JAPAN INTERNATIONAL COOPERATION AGENCY

Tajikairnavigation (TAN)

The Project for Capacity Development in Air Traffic Services in the Republic of Tajikistan

Project Completion Report

December 2018

ΕI	
JR	
18-138	

AIR TRAFFIC CONTROL ASSOCIATION JAPAN ATCAJ

CONTENTS

Page:

1	Basic Information of the Project	1
	 1.1 Country 1.2 Title of the Project 1.3 Duration of the Project (Planned and Actual) 1.4 Background (from Record of Discussions(R/D)) 1.5 Overall Goal and Project Purpose (from Record of Discussions(R/D)) 1.5.1 Overall Goal 1.5.2 Project Purpose 1.6 Implementing Agency 	.1 .1 .2 .2 .2
2	Results of the Project	2
	2.1 Results of the Project	2 5 6 0 0 at 3 3 3 if
3	Results of Joint Review1	4
	3.1 Results of Review based on DAC Evaluation Criteria 1 3.1.1 Relevance 1 3.1.2 Effectiveness 1 3.1.3 Efficiency 1 3.1.4 Impact 1 3.1.5 Sustainability 1 3.2 Evaluation on the results of the Project Risk Management 1 3.3 Lessons Learnt 1	5 5 6 7 8
4	For the Achievement of Overall Goals after the Project Completion:	21
	4.1 Prospects to achieve Overall Goal	1
	4.2 Implementation Structure and Plan of Operation of the TAN side to achieve Overall Goal	21
	4.3 Recommendations for the TAN and Tajikistan Government side2	2

LIST OF ANNEXES

ANNEX 1: Results of the Project

ANNEX1-1: List of Dispatched Experts

ANNEX1-2: List of Counterparts

ANNEX1-3: List of Training

ANNEX 2: List of Products Produced by the Project

ANNEX 3: PDM (All versions of PDM)

ANNEX3-1: PDM Version 1.0

ANNEX3-2: PDM Version 1.1

ANNEX3-3: Plan of Operation 1.0

ANNEX3-4: Plan of Operation 2.0

ANNEX3-5: Plan of Operation 3.0

ANNEX 4: R/D, M/M, Minutes of JCC (copy)

ANNEX4-1: RD

ANNEX4-2: Minutes of JCC1

ANNEX4-3: Minutes of JCC2

ANNEX4-4: Minutes of JCC3

ANNEX4-5: Minutes of JCC4

ANNEX 5: Monitoring Sheet (copy)

ANNEX5-1: Monitoring Sheet I Version 1

ANNEX5-2: Monitoring Sheet II Version 1

ANNEX5-4: Monitoring Sheet I Version 2

ANNEX5-5: Monitoring Sheet II Version 2

ANNEX5-6: Monitoring Sheet Summary Version 2

ANNEX5-7: Monitoring Sheet I Version 3

ANNEX5-8: Monitoring Sheet II Version 3

ANNEX5-9: Monitoring Sheet Summary Version 3

ANNEX5-10: Monitoring Sheet I Version 4

ANNEX5-11: Monitoring Sheet II Version 4

ANNEX5-12: Monitoring Sheet Summary Version 4

ANNEX5-13: Monitoring Sheet I Version 5

ANNEX5-14: Monitoring Sheet II Version 5

ANNEX5-15: Monitoring Sheet Summary Version 5

ANNEX5-16: Monitoring Sheet I Version 6

ANNEX5-17: Monitoring Sheet II Version 6

ANNEX5-18: Monitoring Sheet Summary Version 6

ABBREVIATIONS

ACC	Area Control Center		
AD	Aerodrome		
AIC	Aeronautical Information Circular		
AIP	Aeronautical Information Publication		
AIS	Aeronautical Information Services		
ANSP	Air Navigation Service Provider		
ATC	Air Traffic Control		
ATCO	Air Traffic Control Officer		
ATS	Air Traffic Services		
ATFM-C	Air Traffic Flow Management Center		
AWP	Annual Working Plan		
BL	Baseline		
CA	Chief Advisor		
CAA	Civil Aviation Authority		
CNS	Communication, Navigation and Surveillance		
C/P	Counterpart		
СР	Contingency Plan		
CR	Chief Representative		
DCA	Department of Civil Aviation		
DDG	Deputy Director General		
DG	Director General		
EBRD	European Bank for Reconstruction and Development		
FPD	Flight Procedure Design		
FPS	Flight Progress Strip		
GIT	General Instructor Training		
IATA	International Air Transport Association		
ICAO	International Civil Aviation Organization		
ILS	Instrument Landing System		
INV	ATM Occurrence Investigation and Analysis		
IFC	International Finance Corporation		
JCAB	Civil Aviation Bureau of Japan		
JCC	Joint Coordination Committee		
MAvA	Malaysia Aviation Academy		
NOTAM	Notice to Airman		
ODA	Official Development Assistance		
OJT	On the Job Training		
O/M	Operation Manual		
OS	Operation System		
PANS-OPS	Procedures for Air Navigation Services - Aircraft Operations		
PBN	Performance Based Navigation		
PCM/n	Project Coordination Meeting		
PD	Project Director		
PDM	Project Design MatrixINV		

PO	Plan of Operation		
PM	Project Manager		
QMS	Quality Management System		
R/M&S/A	Risk Management and Safety Assurance		
SA	Safety Assessment		
SAF	Introduction to Safety Assessment Methodology (SAF-SA1) ATM		
SAR	Search and Rescue		
SID/STAR	Standard Instrument Departure/Standard Terminal Arrival Route		
SMS	Safety Management System		
TAN	Tajikairnavigation		
TBD	To Be Determined		
TFnM	Taskforce-n Meeting		
TOR	Terms Of Reference		
ToT	Training of Trainer		
TRACECA	Transport Corridor Europe-Caucasus-Asia		
UTDD	Dushanbe International Airport		
UTDK	Kulab International Airport		
UTDL	Khujand International Airport		
UTDT	Kurgan-tyube Airport		
VOR/DME	VHF Omnidirectional Range/Distance Measuring Equipment		
W/G	Working Group		
W/S	Workshop		
WGS84	World Geodetic System 1984		

1 Basic Information of the Project

1.1 Country

The Republic of Tajikistan

1.2 Title of the Project

"The Project for Capacity Development in Air Traffic Services"

1.3 Duration of the Project (Planned and Actual)

The project was implemented for the period from March 2016 to December 2018 as planned.

1.4 Background (from Record of Discussions(R/D))

Air transport in Tajikistan, which is a land-locked country with 93% of the area being mountainous, plays an important role to support socio-economic activities. Air transport has great importance in international and long-distance domestic transport, having comparative advantage over road and rail transport. With recent economic growth, air traffic demand in Tajikistan has been increasing rapidly. The number of air passengers at Dushanbe International Airport has grown by 1.4 times between 2009 and 2013, reaching to 1.3 million passengers in 2013. Air cargo traffic as well increased rapidly by 1.7 times during the same period, reaching to 2,370 tons at Dushanbe International Airport in 2013. These growth trends are expected to continue toward the future.

With recognition that coping with increasing air traffic demand is an urgent need, Tajikistan has been upgrading aviation infrastructure at its major airports with assistance of EBRD, World Bank, the Government of France and the Government of Japan. However, in order to adequately handle further growth of air traffic, human resource development is equally important.

Air Traffic Control (ATC) services in Tajikistan needs modernization and capacity development. With a safety oversight on the civil aviation system in Tajikistan in 2008, International Civil Aviation Organization (ICAO) focused on old Soviet era-based rules, guidelines and operational manuals, which do not fully comply with international air navigation requirements. ICAO also found that the implementation of training program for ATC instructors/officers is necessary.

In response to ICAO's recommendations, the Ministry of Transport started establishing civil aviation regulations complied with international standards since 2008, and these changes required retraining of air traffic control officers to new ATC standard operation procedures.

1.5 Overall Goal and Project Purpose (from Record of Discussions(R/D))

1.5.1 Overall Goal

The Project's overall goal statement is: "To improve Air Traffic Service (ATS) in Tajikistan".

1.5.2 Project Purpose

The Project's purpose statement is: "To enhance capacity of Tajikairnavigation (TAN) in Air Traffic Service".

1.6 Implementing Agency

Tajikairnavigation (TAN)

2 Results of the Project

2.1 Results of the Project

2.1.1 Input by the Japanese side (Planned and Actual)

a. Total cost

370 million Japanese Yen (planned)

310 million Japanese Yen (actual)

b. JICA Experts

Table 2-1 shows the list of experts dispatched from Japanese side for the Project. A total of approximately 68.92 person-months of experts have been provided to the Project. This translates into an input of approximately 24.32 person-months per year.

Table 2-1: List of JICA Experts in Person-Months

Position/Technical Field	Person-Months		
Fosition/Technical Field	Planned	Actual	
Chief Advisor/ ATC Expert (1)	18.00 months	15.78 months	
Deputy Chief Advisor/ATC Expert (2)	8.60 months	4.27 months	
Simulator Training Expert	4.70 months	2.47 months	
AIS Expert	3.80 months	4.60 months	
Flight Procedure Design Expert	5.80 months	8.30 months	
Evaluation Expert	-	0.50 months	
Project Coordinator	33.00	33.00 months	
Total	73.90 months	68.92months	

The number of days, which the experts were engaged in the activities in Tajikistan is shown in Table 2-2.

Table 2-2: Dispatched Duration (days) of JICA Experts

Position/Technical Field	Duration (days)
Chief Advisor/ ATC Expert (1)	394
Deputy Chief Advisor/ATC Expert (2)	128
Simulator Training Expert	74
AIS Expert	138
Flight Procedure Design Expert	252
Evaluation Expert	15
Project Coordinator	974
Total	1975

c. Training Materials

The following training materials and other documents were produced during this Project.

	Training Material				
Task force	Sub-activities	No.	Title		
TF-1	2-1-1	1	Contingency Plan Basic Training Text Book		
TF-3	3-4	3	Outline of Flight Procedure Design (FPD) Guidance of FPD Exercise Map procurement specification		
Ì	Presentations, Dr	aft of Man	uals, other documents by TF and Expert team		
Task force	Sub-activities	No.	Title		
TF-1	1-4	7	Operation Manual Review Observation on ATC facility ATS system Capacity in TAN Calculation work flow Calculation detail procedure Runway capacity (sliding scale) MVA Map development OJT Instructor Training course OJT-I Hand Book in Japan OJT-I Hand Book in TAN Check list for OJT-I training (translate to Russian)		
	1-7	4	Training Material List (ACC, Approach, Radar, Tower) Air Traffic Controller's Training in Japan Examination system development in TAN ATC Tower Training with 3D Tower Simulator Operation Record Form Malfunction Report Form AD Simulator Supplementary Manual		
TF-2	2-1-1	1	Contingency Plan in TAN (approved by CAA)		
	2-1-3	1	Contingency Exercise Plan		

	2-2-2	2	The result of analysis on draft of SMS manual in TAN SMS manual in TAN (approved by CAA)
	2-2-4	2	Human Factor in TAN Airport Hazard Mapping
TF-3	3-1	2	Draft of RCC Operation Manual Draft of RCC Coordination Exercise Plan
	3-2	1	Presentation for Catch-up Exercise on Aeronautical Chart Drawing
	3-3	3	Draft of NOTAM operating procedure Manual TAN Draft of AIS Organization Manual Draft of AIP Process Manual
	3-5	12	Sample of Data Format Requirement, WGS-84 Survey for UTDD Survey points of WGS-84 Implementation, UTDD Outline of OJT on Flight procedure Design Guidance of OJT on FPD Guidance of Observation for FPD in Dushanbe airport Draft AIP of FPD (UTDD) Draft AIP of WGS-84 List (UTDD) Finalizing & AIP Charting Reference FPD-QA Preliminary Material Follow-up Guidance of FPD Outline of FPD Quality Assurance & Ground validation
Total		46	

d. Training Equipment (39 million Japanese Yen)

The following training equipment was procured for the implementation of the Project:

The grant equipment of AD Simulator system was successfully handed over to TAN on 8th September 2017.

Project procured 3 sets of 55" 4k UHD TV and stand in July 2017 and coordinated tax waiver custom clearance for importing equipment in August 2017.

NTT-data Corporation installed AD simulator system, then conducted "user training" and "maintenance training" successfully from August to September 2017.

Table 2-3: List of Learning Aids and Office Equipment Provided by Japanese Side

<*Procured in Japan>*

Name of Product	Qty	Procured Date	Price JPY
AD simulator	1	September 2017	39,067,837
Total 39,067,83			39,067,837

e. Overseas Training (47.6 million Japanese Yen) Oct.2018JICA rate113.029

The list of overseas training conducted under Japanese budget is shown in Table 2-4. The number of overseas training was (16), and a total of (56) trainees. Out of the (16) trainings, (8) were conducted in Malaysia.

Table 2-4: List of Overseas Training Conducted under Japanese Budget

Name of Training	Target Persons	No. of Trainees	Remarks
Aerodrome Control (#052)	Air Traffic Controller Officers	4	Jul, Oct 2016
	(ATCOs)		
Approach Control (#053)	ATCOs	3	Jul, Oct 2016
Approach Control (#054)	ATCOs	4	Jul, Oct 2016
Area Control (#055)	ATCOs	4	Jul 2016
Area Control (#054)	ATCOs	3	Jul, Oct 2016
General Instructor (#211)	AD Sim Instructors	8	Feb 2017
OJT Instructor (#219)	OJT Instructors	6	Jan, May 2017
Management	TF-1 managements	6	May 2017
SAF-SA1	Safety officers	2	Oct 2016
SAF-INV	Safety officers	2	Mar 2017
SAF-SA2	Safety officer	1	Jul 2017
Trainers Training for SMS	Safety officer and ATC	2	Jul 2017
Investigation ATC Incident	Safety officers	2	Feb 2018
SAF-HFA	Safety officer	1	Jun 2018
AIS Basic	AIS officers	4	Aug 2017
SAR Administration	AIS officers	4	Sep 2017
Total		56	

Note: # indicates ICAO Training Code Number

f. Overseas Activities Cost (9.5 million Japanese Yen)

Overseas Activities Cost were used for employment expenses of project assistant, transportation expenses and stationery purchase expenses.

2.1.2 Input by the TAN side (Planned and Actual)

a. Counterpart Personnel (C/P)

The Counterpart personnel assigned for the Project are shown in Table 2-5.

Table 2-5: List of Counterparts

Role in project	Name (Planned)	Name (Actual as of October 2018)
Project Director	Mr. Jobirov Ibrohim (Director	Mr. Ashurov Loik (Director
	General, TAN)	General, TAN)
Project Deputy Director	Mr. Shambiev Alisher (Fist	No change
	Deputy Director, TAN)	
Project Manager	Mr. Bakhtiyor Sheraliev (Head of	No change
	the Safety and Quality	
	Department)	
Taskforce 1 Leader	Mr. Davlyatov Daylat (Head of	Mr. Davron (Head of ATS)
	ATS)	
Sub-Leader	Mr. Mansuri Makhmad	Mr. Khusenov Payrav
	(Chief of ACC Dushanbe)	(Chief of ACC Dushanbe)
Taskforce 2 Leader	Mr. Bakhtiyor Sheraliev (Head of	No change

	the Safety and Quality	
	Department)	
Sub-Leader	Mr. Toshmatov Ulugbek (Safety	No change
	and Quality inspector)	
Taskforce 3 Leader	Mr. Khumorov Bakhtiyor (Head	Mr. Mukhamadaminshoev Firuz
	of ATFMC)	(Head of ATFMC)
Sub-Leader	Mr. Mukhamadaminshoev Firuz	Mr. Khumorov Bakhtiyor (Head
	(Head of AIS)	of AIS)

b. Project Office Space

Office space for the Project was provided in Head Quarter of TAN. TAN also provided desks, chairs and internet connection for the Project office.

Project Office Expenses

Utility cost was paid by TAN. JICA provided the following expenses for the project office.

No.	Item	Cost (TJS)
1	Purchase of Projector / EPSON EB-X04:	4,661
2	Purchase of Safe box / MAHAMAYI VS100K	3,605
3	Purchase of Scanner / HP Scanjet Pro 3000 s2	3,550
4	Purchase of Note-PC/ Lenovo ideapad FLEX4	8,310
5	Purchase of Note-PC/ Lenovo ideapad FLEX3	6,990
6	Purchase of Printer EPSON L1300	5,362
	Total	32,478

2.1.3 Activities (Planned and Actual)

a. Activities Related to Output 1

There are 7 activities related to Output 1: "To enhance capacity of training for Air Traffic Control (ATC) officers in line with ICAO standards" in the PDM. The results of each activity are shown below.

PDM Activities	Planning	Results
1-1. To conduct	Aerodrome #052	Completed:
training of ATC	Jul. 2016-Sep. 2016	Eighteen (18) ATC officers
officers on aerodrome,	Oct.2016-Dec.2016	successfully completed ICAO
approach and area	Approach procedure #053	authorized #052-#055 trainings
control services	Jul. 2016-Sep. 2016	in Malaysia Aviation Academy
	Nov.2016-Jan.2017	(MAvA) until August 2018.
	Approach surveillance #054	
	Jul. 2016-Sep. 2016	
	Oct.2016-Dec.2016	
	Area procedure #055	
	Jul. 2016-Sep. 2016	
	Area surveillance #054	
	Jul. 2016-Sep. 2016	
	Oct.2016-Dec.2016	

		T
1-2. To conduct OJT	OJT-I #219	Completed:
instructor training for	May2017	Five (5) instructors successfully
selected ATC officers		completed ICAO authorized
		#219 training in MAvA in January 2017.
1-3. To conduct	Simulator trainer	Completed:
instructor training for	(GIT)#211	Eight (8) instructors successfully
the simulator trainers	Feb2017	completed ICAO authorized
the simulator trainers	1602017	#211 training in MAvA in
		February 2017.
1-4. To review and if	Translation documents	Partially Completed:
necessary improve	(RusEng.)	All operation manual was
Operation manuals	Jul2016-Aug2016	reviewed.
operation manuals	Develop and update	Improvement of the manuals
	Sep2016-Jan2017	have not been completed for all
	Expert reporting session	reviewed results.
	Aug.2017	
	Workshop on Operation	
	Manual Review	
	Dec2017/Jan&May2018	
	ATC Capacity Assessment	
	(new request)	
	May2018	
1-5. To conduct OJT	OJT-I training	Completed:
on aerodrome,	Aug2017	ATC-1 expert observed several
approach and area	Workshop on OJT-I	instructors are capable of
control services	Material and Training Plan	providing OJT on aerodrome,
	Dev.	approach and are services
	Nov2017/May2018	according to the ICAO standard.
	Observation of OJT by CP	
	Instructors Nov2017	
1.6. To program	Nov2017	Completed
1-6. To procure aerodrome simulator	User Training on	Completed:
actouronne simurator	Aerodrome Simulator	Hand-over ceremony in September 2017.
	Sep 2017 Maintenance and Operation	Certificate by CAA in December
	Training on Aerodrome	2017.
	Sim	2017.
	Sep2017	
1-7. To conduct	Aerodrome Simulator	Completed:
simulator trainings	Trainer's Training	AD Sim training
	Jan2018	materials/periodical plan were
	Workshop on Simulator	developed, and trainings were
	Tr's Material & Training	done in accordance with the
	<u>Plan Dev</u>	plan.
	Jan2018	
	Observation of Aerodrome	
	Simulator by CP Trainers	
	Jan2018	

b. **Activities Related to Output 2**

There are 9 activities related to Output 2: "To enhance capacity of training for ATC officers 7

with regard to ICAO recommendations" in the PDM. The results of each activity are shown below.

PDM Activities	Planning	Results
2-1-1. To conduct basic <u>Translation documents</u>		Completed:
training on contingency	(RusEng.)	ATC-2 Expert conducted the
plan	Jun2016-Aug2016	lecture of "Contingency Plan
	Contingency Plan (CP)	(CP) Basic" in 21 July 2016.
	Basic 2016	
2.1.2 To improve the	Aug 2016 Develop Contingency	Completed:
2-1-2. To improve the draft contingency plans	Plan	CP was improved, and CP
draft contingency plans	Aug2016-Nov2016	completion seminar was
	114g201011012010	conducted.
2-1-3.To conduct	Make Exercise Plan	Completed:
exercise of contingency	Dec2016-Jan2017	CP exercise were conducted
procedures	Workshop on CP Exercise	twice. (in April 2017, in May
	May2018	2018)
2-1-4 To request	Monitoring on approval	Completed:
approval of CAA on the	process for CP (changed)	MOT approved Contingency Plan
contingency plans for	Jul2017	in TAN on 25th July 2017.
implementation	G.1.7/G.1.1.	
2-2-1. To obtain	SAF/SA 1 Oct2016 SAF/SA 2 Dec2016	Completed:
necessary knowledge of SMS	SAF/SA 2 Dec2016 SAF/INV Sep2016	Two (2) Safety officers successfully completed SAF-SA1
SIVIS	SAF-SA2 in	in October 2016 and SAF-INV in
	EUROCONTROL	March 2017 by
	Jul2017	EUROCONTROLE Luxemburg.
	Follow-up training on	
	SMS	
	Apr2017/Jul2017	
2-2-2. To develop and	Develop SMS Manual	Completed:
update SMS Manual	Aug2016-Oct2016	SMS manual was improved, and
	Study on SMS	Seminar on SMS manual
	<u>Implementation</u>	completion was conducted.
	Jul2017	
	W/S on Developing SMS Manual	
	Jul2017	
	Jul2017	
2-2-3. To establish risk		Completed:
management process		TAN's voluntary reporting
2.2.4. To image 1	Tueining on Designation	
•		
and safety assurance	•	
	l	
		_
	Seminar on Completion of SMS Manual Jul2017 Training on Basic Human Factors Apr2017 W/S on Runway Safety Program May2018	

		airports have RST and made hazard-map.
2-2-5. To conduct SMS	Make SMS Training Plan	Completed:
training and education	Dec2016	Additional SMS ToT in Russia
for ATC officers		for instructor was done. SMS
		training was conducted at 4
		airports, and will be continuously
		conducted for in September,
		October 2018

c. Activities Related to Output 3

There are 6 activities related to Output 3: "To enhance capacity of Aeronautical Information Services (AIS) officers with regard to ICAO recommendations" in the PDM. The results of each activity are shown below.

PDM Activities	Planning	Results
3-1. To conduct basic	AIS/General&	Completed:
3-1. To conduct basic training on AIS	AIS/General& AIS/Cartography Jun-Jul2016 W/S on SAR coordination manual development Apr2018 SAR Coordination Exercise Jul2018 Seminar on SAR Coordination Manual Jul2018	4 AIS officers successfully completed "AIS Basic" training provided by Group EAD in Frankfurt in August 2016. 4 officers participated in SAR administration training in Malaysia in September 2017, then AIS expert provided the workshop on SAR coordination manual development in April 2018 to organize SAR coordination exercise in July
3-2. To conduct basic		2018 finally.
training on aeronautical charts	NOTAM & AID	Completed: Project provides catch-up trainings of aeronautical chart drawing exercise as Subactivities by AIS Expert from in February and August 2017 by FPD expert.
3-3. To develop operation manual for Notice to Airman (NOTAM), Aeronautical Information Circulars (AIC) and Aeronautical Information Publication (AIP)	NOTAM & AIP Procedure Manual Development W/S Aug&Nov2017 NOTAM & AIP Procedure Manual Development W/S Apr2018	Completed: Operation manual for NOTAM, AIC and AIP were developed in August 2017 and January 2018.
3-4. To conduct basic training on flight procedure design (FPD)	Training on basic PANSOPS FPD Apr2017-May2017	Completed: FPD expert conducted PANS- OPS FPD training in April to May 2017. 5 AIS/ATC participants successfully obtained certification.
3-5. To conduct OJT of	WGS-84 data survey	Completed:

	T	T
flight procedure	(Step-1)	WGS-84 survey (newly included
designers for model	May2017-Jun2017	Projected activity in May and
airport	WGS-84 data survey	September 2017) was completed
	(Step-2a/2b)	in DYU. FPD expert conducted
	Sep2017	on OJT on FPD in November
	WGS-84 data survey	and December. Moreover, FPD
	(Remote oversight)	expert conducted the training for
	Feb2018	FPD Quality Assurance (QA) in
	OJT on FPD in DYU	September 2018.
	Nov2017-Dec2017	•
Observation for FPD in		
	DYU	
	Feb2018/Sep2018	
	PBN IFPD in Japan	
	Jun-Jul2017/ Jun-Jul2018	
	FPD-QA, GV/FV	
	Sep2018	
3-6. To produce draft of	AIP design Exercise on	Completed:
AIP of the model airport	Dushanbe Airport	AIS/FPD created draft of 6 AIPs
•	Apr2018	(5 FPD and WGS-84) by VISIO
	Seminar on AIP	in April.
	development completion	FPD team was fully engaged in
	Apr2018	DIA' ILS27 issued in 2018.

2.2 Achievements of the Project

2.2.1 Outputs and Indicators (Target values and actual values achieved at completion)

The achievements of the three project outputs indicated below are summarized in the following table according to the PDM indicators.

- Output 1: To enhance capacity of training for Air Traffic Control (ATC) officers in line with ICAO standards.
- Output 2: To enhance capacity of ATC officers with regard to ICAO recommendations.
- Output 3: To enhance capacity of Aeronautical Information Services (AIS) officers regard to ICAO recommendations.

Output 1 has been almost achieved since two of five indicators attained 100% achievement, and the remaining three indicators reached to 60% to 85% rates based on the assessment of objectively verifiable indicators of the PDM. It is estimated that two unfinished indicators will reach 100% by the end of 2018, and the remaining one indicator in 2019. Output 2 has been almost achieved since seven of eight indicators attained 100%, and remaining one indicator reached 70% . It is estimated that unfinished indicator will reach 100% in 2019. Output 3 also fully achieved with 100% achievement of all of 11 indicators.

Indicators for the PDM Outputs	Achievement as of October 2018
Output 1	
1-1. At least 80% officers/OJT	Achieved: 100%.
instructors/Simulator trainers who	ATC officers have completed trainings
attended training courses have	successfully and they were certified.

completed trainings successfully	Achieved: 100%.
	OJT instructors have completed trainings
	successfully and they were certified.
	Achieved: 100%.
	Simulator trainers have completed trainings
	successfully and they were certified.
1-2. Operation Manual has been	Partially Achieved: 60%
reviewed and improved if necessary	Expert reviewed the 35 documents, there were 29
	findings such as the difference with ICAO PANS-
	ATM in 8 documents.
	Most of the expert's recommendation has been
	accepted. However, recommendation is not fully
	implemented as planned. It is estimated that this
	indicator will be fully achieved in 2019.
	Improvement of the manual will continue after the
	Project completes.
1-3. Each OJT instructors has	Partially Achieved: 70%
conducted OJT on aerodrome,	OJT-I training was implemented. 20%
approach and area control services	(completed)
at least 2 times.	W/S was conducted successfully. 20%
at least 2 times.	(completed)
	Expert observed and lecture to 3 OJT Instructors.
	30% (completed)
	2 more OJT instructors will conduct OJT in 2019.
1-4. Aerodrome simulator has been	
	Achieved: 100% Aerodrome simulator was installed and
operational.	
1.5. E. d. danda (adam)	operational.
1-5. Each simulator trainers have	Almost Achieved: 85%
been conducting simulator training	Sim-ToT was conducted. 40% (completed)
at least 3 times per month.	W/S was implemented. 20% (completed)
	Expert observed and had lecture to CP instructor.
	10% (completed)
	CP instructors were training AD simulator three
	times a month. 15% (completed)
	Some instructors, who have not performed
	simulator training 3 times a month, will achieve
	the target frequency in 2019.
Output 2	LA 1: 1 1000/
2-1-1 2 ATC officers have	Achieved: 100%
completed basic course on	Basic course on contingency plan was completed
contingency plan successfully.	successfully.
2-1-2 Exercise of contingency	Achieved: 100%
procedures has been conducted	Exercise of contingency procedures have been
successfully.	conducted twice successfully.
2-1-3 The contingency plan has	Achieved: 100%
been approved by CAA for	The contingency plan has been approved by MOT
implementation.	on 25 July 2017.
2-2-1 2 ATC officers have been	Achieved: 100%
completed courses on SMS	SAF-SA1, -SA2, -INV courses were completed
successfully.	and 2 ATC officers were certified.
2-2-2 SMS manual has been	Achieved: 100%
developed and updated.	SMS manual has been developed. F/U training,
	W/S and Seminar were conducted successfully.
	,

2.2.2.0:1	A 1' 1 1000/
2-2-3 Risk management process has	Achieved: 100%
been established.	TAN established risk management process in the
	safety management manual. TAN started to
	operate Voluntary Reporting System, which is one
	important element of the risk management
	process.
2-2-4 Safety risk management and	Partially Achieved: 75%
safety assurance have been	TAN is currently implementing safety risk
implemented.	management. TAN is capable of conducting risk
	assessment (identify the hazard) with the
	knowledge of Human Factors, established a
	system of analyzing data obtained from the
	Runway Safety Team (RST) activities. Safety
	assurance is not implemented yet. It will achieve
	the target in 2019.
2-2-5 SMS training and education	Achieved: 100%
for all ATC officers have been	SMS ToT abroad and Conducted training SMS are
conducted.	completed successfully.
Output 3	
3-1 2 AIS officers have been	Achieved: 100%
successfully completed basic course	Basic course on AIS was completed successfully.
on AIS	
3-2 2 AIS officers have successfully	Achieved: 100%
completed basic course on	Basic course on aeronautical charts was completed
aeronautical charts	successfully.
3-3 Operation manual for Notice to	Achieved: 100%
Airman (NOTAM), Aeronautical	Operation manual of NOTAM, AIC, AIP were
Information Circular (AIC) and	developed.
Aeronautical Information	
Publication (AIP) have been	
developed	
3-4 2 flight procedure designers	Achieved: 100%
have successfully completed basic	Basic course on PANS-OPS was completed
course on PANS-OPS	successfully.
3-5 2 flight procedure designers	Achieved: 100%
have successfully completed OJT on	OJT on conventional flight procedure design was
conventional flight procedure design	completed successfully.
(FPD)	Ashious de 1000/
WGS-84 (newly included Project in	Achieved: 100%
May 2017)	WGS-84 survey was completed in DYU.
FPD-QA (conducted by association)	Achieved: 100%
2.6 Dueft of Agnes!1	FPD-QA training was completed successfully.
3-6 Draft of Aeronautical	Achieved: 100%
Information Publication (AIP) of the	Draft of Aeronautical Information Publication
model airport has been produced	(AIP) of the model airport was produced in April
2.7.4. AIC officers 1	2018.
3-7 4 AIS officers have successfully	Achieved: 100%
completed basic course on SAR	Basic course on SAR was completed successfully
2.0 CAD 1' ' 11	in April 2018.
3-8 SAR coordination manual has	Achieved: 100%
been developed	SAR coordination manual was developed in July
2.0.00 12.00	and September 2018.
3-9 SAR coordination exercise has	Achieved: 100%

been conducted successfully	SAR coordination exercise was conducted
	successfully in October 2018.

