiyor				
Mr. Orita				
Mr. Watanabe				

Input from Experts and Output from Activity:

Input based on agenda at notification letter	Output	Follow-up
Expert explain example of hazard map in Japan	Create hazard Map in Dushanbe Airport.	Monitoring hazard map in May 2018

List of Presentation Material and Handout (Available in web-side)

RJSS ATC HAZARD MAP.pdf
 Airport Hazard Mapping.pdf

Record of discussion

Expert reviewed the agenda and presentation materials of today's RST coordination meeting with Bakhtiyor.
 From 10 o'clock to 11:30, we took a car survey with the airport safety manager and his staff in preliminary survey for preparing a hazard map of Dushanbe Airport.
 From around the terminal building, we turned around the bypass road and gathered what seems to be a hazard.
 Flow lines of pedestrians in restricted areas, animals' nests in drains, obstacles near helicopter parking areas were considered as hazards.
 At the RTS coordination meeting, Bakhtiyor explained the ICAO standard based on the presentation using the Japanese side at East Mekong and the contents of the RST handbook.
 Expert explained how to find a hazard in what viewpoint and make it as a map using concrete examples for airport (Matsuyama airport) and ATC hot spot (Sendai airport) respectively.
 After that, divide the group into two groups, use the grid map of Dushanbe Airport in W/S format, find a hazard, fill in the contents in post it and paste it. In other groups, risk assessment and occurrence frequency were examined for each hazard.
 The meeting started at 14 o'clock, W / S lasted until 16:30. It was a pretty hard day, but it was a meaningful day.

Conclusion and Recommendations

RST in Dushanbe, Airport safety manager is leader of making airport hazard map, Somon Air safety manager and TAN ATC supervisor both is a leader of making ATC hot spot (hazard) map. They are continuing to make hazard map and risk assessment.

2018 Annual Training Plan for OJT

UT DD	OJT Instructors				Training Mode			OJT Trainees				Materials		OJT Schedule					
	Instructor Name Certificate / Approval	Existing Ratings		Working Position	Obtaining Ratings	Add New	Training Hours	Candidates of Trainees				Training Materials	Theoretical Trainings	Simulator Trainings	Practical Trainings				
	I: ICAO #219 O: OJT-I training (Ack) W: Material/ Plan WS(C) T: TAN OJT-I approval (remarks)	Tower	Radar	Approach	Area	Super-V Tower Radar ACC Briefing Others	Tower Radar Area-DD Area-DL	"A" or "N" or "-"	Theoretical + Simulator + Practical (hours)	Name	Tower	Radar	Approach	Area	Super-V Tower Radar Approach Area Others	D/L/T/K + Tower Radar Approach Area	2018/ MMDD- MMDD	T: Tower R: Radar + 2018/ MMDD- MMDD	2018/ MMDD- MMDD
	Kayumov Gulomjon I/O/W	D	D	D		Tower Radar Radar	Tower Radar	A A	120+75+225 120+75+225	Ergashev Abdurahmon Sattarov Rakhmatjon	D			D	Approach Area	D-Tower D-Radar	0115-0202 0903-0921	T/0205-0223 0924-1012	0225-0412 1013-1128
	Makhmudov Umedjon I/O/W	D		D	D	ACC ACC	Approach Tower	A A	120+75+225 116+10+154	Shonazarov Shahboz Kadyrov Manuchekhr				D	Area Other	D-App D-Tower	0301-0326 0801-0821	0327-0417 0823-0824	0418-0604 0826-0927
	Rahimov Hotamjon I/O/W	D	D	D	D	ACC ACC	Approach Approach	A A	120+75+225 120+75+225	Nazarov Akmal Adylov Abdukayum				D	Area Area	D-App D-App	0122-0209 0502-0522	0212-0302 0523-0612	0305-0421 0613-0730
	Shukurov Shuhrat I/O	D		D	D	ACC ACC ACC	Area-DD Approach Tower	N A A	116+10+154 120+75+225 120+75+225	Azimov Khurshed Satybaldiyev Sergey Nishonov Abdumutolib				D	Area Area Tower	D-App D-App L-Area	1220-0110 0302-0323 0903-0921	R/0111-0118 0326-0414 0922-0925	0119-0216 0415-0522 0926-1124
	Okilov Makhjudjon I/O	L	L		L	ACC ACC	Area-DL Area-DL	A A	120+75+225 120+75+225	Babayev Akmaljon Rakhimov Nuriddin	D				Tower Tower	L-Area L-Area	0301-0324 0801-0821	0326-0413 0823-0912	0416-0530 0913-1030
	Nabijonov Nizomjon I/O	T				Super-V Super-V	Tower	N	116+10+154	Marupov Rakhmatjon					Briefing	T-Tower	0301-0320	0326-0327	0328-0424
	xxx ()					- -	- -	- -	- -	- -									