2.2.2 Project Purpose and Indicators (Target values and actual values achieved at completion)

The Project Purpose "To enhance capacity of Tajikairnavigation (TAN) in Air Traffic Services (ATS)" was almost achieved based on the assessment of objectively verifiable indicators of the PDM. The achievements of the Project Purpose at the time of this evaluation are summarized in the following table. The Project Purpose is expected to achieve 100% in 2019.

Indicator for Project Purpose	Achievement as of October 2018
1 All ATC officers working at ATC units have passed training in line with ICAO standards conducted by OJT instructors and simulator trainers	Almost Achieved: TAN's OJT instructors and simulator trainers have provided trainings for ATC officers. Operation Manual needs further modification to fully comply with ICAO standards, and this will be completed in 2019.
2 The Contingency Plan and SMS for ATC have been implemented	Achieved: Contingency Plan was approved by MOT. SMS has been implemented.
3 The draft AIP of model airport has been compliant with ICAO standards	Achieved: 5 (FPs) and 1 (WGS-84) AIP (AD) in UTDD were drafted by VISIO, and Expert confirmed it as ICAO standard quality.

2.3 History of PDM Modification

The Project revised the PDM once from the PDM version 1.0 dated 26 April 2016 as shown below to suit to assistance needs. The indicator for newly added SAR in PDM was changed in accordance of discussion at JCC/2. The revisions contributed to indicate the achievement of the Project Purpose more accurately. The details of the revisions are shown in Annex 3.

(1) The 1st revision dated 16 June 2017

Indicators of Outputs 3: Three indicators on SAR were added the PDM as follows;

Indicator 3-7: 4 AIS officers have successfully completed basic course on SAR.

Indicator 3-8: SAR coordination manual has been developed.

Indicator 3-9: SAR coordination exercise has been conducted successfully.

2.4 Others

2.4.1 Results of Environmental and Social Considerations (if applicable)

Not applicable.

2.4.2 Results of Considerations on Gender/Peace Building/Poverty Reduction (if applicable)

Not applicable.

3 Results of Joint Review

3.1 Results of Review based on DAC Evaluation Criteria

The Project is reviewed jointly by both the Japanese side and the TAN side from the viewpoint of Five Evaluation Criteria, defined by JICA which was originally proposed by DAC (OECD) shown in the following table.

Table 3-1: Five Evaluation Criteria

Criteria	Description
1.Relevance	Degree of compatibility between the development assistance and
	priority of policy of the target group, the recipient, and the donor.
2.Effectiveness	A measure of the extent to which an aid activity attains its objectives.
3.Efficiency	Efficiency measures the outputs qualitative and quantitative in
	relation to the inputs. It is an economic term which is used to assess the extent to
	which aid uses the least costly resources possible in order to achieve the desired
	results. This generally requires comparing alternative approaches to achieving the
	same outputs, to see whether
	the most efficient process has been adopted
4.Impact	The positive and negative changes produced by a development
	intervention, directly or indirectly, intended or unintended. This involves the main
	impacts and effects resulting from the activity on the local social, economic,
	environmental and other development indicators.
5.Sustainability	Sustainability is concerned with measuring whether the benefits of an activity are
	likely to continue after donor funding has been withdrawn. Projects need to be
	environmentally as well as financially sustainable.

Source: JICA Project Evaluation Guideline (2010), JICA

The table below indicates summary of the evaluation results. Since effectiveness of the Project, which measures achievement of outputs, have differences between the three outputs, this part of the results is shown for each output and the total of the Project.

Table 3-2: Evaluation based on DAC Criteria

Relevance	High
Effectiveness	High Output 1: Fair, Output 2: High, Output 3: High
Efficiency	Fair
Impact	High
Sustainability	High

3.1.1 Relevance

The relevance of the Project is judged "High" for the following reasons:

Since 93% of the Tajikistan territory is mountainous area, civil aviation is a very critical mode to complement the road and railroad transportation. The "National Target Development Strategy for Transport Sector of the Republic Tajikistan to the Year 2025" (2011) mentions necessity of the air navigation improvement to support economic development. Thus, safe and smooth operation of civil aviation is a priority policy of the nation.

In January 2015, International Civil Aviation Organization (ICAO) conducted a Validation Mission to TAN and made recommendation on air transportation services such as Training program, Contingency plan, planning and implementation of Safety Management System, Aeronautical Information Services, etc. The Project has been planned to carry out these ICAO recommendations.

JICA's supporting policy for Tajikistan puts importance on transportation infrastructure for vitalization of regional connection and sustainable economic development. Recently JICA implemented a grant project "Dushanbe International Airport Improvement Plan (2014-2016)" which can generate synergistic effects with the Project.

Even though the number of flights in Tajikistan has been fluctuating in recent years due to, mainly, regional issues such as disturbances in Afghanistan, this country has a good potential to handle more air passengers and cargo. To prepare for the future increase in air traffic, TAN has a crucial need to improve its capacity that meets the ICAO's standard.

3.1.2 Effectiveness

The effectiveness of the Project is judged "High" for the following reasons:

The Project purpose and outputs were defined in PDM in the following way;

- Project purpose: To enhance capacity of Tajik-air-navigation (TAN) in Air Traffic Services (ATS)
 - Output 1: To enhance capacity of training for Air Traffic Control (ATC) officers in line with ICAO standards.
 - Output 2: To enhance capacity of ATC officers with regard to ICAO recommendations.
 - Output3: To enhance capacity of Aeronautical Information Services (AIS) officers regard to ICAO recommendations.

Achievement of the project purpose and outputs were examined by their indicators. As is shown in 2.2 of this report, most of the outputs and project purpose have been attained to the satisfactory extent.

• Output 1

Three major components of Output 1 are overseas trainings, conducting various training in TAN and revising TAN's operation manuals. Overseas trainings were successfully conducted in Malaysia and other countries (refer to Table 2-4: List of Overseas Training Conducted under Japanese Budget). Human resource of ATC and OJT instruction has been enhanced successfully and instructors are active for trainings. Another component, revising operation manual was not fully completed during the project period, and improvement of the manual will continue after the project completes.

• Output 2

Concerning Output 2, "enhance capacity of ATC officers", the achievement was good. Even before the Project, C/P had some knowledge of Contingency Plan, Safety Management System, etc. to some extent. This Project enhanced their capacity to international level. The Project well implemented the activity plan with conducting lectures, manual editing and other tasks. As a result, effectiveness of Task force 2 is high.

• Output 3

Activities of Output 3 includes training on Aeronautical Information System (AIS). The Project successfully completed developed NOTAM, AIC and AIP manual, which are compliant to ICAO standard.

Activities of Output 3 also includes Search and Rescue (SAR). Four TAN officers learned basic of SAR in Malaysia. This is a new task of TAN, which was pointed out by ICAO audit. What the training participants learned in Malaysia was how to plan SAR system. They acquired knowledge on how to manage the SAR implementation, developed SAR coordination manual and successfully conducted SAR coordination exercise.

Flight Procedure Design (FPD) is also under the category of Output3. TAN dispatched four participants to JICA group training in Japan, and the JICA experts provided practical training of FDP in Tajikistan. Those TAN staff have successfully drafted Aeronautical Information Publication (AIP) of the model airport and indicated that their FDP-related AIS capacity have been enhanced by the Project.

Judging from indicators of Output 3 mentioned in Project Design Matrix (PDM), effectiveness of Output 3 is high.

3.1.3 Efficiency

The efficiency of the Project is Fair. The Project allocated almost all the planed and added inputs within the scheduled period and achieved expected outputs with some exceptions such as remaining work for operation manual revision. As is mentioned in "2.1 Results of the Project" items of inputs and their cost is reasonable and total cost was enough below the plan. However, joint evaluation team found some faults that damaged the effective operation of the Project.

Preferable side

a) Preprimary Trainings

The C/P of the Task Forces has attended the third county trainings of ICAO standard at MAvA, Malaysia. This system prepared readiness of C/Ps to receive higher technical transfer from Japanese experts. Within the limited assignment allocation of the C/P and JICA experts, this project has input almost all the resources planned and conducted most of the necessary activities as scheduled. Main language of communication between C/P and JICA experts was English. Nomination of participants to the third country trainings considered English ability. In some cases, both of JICA experts and C/Ps felt difficulty in English communication.

b) Development of Training Capacity

For the enhancement of training capacity of TAN, the Project dispatched six Air Traffic Controllers to OJT-I training and another eight Air Traffic Controllers to GIT training in Malaysia, and now they are active in OJT and simulator training. This strategy (Training of Trainers) was very efficient. JICA granted tower navigation simulator to TAN, which is very effective equipment to improve and examine the capacity of ATCOs. Establishing training system in TAN is more cost-efficient comparing with technical transfer between JICA experts and TAN's C/P.

c) Assignment of JICA Experts

At the beginning, the Project expected longer assignment of the JICA experts. But, assignment of JICA experts was rationalized during the implementation of the Project. The experts completed all the activities within this shorter-than-planned assignment period, and this change, as a result, improved the efficiency of the Project.

Unpreferable side

a) Attendance Rate to Lectures of JICA Experts

JICA experts have organized many lectures. According to the report of the lectures, attendance ratio was not always high. C/Ps participate to lectures at the off time of their work shift. Sometimes C/Ps are on their shift and could not attend lectures of JICA experts. Some C/P mentioned lectures were not always interactive, excited and very relevant to needs of them. Not all the responsibility of lecture preparation and execution belong to JICA experts. Task force leaders and resource persons of TAN especially these trained in Malaysia could have made some improvement of this lecture issue.

b) Delay in Preparation of Detailed Project Activity Plan

Preparation of the detailed Project activity plan was produced after one year from the commencement of the Project, which disturbed the efficiency of the technical cooperation. Project activities and their break down should logically connected to the three outputs of the Project. Thus, JICA expert should be aware that how each detailed activity contributes to the relevant output. The Project might have regarded that detailed activities do not have to be prepared before the completion of MAvA trainings. This delay caused various hindrances for the smooth activities of the Project, especially in Task Force 1. In other words, Task force 2 & 3 got less damages from this delay. Because activities of Task Force 2 were already planned with some details and those of Task Force 3 were scheduled to start from the middle of 2017.

3.1.4 Impact

Impact of the Project is High

This project has achieved its goal to an appropriate extent and TAN is even making steady steps towards accomplishment of its overall goal, which is "To improve Air Traffic Services (ATS) in Tajikistan". TAN has established an integrated training, rating, and examination system to improve quality of its human resources. These systems will lead TAN to the achievement of the Overall goal.

C/P trainings in foreign countries such as Malaysia, Japan, Russia, Kazakhstan, Germany and Luxemburg raised capacity of TAN's participants. These trainings pulled up the level of C/P and let them be ready for the technical transfer from the JICA experts. In addition to this direct effect, these training occasions have stimulated TAN staff. They became more aware and motivated to learn English language and to learn Air Traffic Services through comparison between systems of TAN and other countries. This project opened their eyes to the outer world.

With ICAO's audit and this Project, TAN become aware of the world out of the former Soviet Union. C/Ps have been exposed to new concept and tasks such as Search and Rescue (SAR), Flight Procedure Design (FPD), WGS-84, FPD-QA, G/V. Also, during the Project C/P got ideas of road map for the future that include Performance Based Navigation (PBN). The impact of the Project that released TAN from "isolated situation" was significant.

3.1.5 Sustainability

Sustainability of the Project is High.

Policy and Institutional Aspect

Smooth and safe civil aviation will remain important national policy for sound socioeconomic development. Even though air traffic count is not regularly increasing, Air Traffic Service is an essential infrastructure to manage prospective economic development.

Organizational aspect

a) Structural Revising

During the project, a new section named Development Department has been organized. This section handles newly introduced tasks by the Project such as Safety Management System, Flight Procedure Design of the Task Force 3. Under a very capable manager, this department has very high potential to establish and implement these new tasks.

b) Personnel policy of TAN

Recently, the TAN's Head of Personnel Department got another assignment as the Head of the Training Center of TAN. This will make stronger connection between human resource development and treatment. TAN has made incentive for human resource development. For example, if navigation officer gets one more rating (license of sub-work), he/she can get 5% of salary increase. Also, navigation officers working for Flight Procedure Design get 30% of salary increase. These personnel policy facilitates staff motivation to challenge new task and ratings.

Technical aspect

During the Project, TAN has established training system with multi methodologies as shown below. This system will continuously contribute to the human resource development of TAN.

a) Training System

OIT

One-to-one and face-to-face training (theoretical, practical and using-simulator) for the position of Briefing, Tower, Air Control Center (ACC), Approach and Radar are in operation by six OJT instructors.

Technical Trainings

Monthly one-day training and seasonal trainings (twice a year) are conducted by lecture and by simulators. Also, Web Based Training by Russian system is available for theoretical training.

• English refreshing course

TAN has two English teachers and a class room facility.

b) Examination system

• Rating examination

Air traffic officers should take a license to work in the position of Briefing, Tower, Area Control Center, Approach and Radar. Trainees learn these practical skills through OJT. Examination are conducted twice; 1st one by TAN and 2nd one by CAA.

Seasonal Examination

At the beginning of summer and winter season, Air Traffic Controllers with each rating should take writing and interview examination to check their readiness for the coming season. In addition to this examination, each officer should work for certain hours in each

rating position to maintain their ratings.

• Examination of License Renewal

All the Air Traffic Controllers should take exam of 11 subjects to maintain their license. Without passing this examination, no Air Traffic Controllers can renew their license. In addition to this examination, each officer should work for certain hours in air navigation to maintain their license.

Among the items mentioned above, OJT and Aerodrome simulation training have been established by the Project. TAN will surely optimize these new training methods.

Financial aspect

Revenue of TAN is charge of air navigation and aeronautical information services. Income of 2017 was some 70 million Somoni, which is some 6.40 million US\$. Revenue of 2018 would be improved. Number of airways connecting points between Tajikistan and neighboring countries was 54 in 2017. It has increased to 65 now in 2018. The more the connecting points the smoother the flight lines. And it would attract more airlines to use over pass navigation service of Tajikistan. Since TAN is making effort to increase air navigation revenues, it is estimated that TAN can sustain the effect of the Project in financial aspect.

3.2 Evaluation on the results of the Project Risk Management

There are two kinds of risks in this project, resignation of CPs trained by the Project and motivation of Task Force Leaders.

1) Resignation

Since the TAN's salary is not good enough from the international standard, there is a significant potential that trained and capable Project C/P might resign for a better paid job. As countermeasures, TAN provided additional salary if a C/P undertakes additional tasks (such as Flight Procedure Design trained by the Project) in addition to his ordinal work, the officer gets supplementary salary. The Project also selected participants to overseas training from those who would work continuously for TAN.

2) Motivation of Task Force Leaders

Attitude and enthusiasm toward the Project varied among task force leaders. At the ending period of the Project, the most motivated leader was assigned for some difficult task such as operation manual revising, Fight Procedure Design (FPD) and Search and Rescue with some organizational change of TAN so that the Project effects can survive after its completion.

3.3 Lessons Learnt

(1) Preferable Aspects

1) Training in Japan and third countries

This project dispatched its C/P to Japan (JICA's group Training) Malaysia, Germany, Russia and Luxemburg. These trainings gave the participants enormous knowledge, skill, stimulation, motivation and awareness of different navigation system and its teaching methods of ICAO standards. JICA experts supported these ex-trainees in an effective way because all these C/P has reached to an appropriate technical level. These trainings abroad were very effective eye openers to motive them learning from different system.

2) Building capacity of Training

The Project aimed not only capacity of TAN officers, but also capacity of training for sustainable capacity development. System of Training of Trainers (TOT), OJT, lecture and simulation types of trainings are well implemented as routine tasks of the organization. This secures sustainability of the Project achievement.

Flexible Project Management

Introduction, technical improvement and institutional development of "Search and Rescue (SAR)" WGS-84, FPD-QA, G/V, Third Country training for TF 2 were added to the Project activities after commencement. These are an important topic to change air navigation system consistent with ICAO standard. Upon request from TAN, JICA side affirmatively consider these and agree to include these new topics into the Project. Any project plan may be good enough at the starting point, however, if situations change, the Project also change to produce the most preferable results at the end of the Project. Inclusion of SAR and other items is a good practice for project management.

(2) Unpreferable Aspect

1) Delay of Detailed Action Planning

Project Design Matrix (PDM) prepared by JICA mentions Project Activities as a part of narrative summary. But PDM is not enough to implement the Project. The Project members should have prepared a detailed action plan at an earlier stage of the Project and it should be shared among all the Project stakeholders. Detailed activity plan facilitates practical assignment frequency and period of the JICA experts and gives clear ideas for preparation of activities.

Since major activities of Task Force 1 were expected to start after the third country trainings at MAvA, Malaysia, the Project may have misunderstood this as a moratorium of detailed planning. The project caught up the schedule of detailed planning at the 2nd year and learned detailed plan should be prepared enough beforehand, because often an output of activity "A" is an input of the next activity "B". Detailed plan is necessary to have a good glance of the entire Project for a better management.

2) Contribution of C/P after Trainings in Third Countries

Trainings of C/P in third countries later facilitated effective technical transfer from the JICA experts. However, some expected contributions were not fulfilled. Not all the ex-trainees were passionate to support the smooth and efficient implementation of the Project. If their contribution were more, the Project could have fully complete revision of TAN's operation manuals and organized more vivid lectures for technical transfer. Projects should have some mechanism to overcome this issue. Even though C/Ps of Task Force 1 were motivated enough just after the trainings at MAvA, their momentum may have decreased by the not-well-prepared technical support at the early stage of the Project.

3) Coordination of C/Ps' work shift and incentive to attend the experts' lectures

At the early stage of the Project for the C/Ps, there were no incentive and compensation to attend the experts' lectures at their shift off time. And C/Ps on their shift could not attend the lecture. The Project started necessary arrangement at the later stage. Since paying overtime and change of work-shift may need change of rules and additional cost, a careful attention should

have been paid to this issue at the planning stage of the Projects.

4) Language skill

Working language of TAN is basically Russian, with which no JICA experts are friendly. Even though Air Traffic Controllers use English language in their work, their English skill are not necessarily good enough to learn technical matters in this language. JICA side should dispatch experts with a good English skill at least. In addition to that, the Project should have been aware of necessity for the Russian-English translation and interpretation. When the Project prepares the detailed action plan at the beginning, it should examine if each action can be executed without language problem.

4 For the Achievement of Overall Goals after the Project Completion

4.1 Prospects to achieve Overall Goal

Possibility of TAN to achieve the overall goal is high. Because training systems in TAN has been established during the Project and they are making effects. This is partly because the overall goal and project purpose are very similar with each other, which means achievement of the Project purpose is nearly equal to accomplishment of the overall goal.

- Project purpose: To enhance capacity of Tajik-air-navigation (TAN) in Air Traffic Services (ATS)
- Overall Goal: To improve Air Traffic Services (ATS) in Tajikistan

4.2 Implementation Structure and Plan of Operation of the TAN side to achieve Overall Goal

(1) Relevant structure of the Project to achieve the overall goal

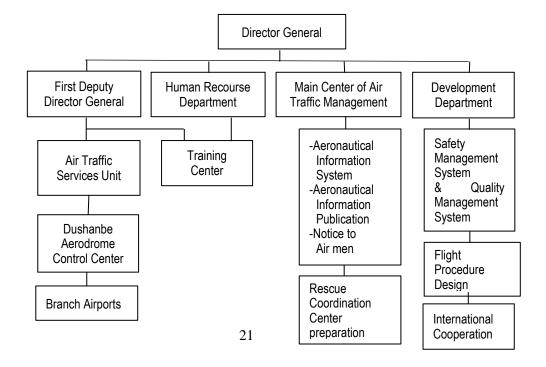


Figure 3-2: Structure of TAN (only the Project relevant parts)

TAN has an organizational structure as shown in the Figure 3-2 above. Some of the structure has been changed to maintain the achievement of the Project.

(2) Plan of operation of TAN to achieve the overall goal

Plan of operation of TAN to achieve the overall goal has not yet been prepared. However, TAN has enhanced human resource development system with the Project. Training and examination system of TAN is mentioned in "Organizational aspect" of "3.1.5 Sustainability". These multilayered trainings, rating and examination system will continuously develop human resource of TAN and achieve the overall goal.

4.3 Recommendations for the TAN and Tajikistan Government side

(1) Plan of Management and Operation of TAN after the Project

TAN should have management and operation plan to further develop its capacity. Even after the improvement by the Project, TAN has issues to overcome and challenge. For an organization in an environment of rapid technical progress, long and mid-term management and operation plan would help to judge priority with limited resources.

- (2) Continuous Relation with JICA and other countries
- TAN should often remind the request of next technical cooperation on PBN to JICA.
 Tajikistan PBN implementation plan shall be improved for effective cooperation with JICA. TAN should continuously monitor the availability of JICA group trainings on relevant technical topics of ATS.
- 2) This project used existing training system in third countries such as Malaysia, Russia, Germany, and Luxemburg, which were good opportunities for TAN officers to compare TAN system with others. There can be some chances for TAN to send its officers to these training at an affordable cost. The newly established International Cooperation Unit of Development Department of TAN should actively look for these occasions.
- 3) Cooperation with neighboring countries is important with two aspects. One is that most of them are on the way to adapt ICAO system to their Air Navigation and as "fellow organization", TAN could mutually learn with them.
 - Second aspect is overpass flights. Neighboring countries should make cooperation to set reasonable over flight routes. TAN should actively build good relations with its neighboring counterpart organizations and get the newest information.
- (3) Capacity building of Civil Aviation Agency (CAA)

CAA is a government organization to make grand design of civil aviation and supervise TAN. However, no one of the CAA officers has experience of Air Traffic Control Services, which disturbs to develop and amend policies of civil aviation including Air Traffic Control Services. CAA and TAN should make coordination so that at least one CAA officer has practical knowledge of Air Traffic Control Services.

ANNEXES

ANNEX 1: Results of the Project

(List of Dispatched Experts, List of Counterparts, List of Trainings, etc.)

ANNEX 2: List of Products (Report, Manuals, Handbooks, etc.) Produced by the Project

ANNEX 3: PDM (All versions of PDM)

ANNEX 4: R/D, M/M, Minutes of JCC (copy) (*)

ANNEX 5: Monitoring Sheet (copy) (*)

Separate Volume: Copy of Products Produced by the Project

ANNEX 1-1

• List of Dispatched Experts

Name	Role in the Project	Assigned Period (Person-Month)
Toshio YOSHIDA	Chief Advisor/ Air Traffic Controller (ATC 1), Training Specialist ~Sep 2017	9.37 months
Hideo WATANABE	Chief Advisor/ Air Traffic Controller (ATC 1), Training Specialist Oct 2017~	2.66 months
Hideo WATANABE	Deputy Chief Advisor/ Air Traffic Controller (ATC 2) Contingency Plan and Safety Expert	4.27 months
Akio SAKAE	Simulator Training Expert	2.47 months
Atsushi YAMANE	FPD Expert	8.44 months
Tsuyoshi SHIRAI	AIS Expert	1.23 months
Shinichiro SUKEGAWA	AIS and SAR Expert	3.37 months
Hideo SAKAMOTO	Evaluation Expert	0.5 month
Tomonori ORITA	Project coordinator	33 months

ANNEX 1-2 List of Counterparts & Support Staff

List of Counterparts

Role in the Project	Name	Affiliation (Division, Section, Unit)	
Project Director	Mr. J. Ibrohim	Director General of Tajikairnavigation(TAN) ~Oct. 2016	
Project Director	Mr. A. Loik	Director General of TAN Nov. 2016~	
Project Deputy Director	Mr. S. Alisher	First Deputy Director, TAN	
Project Manager	Mr. B. Sheraliev	Head of the safety and Quality Department, TAN	
Project Coordinator	Mr. T. Orita	Project coordinator, TJ-ATS project, JICA	
Taskforce 1 leader	Mr. D. Daylat	Head of ATS, TAN ~Jan 2018	
	Mr. D. Rajabov	Head of ATS, TAN Feb.2018~	
Taskforce 1 sub-leader	Mr. M. Makhmad	Chief of ACC Dushanbe, TAN ~Jan 2018	
	Mr. K. Payrav	Chief of ACC Dushanbe, TAN Feb 2018~	
Taskforce 2 leader	Mr. B. Sheraliev Head of the safety and Quality Depart TAN		
Taskforce 2 sub-leader	Mr. T. Ulugbek	Safety and Quality inspector, TAN	
Taskforce 3 leader	Mr. K. Bakhtiyor	Head of ATFM, TAN ~ Jan 2018	
	Mr. M. Firuz	Head of ATFM, TAN Feb 2018~	
Taskforce 3 sub-leader	Mr. M. Firuz	Head of AIS, TAN ~ Jan 2018	
	Mr. K. Bakhtiyor	Head of AIS, TAN Feb 2018~	

ANNEX 1-3

• List of Trainings

<Overseas>

Course Title	No. of Trainees	Duration
Aerodrome Control #052	2	2016/07/26-09/23 8 weeks
(MAvA, Malaysia)		
Approach Control (Procedural)	2	2016/07/26-09/30 8 weeks
#053 (MAvA, Malaysia)		o wooko
Approach Control (Surveillance)	2	2016/07/26-09/30
#054(MAvA, Malaysia)	2	8 weeks
Area Control (Procedural) #055 (MAvA, Malaysia)	2	2016/07/26-10/21 12 weeks
Area Control (Surveillance) #054 (MAvA, Malaysia)	2	2016/07/26-09/30 8 weeks
Aerodrome Control	2	2016/10/18-12/23
#052 (MAvA, Malaysia)	2	8 weeks
Approach Control (Procedural)	1	2016/10/18-12/23
#053 (MAvA, Malaysia)	1	8 weeks
Approach Control (Surveillance)	2	2016/10/18-12/23
#054 (MAvA, Malaysia)	L	8 weeks
Area Control (Surveillance)	3	2016/10/18-12/23
#054 (MAvA, Malaysia)		8 weeks
OJT Instructor Training	5	2017/01/09-01/20
#219 (MAvA, Malaysia)	3	2 weeks
General Instructor Training (BIT)	8	2017/02/13-02/17
#211 (MAvA, Malaysia)	O O	1 week
OJT Instructor Training	1	2017/05/08-05/19
#219 (MAvA, Malaysia)	1	2 weeks
TF1 Management Training	7	2017/05/08-05/12
(MAvA, Malaysia)	,	1 week
Safety Assessment SAF-SA1	2	2016/10/17-10/21
(Theoretical) (EURCNT, Luxemburg)	L	1 week

ATM Occurrence Investigation & Analysis (EURCNT, Luxemburg)	2	2017/03/20-03/24 1 week
Safety Assessment SAF-SA2 (Practical) (EURCNT, Luxemburg)	1	2017/07/03-07/07 1 week
AIS Training (AIS basic / Aeronautical Chart) (GroupEAD, Germany)	4	2016/08/15-09/03 3 weeks
PBN Instrument FPD in Japan	2	2017/06/12-07/31 6 weeks
PBN Instrument FPD in Japan	2	2018/06/6-07/14 6 weeks
Total		

<Tajikistan>

Course Title	No. of Trainees	Duration
English Writing Training in Dushanbe (Mehrbonu)	6	2016/08/22-10/14 8 weeks
English Writing Training in Khujand (DONO)	2	2016/08/22-10/14 8 weeks
Operation Manual review Working Group formation meeting + Shearing technical findings of MAvA among Jul, Oct-G and Expert	18+	2017/02/08-02/08 1 day
Follow-up seminar on aerodrome control	18+	2017/02/21-02/24 4 days
AD-Sim Operation Training by NTT-Data	4	2017/09/04-08 1 week
Contingency Plan Basic	2	2016/07/21-07/21 1 day
Human Factor Training	2	2017/04/10-04/14 1 week
SAF-INV F/U Training (Included reporting)	2	2017/04/07-04/07 1 day
CP Exercise / Implement WS	2	2017/04/18-04/18 1 day
CP Completion Seminar	2	2017/04/20-04/20 1 day

Aeronautical Information Service (AIS) Seminar	N/A	2017/02/09-02/09 1 day
Catchup exercise on Aeronautical Chart drawing -1	4	2017/02/13-02/17 1 week
NOTAM/AIP Procedure Manual Development W/S	4	2017/02/27-03/02 1 week
Training on basic PANS-OPS Flight Procedure Design	4	2017/04/12-05/24 7 weeks
Total		

ANNEX 2: List of Products Produced by the Project

Reports

	Name of Products
Inception Report	
Work Plan	
Monitoring Sheet I	
Monitoring Sheet II	

Training Materials and Other documents

Name of Products		
TF-1	(1)	Operation Manual Review
	(2)	Observation on ATC facility
	(3)	ATS system Capacity in TAN
	(4)	Calculation work flow
	(5)	Calculation detail procedure
	(6)	Runway capacity (sliding scale)
	(7)	MVA Map development
	(8)	OJT Instructor Training course
	(9)	OJT-I Hand Book in Japan
	(10)	OJT-I Hand Book in TAN
	(11)	Check list for OJT-I training (translate to Russian)
	(12)	Training Material List (ACC, Approach, Radar, Tower)
	(13)	Air Traffic Controller's Training in Japan
	(14)	Examination system development in TAN
	(15)	ATC Tower Training with 3D Tower Simulator

	(16)	Operation Record Form
	(17)	Malfunction Report Form
	(18)	AD Simulator Supplementary Manual
TF-2	(19)	Contingency Plan Basic Training Text Book
	(20)	Contingency Plan in TAN (approved by CAA)
	(21)	Contingency Exercise Plan
	(22)	The result of analysis on draft of SMS manual in TAN
	(23)	SMS manual in TAN
	(24)	Human Factor in TAN
	(25)	Airport Hazard Mapping

		,
TF-3	(26)	Outline of Flight Procedure Design (FPD)
	(27)	Guidance of FPD Exercise
	(28)	Map procurement specification
	(29)	Draft of RCC Operation Manual
	(30)	Draft of RCC Coordination Exercise Plan
	(31)	Presentation for Catch-up Exercise on Aeronautical
	(Chart Drawing
	(32)	Draft of NOTAM operating procedure Manual TAN
	(33)	Draft of AIS Organization Manual
	(34)	Draft of AIP Process Manual
	(35)	Sample of Data Format Requirement, WGS-84
	(36)	Survey for UTDD
	(37)	Survey points of WGS-84 Implementation, UTDD
	(38)	Outline of OJT on Flight procedure Design
	(39)	Guidance of OJT on FPD
	(40)	Guidance of Observation for FPD in Dushanbe airport
	(41)	Draft AIP of FPD (UTDD)
	(42)	Draft AIP of WGS-84 List (UTDD)
	(43)	Finalizing & AIP Charting Reference
	(44)	FPD-QA Preliminary Material
	(45)	Follow-up Guidance of FPD
	(46)	Outline of FPD Quality Assurance & Ground validation

ANNEX3-1

PDM Version 1.0

Project Title: The Project for Capacity Development in Air Traffic Services Implementing agency: SUE "TAJIKAIRNAVIGATIONT" (TAN), Project term: 33 months from 28 March 2016, Project site: TAN in Dushanbe

Narrative Summary		Objectively Verifiable Indicators		Means of Verification	Important Assumption
Overall Go	oal				
To improve (ATS) in Ta	e Air Traffic Services ajikistan	Indicator 1: Indicator 2:	All ATC officers working at ATC units maintain ATC ratings in line with ICAO standards through TAN's continuing training program The contingency plan and SMS for ATC have been kept in operation.	- Rating record - Survey	
		Indicator 3:	Aeronautical Information Publication (AIP) has been updated in line with ICAO standards.		
Project Pu	rnoco	maicator 5.	Actoriadical miormation i ubilication (All) has been aparted in line with 10/10 standards.		
	·	lo di a atau di	All ATC officers would not ATC write hours record training in line with ICAO at and and	Duningt	CNIC/ATM systems are managed and intelliged
	e capacity of rigation (TAN) in	Indicator 1:	All ATC officers working at ATC units have passed training in line with ICAO standards conducted by OJT instructors and simulator trainers.	 Project Monitoring 	CNS/ATM systems are properly maintained Trained ATC officers continue to work in TA
Air Traffic Services (ATS)		Indicator 2:	The contingency plan and SMS for ATC have been implemented.	Sheet	- Trained instructors/ trainers, AIS officers and
		Indicator 3:	The draft AIP of the model airport has been accepted as confirming to ICAO standards by JICA Expert.		flight procedure designers continue to work
Outputs					
Output 1:	To enhance capacity of training	Indicator 1-1:	At least 80% of ATC officers/OJT instructors/Simulator trainers who attended training courses have completed trainings successfully.	- Project Monitoring	Trained ATC officers continue to work in TAN Trained instructors/ trainers, AIS officers and
	for Air Traffic Control (ATC) officers in line with ICAO standards	Indicator 1-2:	Operation Manual has been reviewed and improved if necessary	Sheet	flight procedure designers continue to work in
		Indicator 1-3:	Each of the OJT instructors has conducted OJT on aerodrome, approach and/or area control services at least 2 times.		TAN
	10AO standards	Indicator 1-4:	Aerodrome simulator has been operational.		
		Indicator 1-5:	Each of the simulator trainers has been conducting simulator training at least 3 times per month.		
Output 2:		Indicator 2-1-1:	2 ATC officers have completed basic course on contingency plan successfully.		
	capacity of ATC officers with regard	Indicator 2-1-2:	5 71		
	to ICAO	Indicator 2-1-3:	3 71 11 7 1		
	recommendations	Indicator 2-2-1:	•		
		Indicator 2-2-2:	' '		
		Indicator 2-2-3:	ů i		
		Indicator 2-2-4:	, ,		
		Indicator 2-2-5:	<u> </u>		
Output 3:	To enhance	Indicator 3-1:	2 AIS officers have successfully completed basic course on AIS.		
	capacity of Aeronautical	Indicator 3-2:	2 AIS officers have successfully completed basic course on aeronautical charts.		
	Information Services (AIS)	Indicator 3-3:	Operation manuals for Notice to Airman (NOTAM), Aeronautical Information Circulars (AIC) and Aeronautical Information Publication (AIP) have been developed		
	officers with regard	Indicator 3-4:	2 flight procedure designers have successfully completed basic course on PANS-OPS.		
	to ICAO recommendations	Indicator 3-5:	2 flight procedure designers have successfully completed OJT on conventional flight procedure design.		
		Indicator 3-6:	Draft of Aeronautical Information Publication (AIP) of the model airport has been produced.		

A 11 111	Inputs		
Activities	Japanese side	Tajikistan side	Important Assumption
 1-1: To conduct training of ATC officers on aerodrome, approach and area control services 1-2: To conduct OJT instructor training for selected ATC officers 1-3: To conduct instructor training for simulator trainers 1-4: To review and if necessary improve Operation Manuals 1-5: To conduct OJT on aerodrome, approach and area control services 1-6: To procure aerodrome simulator 1-7: To conduct simulator trainings 2-1. To develop ATC contingency plan 2-1-2: To improve the draft contingency plans 2-1-3: To conduct exercise of contingency procedures 2-1-4: To request approval of CAA on the contingency plans for implementation 2-2. To improve Safety Management System (SMS) 2-2-1: To obtain necessary knowledge of SMS 2-2-2: To develop and update SMS Manual 2-2-3: To establish risk management process 2-2-4: To implement safety risk management and safety assurance 2-2-5: To conduct SMS training and education for ATC officers 3-1: To conduct basic training on AIS 3-2: To conduct basic training on aeronautical charts 3-3: To develop operation manuals for Notice to Airman (NOTAM), Aeronautical Information Circulars (AIC) and Aeronautical Information Publication (AIP) 3-4: To conduct basic training on flight procedure design 3-5: To conduct OJT of flight procedure designers for a model airport 3-6: To produce draft of AIP of the model airport 	Experts: - Chief Advisor/ATC Expert (1) - ATC Expert (2) - Simulator Training Expert - AIS Expert - Flight Procedure Design Expert - Project Coordinator/Training Planner - Others as necessary Training in the third countries: - Training of ATC officers on ATC services - OJT Instructor Training for selected ATC officers - Instructor Training for simulator trainers - SMS Training - AIS Training - Others as necessary Equipment: - Aerodrome Simulator	Counterparts: - Project Director (Director General, TAN) - Deputy Project Director (First Deputy DG, TAN) - Project Manager (Head of Safety and Quality Department, TAN) - ATC Training Task Force - Contingency Plan/SMS Task Force - AIS/Flight Procedure Design Task Force - Interpreter as necessary Project Offices (with desks/chairs and internet connection): - In TAN Headquarters - In TAN Training Center Facilities of TAN Training Center: - Class rooms - Aerodrome simulator room Running Cost: - Operation and maintenance of Aerodrome Simulator - Supply or replacement of machinery, equipment and materials necessary for the Project other than provided by JICA - In-country travel expenses of TAN counterpart personnel Data and Information related to the Project	Pre-conditions - TAN ensures the budget for input by Tajikistan side - TAN assigns AIS personnel

ANNEX3-2

PDM Version 1.1

Project Design Matrix

Project Title: The Project for Capacity Development in Air Traffic Services

Implementing Agency: Tajikairnavigation (TAN)
Target Group: Tajikairnavigation ATS Officers

Period of the Project: 33 months

Project Site: TAN and TAN Training Center, Dushanbe

	Narrative Summary		Objectively Verifiable Indicators	Means of Verification	Important Assumption
Overall Go	pal				
To improve Air Traffic Services (ATS) in Tajikistan		Indicator 1: Indicator 2: Indicator 3:	All ATC officers working at ATC units maintain ATC ratings in line with ICAO standards through TAN's continuing training program The rate of unsafe occurrences with regard to ATC in Tajikistan will decrease Aeronautical Information Publication (AIP) has been updated in line with ICAO standards.	- Rating record - Survey	
Project Pu	rpose				
To enhanc	e capacity of Tajikairnavigation ir Traffic Services (ATS)	Indicator 1: Indicator 2: Indicator 3:	All ATC officers working at ATC units have passed training in line with ICAO standards conducted by OJT instructors and simulator trainers. The contingency plan and SMS for ATC have been implemented. The draft AIP of the model airport has been compliant with ICAO standards.	- Project Monitoring Sheet	Trained ATC officers continue to work in TAN Trained instructors/ trainers, AIS officers and flight procedure designers continue to work in TAN Trained ATC officers
Outputs					
Output 1:	To enhance capacity of training for Air Traffic Control (ATC) officers in line with ICAO standards	Indicator 1-1: Indicator 1-2: Indicator 1-3: Indicator 1-4: Indicator 1-5:	At least 80% of ATC officers/OJT instructors/Simulator trainers who attended training courses have completed trainings successfully. Operation Manual has been reviewed and improved if necessary Each of the OJT instructors has conducted OJT on aerodrome, approach and/or area control services at least 2 times. Aerodrome simulator has been operational. Each of the simulator trainers has been conducting simulator training at least 3 times per month.	- Project Monitoring Sheet	 Trained ATC officers continue to work in TAN Trained instructors/ trainers, AIS officers and flight procedure designers continue to work in TAN
Output 2:	To enhance capacity of ATC officers with regard to ICAO recommendations	Indicator 2-1-2: Indicator 2-1-3: Indicator 2-2-1: Indicator 2-2-2: Indicator 2-2-3: Indicator 2-2-4:	2 ATC officers have completed basic course on contingency plan successfully. Exercise of contingency procedures has been conducted successfully. The contingency plans have been approved by CAA for implementation. 2 ATC offices have completed courses on SMS successful. SMS Manual has been developed and updated Risk management process has been established Safety risk management and safety assurance have been implemented SMS training and education for all ATC officers have been conducted		
Output 3:	To enhance capacity of Aeronautical Information Services (AIS) officers with regard to ICAO recommendations	Indicator 3-2: Indicator 3-3: Indicator 3-4: Indicator 3-5: Indicator 3-6: Indicator 3-7: Indicator 3-8:	2 AIS officers have successfully completed basic course on AIS. 2 AIS officers have successfully completed basic course on aeronautical charts. Operation manuals for Notice to Airman (NOTAM), Aeronautical Information Circulars (AIC) and Aeronautical Information Publication (AIP) have been developed 2 flight procedure designers have successfully completed basic course on PANS-OPS. 2 flight procedure designers have successfully completed OJT on conventional flight procedure design. Draft of Aeronautical Information Publication (AIP) of the model airport has been produced. 4 AIS officers have successfully completed basic course on SAR. SAR coordination manual has been developed. SAR coordination exercise has been conducted successfully.		

Version 1.1
Dated 16 June 2017

ANNEX3-3

Plan of Operation 1.0

Version 1.0 26 April 2016 Project Title: The Project for Capacity Development in Air Traffic Services **Inputs** 2016 2017 2018 2019 Remarks Plan **Expert** Plan Chief Advisor/ATC Expert (1) **Actual** Plan ATC Expert (2) **Actual** Plan Simulator Training Expert **Actual** Plan AIS Expert **Actual** Plan Flight Procedure Design Expert Actual Plan Project Coordinator/ Training Planner **Actual Equipment** Plan Aerodrome Simulator Actual Training in the third country Plan Training of ATC officers on ATC services **Actual** Plan OJT instructor training for selected ATC officers **Actual** Plan Instructor Training for simulator trainers **Actual** Plan SMS Training Actual Plan AIS Training **Actual** Plan 2016 2017 2018 2019 **Responsible Organization Activities** IV П Ш IV П Ш IV П Ш IV **Actual** Ι Japan Tajikistan **Sub-Activities** Output 1: To enhance capacity of Air Traffic Control (ATC) officers in line with ICAO standards Plan 1-1: To conduct training of ATC officers on aerodrome, approach **JICA** TAN and area control services Actual Plan 1-2: To conduct OJT instructor training for selected ATC officers **JICA** TAN **Actual** Plan 1-3: To conduct instructor training for simulator trainers **JICA** TAN **Actual** Plan 1-4: To review and if necessary improve Operation Manuals **JICA** TAN Actual 1-5: To conduct OJT on aerodrome, approach and area control Plan **JICA** TAN **Actual** Plan 1-6: To procure aerodrome simulator **JICA** TAN **Actual** Plan 1-7: To conduct simulator trainings **JICA** TAN **Actual** Output 2: To improve ATC services with regard to ICAO recommendations Plan 2-1-1: To conduct basic training on contingency plan **JICA** TAN **Actual** Plan 2-1-2: To improve the draft contingency plans **JICA** TAN **Actual** Plan 2-1-3: To conduct exercise of contingency procedures **JICA** TAN **Actual** Plan 2-1-4: To request approval of CAA on the contingency plans for JICA TAN implementation Plan 2-2-1: To obtain necessary knowledge of SMS **JICA** TAN **Actual** Plan 2-2-2: To develop and update SMS Manual **JICA** TAN **Actual** Plan 2-2-3:To establish risk management process **JICA** TAN **Actual** 2-2-4: To implement safety risk management and safety Plan **JICA** TAN **Actual** Plan 2-2-5:To conduct SMS training and education for ATC officers **JICA** TAN **Actual** Output 3: To improve Aeronautical Information Services (AIS) with regard to ICAO recommendations Plan 3-1. To conduct basic training on AIS **JICA** TAN **Actual** Plan 3-2. To conduct basic training on aeronautical charts **JICA** TAN **Actual** Plan 3-3. To develop operation manuals for NOTAM, AIC and AIP **JICA** TAN **Actual** Plan 3-4. To conduct basic training on flight procedure design **JICA** TAN Actual 3-5. To conduct OJT of flight procedure designers for a model Plan **JICA** TAN **Actual** Plan 3-6. To produce draft of AIP of the model airport **JICA** TAN **Actual** Plan **Duration / Phasing Actual Monitoring Plan** 2017 Plan 2016 2018 2019 Remarks Monitoring Plan Joint Coordination Committee Actual Plan Joint Monitoring (Project Monitoring Sheet) Actual Plan Post Monitoring (End of Year 2021) Actual Reports/Documents Plan Minutes of Meeting (JCC)

Actual Plan

Actual

Completion Report

ANNEX3-4

Plan of Operation 2.0

Project Title: The Project for Capacity Development in Air Traffic Service 30 May 2017 Inputs 2017 2018 2019 Remarks Expert Plan Chief Advisor/ATC Expert (1) Actua Plan ATC Expert (2) Actua Simulator Training Expert Plan AIS Expert Actual Flight Procedure Design Expert Plan Project Coordinator/ Training Planner Actua Equipment Aerodrome Simulator Actua Training in the third country Training of ATC officers on ATC services Actual OJT instructor training for selected ATC officers Actua Plan Instructor Training for simulator trainers Actua SMS Training AIS Training / SAR Training Actua 2017 2019 Responsible Organiza Activities Actua W и п п W I Π Ш IV I II Ш IV Ι Japan Tajikistan **Sub-Activities** 1 2 3 4 5 6 7 8 9 10 11 12 Output 1: To enhance capacity of Air Traffic Control (ATC) officers in line with ICAO standards Plan Actual 1-1: To conduct training of ATC officers on aerodrome, approach TAN 1-2: To conduct OJT instructor training for selected ATC officers TAN JICA 1-3: To conduct instructor training for simulator trainers TAN Plan 1-4: To review and if necessary improve Operation Manuals TAN Actua 1-5: To conduct OJT on aerodrome, approach and area control Plan TAN Actua Plan 1-6: To procure aerodrome simulator JICA TAN Actua 1-7: To conduct simulator trainings JICA TAN Output 2: To improve ATC services with regard to ICAO recommendations 2-1-1: To conduct basic training on contingency plan TAN TAN JICA 2-1-2: To improve the draft contingency plans Actua Plan JICA TAN 2-1-3: To conduct exercise of contingency procedures Actua 2-1-4: To request approval of CAA on the contingency plans for Plan TAN implementation Actua Plan 2-2-1: To obtain necessary knowledge of SMS JICA TAN Actua Plan 2-2-2: To develop and update SMS Manual JICA TAN Plan 2-2-3:To establish risk management process JICA TAN 2-2-4: To implement safety risk management and safety Plan JICA TAN Actua Plan 2-2-5:To conduct SMS training and education for ATC officers Actual Output 3: To improve Aeronautical Information Services (AIS) with regard to ICAO recommendations TAN 3-1. To conduct basic training on AIS Actua Plan TAN 3-2. To conduct basic training on aeronautical charts Actua Plan 3-3. To develop operation manuals for NOTAM, AIC and AIP JICA TAN Actua Plan 3-4. To conduct basic training on flight procedure design JICA TAN 3-5. To conduct OJT of flight procedure designers for a model JICA TAN Plan 3-6. To produce draft of AIP of the model airport TAN Actual Plan **Duration / Phasing** Actual Monitoring Plan 2017 2018 2019 Remarks Monitoring 1 2 3 4 5 6 7 8 9 10 11 12 Plan Joint Coordination Committee Joint Monitoring (Project Monitoring Sheet) Post Monitoring (End of Year 2021) Reports/Documents Plan Minutes of Meeting (JCC) Completion Report

ANNEX3-5

Plan of Operation 3.0

Version 3.0 Project Title: The Project for Capacity Development in Air Traffic Service 3 May 2018 Inputs 2016 2017 2018 2019 Remarks Expert Plan Chief Advisor/ATC Expert (1) Actua Plan ATC Expert (2) Actual Simulator Training Expert Actua Plan Actua Plan Flight Procedure Design Expert Actual Plan Project Coordinator/ Training Planner Actua Equipment Aerodrome Simulator Actual Training in the third country Training of ATC officers on ATC services Actual Plan OJT instructor training for selected ATC officers Actual Plan Instructor Training for simulator trainers Actua SMS Training Plan AIS Training /SAR training Actua Plan Responsible Organizat Activities I N Actua IV I I Ш IV I п Ш IV п Ш I Japan Tajikistan **Sub-Activities** 1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4 5 6 7 8 9 10 11 1 Output 1: To enhance capacity of Air Traffic Control (ATC) officers in line with ICAO standards Plan 1-1: To conduct training of ATC officers on aerodrome, approach TAN and area control services Actual 1-2: To conduct OJT instructor training for selected ATC officers JICA TAN Actual Plan 1-3: To conduct instructor training for simulator trainers TAN Actual Plan 1-4: To review and if necessary improve Operation Manuals JICA TAN Actual 1-5; To conduct OJT on aerodrome, approach and area control JICA TAN Plan JICA TAN 1-6: To procure aerodrome simulator Actual Plan 1-7: To conduct simulator trainings TAN Actua Output 2: To improve ATC services with regard to ICAO recommendations Plan 2-1-1: To conduct basic training on contingency plan TAN Actua Plan 2-1-2: To improve the draft contingency plans TAN Actua Plan 2-1-3: To conduct exercise of contingency procedures TAN Actua Plan 2-1-4: To request approval of CAA on the contingency plans for JICA TAN Actual 2-2-1: To obtain necessary knowledge of SMS JICA TAN Plan JICA TAN 2-2-2: To develop and update SMS Manual Actual Plan 2-2-3:To establish risk management process JICA TAN Actual 2-2-4: To implement safety risk management and safety Plan TAN Actua 2-2-5:To conduct SMS training and education for ATC officers TAN Actual Output 3: To improve Aeronautical Information Services (AIS) with regard to ICAO recommendations Plan Actual Plan A 3-1. To conduct basic training on AIS TAN TAN 3-2. To conduct basic training on aeronautical charts JICA TAN 3-3. To develop operation manuals for NOTAM, AIC and AIP JICA JICA TAN 3-4. To conduct basic training on flight procedure design 3-5. To conduct OJT of flight procedure designers for a mode Plan TAN Actual Plan 3-6. To produce draft of AIP of the model airport TAN Actual Plan **Duration / Phasing Monitoring Plan** Plan 2018 2019 Remarks Monitoring Plan Joint Coordination Committee Joint Monitoring (Project Monitoring Sheet) Actual Plan Post Monitoring (End of Year 2021) Actua Reports/Documents Minutes of Meeting (JCC) Actual Completion Report

ANNEX4-1 Record of Discussion

RECORD OF DISCUSSIONS

ON

THE PROJECT FOR CAPACITY DEVELOPMENT IN AIR TRAFFIC SERVICES

THE REPUBLIC OF TAJIKISTAN

AGREED UPON BETWEEN

TAJIKAIRNAVIGATION, MINISTRY OF TRANSPORT AND JAPAN INTERNATIONAL COOPERATION AGENCY

Dushanbe, 4 December 2015

Kiyoshi Ishii

Resident Representative JICA Tajikistan Office

Shambiev Alisher
First Deputy Director General
State Unitary Enterprise "Tajikairnavigation"

0

Rahmon Usuf Azimy

Head of Civil Aviation Department

Ministry of Transport

Based on the Minutes of Meetings on the Detailed Planning Survey on the Project for Capacity Development in Air Traffic Services (hereinafter referred to as "the Project") signed on 2 September 2015 between Tajikairnavigation (hereinafter referred to as "TAN"), Ministry of Transport (hereinafter referred to as "MOT") and the Japan International Cooperation Agency (hereinafter referred to as "JICA"), JICA held a series of discussions with TAN and relevant organizations to develop a detailed plan of the Project.

Both parties agreed the details of the Project and other points discussed as described in the Appendix 1 and the Appendix 2 respectively.

Both parties also agreed that TAN, the counterpart to JICA, will be responsible for the implementation of the Project in cooperation with JICA, coordinate with other relevant organizations and ensure that the self-reliant operation of the Project is sustained during and after the implementation period in order to contribute toward social and economic development of the Republic of Tajikistan.

The Project will be implemented within the framework of the "Agreement on Technical Cooperation between the Government of the Republic of Tajikistan and the Government of Japan" signed on February 15, 2005 (hereinafter referred to as "the Agreement") and the Note Verbales to be exchanged between the Government of Japan (hereinafter referred to as "GOJ") and the Government of the Republic of Tajikistan (hereinafter referred to as "GOT")

Appendix 1: Project Description
Appendix 2: Other Points Discussed

Appendix 3: Minutes of Meetings on the Detailed Planning Survey on the Project for

Capacity Development in Air Traffic Services

(I) James

H

PROJECT DESCRIPTION

I. BACKGROUND

Air transport in Tajikistan, which is a land-locked country with 93% of the area being mountainous, plays an important role to support socio-economic activities. Air transport has great importance in international and long-distance transport, having comparative advantage over road and rail transport. With recent economic growth, air traffic demand in Tajikistan has been increasing rapidly. The number of air passengers at Dushanbe International Airport has grown by 1.4 times between 2009 and 2013, reaching to 1.3 million passengers in 2013. Air cargo traffic as well increased rapidly by 1.7 times during the same period, reaching to 2,370 tons at Dushanbe International Airport in 2013. These growth trends are expected to continue toward the future.

With recognition that coping with increasing air traffic demand is an urgent need, Tajikistan has been upgrading aviation infrastructure at its major airports with assistance of EBRD, World Bank, the Government of France and the Government of Japan. However, in order to adequately handle further growth of air traffic, human resource development is equally important.

Air Traffic Control (ATC) services in Tajikistan needs modernization and capacity development. With a safety oversight on the civil aviation system in Tajikistan in 2008, International Civil Aviation Organization (ICAO) focused on old Soviet era based rules, guidelines and operational manuals, which do not fully comply with international air navigation requirements. ICAO also found that the implementation of training program for ATC instructors/officers is necessary.

In response to ICAO's recommendations, the Ministry of Transport started establishing civil aviation regulations complied with international standards since 2008, and these changes required retraining of air traffic control officers to new ATC standard operation procedures. State Unitary Enterprise "Tajikiairnavigation" (TAN) of the Ministry of Transport, which provides air navigation services for whole Tajikistan, has been making effort to comply with ICAO's recommendations by implementing in-country/overseas training as well as reconstruction of Training Center.

However, TAN found that it will require international assistance to develop ICAO compliant operation procedures, and to establish training program for ATC instructors/trainers and officers. Therefore, TAN requested the implementation of this Technical Cooperation project to the Government of Japan.

In January 2015, the ICAO Coordinated Validation Mission (ICVM) conducted evaluation of the status of implementation of the corrective action plan in response to ICAO's audit. As a result of the mission, ICVM required GOT to improve ATC services such as establishment and implementation of training program, Contingency Plan and Safety Management System (SMS) and to improve Aeronautical Information Services (AIS).

With regard to these recommendations, Japan International Cooperation Agency (JICA) and TAN reviewed a detailed plan of the Project in the Detailed Planning Survey.

10 pmm/3

All

S

II. OUTLINE OF THE PROJECT

Details of the Project are described in the Project Design Matrix (PDM) in Annex 1 and the Plan of Operation (PO) in Annex 2.

1. Title of the Project

The Project for Capacity Development in Air Traffic Services

2. Input

(1) Input by JICA

(a) Dispatch of Experts

- Chief Advisor/ATC (Air Traffic Control) Expert (1)
- ATC Expert (2)
- Simulator Training Expert
- AIS (Aeronautical Information Services) Expert
- Flight Procedure Design Expert
- Project Coordinator/Training Planner
- Others as necessary

(b) Training abroad

- Training of ATC officers on ATC services
- OJT Instructor Training for selected ATC officers
- Instructor Training for simulator trainers
- SMS (Safety Management System) Training
- AIS Training
- Others as necessary

(c) Equipment

Aerodrome Simulator

In case of importation, the machinery, equipment and other materials under II-2 (1) (c) above will become the property of the GOT upon being delivered and installed at location of training in the Republic of Tajikistan.

Input other than indicated above will be determined through mutual consultations between JICA and TAN during the implementation of the Project, as necessary.

(2) Input by TAN

TAN will take necessary measures to provide at its own expense:

- (a) Services of TAN counterpart personnel and administrative personnel as referred to in II-3;
- (b) Office with Desks/Chairs and Internet Connection
 - In TAN Headquarters
 - In TAN Training Center
- (c) Facilities of TAN Training Center:
 - Class rooms
 - Aerodrome simulator room

(Jo) mm/s

GN)

1/6

(d) Running Cost

- Operation and maintenance of Aerodrome Simulator;
- Supply or replacement of machinery, equipment and materials necessary for the Project other than provided by JICA;
- In-country travel expenses of TAN counterpart personnel
- (e) Data (including maps and photographs) and Information related to the Project

3. Implementation Structure

The project organization chart is given in the Annex 3. The roles and assignments of relevant organizations are as follows:

(1) TAN

- (a) Director General, as the Project Director, will bear overall responsibility for administration and implementation of the Project.
- (b) First Deputy Director General, as the Deputy Project Director, will assist Project Director in administration and implementation of the Project.
- (c) Head of Safety and Quality Department, as the Project Manager, will be responsible for managerial and technical matters of the Project.
- (d) The following task forces will be established with assignment of a leader and members:
 - ATC Training Task Force
 - Contingency Plan/SMS Task Force
 - AlS/Flight Procedure Design Task Force
 - Interpreter as necessary

(2) JICA Experts

The JICA experts will give necessary technical guidance, advice and recommendations to TAN on any matters pertaining to the implementation of the Project.

(3) Joint Coordinating Committee

Joint Coordinating Committee (hereinafter referred to as "JCC") will be established in order to facilitate inter-organizational coordination. JCC will be held at least once a year and whenever deems it necessary. JCC will review the progress, revise the overall plan when necessary, approve an annual work plan, conduct evaluation of the Project, and exchange opinions on major issues that arise during the implementation of the Project. A list of proposed members of JCC is shown in the Annex 4.

Project Sites and Beneficiaries

Project sites and beneficiaries of the Project are as follows:

Project Sites: TAN and TAN Training Center, Dushanbe

Direct Beneficiaries of the Project: TAN ATS officers

Indirect Beneficiaries of the Project: Airlines and users of air transportation in

Tajikistan

5. Duration

The duration of the technical cooperation for the Project will be thirty three (33) months from the arrival of the first expert.

F0 pmmy3

ß

6. Reports

TAN and JICA will jointly prepare the following reports in English with unofficial translation in Russian.

- Project Monitoring Sheets on semiannual basis until the Project completion
- Project Completion Reports at the time of Project completion
- 7. Environmental and Social Considerations

TAN and JICA agreed to follow 'JICA Guidelines for Environmental and Social Considerations' in order to ensure that appropriate considerations will be made for the environmental and social impacts of the Project.

III. UNDERTAKINGS OF TAN AND MOT

- On the basis of the Agreement, TAN and MOT will take necessary measures to, and/or coordinate with relevant government authorities to:
 - (1) ensure that the technologies and knowledge acquired by the Tajikistan nationals as a result of Japanese technical cooperation contributes to the economic and social development of the Republic of Tajikistan, and that the knowledge and experience acquired by the personnel of the Republic of Tajikistan from technical training as well as the equipment provided by JICA will be utilized effectively in the implementation of the Project;
 - (2) grant privileges, exemptions and benefits to the JICA experts referred to in II-2 (1) (a) above and their families, which are no less favorable than those granted to experts and members of the missions and their families of third countries or international organizations performing similar missions in the Republic of Tajikistan.
 - (3) provide credentials or identification cards for the JICA experts;
 - (4) provide information as well as support in obtaining medical service for the JICA experts;
 - (5) provide security-related information as well as measures to ensure the safety of the JICA experts;
 - (6) permit the JICA experts to enter, leave and sojourn in the Republic of Tajikistan for the duration of their assignments therein and exempt them from foreign registration requirements and consular fees;
 - (7) exempt the JICA experts from taxes and any other charges on the equipment, machinery and other material necessary for the implementation of the Project;
 - (8) exempt the JICA experts from income tax and charges of any kind imposed on or in connection with any emoluments or allowances paid to them and/or remitted to them from abroad for their services in connection with the implementation of the Project;
 - (9) meet taxes and any other charges on the equipment, machinery and other material, referred to in II-2 (1) (c) above, necessary for the implementation of the Project; and
 - (10) provide necessary facilities to the JICA experts for the remittance as well as utilization of the funds introduced into the Republic of Tajikistan from Japan in connection with the implementation of the Project.
- 2. TAN will bear claims, if any arises, against the JICA experts resulting from, occurring in the course of, or otherwise connected with, the discharge of their duties in the implementation

10/mm/2

V /6

GH

of the Project, except when such claims arise from gross negligence or willful misconduct on the part of the JICA experts.