Required Training hours

ОБЪЕМ СТАДИОННОЙ ПЕРСОНАЛА ОБД НА ДИСПЕТЧЕРСКИХ ПУНКТАХ ПРИ ПОЛУЧЕНИИ ДОПУСКА К РАБОТЕ

	Должность	Время стажировки, час		Время выполнения с работниками диспетчерских пунктов, час
		На рабочем месте	На тренажере	
(GND) Tower	Диспетчер ДПР	90	10	40 (АДП СДП ВСДП)
	Диспетчер СДП ВСДП	200	10	70 (ДПК ПДП ДПСД ДПР)
Approach	Диспетчер ДПП (АДП АДП)	300(400)	75	45 (ДПК ПДП ДПСД СДП РУ ДПР)
Radar	Диспетчер ДПК (ДПР МВЛ Вышка)	300(400)	75	45 (ДПП (ВЛПП) ПДП СДП ВСДП)
Area	Диспетчер РД ВРД ЕС ОбВЛ с правом ОБД	300(400)	75	45 (ДПК КДП МВЛ ВЛП взаимодействующие РУ (ВРД) ЕС ОбВЛ и другие смежные пункты ОБД)
			Practical	Sim

Approval on OJT Instructor	Старшие диспетчеры, руководители полетов диспетчеры - инструкторы	Practical		Sim
		170		
				100 (все диспетчерские пункты ОБД данного аэродрома (данного района ОБД - для руководителей полетов района), смен взаимодействующих при ОБД слож аэропорта)

[Signature]
ATC Head, Daviyatov Daviyat

January 26, 2018

Attachment-4-1
ACC training program

Theoretical training (ACC program)	Material
1. Study of the organizational structure of the air navigation system of the Republic of Tajikistan.	Structure of TAN
	United system of organization of air movement of RT
2. Acquaintance with the general technological process of the ATC at the control center.	Operation Manual of ACC (O/M)
	Job description of "ACC" controller
	Manual of use RVSM
	Agreement with ATC rooms of neighboring countries concerning ATS procedures and coordination
3. Acquaintance with the reference materials of the control center.	GAR-30
	GAR-21
	Aviation flight rules of RT
	Rules of use of air space of RT
	Air Code of RT
	Aviation rules concerning organization of air movement of RT
4. Study of the order and features of interaction with adjacent control centers (ATC sectors)	O/M
	LOA another ACC
	Coordination with air force and air defense forces.
5. Study of the order of	O/M

Attachment-4-1
ACC training program

interaction with adjacent control centers (ATC sectors), air force and air defense forces.	Coordination with air force and air defense forces.
6. Acquaintance with meteorological support of the control center.	Manual of use AVIMET system and all meteorological equipment.
7. Acquaintance with the means of the radio navigation and communication system and ATC at the control center.	Manual of use "Master" system
	Manual of use "Frequentis" system
	Manual of use "MLAT" system
8. Study of the job description and technology of the controller's work.	O/M
	Job description manual
9. Study of the rules of radio communication and the phraseology of radio communication.	GAR-30
	ICAO doc 9432
10. Study of the main provisions of international regulatory documents on air navigation.	ICAO PANS-ATM doc 4444

Attachment-4-2
Approach training program

Theoretical training (Approach)	Material
1. Study of the organizational structure of the air navigation system of the Republic of Tajikistan.	Structure of TAN
	United system of organization of air movement of RT
2. Acquaintance with the general technological process of the ATC at the control center.	Operation Manual of Approach (O/M)
	Job description of "Approach" controller
	Agreement with ATC rooms of neighboring countries concerning ATS procedures and coordination
3. Acquaintance with the reference materials of the control center.	GAR-30
	GAR-21
	Aviation flight rules of RT
	Rules of use of air space of RT
	Air Code of RT
	Aviation rules concerning organization of air movement of RT
4. Study of the order and features of interaction with adjacent control centers (ATC sectors)	O/M
	LOA another ACC
	Coordination with air force and air defense forces.
5. Study of the order of interaction with adjacent control centers (ATC sectors), air force and air defense forces.	O/M
	Coordination with air force and air defense forces.