IV. MONITORING AND EVALUATION

JICA and TAN will jointly and regularly monitor the progress of the Project through the Project Monitoring Sheets based on the Project Design Matrix (PDM) and Plan of Operation (PO). The Project Monitoring Sheets will be reviewed every six (6) months.

Also, Project Completion Report will be drawn up one (1) month before the termination of the Project.

JICA will conduct the following evaluations and surveys to verify sustainability and impact of the Project and draw lessons. TAN is required to provide necessary support for them.

- 1. Ex-post evaluation three (3) years after the project completion, in principle
- 2. Follow-up surveys on necessity basis

V. PROMOTION OF PUBLIC SUPPORT

For the purpose of promoting support for the Project, TAN will take appropriate measures to make the Project widely known to the people of the Republic of Tajikistan.

VI. MISCONDUCT

If JICA receives information related to suspected corrupt or fraudulent practices in the implementation of the Project, TAN and relevant organizations will provide JICA with such information as JICA may reasonably request, including information related to any concerned official of the government and/or public organizations of the Republic of Tajikistan.

TAN and relevant organizations shall not, unfairly or unfavorably treat the person and/or company which provided the information related to suspected corrupt or fraudulent practices in the implementation of the Project.

VII. MUTUAL CONSULTATION

JICA and TAN will consult each other whenever any major issues arise in the course of Project implementation.

VIII. AMENDMENTS

The record of discussions may be amended by the minutes of meetings between JICA, Ministry of Transport and TAN. However, PO may be amended in the Project Monitoring Sheets.

The minutes of meetings will be signed by authorized persons of each side who may be different from the signers of the record of discussions.

List of Annexes

Annex 1: Project Design Matrix (PDM)
Annex 2: Plan of Operation (PO)
Annex 3: Project Organization Chart

Annex 4: A List of Proposed Members of Joint Coordinating Committee (JCC)

10 mm/3

S

Project Design Matrix

Project Title: The Project for Capacity Development in Air Traffic Services implementing Agency: Tajikairnavigation (TAN)
Target Group: Tajikairnavigation ATS Officers
Period of the Project: 33 months
Project Site: TAN and TAN Training Center, Dushanbe

Project of	Project Site: IAN and IAN Italining Celller, Dusiraline	Contractor	AND THE PROPERTY AND TH			The state of the s	
	Narrative Summary		Objectively Verifiable Indicators	Means of Verification	Important Assumption	Achievement	Remarks
Overall Goal To improve A Tajkistan	Overall Goal To improve Air Traffic Services (ATS) in Tajikistan	indicator 1: Indicator 2:	All ATC officers working at ATC units maintain ATC ratings in line with ICAO standards through TAN's continuing training program The contingency plan and SMS for ATC have been kept in operation.	- Rating record - Survey			
		Indicator 3:	Aeronautical Information Publication (AIP) has been updated in line with ICAO standards.				
Project Purpose To enhance capa	Project Purpose To enhance capacity of Tajikairnavigation	Indicator 1;	All ATC officers working at ATC units have passed training in line with ICAO standards	- Project Monitorina	- Trained ATC officers continue to work in		
TAN) in	Air Traffic Services (A.I.S.)	Indicator 2: Indicator 3:	Controlled by Od Institutions and Smithaus remove. The contingency plan and SMS for ATC have been implemented. The draft AIP of the model airport has been accepted as confirming to ICAO standards by JICA.	Sheet	TAN - Trained instructors/ trainers AIS officers		
			Ехреп.	-	and flight procedure designers continue to work in TAN		-
Outputs	1000- The Control of	- Community of the Comm	A CONTRACT OF THE CONTRACT OF	,	C F Y		
Output 1:	To enhance capacity of training	Indicator 1-1:	At least 80% of ATC officers/OJT instructors/Simulator trainers who attended training courses have completed trainings successfully.	 Project Manitoring 	continue to work in		
	officers in line with ICAO	Indicator 1-2:	Operation Manual has been reviewed and improved if necessary	Sheet	TAN Trained instructors/		
	standards	Indicator 1-3:	Each of the OJT instructors has conducted OJ I on aefodrome, approach and/or area comos services at least 2 times.		trainers, AIS officers		
		Indicator 1-4:	Aerodrome simulator has been operational.		designers continue		
		Indicator 1-5:	Each of the simulator trainers has been conducting simulator training at reast 5 lines year month.	•	to work in TAN		
Output 2:	1	Indicator 2-1-1: Indicator 2-1-2:	Indicator 2-1-1: 2 ATC officers have completed basic course on contingency plan successfully. Indicator 2-1-2: Exercise of contingency procedures has been conducted successfully.				e general de la constantina de la cons
	recommendations	Indicator 2-1-3: Indicator 2-2-1:	Indicator 2-1-3: The contingency plans have been approved by CAA to implementation. Indicator 2-2-1: 2 ATC offices have completed courses on SMS successful.				and the second division of the second divisio
		Indicator 2-2-2:	: SMS Manual has been developed and updated				
		Indicator 2-2-3	Indicator 2-2-3: Risk management process has been established	m~v ∴ ·	A TOTAL CONTRACTOR	***	
		Indicator 2-2-4:	Indicator 2-2-4; Safety risk management and safety assurance have been implemented indicator 2-2-5; SMS training and education for all ATC officers have been conducted				
Output	To enhance capacity of	Indicator 3-1:	2 AIS officers have successfully completed basic course on AIS.				
		Indicator 3-2:	2 AIS officers have successfully completed basic course on aeronautical charls.				
	(AIS) officers with regard to ICAU recommendations	Indicator 3-3:	Operation manuals for Notice to Airman (NOTAM), Aeronautical information Circulats (AIC) and Aeronautical Information Publication (AIP) have been developed				
***************************************		Indicator 3-4:	2 flight procedure designers have successfully completed basic course on PANS-OPS. 2 flight procedure designers have successfully completed OJT on conventional flight procedure.				
		וועונמטו כ	יייייייייייייייייייייייייייייייייייייי				9000

design. Draft of Aeronautical Information Publication (AIP) of the model airport has been produced.

Indicator 3-6:

bytoach and Experts: - Chief Advisor/ATC Expert (1) - Chief Advisor/ATC Expert (1) - ATC Expert (2) - Simulator Training Expert - AIS Expert - Project Coordinator/Training Planner - Others as necessary - Training of ATC officers on ATC services - Training of ATC officers on ATC services - Ou'l Instructor Training for selected ATC officers - Instructor Training for simulator trainers - SMS Training - AIS Training - AIS Training - AST Trai			
ne, approach and Experts: - Chief Advisor(ATC Expert (1) - ATC Expert (2) - ATC Expert (2) - ATE Expert - Simulator Training Expert - AIS Expert - AIS Expert - Project Coordinator/Training Planner - Others as necessary - Training in the third countries: - Training in the third countries: - OuT Instructor Training for selected ATC - officers - AIS Training - ARC officers - ARC Training - ARC officers - ARC Training - ARC officers - ARC Training - ARC officers - Arcodrome Simulator - Aerodrome Simulator - Ae	Japanese side	Tajikistan side	Assumption
reres Simulator Training Expert - Simulator Training Expert - Simulator Training Expert - Flight Procedure Design Expert - Project Coordinator/Training Planner - Others as necessary - Training in the third countries: - Training of ATC officers on ATC services - OuT instructor Training for selected ATC officers - Instructor Training for simulator trainers - Simulator training - Others as necessary - Runr - Als Training - Others as necessary - Facil - Als Training - Others as necessary - Runr - Aerodrome Simulator Aerodrome Simulator Aerodrome Simulator	Experts: - Chief Advisor/ATC Expert (1)	Sounterparts: Project Director (Director General, TAN) Denuty Project Director (First Deouty DG, TAN)	<u> </u>
area control services - Flight Procedure Design Expert - Project Coordinator/Training Planner - Others as necessary Training in the third countries: Training of ATC officers on ATC services - Training of ATC officers on ATC services officers - OJT Instructor Training for selected ATC officers - Instructor Training for simulator trainers - SMS Training - AMS Training - AMS Training - AMS Training - AMS Training - A Aerodrome Simulator - SMS Training - Aerodrome Simulator - Aerodrome -	Hers	Project Manager (Head of Safety and Quality Department, TAN)	
- Project Coordinator/Training Planner - Others as necessary Training in the third countries: - Training of ATC officers on ATC services - Training of ATC officers on ATC services - OuT instructor Training for selected ATC officers - Instructor Training for simulator trainers - SMS Training - AIS Training - AIS Training - AIS Training - AIS Training - ARC officers - Arcodrome Simulator - Aerodrome Simulator - Aerod	area control services -	ATC Training Task Force	
an Training in the third countries: Training of ATC officers on ATC services DAT instructor Training for selected ATC officers officers Instructor Training for simulator trainers Instructor Training for simulator trainers AST arining Others as necessary Equipment: Aerodrome Simulator ArtC officers s nan (NOTAM), Data	Project Coordinator/Training Planner Others as necessary	Als/Flight Procedure Design Task Force	
an Iraning of ALC officers of ALC services Out Instructor Training for selected ATC Out officers on officers afery assurance ATC officers Aerodrome Simulator Aerodrome Simulator Aerodrome Simulator	Training in the third countries:	 Interpreter as necessary Interpreter as necessary 	Pre-conditions
ncy plans for Instructor Training for simulator trainers - Instructor Training - SMS Training - ANS Training - Others as necessary - Aerodrome Simulator	Iraning of ALC officers of ALC services OUT Instructor Training for selected ATC	Connection):	- TAN assigns AlS personnel
ncy plans for	cedures	- In TAN Training Center	
- AIS Training - AIS Training - Others as necessary Equipment: - Others as necessary Runr Equipment: - Aerodrome Simulator Aerodrome Simulator	SMS Training	Facilities of TAN Training Center:	
- Others as necessary Equipment: - Aerodrome Simulator - Aerodrome		Class Toolis Aerodrome simulator room	
rety assurance C officers an (NOTAM), Data	. Others as necessary Eninment:	Auning Cost:	
TC officers	- Aerodrome Simulator	Operation and maintenance of Aerodrome Signature Circuit and Comments Circuit and	
an (NOTAM). Data	and safety assurance for ATC officers	Supply or replacement of machinery, equipment	
an (NOTAM), onautical Data		and materials recessary to the moject offer than provided by JICA	< ssues and
an (NOTAM), onautical	charts	 In-country travel expenses of TAN counterpart 	COUNTERINGABULES
	an (NOTAM), onautical	personner Data and Information related to the Project	
To conduct basic training on flight procedure design	re design		
To conduct OJT of flight procedure designers for a model airport	ers for a modet airport		

Dommis

muß

Tentative Plan of Operations

Project Title: The Project for Capacity Development in Air Traffic Services

								Monitoring	oring
Inputs	Plan	2016	2017	2018	2019	Remarks		Issue	Solution
Expert			╏╸ ╏╸╏╸╏╸╏╸╏╸╏╸╏╸	* 		٠			
Chief Advisor/ATC Expert (1)	Plan								
ATC Expert (2)	Plan					T-1			
Simulator Training Expert	Plan					1 T			
AIS Expert	Plan Actual								
Flight Procedure Design Expert	Plan					1 1			
Project Coordinator/ Training Planner	Plan Actual					Y 1			
Equipment									
Aerodrome Simulator	Plan					, , , , , , , , , , , , , , , , , , , 		•	
Training in the third country									
Training of ATC officers on ATC services	Plan					,		******	
OJT instructor training for selected ATC officers	Plan								
Instructor Training for simulator trainers	Plan								
SMS Training	Plan					····			
AIS Training	Plan Actual					· · · · · · · · · · · · · · · · · · ·			
A 4-6-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-	Plan	2016	2017	2018	2019	Responsible Organization	l I		& enssl
ACIUMIES	Actual	м и п и	и ппш	м и п	м и п	Japan T	Tajikistan Achie	Acnievements	Countermeasures
Sub-Activities		2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	1 2 2 2 8 2 9 2 9 2 7	123455789888	12345638988		****		
Output 1: To enhance capacity of Air Traffic Control (ATC) officers in line with IC	officers in line with IC	AO standards							
1-11 to carouct training of ATC officers on aerodrome, approach and area control services	Actual					JICA	TAN		
1-2: To conduct OJT instructor fraining for selected ATC officers	Płan Actual					JICA	TAN		
1-3. To conduct instructor training for simulator trainers	Plan Actual					JICA	TAN		THE STATE OF THE S
1-4: To review and if necessary improve Operation Manuals	Plan Actual					JICA	TAN		
1-5. To conduct OJT on aerodrome, approach and area control services	Plan Actual					JICA	TAN		
1-6: To procure aerodrome simulator	Plan Actual					JICA	TAN		
1-7: To conduct simulator trainings	Plan Actual					JICA	TAN		
Output 2: To improve ATC services with regard to ICAO recommendations	commendations							WWW	
Contract the state of the state		T TOWN						-	

	JICA	^
2-1-3: To conduct exercise of contingency procedures Actual	JICA	
2-1-4: To request approval of CAA on the contingency plans for Actual	JICA TAN	
2-2-1: To obtain necessary knowledge of SMS Actual	JICA TAN	
2-2-2. To develop and update SMS Manual Actual	TAN TAN	
2-2-3. To establish risk management process	JICA TAN	
2.2-4: To implement safety risk management and safety Actual	JICA TAN	
anduct SMS training and education for ATC officers	JICA TAN	
Output 3: To improve Aeronautical Information Services (AIS) with regard to ICAO re	recommendations	
3-1. To conduct basic training on AIS Actual	JICA TAN	
3-2. To conduct basic training on aeronautical charts Actual	JICA TAN	
3-3. To develop operation manuals for NOTAM, AIC and AIP	JICA TAN	
3-4. To conduct basic training on flight procedure design Actual	JICA TAN	-
3-5. To conduct OJT of flight procedure designers for a model Plan airport	JICA TAN	The same of the sa
3-6. To produce draft of AIP of the model airport	JICA TAN	
Buration / Phasing Actual		
Monitoring Plan	2016 2017 2018 2019 Remarks Issue	e Solution
Monitoring	य ५ ६ ६ १ १ १ १ १ १ १ १ १ १ १ १ १ १ १ १ १	
Joint Coordination Committee Actual Actual		
Joint Monitoring (Project Monitoring Sheet) Actual		
Plan Pl		The state of the s
Reports/Documents		
Minutes of Meeting (JCC)		
Completion Report Actual		

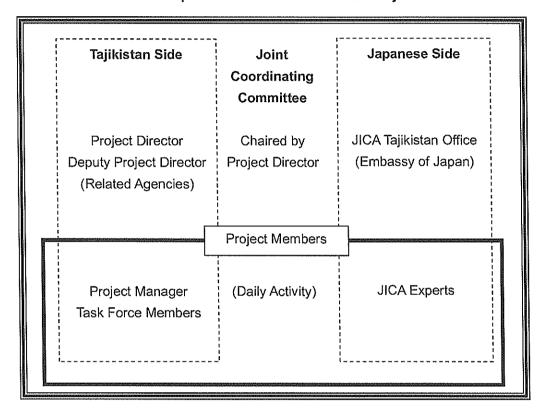
10/mm/2

i/b

Annex 3: Project Organization Chart

The Project will be implemented by TAN in cooperation with JICA. The Project Organization Chart indicating joint implementation structure is shown below:

Joint Implementation Structure of the Project



10/mm/3

Annex 4: Proposed Members of Joint Coordinating Committee (JCC)

The Proposed chairperson and the members of the JCC will be as follows:

- 1) Chairperson
 - Project Director
- 2) Members from the Tajikistan Side
 - Deputy Project Director
 - Project Manager
 - Members of ATC Training Task Force
 - Members of Contingency Plan/SMS Task Force
 - Members of AIS/Flight Procedure Design Task Force
 - Personnel concerned to be decided by the Tajikistan side
- 3) Members from the Japanese Side
 - Japanese Experts
 - Chief Representative, JICA Tajikistan Office
 - Personnel concerned to be decided by the Japanese Side
- 4) Others
 - Officials of the Ministry of Transport may attend the meeting as observers.
 - Officials of the Embassy of Japan may attend the meeting as observers.
 - Persons who are invited by the Chairperson may attend the meeting as observers.

40 mm/r

, f

H

OTHER POINTS DISCUSSED

This part of the R/D notes remarkable issues for the implementation of the Project that were confirmed by TAN and JICA through discussions during the Detailed Planning Survey in August to September 2015.

Training Abroad of ATS Officers

Among the training needs of TAN's ATS officers, the following subjects for instructors, trainers and specialists were identified as efficiently conducted at training institutes abroad.

Training Subjects	Number of Trainees
Aerodrome Control	4
Approach Control (Procedural)	3
Approach Control (Surveillance)	4
Area Control (Procedural)	4
Area Control (Surveillance)	3
OJT Instructor Training	6
General Instructor Training	8
Safety Assessment (Theoretical)	2
Safety Assessment (Practical)	1
ATM Occurrence Investigation and Analysis	2
Aeronautical Information Services	2
Aeronautical Charts (Aeronautical Cartography)	2

Costs for training abroad include training course fees, airfares, accommodation expenses and per diem. Airfare will be with economy class discount fares. Accommodation expenses and per diem will be provided in accordance with the rule of JICA.

JICA will make best effort to secure necessary budget for training abroad; however it may not be able to bear costs for all of those specialized training. In such cases, JICA and TAN will discuss cost sharing for training abroad during the Project period.

The selection of trainees for the above courses will require consensus between TAN and JICA experts.

JICA confirmed that TAN will take effective measures that ATS officers who have attended the specialist training in the Project will continue to work in TAN for at least three years after finishing the training.

2. Aerodrome Simulator

JICA will provide an Aerodrome Simulator for training of ATC officers. TAN and JICA confirmed the major characteristics of the aerodrome simulator as follows:

ff)

B

- Installation Place: TAN training center
- Major Components:
 - Aerodrome Display (180-degree view)
 - 2 Controller Consoles (Meteorological Indicators/Communication Control/Radar /Training Control Monitor)
 - 2 Pilot/Instructor Positions (Aircraft and Ground Vehicle Control/Training Control Monitor)
 - Computer System, Database and Software
- Airport Simulated: Dushanbe (view from New Control Tower), Khujand, Kulob and Qurgonteppa Airports

TAN will be responsible to prepare installation environment including a room with air conditioning, electric power supply, voltage regulator and UPS system.

TAN will provide photographic images of airfields from the control towers, aerodrome maps, aircraft taxiing charts, approach and departure procedure charts, etc., which will be required for production of Aerodrome Simulator data.

(to)mush

_V/6

#II

MINUTES OF MEETINGS ON THE DETAILED PLANNING SURVEY ON THE PROJECT FOR CAPACITY DEVELOPMENT IN AIR TRAFFIC SERVICES

(Please refer to the following pages)

Topmh,

S

GJ.

MINUTES OF MEETINGS

ON

THE DETAILED PLANNING SURVEY

ON

THE JAPANESE TECHNICAL COOPERATION

FOR

THE PROJECT FOR CAPACITY DEVELOPMENT IN AIR TRAFFIC SERVICES

IN

THE REPUBLIC OF TAJIKISTAN

The Government of the Republic of Tajikistan (hereinafter referred to as "GOT") made an official request to the Government of Japan (hereinafter referred to as "the GOJ") for the Project for Improvement of Air Navigation Services in 2014.

In response to the request, the Japan International Cooperation Agency (hereinafter referred to as "JICA") dispatched the Detailed Planning Survey Team (hereinafter referred to as "the Team") headed by Mr. Hiroyuki Ueda, Senior Advisor on Transport Sector, to the Republic of Tajikistan from 24 August to 5 September 2015.

During its stay, both the Team and authorities concerned of GOT had a series of discussions and exchanged views on the Project for Capacity Development in Air Traffic Services. Both Japanese and Tajikistan sides also held meetings to prepare the drafts of the Record of Discussions, the Project Design Matrix and the Plan of Operation (hereinafter referred to as "R/D", "PDM" and "PO" respectively) of the Project.

As a result of the discussions, both sides agreed to the matters referred to in the documents attached hereto.

2 September 2015

Hiroyuki Veda

Leader

Detailed Planning Survey Team

Japan International Cooperation Agency

Jobirov Ibragim-

Director General

State Unitary Enterprise "Tajikairnavigation"

Rahmon Yusuf Azirb

Head of Civil Aviation Department

Ministry of Transport

I. Title of the Project

Both Japanese and Tajikistan sides agreed that the title of the Project should be altered from "the Project for Improvement of Air Navigation Services" to "the Project for Capacity Development in Air Traffic Services" in order to more adequately indicates the purpose and outputs of the Project. Both sides also confirmed that both sides shall take necessary procedures to change the title of the Project.

II. Draft PDM and PO

The drafts of the PDM and the PO of the Project were prepared in consultation of stakeholders and through meetings as attached in Attachments I and II. The PDM and the PO will be used as a management tool of the Project, and will be finalized by the time of signing of the R/D.

III. Draft Record of Discussions (R/D)

The draft R/D, as the official document which defines the contents of a technical cooperation project, was prepared and agreed through a series of discussions as attached in Attachment III. The draft R/D will be finalized in the course of further consultations towards the signing.

IV. Provisional Schedule until the Project Commencement

- (1) Signing on the R/D by the end of November 2015
- (2) Commencement of the Project in March 2016

Attachments

Attachment I: Project Design Matrix (PDM)
Attachment II: Tentative Plan of Operation (PO)
Attachment III: Draft Record of Discussion (R/D)



un so A.

Version 0.0 Dated 2 September 2015

Attachment I to the Minutes of Meeting on the Project for Capacity Development in Air Traffie Services Project Design Matrix (PDM)

Traffic Services
ŧ
=
pment
0
Š
ā
oacit
ď
ű
ō
ç
<u> </u>
č
9
e: The
t Title
ect Titl
9
Ö

Project Title: The Project for Capacity Development Implementing Agency: Tajikaimavigation (TAN)
Target Group: Tajikaimavigation ATS Officers
Period of the Project: 33 months
Project Site: TAN and TAN Training Center, Dushanbe

posterano Minara		! !	
Remarks			
Achlevement			
Important Assumption		- CNS/ATM systems are properly maintained - Trained ATC officers continued ATC officers tAN - Trained instructors/ trainers, AIS officers and flight procedure designers continue to work in TAN	- Trained ATC officers continue to work in TAN - Trained instructors/ trainers, AIS officers and flight procedure designers continue to work in TAN
Means of Verification	- Rating record - Survey	- Project Monitoring Sheet	- Project Monitoring Sheet
Objectively Verifiable Indicators	 All ATC officers working at ATC units maintain ATC ratings in line with ICAO standards through TAN's continuing training program The contingency plan and SMS for ATC have been kept in operation. Aeronautical Information Publication (AIP) has been updated in line with ICAO standards. 		 1-1: At least 80% of ATC officers /OJT instructors/Simulator trainers who attended training courses have completed trainings successfully. 1-2: Operation Manual has been reviewed and improved if necessary 1-3: Each of the OJT instructors has conducted OJT on aerodrome, approach and/or area control services at least 2 times. 1-4: Aerodrome simulator trainers has been conducting simulator training at least 3 times per month. 2-1: 2 ATC officers have completed basic course on confingency plan successfully. 2-2-2: Exercise of contingency pians have been approved by CAA for implementation. 2-2-2: SMS Manual has been developed and updated 2-2-3: Sisk management process has been established 2-2-3: Sisk management process has been established 2-2-3: Sisk management process has been established 2-2-3: Sins training and education for all ATC officers have been implemented 2-2-3: Sins training and education for all ATC officers have been conducted 2-2-4: Safety risk management and safety assurance have been implemented 2-2-5: Sins training and education for all ATC officers have been conducted 2-2-5: Sins training and education for all ATC officers have been developed 3-3: Als officers have successfully completed basic course on aeronautical information Publication (AIP) have been developed 3-4: Aeronautical Information Publication (AIP) of the model afroot has been produced designers have successfully completed basic course on PANS-OPS. 3-5: And the procedure designers have successfully completed basic course on PANS-OPS. 3-5: And the procedure designers have successfully completed basic course on PANS-OPS. 3-5: And the procedure designers have successfully completed basic course on PANS-OPS. 3-6: And the procedure designers have successfully completed basic course on PANS-OPS. 3-6: And the procedure designers have successfull
	Indicator 1: Indicator 2: Indicator 3:	Indicator 1: Indicator 2: Indicator 3:	Indicator 1-1: Indicator 1-2: Indicator 1-3: Indicator 1-4: Indicator 2-2: Indicator 2-2-1: Indicator 2-2-2: Indicator 2-2-2: Indicator 2-2-3: Indicator 2-2-3: Indicator 3-2: Indicator 3-3:
Narrative Summary	Overall Goal To improve Air Traffic Services (ATS) in Tajikistan	Project Purpose To enhance capacity of Teijkalmavigation (TAN) in Air Traffic Services (ATS)	Output 1: To enhance capacity of training for Air Traffic Control (ATC) officers in line with ICAO standards Coutput 2: To enhance capacity of ATC officers with regard to ICAO recommendations Output 3: To enhance capacity of Aeronautical Information Services (AtS) officers with regard to ICAO recommendations

ner so A.

Attachment 1, Page 2

The state of the s	achment I to the Minnies of Meeting on the Project for Capacity Development in that we were	oject Design Matrix (PDM)
	Attachmei	Project

			Inputs	Important
	Activities	Japanese side	Tajikistan side	Assumption
4-1. T	To cooperate features of ATC officers on periodrome, approach and	Experts:	Counterparts:	- ATC and AIS
	area control services	- Chief Advisor/ATC Expert (1)	 Project Director (Director General, TAN) 	officers will be
1-2: 1	To conduct OUT instructor training for selected ATC officers	- ATC Expert (2)	 Deputy Project Director (First Deputy DG, TAN) 	teleased from
1-3: T	to conduct instructor training for simulator trainers	. Simulator Training Expert	 Project Manager (Head of Safety and Quality 	during training
14: 17	To review and if necessary improve Operation Manuals	- AlS Expert	Department, TAN)	period.
1-5; Tr	To conduct OJT on aerodrome, approach and area control services	Flight Procedure Design Expert	- ATC Training Task Force	
1-6; Tr	To procure aerodrome simulator	 Project Coordinator/Training Planner 	 Contingency Plan/SMS Task Force 	
1-7: Ti	To conduct simulator trainings	- Others as necessary	 AlS/Flight Procedure Design Task Force 	
2-1, Ti	2-1, To develop ATC contingency plan	Training in the third countries:	• Interpreter as necessary	Pre-conditions
2-1-1:	2-1-1: To conduct basic training on contingency plan	- Training of ATC officers on ATC services	Project Offices (with deskis/chairs and internet	- TAN ensures
2-1-2	To improve the draft contingency plans	OJT Instructor Training for selected ATC	in the Muse desired	the budget for
2-1-3:	To conduct exercise of contingency procedures	officers	il Ini readdanas	input by
2-1-4:	To request approval of CAA on the contingency plans for	- Instructor Training for simulator trainers	Facilities of TAN Training Center	Tajikistan side
	implementation	sing Training		- TAN assigns
2-2. T	2-2. To improve Safety Management System (SMS)	- AIS Training		AlS personnel
2-2-1;	2-2-1; To obtain necessary knowledge of SMS	- Others as necessary		
2-2-2;	2-2-2: To develop and update SMS Manual	Equipment:	Muniting Cost:	
2-2-3:	To establish risk management process	Aerodrome Simulator	Operation and maintenance of Actourome Cimulator	
2-2-4:	To implement safety risk management and safel		Supply or replacement of machinery equipment	
2-2-5:	2-2-5: To conduct SMS training and education for ATC officers		and materials necessary for the Project other	omment of the control
3-1, Te	To conduct basic training on AIS		than provided by JICA	cissues and
3-2. Te	To conduct basic training on aeronautical charts		- In-country travel expenses of IAN counterpart	Common reasons as
3.5 E.	To develop operation manuals for Notice to Airman (NOTAM),		personner Data and information related to the Project	
< ∺	Aeronautical Intormation Circulars (ALL) and Aeronautical Information Publication (AIP)			
•	fo conduct basic training on flight procedure design			
3-5. Te	To conduct OJT of flight procedure designers for a model alrport			
79. 11	To produce draft of AIP of the model alrport		A A A A A A A A A A A A A A A A A A A	

ur 10 A.

Attachment II, Page 1

									California Cata	5.65
									MUTHER	Bu
Inputs		Plan	2016	2017	2018	2019	Remarks	enssi	6	Solution
Hypert		Τ,	123458788	C (2) 4 5 6 7 8 9 10 11 12 1 2	2 3 4 5 9 7 4 9 4 4 11 12 1	1 1 1 4 2 4 7 4 9 13 117				
Chief Advisor/ATC Expert (1)		Pinn								
ATC Expert (2)		Actual								
Simulator Trainfing Expert		Pian								
AIS Expert		Plan								
Fight Procedura Design Expart		Plan								
Project Coordinator Training Planner		Plan								
Equipment										
Aerodrome Simulator		Activel								
Training in the third country										
Training of ATC officers on ATC services		Pitan							····	
OJT instructor training for selected ATC officers		Plan								
instructor Training for almulator trainers		Ptan							,-,	
SMS Training		Pfan Actual						•	···	
AIS Trativing		Pran					The state of the s			
		Plan	2016	2017	2018	2019	Fosponsible Organization	tion Achievements	┝	ksue &
Activities		Actual	W I II II	面 Ⅱ Ⅰ 私	M H I M	и п и	Japan Tajikistan			Countermeasures
Sub-Activities			1 1 2 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2		0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2 3 4 3 9 7 4 8 44 15				
Output 1: To enhance capacity of Air Traint Control (A Ly outce) 1-1: To conduct training of ATC officers on evrodrome, approach and	of Cureats in its	Plan					JICA TAN	-		
area control services		Actual					+			
1.2: To conduct OJT instructor training for selected ATC catters		Actual					JICA TAN	-		
1-3; To conduct instructor (rathing for simulator trainers		Ptan					JICA TAN			***************************************
1-4; To review and if necessary improve Operation Manuals		Pian					JICA TAN			
1-5: To conduct OJT on aerodrome, approach and area control services		Plan					JICA TAN			
1-8: To procure serodrome simulator		Plan					JICA TAN	-		
		Pian					-			

Attachment II to the Minutes of Meeting on the Project for Capacity Development in Air Traffic Services Tentative Plan of Operation (PO)

4

uu

Attachment II, Page 2

Attachment II to the Minutes of Meeting on the Project for Capacity Development in Air Traffic Services Tentative Plan of Operation (PO)

Chigai Chot de biagot inter societas of A secicina of 23 Indian	IECOSIII	IIIMIIIMIII	2								-			
2-4-1- To crowley! having (raining an earthcoardy dlan			Plan								ž T	TAN		
			Actual						#			+		
2-1-2: To improve the draft contingency plans			Actual								Yor H	TAN		
2-1-3: To conduct exercise of contingency procedures			Plan								ADICA	Y TAN		
2-1-4: To requost approved of CAA on the contingency plans for smoothentelion			Plan								JISA	TAN		
2.2.1: To obtain necessary knowledge of SMS			Pian								AOIL	Y TAN		
2.2.2: To develop and updata SMS Mimuat			Plan								A JICA	NAT		
2-2-3:To establish risk management process			Plan								- IICA	1 TAN		
2-2-4: To implement solety risk management and selety assurence			Plan								AJICA	TAN		
2-2-5:To conduct SMS training and education for ATC officers			Plan								H JICA	TAN		
Outnut 3: To improve Aeronautical Information Services (AIS)	(AIS) w	Ith regar	with regard to ICAO recommendations	гесолите	ndations									
3-1. To conduct basic Iraining on AIS			Plan								JICA	TAN		
3.2. To conduct basic leaining on econautical charts			Plan								H JICA	TAN		
3-3. To develop operation manuals for NOTAM, AIC and AIP			Plan								JICA	TAN		
3-4. To conduct basic training on Right procedure design			Plan								AOID	TAN		
3-5. To corduct OUT of fight procedure designers for a model suport			Plan								YOU	TAN		
3-6. To produce drak of APP of the model alport			Plan								A NICA	TAN		
Duration / Phasing			Plan Actual											
Monitoring Plan			Plan	2016		2017		2018		2019		Remarks	enssl	Solution
Monitoring				3 4 3 6 7 8	5 ED (1) ED 4 5 1	436716	C # 1 2 13 2	र 2 3 व र 3 5 7 8 5 9 व्यक्त कि 1 2 3 4 3 d 7 8 9 व्यक्त कर 1 3 2 4 5 6 9 व्यक्त कि 1 2 3 4 5 6 हा 8 9 व्यक्त	10 2 1 2 3	1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	<u>=</u>			
Joint Coordination Committee			Actual											
Joint Morillating (Project Manillating Sheet)			Actual											
Post Mostlaring (End of Year 2021)			Plen								1			
Reports/Documents			V											
Minutes of Meeting (UCC)			Actual											
Consider Bench			Pan			-								



DRAFT RECORD OF DISCUSSIONS ON THE PROJECT FOR CAPACITY DEVELOPMENT IN AIR TRAFFIC SERVICES IN

AGREED UPON BETWEEN

THE REPUBLIC OF TAJIKISTAN

TAJIKAIRNAVIGATION, MINISTRY OF TRANSPORT AND JAPAN INTERNATIONAL COOPERATION AGENCY

Dushanbe, xx November 2015

Kiyoshi Ishii Resident Representative Tajikistan Office Japan International Cooperation Agency Jobirov Ibrohim
Director General
State Unitary Enterprise "Tajikairnavigation"

Minister of Transport



un to A

Based on the Minutes of Meetings on the Detailed Planning Survey on the Project for Capacity Development in Air Traffic Services (hereinafter referred to as "the Project") signed on 2 September 2015 between Tajikairnavigation (hereinafter referred to as "TAN"), Ministry of Transport (hereinafter referred to as "MOT") and the Japan International Cooperation Agency (hereinafter referred to as "JiCA"), JiCA held a series of discussions with TAN and relevant organizations to develop a detailed plan of the Project.

Both parties agreed the details of the Project and other points discussed as described in the Appendix 1 and the Appendix 2 respectively.

Both parties also agreed that TAN, the counterpart to JICA, will be responsible for the implementation of the Project in cooperation with JICA, coordinate with other relevant organizations and ensure that the self-reliant operation of the Project is sustained during and after the implementation period in order to contribute toward social and economic development of the Republic of Tajikistan.

The Project will be implemented within the framework of the "Agreement on Technical Cooperation between the Government of the Republic of Tajikistan and the Government of Japan" signed on February 15, 2005 (hereinafter referred to as "the Agreement") and the Note Verbales to be exchanged between the Government of Japan (hereinafter referred to as "GOJ") and the Government of the Republic of Tajikistan (hereinafter referred to as "GOT")

Appendix 1: Project Description
Appendix 2: Other Points Discussed

Appendix 3: Minutes of Meetings on the Detailed Planning Survey on the Project for

Capacity Development in Air Traffic Services

for

uce so A

Appendix 1 to the R/D

PROJECT DESCRIPTION

BACKGROUND

Air transport in Tajikistan, which is a land-locked country with 93% of the area being mountainous, plays an important role to support socio-economic activities. Air transport has great importance in international and long-distance transport, having comparative advantage over road and rail transport. With recent economic growth, air traffic demand in Tajikistan has been increasing rapidly. The number of air passengers at Dushanbe International Airport has grown at 15-18% per year in the last five years, reaching to 1.3 million passengers in 2013. Air cargo traffic as well increased rapidly by 1.6 times between 2009 and 2013, reaching to 2,370 tons at Dushanbe International Airport in 2013. These growth trends are expected to continue toward the future.

With recognition that coping with increasing air traffic demand is an urgent need, Tajikistan has been upgrading aviation infrastructure at its major airports with assistance of EBRD, World Bank, the Government of France and the Government of Japan. However, in order to adequately handle further growth of air traffic, human resource development is equally important.

Air Traffic Control (ATC) services in Tajikistan needs modernization and capacity development. With a safety oversight on the civil aviation system in Tajikistan in 2008, International Civil Aviation Organization (ICAO) focused on old Soviet era based rules, guidelines and operational manuals, which do not fully comply with international air navigation requirements. ICAO also found that the implementation of training program for ATC instructors/officers is necessary.

In response to ICAO's recommendations, the Ministry of Transport started establishing civil aviation regulations complied with international standards since 2008, and these changes required retraining of air traffic control officers to new ATC standard operation procedures. State Unitary Enterprise "Tajikiairnavigation" (TAN) of the Ministry of Transport, which provides air navigation services for whole Tajikistan, has been making effort to comply with ICAO's recommendations by implementing in-country/overseas training as well as reconstruction of Training Center.

However, TAN found that it will require international assistance to develop ICAO compliant operation procedures, and to establish training program for ATC instructors/trainers and officers. Therefore, TAN requested the implementation of this Technical Cooperation project to the Government of Japan.

In January 2015, the ICAO Coordinated Validation Mission (ICVM) conducted evaluation of the status of implementation of the corrective action plan in response to ICAO's audit. As a result of the mission, ICVM required GOT to improve ATC services such as establishment and implementation of training program, Contingency Plan and Safety Management System (SMS) and to improve Aeronautical Information Services (AIS).

With regard to these recommendations, Japan International Cooperation Agency (JICA) and TAN reviewed a detailed plan of the Project in the Detailed Planning Survey.

for

uce DA

II. OUTLINE OF THE PROJECT

Details of the Project are described in the Project Design Matrix (PDM) in Annex 1 and the Plan of Operation (PO) in Annex 2.

1. Title of the Project

The Project for Capacity Development in Air Traffic Services

2. Input

(1) Input by JICA

(a) Dispatch of Experts

- Chief Advisor/ATC (Air Traffic Control) Expert (1)
- ATC Expert (2)
- Simulator Training Expert
- AiS (Aeronautical Information Services) Expert
- Flight Procedure Design Expert
- Project Coordinator/Training Planner
- Others as necessary

(b) Training abroad

- Training of ATC officers on ATC services
- OJT Instructor Training for selected ATC officers
- Instructor Training for simulator trainers
- SMS (Safety Management System) Training
- AIS Training
- Others as necessary

(c) Equipment

Aerodrome Simulator

In case of importation, the machinery, equipment and other materials under II-2 (1) (c) above will become the property of the GOT upon being delivered and installed at location of training in the Republic of Tajikistan.

Input other than indicated above will be determined through mutual consultations between JICA and TAN during the implementation of the Project, as necessary.

(2) Input by TAN

TAN will take necessary measures to provide at its own expense:

- (a) Services of TAN counterpart personnel and administrative personnel as referred to in II-3;
- (b) Office with Desks/Chairs and Internet Connection
 - In TAN Headquarters
 - In TAN Training Center
- (c) Facilities of TAN Training Center.
 - Class rooms
 - Aerodrome simulator room

to

un fof

(d) Running Cost

- Expenses necessary for operation and maintenance of Aerodrome Simulator;
- Supply or replacement of machinery, equipment, instruments, vehicles, tools, spare parts and any other materials necessary for the implementation of the Project other than the equipment provided by JICA;
- In-country travel expenses of TAN counterpart personnel
- (e) Data (including maps and photographs) and Information related to the Project

3, Implementation Structure

The project organization chart is given in the Annex 3. The roles and assignments of relevant organizations are as follows:

(1) TAN

- (a) Director General, as the Project Director, will bear overall responsibility for administration and implementation of the Project.
- (b) First Deputy Director General, as the Deputy Project Director, will assist Project Director in administration and implementation of the Project.
- (c) Head of Safety and Quality Department, as the Project Manager, will be responsible for managerial and technical matters of the Project.
- (d) The following task forces will be established with assignment of a leader and members:
 - ATC Training Task Force
 - Contingency Plan/SMS Task Force
 - AIS/Flight Procedure Design Task Force

(2) JICA Experts

The JICA experts will give necessary technical guidance, advice and recommendations to TAN on any matters pertaining to the implementation of the Project.

(3) Joint Coordinating Committee

Joint Coordinating Committee (hereinafter referred to as "JCC") will be established in order to facilitate inter-organizational coordination. JCC will be held at least once a year and whenever deems it necessary. JCC will review the progress, revise the overall plan when necessary, approve an annual work plan, conduct evaluation of the Project, and exchange opinions on major issues that arise during the implementation of the Project. A list of proposed members of JCC is shown in the Annex 4.

4. Project Sites and Beneficiaries

Project sites and beneficiaries of the Project are as follows:

- Project Sites: TAN and TAN Tr

Direct Beneficiaries of the Project: TAN ATS officers

- Indirect Beneficiaries of the Project: Airlines and users of air transportation in

Tajikistan

TAN and TAN Training Center, Dushanbe

5. Duration

The duration of the technical cooperation for the Project will be thirty three (33) months from the arrival of the first expert.

A

un to A

6. Reports

TAN and JICA will jointly prepare the following reports in English with unofficial translation in Russian.

- Project Monitoring Sheets on semiannual basis until the Project completion
- Project Completion Reports at the time of Project completion

7. Environmental and Social Considerations

TAN and JICA agreed to follow 'JICA Guidelines for Environmental and Social Considerations' in order to ensure that appropriate considerations will be made for the environmental and social impacts of the Project.

III. UNDERTAKINGS OF TAN AND MOT

- On the basis of the Agreement, TAN and MOT will take necessary measures to, and/or coordinate with relevant government authorities to:
 - (1) ensure that the technologies and knowledge acquired by the Tajikistan nationals as a result of Japanese technical cooperation contributes to the economic and social development of the Republic of Tajikistan, and that the knowledge and experience acquired by the personnel of the Republic of Tajikistan from technical training as well as the equipment provided by JICA will be utilized effectively in the implementation of the Project;
 - (2) grant privileges, exemptions and benefits to the JICA experts referred to in II-2 (1) (a) above and their families, which are no less favorable than those granted to experts and members of the missions and their families of third countries or international organizations performing similar missions in the Republic of Tajikistan.
 - (3) provide credentials or identification cards for the JICA experts;
 - (4) provide information as well as support in obtaining medical service for the JICA experts;
 - (5) provide security-related information as well as measures to ensure the safety of the JICA experts;
 - (6) permit the JICA experts to enter, leave and sojourn in the Republic of Tajikistan for the duration of their assignments therein and exempt them from foreign registration requirements and consular fees;
 - (7) exempt the JICA experts from taxes and any other charges on the equipment, machinery and other material necessary for the implementation of the Project;
 - (8) exempt the JICA experts from income tax and charges of any kind imposed on or in connection with any emoluments or allowances paid to them and/or remitted to them from abroad for their services in connection with the implementation of the Project:
 - (9) meet taxes and any other charges on the equipment, machinery and other material, referred to in II-2 (1) (c) above, necessary for the implementation of the Project; and
 - (10) provide necessary facilities to the JICA experts for the remittance as well as utilization of the funds introduced into the Republic of Tajikistan from Japan in connection with the implementation of the Project.
- 2. TAN will bear claims, if any arises, against the JICA experts resulting from, occurring in the

TA

uu 10 A

course of, or otherwise connected with, the discharge of their duties in the implementation of the Project, except when such claims arise from gross negligence or willful misconduct on the part of the JICA experts.

IV. MONITORING AND EVALUATION

JICA and TAN will jointly and regularly monitor the progress of the Project through the Project Monitoring Sheets based on the Project Design Matrix (PDM) and Plan of Operation (PO), The Project Monitoring Sheets will be reviewed every six (6) months.

Also, Project Completion Report will be drawn up one (1) month before the termination of the Project.

JICA will conduct the following evaluations and surveys to verify sustainability and impact of the Project and draw lessons. TAN is required to provide necessary support for them.

- 1. Ex-post evaluation three (3) years after the project completion, in principle
- 2. Follow-up surveys on necessity basis

V. PROMOTION OF PUBLIC SUPPORT

For the purpose of promoting support for the Project, TAN will take appropriate measures to make the Project widely known to the people of the Republic of Tajikistan.

VI. MISCONDUCT

If JICA receives information related to suspected corrupt or fraudulent practices in the implementation of the Project, TAN and relevant organizations will provide JICA with such information as JICA may reasonably request, including information related to any concerned official of the government and/or public organizations of the Republic of Tajikistan.

TAN and relevant organizations shall not, unfairly or unfavorably treat the person and/or company which provided the information related to suspected corrupt or fraudulent practices in the implementation of the Project.

VII. MUTUAL CONSULTATION

JICA and TAN will consult each other whenever any major issues arise in the course of Project implementation.

VIII. AMENDMENTS

The record of discussions may be amended by the minutes of meetings between JICA, Ministry of Transport and TAN. However, PO may be amended in the Project Monitoring Sheets.

The minutes of meetings will be signed by authorized persons of each side who may be different from the signers of the record of discussions.

List of Annexes

Annex 1: Project Design Matrix (PDM)

Annex 2: Plan of Operation (PO)

Annex 3: Project Organization Chart

Annex 4: A List of Proposed Members of Joint Coordinating Committee (JCC)

to

un DA.

Attachment III to the Minutes of Meeting on the Project for Capacity Development in Air Traffic Services Draft Record of Discussions (R/D)

Annex 1: Project Design Matrix (PDM)

(PDM in the Minutes of Meeting with necessary modifications agreed between JICA and TAN will be here.)

X

un 10 A-

Attachment III to the Minutes of Meeting on the Project for Capacity Development in Air Traffic Services **Draft Record of Discussions (R/D)**

Annex 2: Plan of Operation (PO)

(PO in the Minutes of Meeting with necessary modifications agreed between JICA and TAN will be here.)

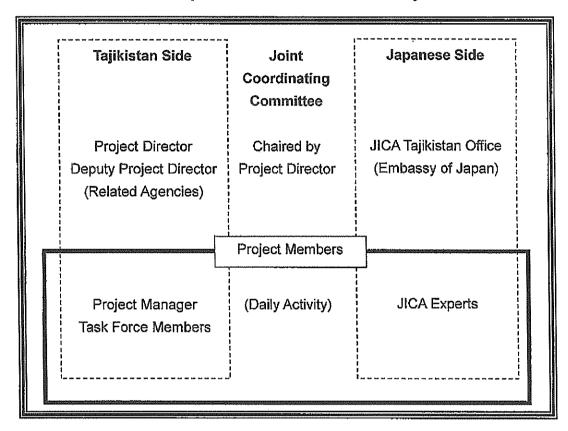
to

ueu 10 A.

Annex 3: Project Organization Chart

The Project will be implemented by TAN in cooperation with JICA. The Project Organization Chart indicating joint implementation structure is shown below:

Joint Implementation Structure of the Project





un LOA

Annex 4: Proposed Members of Joint Coordinating Committee (JCC)

The Proposed chairperson and the members of the JCC will be as follows:

- 1) Chairperson
 - Project Director
- 2) Members from the Tajikistan Side
 - Deputy Project Director
 - Project Manager
 - Members of ATC Training Task Force
 - Members of Contingency Plan/SMS Task Force
 - Members of AIS/Flight Procedure Design Task Force
 - Personnel concerned to be decided by the Tajikistan side
- 3) Members from the Japanese Side
 - Japanese Experts
 - Chief Representative, JICA Tajikistan Office
 - Personnel concerned to be decided by the Japanese Side
- 4) Others
 - Officials of the Ministry of Transport may attend the meeting as observers.
 - Officials of the Embassy of Japan may attend the meeting as observers.
 - Persons who are invited by the Chairperson may attend the meeting as observers.

JA.

uu jo A

Appendix 2 to the R/D

OTHER POINTS DISCUSSED

This part of the R/D notes remarkable issues for the implementation of the Project that were confirmed by TAN and JICA through discussions during the Detailed Planning Survey in August to September 2015.

1. Training Abroad of ATS Officers

Among the training needs of TAN's ATS officers, the following subjects for instructors, trainers and specialists were identified as efficiently conducted at training institutes abroad.

Training Subjects	Number of Trainees
Aerodrome Control	4
Approach Control (Procedural)	3
Approach Control (Surveillance)	4
Area Control (Procedural)	4
Area Control (Surveillance)	3
OJT Instructor Training	6
General Instructor Training	8
Safety Assessment (Theoretical)	2
Safety Assessment (Practical)	1
ATM Occurrence Investigation and Analysis	2
Aeronautical Information Services	2
Aeronautical Charts (Aeronautical Cartography)	2

Costs for training abroad include training course fees, airfares, accommodation expenses and per diem. Airfare will be with economy class discount fares. Accommodation expenses and per diem will be provided in accordance with the rule of JICA.

JICA will make best effort to secure necessary budget for training abroad; however it may not be able to bear costs for all of those specialized training. In such cases, JICA and TAN will discuss cost sharing for training abroad during the Project period.

The selection of trainees for the above courses will require consensus between TAN and JICA experts.

JICA confirmed that TAN will take effective measures that ATS officers who have attended the specialist training in the Project will continue to work in TAN for at least three years after finishing the training.

2. Aerodrome Simulator

JICA will provide an Aerodrome Simulator for training of ATC officers. TAN and JICA



cec for

Attachment III to the Minutes of Meeting on the Project for Capacity Development in Air Traffic Services **Draft Record of Discussions (R/D)**

confirmed the major characteristics of the aerodrome simulator as follows:

- Installation Place: TAN training center
- Major Components:
 - Aerodrome Display (180-degree view)
 - 2 Controller Consoles (Meteorological Indicators/Communication Control/Radar /Training Control Monitor)
 - 2 Pilot/instructor Positions (Aircraft and Ground Vehicle Control/Training Control Monitor)
 - Computer System, Database and Software
- Airport Simulated: Dushanbe (view from New Control Tower), Khujand, Kulob and Qurgonteppa Airports

TAN will be responsible to prepare installation environment including a room with air conditioning, electric power supply, voltage regulator and UPS system.

TAN will provide photographic images of airfields from the control towers, aerodrome maps, aircraft taxiing charts, approach and departure procedure charts, etc., which will be required for production of Aerodrome Simulator data.

uec 40 A

Appendix 3 to the R/D

MINUTES OF MEETINGS ON THE DETAILED PLANNING SURVEY ON THE PROJECT FOR CAPACITY DEVELOPMENT IN AIR TRAFFIC SERVICES

Minutes of Meetings on the Project for Capacity Development in Air Traffic Services on 2 September 2015 will be attached here.

uce to A'

to

ANNEX4-2 Minutes of JCC1



Minutes of the First Meeting of Joint Coordinating Committee (JCC/1) for "The Project for Capacity Development in Air Traffic Services" in Tajikistan Dushanbe, 26 April 2016

- 1. The First Meeting of Joint Coordinating Committee (JCC/1) for "The Project for Capacity Development in Air Traffic Services" (hereinafter "the Project") was held Ministry of Transportation in Dushanbe, Tajikistan on 26 April 2016.
- 2. Mr. Shambiev Alisher, First Deputy Director of TAJIKAIRNAVIGATION (hereinafter TAN), on behalf of Project Director Mr. Jobirov Ibragim, Director General of TAN who was not available due to an urgent business trip, opened the meeting as the chairman with the presence of the participants listed at Appendix A to this Minutes.
- 3. Mr. Kiyoshi Ishii, on behalf of JICA, expressed his sincere appreciation for Mr. Shambiev Alisher for having this Meeting and made opening remarks. The representative of Civil Aviation Authority of Ministry of Transportation made opening remarks on the side of Tajikistan.
- 4. Mr. Hiroyuki Ueda, the senior advisor of JICA headquarters, briefed the Project background.
- 5. Mr. Toshio Yoshida, the Project Chief Advisor of ATCA-Japan, explained the Project activities in detail, and he presented the committee with Project Design Matrix (PDM) version 1.0, Plan of Operations (PO) version 1.0, Annual Working Plan-2016 (AWP-2016) version 1.0 and Monitoring Sheet- I / II those were attached as Appendix B, C, D, G and H to the Minutes, and the Committee adopted all. He also presented the summary of 3rd country training and explained detail of a technical transfer by the short term experts to the Taskforce-1 for ATC, 2 for SMS and 3 for AIS, and the Committee consented all activates.
- 6. Mr. Tomonori Orita, the Project Coordinator of JICA, explained the logistics as Appendix-F and travel allowance table for 3rd country training as Appendix-G, and the Committee consented its. He also presented an abbreviation for long project title as "TJ-ATS" and the emblem of the Project, and the Committee adopted all. He promised to establish a dedicated Website for the Project before July 2016, and the Committee made his contribution welcome.
- 7. Mr. Sheraliev Bakhtiyor, the Project Manager of TAN, explained the input from TAN side and presented a constituent member of the Taskforce-1, 2 and 3, and the Committee consented the Taskforces formulation.
- 8. Mr. Shambiev Alisher as the chairman made closing address, then close the Meeting.

Dushanbe, 26 April 2016

Shambiev Alisher

First Deputy Director

State Unitary Enterprise "TAJIKAIRNAVIGATION"

Kiyoshi Ishii

Resident Representative

JICA Tajikistan Office

Rahmon Usuf Azim

Head of Civil Aviation Department

Ministry of Transportation

Лоиха оид ба баланд намудани потенсиал дар самти хизматрасонии харакати хавой Проект по повышению потенциала в сфере обслуживания воздушного движения The Project for Capacity Development in Air Traffic Services



List of Appendix

Appendix-A: JCC/1 general, agenda, program, list of document and participant list

Appendix-B: PDM, Project Design Matrix (ver.-1.0) Appendix-C: PO, Plan of Operations (ver.-1.0)

Appendix-D: AWP-2016, Annual Working Plan for 2016 (ver.-1.0)

Appendix-E: 3rd Country Training Summary

Appendix-F: 3rd Country Training Rule and Allowance table Appendix-G: Monitoring Sheet- I (PDM + monitoring space) Appendix-H: Monitoring Sheet-II (PO + monitoring space)

Лоиха оид ба баланд намудани потенсиал дар самти хизматрасонии харакати хавой Проект по повышению потенциала в сфере обслуживания воздушного движения The Project for Capacity Development in Air Traffic Services



The First Meeting of Joint Coordinating Committee (JCC/1) for "The Project for Capacity Development in Air Traffic Services" in Tajikistan Dushanbe, 26 April 2016

General:

- 1. Date: Tuesday, 26 April 2016
- 2. Venue: Meeting Room in Ministry of Transportation in Dushanbe
- 3. Working language: English (with TAN's Russian interpreter in case of necessary)
- 4. Chairman: Mr. Shambiev Alisher, First Deputy Director of SUE "TAJIKAIRNAVIGATION"

Agenda:

- 1. The Project activates, PDM, PO and AWP-2016 by the Project Chief Advisor
- 2. The 3rd country training plan by the Project Chief Advisor
- 3. The inputs from TAN and the Taskforce-1/2/3 assignments by the Project Manager
- 4. The logistics and administrative issues by the Project Coordinator
- Approval of PDM, PO, AWP-2016 Moniroting Sheets, 3rd country training plan, TF members, and other administrative issues by all.

Program:

- 10:00 Opening by the Chairman
- 10:05 Opening Remarks by Mr. Kiyoshi Ishii, Resident Representative of JICA Tajikistan
- 10:10 Welcome Address by Mr. Rahmon Usuf Azim, Civil Aviation Authority in Ministry of Transportation
- 10:15 Introduction of participants Tajik side by Project Manager and Japan side by Project Chief Advisor
- 10:20 Presentation by Mr. Hiroyuki Ueda, JICA headquarter
- 10:30 Explanation by Mr. Toshio Yoshida (Project activities, PDM, PO, AWP-2016, M/S- I & II), approval
- 10:40 Explanation by Mr. Toshio Yoshida (3rd country training and technical transfer), and approval
- 10:50 Explanation by Mr. Tomonori Orita (Logistics and administrative issues), and approval
- 11:00 Explanation by Mr. Sheraliev Bakhtiyor (Inputs from TAN and Taskforce-1, 2 and 3), and approval
- 11:10 Other Discussion and Q&A
- 11:20 Closing Remarks by Embassy of Japan in The Republic of Tajikistan
- 11:25 Closing by the chairman, First Deputy Director of TAN
- 11:30 Sign the Minutes of the Meeting (M/M) by TAN, MOT and JICA
- 11:35 Group Photo
- (11:45 Lunch in cafeteria hosted by TAN)

List of Document

- 1. JCC/1 general, agenda, program, list of document and participant list
- 2. PDM, Project Design Matrix (Version 1.0)
- 3. PO, Plan of Operations (Version 1.0)
- 4. AWP-2016, Annual Working Plan for 2016 (Version 1.0)
- 5. 3rd Country Training Summary
- 6. 3rd Country Training Rule and Allowance table
- 7. Monitoring Sheet- I (PDM + monitoring space, Version 1.0)
- 8. Monitoring Sheet- II (PDM + monitoring space, Version 1.0)

Поиха оид ба баланд намудани потенсиал дар самти хизматрасонии харакати хавой Проект по повышению потенциала в сфере обслуживания воздушного движения The Project for Capacity Development in Air Traffic Services



Participant List

1.Tajikistan side

	Name	Title	Project role
1	Mr. Shambiev Alisher	First Deputy Director, TAJIKAIRNAVIGATION	Project Manager
2	Mr. Rahmon Usuf Azim	Head of Civil Aviation Department, MOT	JCC Member
3	Mr. Sheraliev Bakhtiyor	Head of the Safety and Quality Department	Project Manager
4	Mr. Davlyatov Davlat	Head of ATS	Taskforce-1 Leader
5	Mr. Khumorov Bakhtiyor	Head of ATFMC	Taskforce-2 Leader
6	Mr. Sheraliev Bakhtiyor	Head of the Safety and Quality Department	Taskforce-3 Leader
7	Mr. Mansuri Makhmad	Chief of ACC Dushanbe	Taskforce-1 Member
8	Mr. Majidov Behruz	ATS controller	Taskforce-2 Member
9	Mr. Toshmatov Ulugbek	Safety and Quality inspector	Taskforce-3 Member
10	Ms. Zarrinai Mirzo	English Teacher	Interpreter

2. Japan side

<u>z. Jo</u>	pan side	
	Name	Title
1	Mr. Yu Ishikawa	Second Secretary, Embassy of Japan
2	Mr. Takashi Okimoto	Third Secretary, Embassy of Japan
3	Mr. Kiyoshi Ishii	Resident Representative, JICA Tajikistan office
4	Ms. Makiko Konohara	Program Formulation Office, JICA Tajikistan office
5	Mr. Najmedinov Tojiddin	Program Officer, JICA Tajikistan office
6	Mr. Hiroyuki Ueda	Senior Advisor, JICA Headquarters
7	Mr. Toshio Yoshida	Project Chief Advisor / ATC Expert, ATCA-Japan
8	Mr. Hideo Watanabe	Project Sub Advisor / ATC Expert, ATCA-Japan
9	Mr. Tomonori Orita	Project Coordinator, JICA

Version 1.0 ° 26 April 2016

Project Design Matrix

Project Title: The Project for Capacity Development in Air Traffic Services Implementing agency: SUE "TAJIKAIRNAVIGATIONT" (TAN), Project term: 33 months from 28 March 2016, Project site: TAJIKAIRNAVIGATIONT" (TAN), Project term: 33 months from 28 March 2016, Project site: TAJIKAIRNAVIGATIONT" (TAN), Project term: 33 months from 28 March 2016, Project site: TAJIKAIRNAVIGATIONT" (TAN), Project term: 33 months from 28 March 2016, Project site: TAJIKAIRNAVIGATIONT" (TAN), Project term: 33 months from 28 March 2016, Project site: TAJIKAIRNAVIGATIONT" (TAN), Project term: 34 months from 28 March 2016, Project site: TAJIKAIRNAVIGATIONT (TAN), Project term: 35 months from 28 March 2016, Project site: TAJIKAIRNAVIGATIONT (TAN), Project term: 36 months from 28 March 2016, Project site: TAJIKAIRNAVIGATIONT (TAN), Project term: 37 months from 28 March 2016, Project site: TAJIKAIRNAVIGATIONT (TAN), Project term: 38 months from 28 March 2016, Project site: TAJIKAIRNAVIGATIONT (TAN), Project term: 38 months from 28 March 2016, Project site: TAJIKAIRNAVIGATIONT (TAN), Project term: TAJIKAIRNAVIGATIONT (TAN), PROJECT (TAN), PRO