Attachment-4-2
Approach training program

6. Acquaintance with meteorological support of the control center.	Manual of use AVIMET system and all meteorological equipment.
7. Acquaintance with the means of the radio navigation and communication system and ATC at the control center.	Manual of use "Master" system
	Manual of use "Frequentis" system
8. Study of the job description and technology of the controller's work.	O/M
	Job description manual
9. Study of the rules of radio communication and the phraseology of radio communication.	GAR-30
	ICAO doc 9432
10. Study of the main provisions of international regulatory documents on air navigation.	ICAO PANS-ATM doc 4444

Attachment-4-3
Radar training program

Theoretical training (Radar)	Material
1. Study of the organizational structure of the air navigation system of the Republic of Tajikistan.	Structure of TAN
	United system of organization of air movement of RT
2. Acquaintance with the general technological process of the ATC at the control center.	Operation Manual of Radar (O/M)
	Job description of "radar" controller
	IFR SID/STAR
	VFR Charts
	Chart of emergency landing after take-off
	Table of QNH/QFE
3. Acquaintance with the reference materials of the control center.	GAR-30
	GAR-21
	Aviation flight rules of RT, Rules of use of air space of RT
	Air Code of RT
	Aviation rules concerning organization of air movement of RT
4. Study of the order and features of interaction with adjacent control centers	O/M
	Coordination with air force and air defense forces.
5. Study of the order of	O/M

Attachment-4-3
Radar training program

interaction with adjacent control centers (ATC sectors), air force and air defense forces.	Coordination with air force and air defense forces.
6. Acquaintance with meteorological support of the control center.	Manual of use meteorological system* and all meteorological equipment.
	*AVIMET(UTDD)
	*CRAMS(UTDT)
7. Acquaintance with the means of the radio navigation and communication system and ATC at the control center.	Manual of use "Master" system
	Manual of use "Frequentis" system
8. Study of the job description and technology of the controller's work.	O/M
	Job description manual
9. Study of the rules of radio communication and the phraseology of radio communication.	GAR-30
	ICAO doc 9432
10. Study of the main provisions of international regulatory documents on air navigation.	ICAO PANS-ATM doc 4444

Attachment-4-4
Tower training program

Theoretical training (Tower)	Material
1. Study of the organizational structure of the air navigation system of the Republic of Tajikistan.	Structure of TAN
	United system of organization of air movement of RT
2. Acquaintance with the general technological process of the ATC at the control center.	Operation Manual of Tower (O/M)
	Job description of "tower" controller
	Technological coordination with aerodrome services
	IFR SID/STAR
	VFR Charts
	Chart of emergency landing after take-off Table of QNH/QFE
3. Acquaintance with the reference materials of the control center.	GAR-30
	GAR-21
	Aviation flight rules of RT
	Rules of use of air space of RT
	Air Code of RT
	Aviation rules concerning organization of air movement of RT
4. Study of the order and features of interaction with adjacent control centers (ATC sectors)	O/M
	Coordination with air force and air defense forces.

Attachment-4-4
Tower training program

5. Study of the order of interaction with adjacent control centers (ATC sectors), air force and air defense forces.	O/M
	Coordination with air force and air defense forces.
6. Acquaintance with meteorological support of the control center.	Manual of use meteorological system* and all meteorological equipment.
	*AVIMET(UTDD),
	*CRAMS(UTDT)
	*TRANS OMIS RF(UTDL)
7. Acquaintance with the means of the radio navigation and communication system and ATC at the control center.	Manual of use "Master" system
	Manual of use "Frequentis" system
	Manual of use lighting system
	Manual of use MLAT(UTDT)
8. Study of the job description and technology of the controller's work.	O/M
	Job description manual
	Instruction of production of flight in aerodrome
	Technological coordination with aerodrome services
9. Study of the rules of radio communication and the phraseology of radio communication.	GAR-30
	ICAO doc 9432
10. Study of the main provisions of international regulatory documents	ICAO PANS-ATM doc 4444

Attachment-4-4
Tower training program

on air navigation.	
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Next dispatch schedule (30 Apr. – 11 May. 2018)

Date		AM	PM	Remarks
28 Apr	S			
29	S			SZ201
30	M	TF-1& TF-2 meeting	PCM (for JCC/3)	ID pass Receive
1 May	T	Observation OJT-I		
2	W	Observation OJT-I		
3	T	Observation OJT-I		
4	F	Review Observation OJT-I		
5	S			
6	S			
7	M	Observation CP exercise	Monitoring hazard map	
8	T	W/S confirmation for result 1-4		
9	W	Preparation for JCC		
10	T	Preparation for JCC		
11	F	JCC/3	MM signing, report to JICA office	ID pass return
12	S			
13	S			SZ202