Dbjectively Verifiable Indicators Dbjectively Verifiable Indicators ordining at ATC units maintain ATC ratings in line with ICAO standards rolling at ATC units maintain ATC ratings in line with ICAO standards ordination Publication (AIP) has been updated in line with ICAO standards Trained Tra	Implementing agency: SUE "IAJIKAIKNAVIGATION"	" ASINAIRIN		Moone of	
Indicator 1: All ATC officers working at ATC units maintain ATC ratings in line with ICAO standards through TAN's continuing training trai	Narrative Summary		Objectively Ve	Verification	Important Assumption
Indicator 3: Aeronalmucon concess by OJT instructors and simulation training in line with ICAO standards working at ATC units have passed training in line with ICAO standards working at ATC units have passed training in line with ICAO standards working at ATC units have passed training in line with ICAO standards by OJT instructors and simulated ratinings to ICAO standards by Indicator 3: JICA Expert. Indicator 1-1: At least 80% of ATC officers/OJT instructors/Simulator trainers who attended training working at a part of the OJT instructors has conducted OJT on aerodrome, approach and/or area courses have completed trainings successfully. Indicator 1-3: Contrain Aerodrome simulator has been conducting simulator training at least 3 times onfort associated associated on the OJT instructors has been conducted successfully. Indicator 1-4: Each of the Simulator has been poperational. Indicator 2-1-1: Exercise of contingency plans have been implemented indicator 2-1-1: 2 ATC officers have completed basic course on of SMS successfully. Indicator 2-2-1: Also inferes have completed basic course on SMS successfully. Indicator 2-2-2: SMS Manual has been developed and updated indicator 2-2-3: SMS Manual has been developed and updated indicator 2-2-3: SMS fraining and education for all ATC officers have been implemented indicator 2-2-3: SMS fraining and education for all ATC officers have been implemented indicator 2-2-3: SMS fraining and education for all ATC officers have been implemented indicator 2-2-3: SMS fraining and education for all ATC officers have been implemented indicator 2-2-3: SMS fraining and education for all ATC officers have been implemented indicator 3-3: Ind	Overall Goal To improve Air Traffic Services (ATS) in Tajikistan	Indicator 1:	All ATC officers working at ATC units maintain ATC ratings in line with ICAO standards through TAN's continuing training program The contingency plan and SMS for ATC have been kept in operation. The contingency plan and SMS for ATC have been updated in line with ICAO standards.	- Rating record - Survey	
Indicator 1-1: At least 80% of ATC officers/OJT instructore/Simulator training reapacity of training focuses have completed trainings successfully. To enhance for ATC officers of the OJT instructore/Simulator training at least 3 times and improved in necessary for the OJT instructors has conducted OJT on aerodrome, approach and/or area control services at least 2 times. To enhance for the OJT instructors has conducted OJT on aerodrome, approach and/or area control services at least 2 times. To enhance for the OJT instructors has been conducted Simulator training at least 3 times per month. To enhance for the OJT instructors has been conducted Simulator training at least 3 times per month. To enhance for the OJT instructors has been conducted successfully. Indicator 2-1-1: Each of the simulator trainers has been conducted successfully. Indicator 2-1-2: Exercise of contingency plans have been conducted successfully. Indicator 2-2-3: SMS Manual has been developed and updated for implementation. Indicator 2-2-3: SMS fraining and education for all ATC officers have successfully completed basic course on AIS. Indicator 2-2-3: SMS fraining and education for all ATC officers have successfully completed basic course on AIS. Indicator 2-2-3: SMS fraining and education for all ATC officers have successfully completed basic course on AIS. Indicator 2-2-3: Character have successfully completed basic course on PANS-OPS. Indicator 3-2: Character have successfully completed basic course on PANS-OPS. Indicator 3-3: Character have successfully completed basic course on PANS-OPS. Indicator 3-3: Character have successfully completed basic course on PANS-OPS. Indicator 3-4: Character designers have successfully completed basic course on PANS-OPS. Indicator 3-5: Character designers have successfully completed basic course on PANS-OPS. Indicator 3-5: Character designers have successfully completed basic course on PANS-OPS. Indicator 3-5: Character designers have successfully completed basic course on panel panel pr	Project Purpose To enhance capacity of Tajikairnavigation (TAN) in Air Traffic Services (ATS)	Indicator 3: Indicator 1: Indicator 2: Indicator 3:	Aeronautical information of contraction in the Arich Manager Annual Manager Arich Mana	- Project Monitoring Sheet	 CNS/ATM systems are properly maintained Trained ATC officers continue to work in TAN Trained instructors/ trainers, AIS officers and flight procedure designers continue to work in TAN
ICAO standards Indicator 1-4: Aerodrome simulator has been Indicator 1-5: Each of the simulator trainers have been capacity of ATC Indicator 2-1-1: ZATC officers have completed capacity of ATC Indicator 2-1-2: The contingency proced continuendations indicator 2-2-2: SMS Manual has been develop indicator 2-2-3: Risk management and standard an		Indicator 1-1: Indicator 1-2: Indicator 1-3:	At least 80% of ATC officers/OJT instructors/Simulator trainers who attended training courses have completed trainings successfully. Operation Manual has been reviewed and improved if necessary Each of the OJT instructors has conducted OJT on aerodrome, approach and/or area control services at least 2 times.	- Project Monitoring Sheet	 Trained ATC officers continue to work in TAN Trained instructors/ trainers, AIS officers and flight procedure designers continue to work in TAN
To enhance Indicator 2-1-1: 2ATC officers have completed capacity of ATC Indicator 2-1-2: Exercise of contingency proced officers with regard Indicator 2-2-1: The contingency plans have be to ICAO indicator 2-2-2: SMS Manual has been develor indicator 2-2-3: Risk management and standard and	ICAO standards	Indicator 1-4: Indicator 1-5:	Aerodrome simulator has been operational. Each of the simulator trainers has been conducting simulator training at least 3 times per month.		
To enhance Indicator 3-1: 2 AIS officers have successfully capacity of Indicator 3-2: 2 AIS officers have successfully Aeronautical Indicator 3-3: Operation manuals for Notice to (AIC) and Aeronautical Information Indicator 3-4: 2 flight procedure designers have successfully 2 AIS officers have successfully and capacity officers have successfully 2 AIS officers have successfully and capacity officers have successfully 2 AIS officers have successfully and capacity of AIS officers have successfully 2 AIS officers have successfully and capacity of AIS officers have successfully 2 AIS officers have successfully and capacity of AIS officers have and capacity officers have and capacity of AIS officers have and capacity of AIS		Indicator 2-1-1: Indicator 2-1-2: Indicator 2-1-3: Indicator 2-2-1: Indicator 2-2-2: Indicator 2-2-3: Indicator 2-2-3: Indicator 2-2-3:	2 ATC officers have completed Exercise of contingency proced. The contingency plans have bt 2 ATC officers have completed SMS Manual has been develop Risk management process has Safety risk management and s SMS training and education for		
		Indicator 3-1: Indicator 3-2: Indicator 3-4: Indicator 3-5: Indicator 3-5:	2 AIS officers have successfully completed basic course on AIS. 2 AIS officers have successfully completed basic course on aeronautical charts. 2 AIS officers have successfully completed basic course on aeronautical contains of the contain manuals for Notice to Airman (NOTAM), Aeronautical Information Circulars (AIC) and Aeronautical Information Publication (AIP) have been developed 2 flight procedure designers have successfully completed basic course on PANS-OPS. 2 flight procedure designers have successfully completed OJT on conventional flight procedure design. Draft of Aeronautical Information Publication (AIP) of the model airport has been produced.		

(iff Im- white

Account Account	ווייים						Pre-conditions	TAN ensures the budget for input by	TAN assigns AIS personnel				,										- And Andrews Control of the Control
	Taiikistan side	Counterparts:	Project Director (Director General, TAN)	- Deputy Project Director (First Deputy DG, TAN)	- Project Manager (Head of Safety and Quality Department, TAN)	ATC Training Task Force	Task Force Als/Flight Procedure	Design Task Force . Interpreter as necessary	Project Offices (with desks/chairs and internet connection):	- In TAN Headquarters	In TAN Training Center Facilities of TAN Training Center	- Class rooms	Aerodrome simulator room	Running Cost: Operation and maintenance	of Aerodrome Simulator	Supply or replacement of machinery, equipment and	materials necessary for the	Project other than provided	by Jich	of TAN counterpart	personnel	Data and Internation reason to the Project	
To the second se	endul .	Japanese side	Experts: Chief Advisor/ATC Expert (1)	. ATC Expert (2) . Simulator Training Expert	- AIS Expert - Flight Procedure Design Expert - Flight Procedure Design Expert - Flight Procedure - Flight Planner	Others as necessary	Training in the third countries. Training of ATC officers on ATC services	OJT Instructor Training for simulator trainers	. SMS Training . AIS Training	- Others as necessary	Equipment: - Aerodrome Simulator												
		Activities	To conduct training of ATC officers on aerodrome,	approach and area control of the selected ATC	officers To conduct instructor training for simulator trainers To review and if necessary improve Operation Manuals	To conduct OJT on aerodrome, approach and area connoc services	To procure aerodrome simulator To conduct simulator trainings	To develop ATC conlingency plan	2-1-2: To improve the draft contingency plans	2-1-3; To conduct exercise of commission of process for 5-1-4. To request approval of CAA on the contingency plans for		2. to implove Salety management in the property of SMS		2-2-3: To establish risk management process	2-2-4: To implement safety tisk triangles	•	officers	To conduct basic training on AIS	To conduct basic training our action actions are to a similar manuals for Notice to Airman	To develop operation managed in the control of the	Aeronautical Information Publication (AIP)	To conduct basic training on flight procedure design To conduct OJT of flight procedure designers for a model	airport To oroduce draft of AIP of the model airport
			".	1-2:	55. 4	-1-5:	1-6: -7:	2-1.	7 6	, v	4	2-2.	. 7	2	4	2-2-5:		3.1:	3-2:	بن بن		8. 6. 6. 6.	, ,

When, "

Version 1.0 Project Title: The Project for Capacity Development in Air Traffic Service 26 April 2016 Inputs Plan 2018 2019 Remarks Expert Pian Chief Advisor/ATC Expert (1) Actual ATC Expert (2) Actual Simulator Training Expert Actual AIS Expert Actual Flight Procedure Design Expert Actual Project Coordinator/ Training Planner Equipment Aerodrome Simulator Actua Training in the third country Training of ATC officers on ATC services Actual Plan Out instructor training for selected ATC officers Actua Plan Instructor Training for simulator trainers Actual SMS Training Actua Plan AIS Trainino Plan 2018 2019 Responsible Organization Activities [] N Actual IH. W (II III 1 1 a l ts īV Japan Tajikistan Sub-Activities Output 1: To enhance capacity of Air Traffic Control (ATC) officers in line with ICAO standards 1-1: To conduct training of ATC officers on aerodrome, approach Plan TAN and area control services t-2: To conduct OJT instructor training for selected ATC officers JICA TAN Actual Actual Plan
Actual Plan 1-3: To conduct instructor training for simulator trainers JICA TAN 1-4: To review and if necessary improve Operation Manuals JICA TAN 1-5: To conduct OJT on aerodrome, approach and area control JICA TAN 1-5; To procure perodrome simulator JICA TAN Plan 1-7: To conduct simulator trainings JUCA TAN Actual Output 2: To improve ATC services with regard to ICAO recommendations Plan 2-1-1: To conduct basic training on contingency plan TAN Actual Plan 2-1-2: To improve the draft contingency plans JICA TAN Actual Plan 2-1-3: To conduct exercise of contingency procedures JICA TAN Actual 2-1-4. To request approval of CAA on the contingency plans for Plan TAN Actual Plan 2-2-1: To obtain necessary knowledge of SMS JICA TAN Actua 2-2-2: To develop and update SMS Manual JICA TAN Actua Plan 2-2-3:To establish risk management process JICA TAN Actual 2-2-4: To implement safely risk management and safety Plan JICA TAN assurance Actual 2-2-5:To conduct SMS training and education for ATC officers JICA TAN Actual Output 3: To Improve Aeronautical Information Services (AIS) with regard to ICAO recommendations Plan distribution 3-1. To conduct basic training on AIS TAN JICA Plan 3-2. To conduct basic training on aeronautical charts JICA TAN Actual 3-3. To develop operation manuals for NOTAM, AIC and AIP JICA TAN Actua Plan 3-4. To conduct basic training on flight procedure design JICA TAN Actua Plan 3-5. To conduct OJT of light procedure designers for a model ۸۸T lairpon Actua 3-6 To produce draft of AIP of the model airport TAN JICA 安與內質數据自然因數各籍變極所能與多種和學歷數以類類極期間的發出 Plan Duration / Phasing Actual 2017 2018 Monitoring Plan Plan 2019 Remarks Monitoring Plan Joint Coordination Committee Actual Plan Joint Monitoring (Project Monitoring Sheet) Post Manitoring (End of Year 2021) Actual Reports/Documents Minutes of Meeting (JCC) Completion Report

AWP-2016 (Annual Work Plan for 2016)

Version 1.0

26 April 2016 Project Title: The Project for Capacity Development in Air Traffic Services OUTPUT To enhance capacity of training for Air Traffic Control (ATC) officers in line with ICAO standards To enhance capacity of ATC officers with regard to ICAO recommendations To enhance capacity of Aeronautical Information Service(AIS) officers with regards to ICAO recommendations 2016 2017 Activities 10 | 11 6 4 5 △ T/F Meeting △ T/F Meeting △ T/F Meeting Task Force - 1 1-1 ATC Training Third country training Select candidates 18/Oct-23/Dec 26/Iul-30/Sep Aerodrome 16/Nov-18/Jan 26/Jul-23/Sep. Approach Procedural 18/Oct-23/Dec 26/Jul-30/Sep Approach Surveillance 2<u>6/Jul-21/Sep</u> Area Procedural 18/Oct-23/Dec 26/Jul-30/Sep, Area Surveillance 1-2 Instructor Training Third country training Select candidates Not Fixed 4.1 **OJT Instructor** Simulator Trainer 1-3 Operation Manual Translation documents (Rus.-Eng.) Develop and update Simulator Procurement JICA Simulator Training Expert △ T/F Meeting △ T/F Meeting Task Force - 2 Δ T/F Meeting 2-1 ATM Contingency plan Translation documents (Rus.-Eng.) **Develop Contingency Plan** 8-11/Aug Conduct basic training Make Exercise Plan 2-2 Safety Management System Third country training Select candidates 17-21/Oct SAF/SA 1 12-16/Dec SAF/SA 2 12-16/Sap SAF/INV Translation documents (Rus.-Eng.) Develop SMS Manual Make SMS Training Plan △ T/F Meeting Task Force - 3 △ T/F Meeting 3-1 Aeronautical Information Service Third country training Select candidates Jun/Jul AIS/General 4-17/Jul AlS/Cartography JICA AIS Expert 3 7 10 11 12 2

Appendix-E

,

يد امرد 	, 					1				-				1		- -																			forces.
CLAST CARE	נפרוח	26 July-23 Sep	(TUWKS)	(10wks)	26 July-30 Sep (10wks)	16 Nov-16 Jan	(9wks)	(10)	18 Oct-23 Dec	(10wks)	(13wks)	2017 Feb-Mar?	26, Lif-30 Seo	(10wks)	18 Oct-23 Dec	9017/Eeh?	(2wks)	2017/middle?	(2wks)	2017/Feb?	(2wks)		2017/middle?	(ZWKS)	17-21 Oct 2016	(1wk)	(1wk)	12-16 Sep 2016	(1wk)	June? 2016	(owks)			4-17 July 2016	ver by the Tack
	Organization /Country	MAvA/ Malaysia	6,871USD		MAvA/ Malaysia	CATC/ Thailand	MAN.A / Malayaria	MAVA/ Maraysta 7,651USD	MAvA/ Malaysia	7,651USD	MAVA/ Malaysia 8,056USD	CATC/ Thailand	MANA / Malayeis	7,651USD	MAA/Malaysia	7651USD	KAI/ Kiga (under	investigation)		DAI/Digs	(under	Investigation/			FILEOCONTROL	/Luxemburg	FUROCON I ROL	EUROCONTROL	/Luxemburg	CATC/Thailand	//,2001PB			RAI/Riga	(under investigation)
	Potential Training Course Title/Contents		e Control	ICAO 052 Aerodrome Control	ICAO 053	Approach Procedural ATCNIR25		ICAO 054 Approach Surveillance	ICAO 054	Approach Surveillance	ICAO 055			ICAO 054 Area Surveillance		Area Surveillance	OJT Instructor Training				General Instructor Training					Introduction to Salety Assessment [SAF-SA1]	Practical Safety	ATM Occurrence Investigation	and Analysis [SAF-INV]	Aeronautical Cartography (AIS	Map) Introduction to AIS	Computer Application Program	AIS Organization	Electric terrain & obstruct data	Feb 2017 for aeronautical cartography. (under / cm.)/Russian Aeronautical chart provision investigation)
	Restriction and condition	for training course	English		1 and 2 trainee x 2groups	English		2 trainee x 2 groups	English		2 trainee x 2 groups	- English	To design the second se	1 and 2 trainee x 2 groups	English		3 trainee x 2 groups				4 trainee x 2 groups Frelish/ Russian	i	nakin yenn			2 trainee x 1 group	1 trainee x 1 group	English	English	2 trainee x 1 group	before Feb 2017	Cilgian		2 trainee x 1 group	before Feb 2017 English/Russian
	Name of Potential Candidates	as of 19 Apr 2016	1. Sharipov Sino /*a (KU) 2. Gafarov Bahriddin /*b (qt)	3. Ikromov Qayum/*c (kh)	4. Rakhimov Faizall /*d	2, Kaiumov Akbar /*f	3, Karomatov Asadullo		2. Adylov Odil	3. Nadirov Umed	1. Tajibaev Akbar	2. Saifulloev Shukhrat	3. Satisfactory Sergery A Pachidov Firdays /*g (kh)	Rakhimov Khotam	2. Nishonov A.A.	3. Kurbonov Yusur / *n	1. Avezov Mullojon	2. Sharipov Sino / *a (wu) 3. Gafarov Bahriddin /*b (qt)	4. Khusenov Pairav /*e	S. Kakilinov i sizali / · c	1. Kurbanov Sarvar	2. Gullov rituavs 3. Satibaldiev Sergey	4. Tajibaev Akbar /*f	5, Kaiumov Gulom 6. Odinaev Ruslam	7. Rashidov Firdavs /*g (kn) 8 Kajumov (krom /*c (kh)	1, Sheraliev Bakhtiyor	2. Loshmatov Uluguer 1. Sheraliev Bakhtiyor	- -	 Sheraliev Bakhtıyor Toshmatov Ulugbek 	4 4 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1. Majidov Benruz 2. Kuliev Ilkhom			metan Distance	2. Asrorov Faruh
ά	Max	#	4		c	າ ່		4			4			3			9				8					2			2		2				7
90709		Training Title (#ICAO)	Aerodrome Control	700#		Approach Control (Procedural)	#053	Approach Control	(Surveillance)	#054	Control	(Procedural)	#055/procedural	Area Control	(Surveillance)	#054/surveillance	To	Instructor Training	5.17#		General	Instructor Training	2 7 2			Safety Assessment	(Theoretical)	(Practical)	ATM Occurrence	investigation & Atlanysis	AIS (+Aeronautical Carts)	#022			Aeronautical Carts (+AIS)
	3rd Country Training Summary	7.	Taskfoce-1	Leader: Mr. Davlyatov Davlat		Member: Mr. Mansuri Makhmad	4	Expert: Mr. Toshio Yoshida																		Tackforen9	Leader	Mr. Sheraliev Bakhtiyor	Mr. Toshmatov Ulugbek	Expert: Mr Hideo Watanabe	Taskforce-3	Leader: Mr. Khumorov Bakhtiyor	Member:	Mr. Majidov Behruz	Expert: Mr Toshio Yoshida

Appendix-F

Rule of the logistics arrangement	Principally, the Project remits training institute the payment to bank account in USD.	There is possibility that the participants or Project Coordinator take USD cash for In case of	short term courses.				The Draingt provides USD cash to the trainees one week before the departure.	A transportation cost between home to/from Dushanbe airport, an airport in the destination	country to/from a hotel, the hotel to/from a training venue and other small expenditures are	including this allowance.	The Project provides use the actual accommodation fee to the training center for long term	course. The project pays are access to provided by the Project. If lunch and dinner are	including accommodation cost, it will be deducted from Travel allowance.	The Project provides appropriate air–ticket to the trainees one week being and organization.	Trainees should submit boarding pass stab to the contract of the train own responsibility.	Principally, the trainee or TAN should arrange appropriate vior by the first required.	The Project only bears VISA fees for the consular missions and arrangement charges for travel	agency upon the official receipts.		CACCALLANT TO A CONTRACT TO A	The Project provides participants with an essential travel listingue.	This table is subject to change by the update of JICA regulations.
20160426 Training term	Short (<3 weeks) Lang (>3 weeks)	and the second s	Actual				_		50USD/day 40USD/day	60USD/day 50USD/day	100USD/night Actual	Actual	Actual	Actual	omy Class	sa fee +	Arrangement charges by travel agency	(Actual)	Visa fee for EOG in Dushanbe (Actual)	N/A	Max. 5USD/day Max. 5USD/day	(Actual) (Actual)
3" Country Training Rule and Allowance table / 20160426		CATC (Thailand)	EUROCONTROLE (Luxemburg)	MAA (Malaysia)	RAI, LGS (Latvia)	SAA (Singapore)	Aviation Institute? (Moscow)	Thailand Malaysia, Latvia		_	2235	Thailand, Malaysia, Latvia	Luxemburg, Russia (except, Moscom,	Singapore, Moscow	I		Ihailand	Malaysia	Solvengen regions		Kussia	All
3" Country Tre	Category	1 Tuition	9 1,1-1		· · · · ·				7 ITAVE	allowering	2.5	3 Hotel			4 Air fare	1	5 VISA fee	-1,				6 Iravel Insurance

4.7

Monitoring Sheet I

Project Title: The Project for Capacity Development in Air Traffic Services Version 1.0 Implementing agency: SUE "TAJIKAIRNAV IGATIONT" (TAN), Project term: 33 months from 28 March 2016, Project site: TAN in Dushanbe

		Objectively Verifiable Indicators	Means of Verification	Important Assumption	Achievement	Remarks
Natrative Summary Overall Goal To improve Air Traffic Services (ATS) in Tajikistan	Indicator 1: Indicator 2: Indicator 3:	All ATC officers working at ATC units maintain ATC ratings in line with ICAO standards through TAN's continuing training program. The contingency plan and SMS for ATC have been kept in operation.	- Rating record - Survey			
Project Purpose To enhance capacity of Tajikairnavigation (TAN) in Air Traffic Services (ATS)	indicator 1: Indicator 2: Indicator 3:	standards. All ATC officers working at ATC units have passed training in line with ICAO standards conducted by OJT instructors and simulator trainers. The contingency plan and SMS for ATC have been implemented. The drait AIP of the model airport has been accepted as confirming to ICAO standards by JICA Expert.	- Project Monitoring Sheet	- CNS/ATM systems are properly maintained rained ATC officers continue to work in TAN rained instructors/ trainers, ASI officers and flight procedure designers continue to work in TAN	·	τ
Output 1: To enhance capacity of training for Air Traffic Control (ATC) officers in line with ICAO standards	Indicator 1-1: (ndicator 1-2: Indicator 1-3: Indicator 1-4: Indicator 1-4:	At least 80% of ATC officers/OJT instructors/Simulator trainers who attended training courses have completed trainings successfully. Operation Manual has been reviewed and improved if necessary Each of the OJT instructors has conducted OJT on aerodrome, approach and/or area control services at least 2 times. Aerodrome simulator has been operational. Each of the simulator trainers has been conducting simulator training at least 3 times per month.	- Project Monitoring Sheet	Trained ATC officers continue to work in TAN Trained instructors/ trainers, Als officers and flight procedure designers continue to work in TAN		
Output 2 To enhance capacity of ATC officers with regard to ICAO recommendations	Indicator 2-1-1: Indicator 2-1-2: Indicator 2-2-1: Indicator 2-2-2: Indicator 2-2-3: Indicator 2-2-3: Indicator 2-2-4:	Indicator 2-1-1; 2 ATC officers have completed basic course on contingency plan successiony. Indicator 2-1-2: Exercise of contingency procedures has been conducted successfully. Indicator 2-1-3: The contingency plans have been approved by CAA for implementation. Indicator 2-2-1; 2 ATC officers have completed courses on SMS successful. Indicator 2-2-3: SMS Manual has been developed and updated Indicator 2-2-3: Risk management process has been established Indicator 2-2-4: Safety risk management and safety assurance have been implemented Indicator 2-2-5: SMS training and education for all ATC officers have been conducted				
Output 3: To enhance capacity of Aeconautical Information Services (AIS) officers with regard to ICAO recommendations	Indicator 3-1: Indicator 3-2: Indicator 3-3: Indicator 3-4: Indicator 3-5: Indicator 3-5:	2 AIS officers have successfully completed basic course on aeronautical charts. 2 AIS officers have successfully completed basic course on aeronautical charts. Operation manuals for Notice to Airman (NOTAM), Aeronautical Information Circulars (AIC) and Aeronautical Information Publication (AIP) have been developed 2 flight procedure designers have successfully completed basic course on PANS-OPS. 2 flight procedure designers have successfully completed OJT on conventional flight procedure design. Draft of Aeronautical Information Publication (AIP) of the model airport has been produced.				

Issues Countermeasures							ons	,	Jo.			10											The state of the s	
Important	Assumption						Pre-conditions	TAN ensures	the budget for	input by	TAN assions	AIS personnel					1							
Inputs	Jananese side	Cour	ef Advisor(ATC Expert (1)	- ALC expensive: - Simulator Training Expert - Simulator Training Expert - Simulator Training Expert - Simulator Training Expert		Flight Procedure Design Expent Contingency Plant/SMS Task Force	Others as necessary harmonic as necessary	, <u>o</u>		OJT Instructor If airling for selections in TAN Headquariets	United a Training for simulator trainers In TAN Training Center Instructor Training Center Instructor Training Center		AIS Training Aerodrome simulator room	as necessary Run		- Aerodrome Simulator Simulator	Supply or replacement of machinely, equipment	and materials lieucesany for the control in the con	In-country travel expenses of TAN counterpart	personnel	Data and Information related to the Project			-
	J. Cipinita v	Activities	2	officers	To conduct instructor (rathing for shiturator manners to conduct instructor (rathing to constant inprove Operation Manuals	approach and area control sewices	To procure aerodrome sinulator	1	2-1. To develop ATC contragency plan.	1	cedures	To request approval of CAA on the conlingency plans for	1	2	To obtain necessary Automedia Caraca Ec	To develop and update own management process	2-2-3; 10 establish lisa management and safety assurance	2-2-4; lo implement servey more and education for ATC officers	2 To conduct basic fraining on AlS	٠		Aeronautical Information Circuials (PC) 2007	7.4. To conduct basic training on flight procedure design	

ç >

111.

Monitoring Sheet II

Version 1.0

25 113

83.

Countermeasures Solution Sene & Monitoring Dated 25 April 2016 Achievements anssi Tajikistan Responsible Organization TAN AVE TAN TAN ZYN TAN TAN Remarks Japan JICA SICA JICA JICA JICA JICA JICA 2019 2019 2 Ħ 1=1 2018 2018 Þ Ħ Ħ 2017 2017 Project Title: The Project for Capacity Development in Air Traffic Services 2016 2016 -2 Plan
Actual
Plan
Actual
Plan
Plan
Plan
Plan
Plan
Plan
Actual
Plan
Actual
Actual
Actual
Actual Actual Plan Actual Actual Plan Plan Output 1: To enhance capacity of Air Traffic Control (ATC) officers
1-1: To carduct training of ATC officers on aerodrome, approach
and area control services 1-2; To conduct OJT instructor training for selected ATC officers 1-5, To conduct QJT on aerodrome. approach and area control sorvices 1-4; To review and it necessary improve Operation Manuals 1-3. To conduct instructor training for simulator trainers OJT instructor training for selected ATC officers Training of ATC officers on ATC services Instructor Training for simulator trainers Training in the third country Project Coordinator/Training Planner 1-6. To procure aerodrome simulator 1-7; To conduct smutator trainings Flight Procedure Design Expert Chief Advisor/ATC Expert (1) Sımulator Tramıng Expert Sub-Activities Aerodrome Smulalor ATC Expert (2) SMS Training AIS Training Activities Equipment AIS Expert Inputs Expert

Output 2: To improve ATC services with regard to ICAO recommendations	recommendatio			JICA	TAN	
[2-1-1] To conduct basic training on contingency plan		Actual Management of the Control of		AICA	TAN	
2-1-2. To improve the draft contingency plans		Actual Section		AOIC	TAN	
2-1-3. To conduct exercise of contingency pracedures		rian Actual		JICA	TAN	
2-1-1. To request approval of CAA on the contrigency plans for make appropriation		Plan Actual Actual Burn Burn Burn Burn Burn Burn Burn Burn		JICA	TAN	
2.2.1 To oblain necessary knowledge of SMS		Actual Actual		JICA	TAN	
2-2-2. To develop and update SMS Manual		Pran Pran Pran Pran Pran Pran Pran Pran		ASI ASI	TAN	
2-2-3 To establish risk management process		Actual Right Plan		JICA	TAN	
2-2-: To emplement safety risk management and safety assurance	3.53	Actual Plan		JICA	TAN	
2-2-5. To conduct SMS training and education for ATC officers		Actual Commendations			Minay - Issyllit - Bid Bid.	
Outout 3: To improve Aeronautical Information Services (AIS) with regard to ICAO recullmentations	(AIS) with regar	To ICAO reculimentations		JICA	TAN	
2-1. Te conduct basic learning on AfS		Actual W		AOIL	TAN	
3-2. To conduct basic training on aeronautical charls		Actual Experience		AOIL	TAN	
3-3. To develop operation manuals for NOTAM, AIC and AIP		Actual Section		VOIC	TAN	
3-4. To conduct basic training on fight procedure design		Friat Actual State of the State		JICA	TAN	
3.5. To conduct OJT of flight procedure designers for a model		Actual Pian		ADIO	TAN	
3.6. To produce draft of AIP of the model airport						
a transfer of		Pian Actual			ol so le	Solution
Duration / Lucaria		plan 2016 2017 2018	2019	кетатк	+	
Monitoring Plan		1 5 2 1	9 13 11 (2 1 2 2 4 5 6			
Monitoring		Plan Kill Actual		ļ		
Jon't Coordinates Cultumines Jon't Montoring (Project Monitoring Sheet)		Plan Actual Actual				
Posi Manioung (End of Year 2021)		Actual				
Reports/Documents		Plan				
Manues of Meding (JCC)		Actual				
Completion Report		Actual				

ANNEX4-3

Minutes of JCC2



Minutes of the Second Meeting of Joint Coordinating Committee (JCC/2) for "The Project for Capacity Development in Air Traffic Services" in Tajikistan Dushanbe, 26 May 2017

- 1. The Second Meeting of Joint Coordinating Committee (JCC/2) of "The Project for Capacity Development in Air Traffic Services" (hereinafter "the Project") was held in the Ministry of Transportation in Dushanbe, Tajikistan on 26 May 2017.
- 2. Mr. Shambiev Alisher, First Deputy Director on behalf of Mr. Ashurov Loik Begidzhonovich Director General of TAJIKAIRNAVIGATION (hereinafter TAN), opened the meeting as the chairman with the presence of the participants listed at Appendix-A to this Minutes.
- 3. Mr. Shambiev Alisher opened the Committee and welcome the representatives of JICA HQ, Tajikistan office and Civil Aviation Authority in Tajikistan as welcome address, then Mr. Hideki Tanabe, Chief Representative of JICA Tajikistan office expressed his sincere appreciation for Project team for implementing activities smoothly in the first Project year as opening remarks.
- 4. Mr. Tomonori Orita, the Project Coordinator JICA, provided the presentation on result of trainings abroad and Expert's outcomes activities from April 2016 to March 2017.
- 5. Mr. Hiroyuki Ueda, the senior advisor JICA HQ explained completed Taskforce-1 activities and outcomes in 2016 and activity plan for 2017 based on AWP-2017, on behalf of TF-1 Experts. He informed that ATC-1 Expert would be replaced, and TAN side understood it.
- Taskforce-2 Leader Mr. Sheraliev Bakhtiyor and Taskforce-3 Experts Mr. Atsushi Yamane explained completed Taskforce-2 and -3 activities and outcomes in 2016 and activity plan for 2017 based on AWP-2017.
- 7. Mr. Orita explained the schedule and procedure for installing new aerodrome simulator system, configuration, user / maintenance trainings and possibility for diverting radar control trainings.
- 8. Chairman provided the Committee for discussing further request and Q&A opportunities.
 - a) TAN expressed their appreciation to JICA for approving budget for implementing "Taskforce-1 Management Training in Malaysia", "Inviting Malaysian Simulator Training instructors" for the Radar Approach Simulator Training in Output-1 for complementing activities of Simulator Expert.
- b) Mr. Sheraliev as a leader of Taskforce-2 requested additional trainings abroad as listed below for supplementing outcome of SMS by ATC-2 Expert. Responding this, Mr. Ueda replied to the request that JICA recognized the need for additional trainings abroad for SMS staffs who are weak in English as well as for specialized courses that cannot be provided by Japanese expert, and will take this need into consideration within the limited budget of the Project.
 - Incidental Investigation Course in Russian for two SMS officer
 - Trainer Course for trainers for SMS trainer in Russian for two SMS officer
 - Human Factors Course for optimizing ANSP in English for one SMS officer
 - Risk Management Implementation Course in English for one SMS officer

Лоиха оид ба баланд намудани потенсиал дар самти хизматрасонии харакати хавой Проект по повышению потенциала в сфере обслуживания воздушного движения The Project for Capacity Development in Air Traffic Services



http://www.tj-ats.com

- c) Mr. Davlatov as TF-1 Leader expressed appreciation for inviting 18 ATCs to Malaysia, since thorough training Malaysia, professional attitude, ICAO knowledge and quality of ANSP service have been substantially improved, therefore TAN requests additional 20 ATC training. Mr. Ueda replied that it is difficult, and returned trainees are expected to expand the knowledge and experience learned in Malaysia to the colleagues.
- d) Mr. Sheraliev as a Project Manager requested additional training opportunities for limited number of Taskforce-3 staff on SAR (Search and Rescue) in Malaysia since TAN plans to allocate the responsibility on SAR into AIS team. Mr. Ueda mentioned that SAR coordination is an essential activity, as required by ICAO, to be undertaken by AIS officers, but it is missing in current TAN's services and Project activities. Both sides agreed that capacity development in SAR should be included as sub-activities of Output 3. Mr. Ueda also mentioned that SAR training in Malaysia should be associated with development of SAR coordination manual and implementation of SAR coordination exercise, of which detailed plan should be discussed within the Project members.
- e) Mr. Sheraliev as a Project Manager explained that the PBN implementation plan was signed by MOT in May, and for proceeding this national strategy, WGS-84 survey is essentially required for four airports. Responding this, Mr. Ueda mentioned that JICA has allocated minimum budget for introducing WGS-84 into TF3 activities in this Project, because TF3 should conduct an obstacle survey and procuring maps for model airports (UTDD) in conventional FPD OJT activities.
- f) Mr. Shambiev as a DDG on TAN informed JICA that TAN has requested support to donor community through the MOE for PBN implementation Project, New ATC tower in Khojend airport and ATM / CNS equipment in 5th May 2017. He emphasized that the National PBN implementation plan was signed by MOT in 3rd May 2017.
- 9. The committee consented to Monitoring (Sheet Summary, -1 and -2 (ver3.0)), and adopted the AWP-2017 (ver1.0), revised PO (ver2.0) and PDM (ver1.0) as it is as in Appendix to this Minutes. Committee noted that nevertheless AWP-2017 provides plan for Expert assignment terms, the actual working terms of Experts will be determined by a coordination of Expert and each Taskforces leader 6 weeks before based on the Sub-Activity List.
- 10. Mr. Tanabe, Chief Representative of JICA Tajikistan Office, commented that further cooperation by JICA on the introduction of PBN in Tajikistan can be discussed between TAN and JICA.
- 11. Mr. Rahmon Usuf as a head of Civil Aviation Authority in Ministry of Transportation (MOT) made a closing address. He hoped for continuous efforts, ownership and commitment to all participants, TAN officials as well as continuous hard work of JICA Experts, for the success of the Project.
- 12. The chairman requested to adopt the Minutes of the Meeting (M/M) by TAN, MOT and JICA after reflecting the result of discussion taking Mr. Tanabe's advice.

13. The chairman	made	closing.	then	took	group	ph	10	to
------------------	------	----------	------	------	-------	----	----	----

Dushanbe, 26 May 2017

Ashurov Loik Begidzhonovich
Director General
State Unitary Enterprise TAJIKAIRNAVIGATION

Rahmon Usuf Azim
Head of Civil Aviation Department
Ministry of Transportation

Hideki Tanabe Chief Representative JICA Tajikistan Office Лоиха оид ба баланд намудани потенсиал дар самти хизматрасонии харакати хавой Проект по повышению потенциала в сфере обслуживания воздушного движения The Project for Capacity Development in Air Traffic Services



List of Appendix

Appendix-A: JCC/2 general, Agenda, Program, List of document and Participant list

Appendix-B: PDM, Project Design Matrix (ver.1.0) / no changed

Appendix-C: PO, Plan of Operations (ver.2.0)

Appendix-D: AWP-2017, Annual Working Plan for 2017 (ver.-1.0)

Appendix-E: Monitoring Sheet Summary (Ver.3.0 / English)

Appendix-F: Monitoring Sheet-1 (Ver.3.0) Appendix-G: Monitoring Sheet-2 (Ver.3.0)

Appendix-H: Monitoring Sheet Summary (Ver.3.0 / Russian)

Appendix-I: Summary of Sub-activities (English)
Appendix-J: Summary of Sub-activities (Russian)

Appendix-K: Presentation on Training abroad and Monitoring (Mr. Orita)

Appendix-L: Presentation on Taskforce-1 (Mr. Ueda)
Appendix-M: Presentation on Taskforce-2 (Mr. Sheraliev)
Appendix-N: Presentation on Taskforce-3 (Mr. Yamane)

Appendix-O: Presentation on New aerodrome simulator (Mr. Orita)



The Second Meeting of Joint Coordinating Committee (JCC/2) for "The Project for Capacity Development in Air Traffic Services" in Tajikistan Dushanbe, 26 May 2017

General:

- 1. Date: Friday, 26 May 2017
- 2. Venue: Meeting Room in Ministry of Transportation in Dushanbe
- 3. Working language: English (with TAN's Russian interpreter in case of necessary)
- 4. Chairman: Mr. Shambiev Alisher, First Deputy Director TAN "TAJIKAIRNAVIGATION (TAN)"

Agenda:

- 1. Explanation of Project outcome from April 2016 to Mar 2017 by Monitoring Sheet Summary, -1 and -2.
- 2. Explanation of the completed activities, outcome in 2016 and plan in 2017 by three Taskforces
- 3. Explanation of Grant Equipment "Aerodrome ATC Simulator"
- 4. Discussion and Q&A about further activities
- 5. Consent on Monitoring (ver3.0), approval for AWP-2017 and revised PO (ver.2.0) by the committee

Program:

- 09:30 Opening by the Chairman
- 09:35 Welcome Address by Mr. Shambiev Alisher
- 09:40 Opening Remarks by Mr. Hideki Tanabe, Chief Representative of JICA Tajikistan
- 09:45 Introduce participants (Tajik side by Mr. Sherariev, Japan side by Mr. Ueda)
- 09:50 Explanation of the Monitoring Sheets Summary (Ver.3.0) and training abroad by PC Mr. Orita
- 10:05 Presentation of Output-1 (Outcome in 2016, Plan in 2017) JICA HQ Mr. Ueda
- 10:15 Presentation of Output-2 (Outcome in 2016, Plan in 2017) TF-2 Leader Mr. Sheraliev
- 10:25 Presentation of Output-3 (Outcome in 2016, Plan in 2017) TF-3 Expert Mr. Yamane
- 10:35 Presentation of details and progress of the Aerodrome ATC Simulator by PC Mr. Orita
- 10:45 Discussion and Q&A about further activities
- 10:55 Approval of AWP-2017 and revised PO (ver. 2.0) by committee
- 11:00 Closing Address by Representative of Civil Aviation Authority in Ministry of Transportation
- 11:05 Sign the Minutes of the Meeting (M/M) by TAN, MOT and JICA
- 11:10 Closing by the Chairman
- 11:15 Group Photo
- 11:30 (Lunch? hosted by TAN)

List of Documents

- 1. JCC/2 General, Agenda, Program, List of Documents and Participant List (this)
- 2. Monitoring Sheet Summary, -1 and -2 covered from April 2016 to March 2017 (Version 3.0)
- 3. AWP-2017, Annual Working Plan for JPFY 2017 (Version 1.0)
- 4. The Summary List of Sub-activities in AWP-2017 (English/Russian)
- 5. PDM (Version 1.0) / No changed
- 6. PO (Version 2.0)
- 7. Presentation on Monitoring and Training abroad
- 8. Presentation on Taskforce-1, -2 and -3
- 9. Presentation on Aerodrome Simulator

Лоиҳа оид ба баланд намудани потенсиал дар самти хизматрасонии ҳаракати ҳавоӣ Проект по повышению потенциала в сфере обслуживания воздушного движения The Project for Capacity Development in Air Traffic Services



Participant List

1. Tajikistan side

Name	Title	Project role
Mr. Shambiev Alisher	First Deputy Director, TAJIKAIRNAVIGATION	Deputy Project Director
Mr. Rahmon Usuf	Head of Civil Aviation Department, MOT	JCC Member
Mr. Sheraliev Bakhtiyor	Head of the Safety & Quality Department, TAN	Project Manager /TF-2L
Mr. Davlyatov Davlat	Head of ATS, TAN	Taskforce-1 Leader
Mr. Khumorov Bakhtiyor	Head of ATFM Center, TAN	Taskforce-3 Leader
Mr. Mansuri Makhmad	Senior ATC, TAN	Taskforce-1 Sub-leader
Mr. Rajabov Davron	Chief of ACC Dushanbe, TAN	Taskforce-1 Sub-leader
Mr. Toshmatov Ulugbek	Safety and Quality inspector, TAN	Taskforce-2 Sub-leader
Mr. Kuliev Ilhom	ATFM Center, TAN	Taskforce-3 Sub-leader
	Mr. Shambiev Alisher Mr. Rahmon Usuf Mr. Sheraliev Bakhtiyor Mr. Davlyatov Davlat Mr. Khumorov Bakhtiyor Mr. Mansuri Makhmad Mr. Rajabov Davron Mr. Toshmatov Ulugbek	Mr. Shambiev Alisher First Deputy Director, TAJIKAIRNAVIGATION Mr. Rahmon Usuf Head of Civil Aviation Department, MOT Mr. Sheraliev Bakhtiyor Head of the Safety & Quality Department, TAN Mr. Davlyatov Davlat Head of ATS, TAN Mr. Khumorov Bakhtiyor Head of ATFM Center, TAN Mr. Mansuri Makhmad Senior ATC, TAN Mr. Rajabov Davron Chief of ACC Dushanbe, TAN Mr. Toshmatov Ulugbek Safety and Quality inspector, TAN

2. Japan side

2. Japan side		
	Name	Title
1	Mr. Hiroyuki Ueda	Senior Advisor JICA HQ
2	Mr. Hideki Tanabe	Chief Representative, JICA Tajikistan office
3	Ms. Naoko Nishikawa	Project Formulation Advisor, JICA Tajikistan office
4	Mr. Shokirjon Mahmadov	Program Officer, JICA Tajikistan office
5	Mr. Atsushi Yamane	Project TF-3 FPD Expert, ATCA-Japan
6	Mr. Tomonori Orita	Project Coordinator, JICA
7	Mr. Jabalov Safovudin	Project Assistant, JICA

ANNEX4-4

Minutes of JCC3



Minutes of the Third Meeting of Joint Coordinating Committee (JCC/3) for "The Project for Capacity Development in Air Traffic Services" in Tajikistan Dushanbe, 3 May 2018

- 1. The Third Meeting of Joint Coordinating Committee (JCC/3) of "The Project for Capacity Development in Air Traffic Services" (hereinafter "the Project") was held in the Ministry of Transport in Dushanbe, Tajikistan at 9:30-12:00 on 3 May 2018.
- Mr. Shambiev Alisher, First Deputy Director of TAJIKAIRNAVIGATION (hereinafter TAN) opened the meeting as the chairman. It was due to Mr. Ashurov Loik Begidzhonovich, Director General of TAN has had unavoidable and urgent business trip to Russia.
- 3. The chairman opened the Committee and welcomed the representatives of JICA in Tajikistan office and Civil Aviation Agency (hereinafter "CAA") in Tajikistan as welcome address. He noted the establishment of new aviation authority CAA, which was established by government decree in end of the last year. He apologized again for the absence of Director of CAA in the beginning, because of the meeting with Ministry, with possibility of joining in the last part of the meeting.
- 4. Mr. Hideki Tanabe, Chief Representative of JICA Tajikistan office expressed his sincere appreciation for Project team for implementing activities smoothly in the last year and noted the importance of the contribution of the Project for the future aviation industry development of Tajikistan as opening remarks.

He mentioned that JICA hopes the 3rd and final year's work will also go well together during remaining Project term which is about seven months.

He informed committee that all three candidates of TF3CP were accepted to PBN training in Japan. He pointed out that not only CP's skill and knowledge but also their motivation for ensuring aviation safety are important. Project outcome is not individual activity, TAN's management and Government authority should be involved for utilize trained CP.

He expressed his appreciation for the participation of representative of the new CAA, because TAN cannot achieve the Project goal without Government's support. JICA hopes that the representative member of the authority shall be officially appointed and will continue to be engaged in remaining Project activities functioning as the coordinating organization in Aviation sector, and believes that TAN will move forward by using the Project outcomes.

- Mr. Shambiev appreciated JICA for acceptance of additionally requested activities in the last year. It means that he brought new stream to the Project. He mentioned that the results of the Project are remarkable after 2-year activities.
- 6. Mr. Tomonori Orita, the Project Coordinator JICA, provided the presentation on the result of the latest Monitoring, trainings abroad, TF-1 activity 1-6 and others from April 2017 to March 2018. He has reported that the verifiable indicators for the "Overall Goal" and "Project Purpose" were set properly by taskforces and briefly informed "Final Evaluation" in October 2018. Also, he explained the additional activities of Taskforces which were surpassed by the Project.

To the question from Mr. Shambiev about the activities 1-4 and 1-5, of which achieved percentage is 40-50 % at this moment, if the Project will finish them by the end of the year, Mr. Orita answered that we are trying to obtain the outcomes.



- Mr. Hideo Watanabe, the Chief Advisor on ATCA-J Consultant / TF-1 Expert, provided the presentation on input and outcomes of all TF-1 activities (except 1-6 and trainings abroad), and further activities in May 2018.
- 8. Mr. Bakhtiyor Sheraliev, the Project Manager / TF-2 Leader, provided the presentation on input and outcomes of all TF-2 activities, and further activities by TAN in remaining Project terms.
 - Mr. Nabizoda Aziz asked, if TF-2 provided trainings to TAN personnel in previous or not. Mr. Sheraliev replied that the Safety trainings were provided from 2015 as a part of periodically trainings, without plan and experienced instructors, but at this moment, Safety team have annual training plan and training material. Mr. Shambiev noted that the TF-2 activities involve almost all TAN and sometimes they invite guests from other aviation organizations (airports, operators), and they will continue their active tasks.
- Mr. Atsushi Yamane, the TF-3 FPD Expert, provided the presentation on input and outcomes of all TF3 activities, and further activities on SAR/RCC and FPD-QA in 2018.
- 10. Chairman provided the Committee for discussing further request and Q&A opportunities.
 - Mr. Shambiev expressed the appreciation to JICA for successful activities which were additionally approved in the last year as WGS-84, SAR/RCC, four training opportunities in TF-2 and other support for whole aviation sector in Tajikistan.
 - Mr. Shambiev expressed an expectation of new PBN Technical Cooperation Project which was officially requested to JICA last year for making use the outcomes of this Project.
 - Mr. Tanabe explained that decisions by Japanese government on the adoption of requests of new JICA Technical Cooperation are not officially announced yet. We think that solving the issue on lack of Flight Procedures for ILS 27 (equipment which was provided under the JICA Grant Aid project but is not in use) could promote new PBN project.
 - Mr. Shambiev explained that the lack of coordination between the Dushanbe International Airport (hereinafter "DIA") and TAN is one of reason for ILS issue. However, DIA is going to make a contract for designing Flight Procedure with Saint-Petersburg institute under the technical support by the Project. The Ground validation for the Flight Procedure will be done by TAN's designer.

 Mr. Bakhtier Sheraliev complemented that the Saint-Petersburg institute can design the Flight Procedure for ILS no later than 30 days after signing the contract and that TAN will hurry in publishing it after June.
 - Mr. Tanabe advised to expedite this process by June, and asked CAA to assist it. He informed about a visit of JICA President to Tajikistan in the late June, it will be good that DIA shall start using "ILS system" before visit of JICA President.

Responding this, Mr. Shambiev expressed that TAN will notify DIA about JICA President visit and try to accelerate this issue.

- 11. The committee consented the Monitoring (Sheet Summary, -1 and -2 (ver. 5.0)), and approved the AWP-2018 (ver. 1.0), revised PO (ver. 3.0) and PDM (ver. 1.1/ No changed) as it is as in Appendix to this Minutes.
- 12. The deputy director of CAA, Mr.Nabizoda made a closing address. On behalf of CAA, he acknowledged that Project bring lot of outcomes not only to the TAN but also to the safety of Tajikistan aviation sectors. He hopes to continue cooperation.
- 13. The chairman made closing, then took group photo.

Лоиха оид ба баланд намудани потенсиал дар самти хизматрасонии харакати хавой Проект по повышению потенциала в сфере обслуживания воздушного движения The Project for Capacity Development in Air Traffic Services



Dushanbe, 3 May 2018

1

Ashurov Loik Begidzhonovich Director General State Unitary Enterprise "TAJIKAIRNAVIGATION"

Nabizoda Aziz Y
Deputy Director
Agency of Civil Aviation Authority

Hideki Tanabe Chief Representative JICA Tajikistan Office

List of Appendix

Appendix-A: JCC/3 general, Agenda, Program, List of document and Participant list (actual)

Appendix-B: PDM, Project Design Matrix (ver.1.1) / No changed

Appendix-C: PO, Plan of Operations (ver.3.0)

Appendix-D: AWP-2018, Annual Working Plan for 2018 (ver.-1.0)

Appendix-E: Monitoring Sheet Summary (Ver.5.0 / English)

Appendix-F: Monitoring Sheet-1 (Ver.5.0) Appendix-G: Monitoring Sheet-2 (Ver.5.0)

Appendix-H: The latest Sub-activities Plan (English)

Appendix-I: Presentation on Monitoring and others (Mr. Orita)

Appendix-J: Presentation on Taskforce-1 (Mr. Watanabe)

Appendix-K: Presentation on Taskforce-2 (Mr. Sheraliev)

Appendix-L: Presentation on Taskforce-3 (Mr. Yamane)

ANNEX4-5

Minutes of JCC4



Minutes of the Fourth Meeting of Joint Coordinating Committee (JCC/4) for "The Project for Capacity Development in Air Traffic Services" in Tajikistan Dushanbe, 5 December 2018

- 1. The Fourth Meeting of Joint Coordinating Committee (JCC/4) of "The Project for Capacity Development in Air Traffic Services" (hereinafter "the Project") was held in the Ministry of Transport in Dushanbe, Tajikistan at 9:40-11:45 on 5th December 2018.
- 2. Mr. Shambiev Alisher, the Deputy Director General of TAJIKAIRNAVIGATION (hereinafter TAN) opened the meeting as a chairman instead of Mr. Ashurov Loik Begidzhonovich, the Director General TAN, who could not attend this meeting due to another unavoidable mission.
- 3. The chairman welcomed the representatives of JICA in Tajikistan and Deputy Director General of Civil Aviation Agency (hereinafter "CAA") in his opening address.
- 4. Mr. Hideki Tanabe, Chief Representative of JICA Tajikistan Office expressed his congratulation on successful implementation, coming completion of this project to all participants.

He explained that this was the first technical cooperation project by JICA in Tajikistan's aviation sector which is a key part in the transport field for promoting logistics and tourism. He mentioned that the Project was successful in capacity development on TAN's human resources by various activities, especially trainings abroad or in Japan, and he expected TAN to keep their efforts to utilize the Project's outcomes on human resource development and maintain the equipment provided during the Project in order to ensure the safe flights in Tajikistan after the completion of the Project.

He mentioned that a coordination meeting in the aviation sector which was organized by CAA on 25th September 2018 with participation of TAN and other organizations was good start for moving toward, and he explained that JICA would continuously make effort to coordinate matters between related organizations in the aviation sector in the transport field.

He also mentioned that he would like to introduce and share the achievement of the Project in the next DCC Transport Working Group meeting which he co-chairs with the First Deputy Minister of Transport and that JICA would seek next opportunity of the further cooperation in the aviation field in Tajikistan, would have another discussion with related organization.

Lastly, he expressed appreciation to all related staffs in CAA, TAN and JICA expert team for smooth and successful implementation of the Project.

5. Mr. Nabizoda Aziz, Deputy Director General of CAA expressed his appreciation to the JICA's cooperation in the aviation sector, especially to this Project and Dushanbe International Airport cargo terminal construction project. He said that now we see the outcomes of the Project activities which prolonged for 33 months. He mentioned about only remaining issue of WGS-84 introduction to the airport in Kurgan Tyube due to the lack of fund. He also mentioned about ILS equipment provided to Dushanbe International Airport of which cargo terminal was handed over by JICA in Jun 2018. He promised that CAA and TAN will continue effort to ensure outcome of Project contribution.



- 6. Mr. Hideo Watanabe, the Chief Advisor on ATCA-J Consultant / TF-1 Expert, provided explanation on the draft of the Project Completion Report according to the result of final evaluation conducted during the period from 15 to 25 October by the evaluation consultant and to the contents of the Joint Monitoring Reports version 6.
 - a) Summary of Achievement on the Project Purpose: The Project Purpose "To enhance capacity of Tajikairnavigation (TAN) in Air Traffic Services (ATS)" was almost achieved based on the assessment of objectively verifiable indicators of the PDM. The Project Purpose is expected to achieve 100% in 2019.
 - b) Prospects for the Overall Goal:

Possibility of TAN to achieve the overall goal is high. Because training systems in TAN has been established during the Project and they are making effects. This is partly because the overall goal and project purpose are very similar with each other, which means achievement of the Project purpose is nearly equal to accomplishment of the overall goal.

c) Review on Output-1:

Output 1 has been almost achieved since two of five indicators attained 100% achievement, and the remaining three indicators reached to 60% to 85% rates based on the assessment of objectively verifiable indicators of the PDM. It is estimated that two unfinished indicators will reach 100% by the end of 2018, and the remaining one indicator in 2019.

d) Review on Output-2:

Output 2 has been almost achieved since seven of eight indicators attained 100%, and remaining one indicator reached 70%.

e) Review on Output-3:

Output 3 also fully achieved with 100% achievement of all of 11 indicators.

f) Remaining tasks:

It is estimated that 1-3 and 1-5 unfinished indicators will reach 100% in 2019, and the remaining 1-2 indicator in 2019.

It is estimated that 2-2-4 indicator will reach 100% in 2019

- 7. Project Manager had presentation on remaining tasks that TAN should perform in 2019 for ensuring sustainability on Project's outcomes as Appendix-D.
 - TF-1: He mentioned about progress of new ATC tower in UTDD, construction might be completed by early 2019, but procurement of new ATC system is still under the financial consideration.
 - TT-2: He explained that the Project had additional SMS training for two TF2CPs in Almaty in October for filling the gap of a Safety officer trained under the Project who had left TAN in summer 2018.
 - TF-3: He explained that FPD automation software "PHX" would be mandatory for ensuring Project trained FP Designers that need it for implementing PBN Project in 2020.

8. Discussion

Mr. Tanabe commented that Project was completed successfully, but JICA needs a monitoring still lots of remaining tasks need to be completed. Responding to this request, Mr. Shambiev Alisher promised to make every effort to get the results and report it to JICA.



- 9. The JCC members approved the contents of the Project Completion Report.
- 10. Mr. Nabizoda Aziz made a closing speech of the JCC meeting. He expressed appreciation to all participants for attending the meeting again on behalf of CAA and-hopes of keeping cooperation with JICA in aviation sector in the future.
- 11. Project Manager, Mr. Sheraliev Bakhtiyor expressed his appreciation to JICA Tajikistan office and Experts.

	Dushanbe, 5 Dec	cember 2018
Ashurov Loik Begidzhonovich		
Director General		
State Unitary Enterprise "TAJIKAIRNAVIGATION"		
Nabizoda Aziz	Hideki Tanabe	
Deputy Director	Chief Representative	

JICA Tajikistan Office

List of Appendix

Agency of Civil Aviation Authority

Appendix-A: JCC/4 General, Agenda, Program, List of document and Participant list (actual)

Appendix-B: Project Completion Report (without Annexes)

Appendix-C: Presentation ppt by Mr. Watanabe Appendix-D: Presentation ppt by Project Manager



The Fourth Meeting of Joint Coordinating Committee (JCC/4) for "The Project for Capacity Development in Air Traffic Services" in Tajikistan Dushanbe, 5 December 2018

General:

- 1. Date: Wednesday, 5 December 2018
- 2. Venue: Meeting Room in Ministry of Transportation in Dushanbe
- 3. Working language: Russian (with TAN's English interpreter in case of necessary)
- 4. Chairman: Mr. Ashurov Loik Begidzhonovich, Director General "TAJIKAIRNAVIGATION (TAN)"

Agenda:

1. Explanation of Project Completion Report by Expert.

Program:

- 09:30 Opening by the Chairman
- 09:35 Welcome Address by TAN
- 09:40 Opening Remarks by JICA Tajikistan Office
- 09:45 Introduce participants (Tajik side by Mr. Sheraliev, Japan side by Mr. Watanabe)
- 09:50 Presentation of draft of Project Completion Report (DPCR) by Mr. Watanabe.
- 10:50 Presentation on remaining things in 2019 by Project Manager
- 11:00 Discussion
- 11:15 Approval on DPCR by JCC
- 11:20 Closing Address by Representative of Civil Aviation Authority Tajikistan
- 11:25 Closing by the Chairman

List of Documents:

- 1. JCC/4 General, Agenda, Program, List of Documents and Participant List (this)
- 2. Project Completion Report (without Annexes)

Participant List (Actual)

1. Tajikistan side

	Name	Title	Project role
_1	Mr. Nabizoda Aziz	Deputy Director Civil Aviation Agency	JCC Member
2	Mr. Shambiev Alisher	First Deputy Director, TAN	Deputy Project Director
3	Mr. Sheraliev Bakhtiyor	Head of Development Department, TAN	Project Manager /TF-2L
4	Mr. Rajabov Davron	Head of ATS, TAN	Taskforce-1 Leader
5	Mr. Mukhamadaminshoev Firuz	Head of AIS, TAN	Taskforce-3 Leader
6	Mr. Khumorov Bakhtiyor	Head of ATFM in AIS, TAN	Taskforce-3 Sub-leader
7	Mr. Khusenov Payrav	Chief of ACC Dushanbe, TAN	Taskforce-1 Sub-leader
8	Mr. Kashirov Anvar	Leader of Safety team in Dev.Dep., TAN	Taskforce-2 Sub-leader
9	Mr. Tadzhibaev Akbar	Flight Procedure Designer, TAN	Taskforce-3 Member

2. Japan side

	Name	Title
1	Mr. Hideki Tanabe	Chief Representative, JICA Tajikistan Office
2	Ms. Naoko Nishikawa	Project Formulation Advisor, JICA Tajikistan Office
3	Mr. Mahmadov Shokirjon	Senior Program Officer, JICA Tajikistan Office
4	Mr. Hideo Watanabe	Chief Advisor / ATC-1/2 Expert, ATCA-Japan
5	Mr. Tomonori Orita	Project Coordinator, JICA

Monitoring Sheet I Version 1

Project Title: The Project for Capacity Development in Air Traffic Services

Implementing Agency: Tajikairnavigation (TAN)
Target Group: Tajikairnavigation ATS Officers

Period of the Project: 33 months

Project Site: TAN and TAN Training Center, Dushanbe

	Narrative Summary		Objectively Verifiable Indicators	Means of Verification	Important Assumption	Achievement	Remarks
Overall Go	pal						
To improve Tajikistan	e Air Traffic Services (ATS) in	Indicator 1: Indicator 2: Indicator 3:	All ATC officers working at ATC units maintain ATC ratings in line with ICAO standards through TAN's continuing training program The contingency plan and SMS for ATC have been kept in operation. Aeronautical Information Publication (AIP) has been updated in line with ICAO standards.	- Rating record - Survey			
Project Pu	rpose						
	e capacity of Tajikairnavigation ir Traffic Services (ATS)	Indicator 1: Indicator 2: Indicator 3:	All ATC officers working at ATC units have passed training in line with ICAO standards conducted by OJT instructors and simulator trainers. The contingency plan and SMS for ATC have been implemented. The draft AIP of the model airport has been accepted as confirming to ICAO standards by JICA Expert.	- Project Monitoring Sheet	 CNS/ATM systems are properly maintained Trained ATC officers continue to work in TAN Trained instructors/ trainers, AIS officers and flight procedure designers continue to work in TAN 	-	-
Outputs							
Output 1:	To enhance capacity of training for Air Traffic Control (ATC) officers in line with ICAO standards	Indicator 1-1: Indicator 1-2: Indicator 1-3: Indicator 1-4: Indicator 1-5:	At least 80% of ATC officers/OJT instructors/Simulator trainers who attended training courses have completed trainings successfully. Operation Manual has been reviewed and improved if necessary Each of the OJT instructors has conducted OJT on aerodrome, approach and/or area control services at least 2 times. Aerodrome simulator has been operational. Each of the simulator trainers has been conducting simulator training at least 3 times per month.	- Project Monitoring Sheet	 Trained ATC officers continue to work in TAN Trained instructors/ trainers, AIS officers and flight procedure designers continue to work in TAN 	-	-
Output 2:	To enhance capacity of ATC officers with regard to ICAO recommendations	Indicator 2-1-2 Indicator 2-1-3 Indicator 2-2-1 Indicator 2-2-2 Indicator 2-2-3 Indicator 2-2-4	2 ATC officers have completed basic course on contingency plan successfully. Exercise of contingency procedures has been conducted successfully. The contingency plans have been approved by CAA for implementation. 2 ATC offices have completed courses on SMS successful. SMS Manual has been developed and updated Risk management process has been established Safety risk management and safety assurance have been implemented SMS training and education for all ATC officers have been conducted				
Output 3:	To enhance capacity of Aeronautical Information Services (AIS) officers with regard to ICAO recommendations	Indicator 3-1: Indicator 3-2: Indicator 3-3: Indicator 3-4: Indicator 3-5: Indicator 3-6:	2 AIS officers have successfully completed basic course on AIS. 2 AIS officers have successfully completed basic course on aeronautical charts. Operation manuals for Notice to Airman (NOTAM), Aeronautical Information Circulars (AIC) and Aeronautical Information Publication (AIP) have been developed 2 flight procedure designers have successfully completed basic course on PANS-OPS. 2 flight procedure designers have successfully completed OJT on conventional flight procedure design. Draft of Aeronautical Information Publication (AIP) of the model airport has been produced.				

Activities		Inputs	Important	logues	Countarmagauras
Activities	Japanese side	Tajikistan side	Assumption	Issues	Countermeasures
 1-1: To conduct training of ATC officers on aerodrome, approach and area control services 1-2: To conduct OJT instructor training for selected ATC officers 1-3: To conduct instructor training for simulator trainers 1-4: To review and if necessary improve Operation Manuals 1-5: To conduct OJT on aerodrome, approach and area control services 1-6: To procure aerodrome simulator 1-7: To conduct simulator trainings 2-1. To develop ATC contingency plan 2-1-1: To conduct basic training on contingency plan 2-1-2: To improve the draft contingency plans 2-1-3: To conduct exercise of contingency procedures 2-1-4: To request approval of CAA on the contingency plans for implementation 2-2. To improve Safety Management System (SMS) 2-2-1: To obtain necessary knowledge of SMS 2-2-2: To develop and update SMS Manual 2-2-3: To establish risk management process 2-2-4: To implement safety risk management and safety assurance 2-2-5: To conduct SMS training and education for ATC officers 3-1. To conduct basic training on AIS 3-2. To conduct basic training on aeronautical charts 3-3. To develop operation manuals for Notice to Airman (NOTAM), Aeronautical Information Circulars (AIC) and Aeronautical Information Publication (AIP) 3-4. To conduct basic training on flight procedure design 3-5. To conduct OJT of flight procedure designers for a model airport 3-6. To produce draft of AIP of the model airport 	Experts:	Counterparts: Project Director (Director General, TAN) Deputy Project Director (First Deputy DG, TAN) Project Manager (Head of Safety and Quality Department, TAN) ATC Training Task Force Contingency Plan/SMS Task Force Als/Flight Procedure Design Task Force Interpreter as necessary Project Offices (with desks/chairs and internet connection): In TAN Headquarters In TAN Training Center Facilities of TAN Training Center: Class rooms Aerodrome simulator room Running Cost: Operation and maintenance of Aerodrome Simulator Supply or replacement of machinery, equipment and materials necessary for the Project other than provided by JICA In-country travel expenses of TAN counterpart personnel Data and Information related to the Project	Pre-conditions - TAN ensures the budget for input by Tajikistan side - TAN assigns AIS personnel <lssues and="" countermeasures=""></lssues>		

Monitoring Sheet II Version 1

Monitoring Sheet $\, \mathbb{I} \,$

Project Title: The Project for Capacity Development in Air Traffic Services

Version 1.0 Dated 26 April 2016

																	_	- 0	u zo Api	
				1				_												toring
Inputs				Plan	JJ	J	2016		2017		1.1.1	201	3		20	119	Ren	narks	Issue	Solution
Expert				Plan	1 2 3	3 4 5	6 7 8 9 10 11	12 1 :	2 3 4 5 6 7 8 9	10 11 12	1 2	4 5 6 7	8 9 10 11	12 1	2 3	4 5 6				
Chief Advisor/ATC Expert (1) ATC Expert (2)	Г			Actual Plan											ŧ					
Simulator Training Expert	1			Actual Plan	\boxplus			\pm				Ш		Ш	$^{+}$					
AlS Expert	-	l٦		Actual Plan				Н			Ш			Ш						
Flight Procedure Design Expert	1			Actual Plan	\pm			H			Ш				t					
Project Coordinator/ Training Planner	+		Т	Plan	Ш									Ш	t	Ш				
Equipment	H	H	+	Actual	Н	$^{+}$	++++++	H	+++++++	+	Н	+++	+++	Н	$^{+}$	++				
Aerodrome Simulator	†			Plan Actual	ш	Ħ		Ħ		Ħ	Ш	Ш	##	Ш	‡					
Fraining in the third country		Ħ	$\pm \pm$	Actual	H	Ħ		Ħ	+++++++	Ħ	H	+++	++	Ш	t	H				
Training of ATC officers on ATC services		П		Plan Actual	Ш	Ħ								П	ļ					
OJT instructor training for selected ATC officers		H		Plan	Ħ	Ħ		H		Ħ	Ш	Ш		Ħ	t					
Instructor Training for simulator trainers				Plan	Ħ			Ħ		Ħ	Ш			Ш	#	Ш				
SMS Training				Plan	Щ			H		Ħ	Ш	Ш		Ш	#					
AIS Training		Ħ		Plan	Ħ	#		Ħ		Ħ	Ш			Ш	‡	Ш				
		П		Plan			2016	T	2017			201	3	Τ	20	19	Responsible	Organization		Issue &
Activities				Actual	IV	I	пш	P	A I II	ш	IV	I	пш	1	V	I	Japan	Tajikistan	Achievements	Countermeasure
Sub-Activities					1 2 3	3 4 5	6 7 8 9 10 11	12 1	2 3 4 5 6 7 8 9	10 11 12	1 2	4 5 6 7	8 9 10 11	12 1	2 3	4 5 6				
Dutput 1: To enhance capacity of Air Traffic Control (AT 1-1: To conduct training of ATC officers on aerodrome, approach and		icers	s in lin	e with IC	AO :	stan	dards							П	Т	П				
area control services		Н		Actual Plan	Ħ	H					П			H	ļ		JICA	TAN		
1-2: To conduct OJT instructor training for selected ATC officers	Ш	Ш		Actual	Ħ					Ħ	Ш				‡		JICA	TAN		
1-3: To conduct instructor training for simulator trainers		Ш		Actual	Ħ	Ħ					Ш			Ш	‡	Ш	JICA	TAN		
1-4: To review and if necessary improve Operation Manuals				Actual	Ш	Ш								Ш	†		JICA	TAN		
1-5: To conduct OJT on aerodrome, approach and area control senices				Plan Actual	Н	+		Н		H	Н			Н	+	Н	JICA	TAN		
1-6: To procure aerodrome simulator		П		Plan Actual	H			Н		H	Н			H	+	Н	JICA	TAN		
1-7: To conduct simulator trainings				Plan Actual	H	H		${\mathbb H}$						Н	Ŧ	П	JICA	TAN		
Output 2: To improve ATC services with regard to ICAO	reco	mme	ndatio	ons																
2-1-1: To conduct basic training on contingency plan		П		Plan Actual	H	$^{+}$		$^{\rm H}$	+++++++	$^{+}$	Н	Ш	+++	Н	+		JICA	TAN		
2-1-2: To improve the draft contingency plans				Plan Actual	Н	Н		\blacksquare		H	Н			H	+		JICA	TAN		
2-1-3: To conduct exercise of contingency procedures		П		Plan Actual	Ħ	H				H	H	Ш		H	+		JICA	TAN		
2-1-4: To request approval of CAA on the contingency plans for implementation				Plan Actual	H	Ħ		Ħ		Ħ	Н			H	ļ		JICA	TAN		
2-2-1: To obtain necessary knowledge of SMS				Plan Actual	Ħ					H	H				1		JICA	TAN		
2-2-2: To develop and update SMS Manual		П		Plan Actual	Ħ	#		Ħ		Ħ	Н			H	Ŧ	H	JICA	TAN		
2-2-3:To establish risk management process		П		Plan	Ħ	Ħ		Ħ			Ш			Ш	1	Ш	JICA	TAN		
2-2-4: To implement safety risk management and safety assurance		П		Plan	Ħ	Ħ		Ħ		Ħ				Ħ	#	Ш	JICA	TAN		
2-2-5:To conduct SMS training and education for ATC officers		П		Plan	Ħ	Ħ				Ħ				Н	ļ	Ш	JICA	TAN		
Output 3: To improve Aeronautical Information Services	(AIS) with	h rega	rd to ICA				s		11					_					
3-1. To conduct basic training on AIS				Plan Actual	Ш			Н			Ш			Ш		Ш	JICA	TAN		
3-2. To conduct basic training on aeronautical charts				Plan Actual	Ш					Ш	Ш	Ш		Ш	†		JICA	TAN		
3-3. To develop operation manuals for NOTAM, AIC and AIP	Ц	Ц		Plan Actual	Ш	Ħ		Н		\parallel	Ш	Ш	Ш	Ш	‡	Ш	JICA	TAN		
3-4. To conduct basic training on flight procedure design		Ш		Plan Actual	Ш	\parallel		#		Ш	Ш	Ш	Ш	Ш	†	Ш	JICA	TAN		
3-5. To conduct OJT of flight procedure designers for a model airport	Ш	Ц		Plan Actual	Ш	Ħ		\parallel		f				Н	1	Н	JICA	TAN		
3-6. To produce draft of AIP of the model airport				Plan Actual	Н	$^{+}$		$^{\mathrm{H}}$		\parallel	Н		\coprod	Ш	\pm	\mathbb{H}	JICA	TAN		
Duration / Phasing				Plan Actual										\mathbb{H}	Ŧ	Н				
Monitoring Plan				Plan			2016	Ť	2017			201	3	T	20	19	Ren	narks	Issue	Solution
Monitoring					1 2 3		6 7 8 9 10 11	12 1		10 11 12	1 2		8 9 10 11	-	2 3	4 5 6				
Joint Coordination Committee				Plan Actual	Ш	1		H		Н	Ш			Ш	Ŧ					
Joint Monitoring (Project Monitoring Sheet)				Plan Actual	Ш			\prod		H	Ш			Ш	₽	Ш				
Post Monitoring (End of Year 2021)				Plan Actual	Ш	\pm		\pm		\pm	Ш	Ш		Ш	\pm	Ш				
Reports/Documents				Plan	Щ	¥	+++++	\mathbf{H}	 	$^{+}$	Ш		\coprod	Ш	+	H				
Minutes of Meeting (JCC)				Actual	Ħ	П		#		Ħ	Ħ			Ħ	ŧ					
Completion Report				Actual	Ш	Ħ	ШШШ	Ħ		Ħ				Ш	1	Ш				

Monitoring Sheet I Version 2

27 October 2016

Project Title: The Project for Capacity Development in Air Traffic Services Implementing agency: SUE "TAJIKAIRNAV IGATIONT" (TAN), Project term: 33 months from 28 March 2016, Project site: TAN in Dushanbe

	Narrative Summary		Objectively Verifiable Indicators	Means of Verification	Important Assumption	Achievement	Remarks
Overall Go	oal						
To improve Tajikistan	e Air Traffic Services (ATS) in	Indicator 1: Indicator 2: Indicator 3:	All ATC officers working at ATC units maintain ATC ratings in line with ICAO standards through TAN's continuing training program The contingency plan and SMS for ATC have been kept in operation. Aeronautical Information Publication (AIP) has been updated in line with ICAO standards.	- Rating record - Survey		-	
Project Pu	urpose						
To enhand	ce capacity of Tajikairnavigation hir Traffic Services (ATS)	Indicator 1: Indicator 2: Indicator 3:	All ATC officers working at ATC units have passed training in line with ICAO standards conducted by OJT instructors and simulator trainers. The contingency plan and SMS for ATC have been implemented. The draft AIP of the model airport has been accepted as confirming to ICAO standards by JICA Expert.	- Project Monitoring Sheet	 CNS/ATM systems are properly maintained Trained ATC officers continue to work in TAN Trained instructors/ trainers, AIS officers and flight procedure designers continue to work in TAN 	-	-
Outputs							
Output 1:	To enhance capacity of training for Air Traffic Control (ATC) officers in line with ICAO standards	Indicator 1-1: Indicator 1-2: Indicator 1-3: Indicator 1-4: Indicator 1-5:	At least 80% of ATC officers/OJT instructors/Simulator trainers who attended training courses have completed trainings successfully. Operation Manual has been reviewed and improved if necessary Each of the OJT instructors has conducted OJT on aerodrome, approach and/or area control services at least 2 times. Aerodrome simulator has been operational. Each of the simulator trainers has been conducting simulator training at least 3 times per month.	- Project Monitoring Sheet	 Trained ATC officers continue to work in TAN Trained instructors/ trainers, AIS officers and flight procedure designers continue to work in TAN 	10 ATCs attended 5 ATC course and 100% completed.	-
Output 2:	To enhance capacity of ATC officers with regard to ICAO recommendations	Indicator 2-1-2: Indicator 2-1-3: Indicator 2-2-1: Indicator 2-2-2: Indicator 2-2-3: Indicator 2-2-4:	2 ATC officers have completed basic course on contingency plan successfully. Exercise of contingency procedures has been conducted successfully. The contingency plans have been approved by CAA for implementation. 2 ATC officers have completed courses on SMS successful. SMS Manual has been developed and updated Risk management process has been established Safety risk management and safety assurance have been implemented SMS training and education for all ATC officers have been conducted			2 ATCs attended basic Contingency course and completed.	
Output 3:	To enhance capacity of Aeronautical Information Services (AIS) officers with regard to ICAO recommendations	Indicator 3-2: Indicator 3-3: Indicator 3-4:	2 AIS officers have successfully completed basic course on AIS. 2 AIS officers have successfully completed basic course on aeronautical charts. Operation manuals for Notice to Airman (NOTAM), Aeronautical Information Circulars (AIC) and Aeronautical Information Publication (AIP) have been developed 2 flight procedure designers have successfully completed basic course on PANS-OPS. 2 flight procedure designers have successfully completed OJT on conventional flight procedure design. Draft of Aeronautical Information Publication (AIP) of the model airport has been			4 AIS officers attended Basic course of AIS/aeronautical charts and completed.	AIS Expert will catch up Aeronautical Chart.

Activities		Inputs	Important	loouse	Countarmagauras
Activities	Japanese side	Tajikistan side	Assumption	Issues	Countermeasures
 1-1: To conduct training of ATC officers on aerodrome, approach and area control services 1-2: To conduct OJT instructor training for selected ATC officers 1-3: To conduct instructor training for simulator trainers 1-4: To review and if necessary improve Operation Manuals 1-5: To conduct OJT on aerodrome, approach and area control services 1-6: To procure aerodrome simulator 1-7: To conduct simulator trainings 2-1. To develop ATC contingency plan 2-1-1: To conduct basic training on contingency plan 2-1-2: To improve the draft contingency plans 2-1-3: To conduct exercise of contingency procedures 2-1-4: To request approval of CAA on	Experts:	Counterparts: Project Director (Director General, TAN) Deputy Project Director (First Deputy DG, TAN) Project Manager (Head of Safety and Quality Department, TAN) ATC Training Task Force Contingency Plan/SMS Task Force Als/Flight Procedure Design Task Force Interpreter as necessary Project Offices (with desks/chairs and internet connection): In TAN Headquarters In TAN Training Center Facilities of TAN Training Center: Class rooms Aerodrome simulator room Running Cost: Operation and maintenance of Aerodrome Simulator Supply or replacement of machinery, equipment and materials necessary for the Project other than provided by JICA In-country travel expenses of TAN counterpart personnel Data and Information related to the Project	Pre-conditions - TAN ensures the budget for input by Tajikistan side - TAN assigns AIS personnel	None	-

Monitoring Sheet II Version 2

Project Title: The Project for Capacity Development in Air Traffic Services

Version 2.0 Dated 27 October 2016

Monitoring

nputs				Plan		2	2016	3				2	2017	7				201	18			20	19		Ren	narks	Issue	Solution
xpert					1 2	3 4 5	6 7	8 9	10 11	12 1	2 3	4 5	6 7	8 9 1	0 11 12	2 1 2	3 4	5 6	7 8	9 10 1	11 12	1 2 3	4 5	5			Consideration of CP's	Expert session was
Chief Advisor/ATC Expert (1)				Plan Actual																							summer vacation was requested.	shifted adequately.
ATC Expert (2)				Plan Actual							\blacksquare																	
Simulator Training Expert				Plan Actual					\blacksquare	\blacksquare																		
AIS Expert				Plan Actual	\mathbb{H}	\blacksquare	\blacksquare	\blacksquare	\blacksquare	Π				\blacksquare					\blacksquare	\mathbf{H}	\mathbf{H}		H	1				
Flight Procedure Design Expert				Plan Actual	H	\mathbf{H}	\blacksquare	H	\mathbb{H}	H	\blacksquare	H							Ħ	H	Ħ		H	-				
Project Coordinator/ Training Planner				Plan Actual																				1				
quipment					Ш	П		П		П		П		Ħ	П												Delay of instalation is	Time is corrected.
Aerodrome Simulator				Plan Actual	П	\blacksquare	\blacksquare	\blacksquare		\blacksquare		\blacksquare		\blacksquare	\blacksquare			\blacksquare		\blacksquare	\blacksquare	\blacksquare	Н				expected.	
raining in the third country			++	Actual	H					Ħ					††							++-					Schedules were	Schedules were
Training of ATC officers on ATC services				Plan Actual	Ħ						\blacksquare	Ħ								\dagger	Ħ			1			affected by receiving facility.	coordinated and sein acceptable term.
OJT instructor training for selected ATC officers				Plan Actual		\blacksquare	П	П	\blacksquare		\blacksquare			\mp			\blacksquare		\blacksquare	\parallel	\blacksquare			1				Some course was moved forward in fi
Instructor Training for simulator trainers				Plan Actual	Н					П			\blacksquare	\parallel					\parallel	\dagger	\dagger			1				fiscal year.
SMS Training				Plan Actual									\blacksquare						\parallel		\parallel							
AIS Training				Plan Actual	H					\blacksquare	П	\parallel	\mp	\mp					\blacksquare	\blacksquare	\dagger			1				
				Plan		2	2016			T		2	2017	,				20°	18		T	20	19	Resp	onsible	e Organizatio	n	Issue &
Activities				Actual	IV	I		п	Ш	1	IV	I		п	ш	IV		I	Π	I	п	IV	I	Ja	ıpan	Tajikistar	Achievements	Countermeasur
Sub-Activities					1 2	3 4 5	6 7	8 9	10 11	12 1	2 3	4 5	6 7	8 9 1	0 11 12	2 1 2	3 4	5 6	7 8	9 10 1	1 12	1 2 3	4 5	3		•		
output 1: To enhance capacity of Air Traffic Control (AT	C) offi	cers	s in lir	ne with	CAC) sta	nda	rds		-																		
1-1: To conduct training of ATC officers on aerodrome, approach and area control services				Plan Actual							\mathbb{H}	\blacksquare		\blacksquare						\mathbb{H}				J	ICA	TAN	All 10 participants were certified.	
1-2: To conduct OJT instructor training for selected ATC officers				Plan Actual				\blacksquare	\blacksquare		\blacksquare			\blacksquare					\blacksquare		H			J	ICA	TAN		
1-3: To conduct instructor training for simulator trainers				Plan Actual		H	\dashv	\blacksquare		Π			\blacksquare	\dashv			\blacksquare		\exists	\blacksquare	$oxed{\dagger}$			J	ICA	TAN		
1-4: To review and if necessary improve Operation Manuals				Plan Actual	H	\Box															Ħ	+	H	J	ICA	TAN		
1-5: To conduct OJT on aerodrome, approach and area control services				Plan Actual	Ħ	\blacksquare	П																	J	ICA	TAN		
				Plan Actual	H															Ħ				J	ICA	TAN		
1-6: To procure aerodrome simulator																						1 1		1		1	Ī	I

	Plar	П									TTT										Basic Contingency	
2-1-1: To conduct basic training on contingency plan	Actu		$\dagger\dagger\dagger$		+	Ш	+	H	Ш	+	$\dagger\dagger\dagger$	+	H		+	Ш			JICA	TAN	training was conducted,	
2-1-2: To improve the draft contingency plans	Plar Actu		H							Ħ	H		Ħ	Ħ		H		\mathbf{H}	JICA	TAN	2 ATCs were certified.	
2-1-3: To conduct exercise of contingency procedures	Plar Actu			H	\blacksquare	П			Н	\blacksquare				\blacksquare					JICA	TAN		
2-1-4: To request approval of CAA on the contingency plans for implementation	Plar Actu					H		H					\Box	\blacksquare					JICA	TAN		
2-2-1: To obtain necessary knowledge of SMS	Plar Actu		\prod				+	$oxed{+}$	Н	\blacksquare	H	\mp	\blacksquare	\blacksquare	\mp	П		\mathbf{H}	JICA	TAN		
2-2-2: To develop and update SMS Manual	Plar Actu			П		Н	+		П	\blacksquare	H	\mp		\blacksquare	\mp	П		\mathbf{H}	JICA	TAN		
2-2-3:To establish risk management process	Plar Actu	-											\Box					\mathbf{H}	JICA	TAN		
2-2-4: To implement safety risk management and safety assurance	Plar Actu		\prod	\blacksquare	+	\prod				\prod	\prod							\blacksquare	JICA	TAN		
2-2-5:To conduct SMS training and education for ATC officers	Plar Actu		\prod							\blacksquare					\blacksquare			\blacksquare	JICA	TAN		
tput 3: To improve Aeronautical Information Services (AIS) with	regard to I	CAO	reco	mme	nda	tions	S															
3-1. To conduct basic training on AIS	Plar Actu		Н			\Box				\mathbf{H}		+	\prod	\mathbf{H}		Н		\mathbf{H}	JICA	TAN	All 4 participants were certified.	
3-2. To conduct basic training on aeronautical charts	Plar Actu				\blacksquare				Н	\blacksquare	Н		H	\blacksquare		Н			JICA	TAN		
3-3. To develop operation manuals for NOTAM, AIC and AIP	Plar Actu									\blacksquare								\mathbf{H}	JICA	TAN		
3-4. To conduct basic training on flight procedure design	Plar Actu																	\mathbf{H}	JICA	TAN		
3-5. To conduct OJT of flight procedure designers for a model airport	Plar Actu									\blacksquare								\mathbf{H}	JICA	TAN		
3-6. To produce draft of AIP of the model airport	Plar Actu			H	\blacksquare	H				Ħ	H			Ħ		Н		\mathbf{H}	JICA	TAN		
uration / Phasing	Plar Actu	al																				
onitoring Plan	Plar			2016	5			2	2017	7			2	2018			2	2019	Re	marks	Issue	Solutio
pnitoring		1 2	3 4	6 7	8 9 10	11 12	1 2 3	3 4 5	6 7	8 9 10	11 12	1 2 3	4 5	6 7	8 9 1	11 12	1 2	3 4 5	3			
Joint Coordination Committee	Plar Actu	al								#								\coprod				
Joint Monitoring (Project Monitoring Sheet)	Plar Actu Plar	al					+			+		+		\parallel	+			+++			1	
Post Monitoring (End of Year 2021)	Actu			Ш		Ш			Ш		Ш	\pm	丗	Ш	廿	Ш			1			
ports/Documents		11	Ш	\coprod		\coprod	\coprod		Ш	$\perp \! \! \perp$	Ш		Ш	Щ	\coprod	Ш	Ш					
Minutes of Meeting (JCC)	Plar Actu	al		\coprod	#	\coprod	\coprod		Ш	#	Ш	#		Ш	+			+++				
Completion Report	Plar	al				\coprod													_	-		

Monitoring Sheet Summary Version 2

TO RR of JICA Tajikistan OFFICE

PROJECT MONITORING SHEET

Project Title: The Project for Capacity Development in Air Traffic Services in

Tajikistan

Version of the Sheet: Ver.2 (Term: March, 2016 - September, 2016)

Name: Toshio YOSHIDA

<u>Title: Chief Advisor</u>

Submission Date: 31, October, 2016

I. Summary

1 Progress

This project started at 28 March and few works in March were included in this Term.

1-1 Progress of Inputs

(1) Japan side

Chief Advisor and Project Coordinator/Training Planner were assigned.

PC/TP is permanently stationed.

ATC Expert (1) and ATC Expert (2) were dispatched in March-April and June-July session.

(2) Tajikistan side

Counterparts (Project Director, Deputy PD, and Project Manager) were assigned.

Three Task Force (ATC Training, Contingency Plan/SMS, and AIS/Flight Procedure Design) were organized.

Project Office in TAN Headquarter was opened.

Documents requested by JICA Expert were shared.

1-2 Progress of Activities

(1) To conduct training of ATC officers.

Five courses (Aerodrome Control, Approach Control/Procedural, Approach Control/Surveillance, Area Control/Procedural, and Area Control/Surveillance) for TF-1 in the third country (Malaysia) were planned, executed and completed by ten ATCs.

One course (SMS) in Luxemburg for TF-2 was planned and ready for October.

One course (AIS) in Germany for TF-3 was planned, executed and completed by four ATCs.

(2) To procure aerodrome simulator.

Data survey mission was taken by JICA HQ person at TAN in July.

(3) To develop ATC Contingency Plan.

ATC Expert (2) conducted basic training on contingency plan in Aug.

Expert started to improve Draft Contingency Plan and Safety Management System Manual.

1-3 Achievement of Output

(1) All outputs depend on the result of the third country training.

Every participant has returned to TAN with the Course Certification. (100%)

JICA experts expect participants to take adequate roles to expand their knowledge and experience through the third country training into TAN.

(2) TF-2 started their works as planned.

1-4 Achievement of the Project Purpose

Project is moving on schedule.

1-5 Changes of Risks and Actions for Mitigation

None

1-6 Progress of Actions undertaken by JICA

No relevant items

1-7 Progress of Actions undertaken by TAN

No relevant items

- 1-8 Progress of Environmental and Social Considerations (if applicable)
- 1-9 Progress of Considerations on Gender/Peace Building/Poverty Reduction (if applicable)
- 1-10 Other remarkable/considerable issues related/affect to the project (such as other JICA's projects, activities of counterparts, other donors, private sectors, NGOs etc.)

Several of mainly used transit airport have been restricted due to safety issues.

2 Delay of Work Schedule and/or Problems (if any)

None

- 2-1 Detail
- 2-2 Cause
- 2-3 Action to be taken
- 2-4 Roles of Responsible Persons/Organization (JICA, TAN)

3 Modification of the Project Implementation Plan

None

3-1 PO

3-2 Other modifications on detailed implementation plan

(Remarks: The amendment of R/D and PDM (title of the project, duration, project site(s), target group(s), implementation structure, overall goal, project purpose, outputs, activities, and input) should be authorized by JICA HDQs. If the project team deems it necessary to modify any part of R/D and PDM, the team may propose the draft.)

4 Preparation of TAN toward after completion of the Project

II. Project Monitoring Sheet I & II as Attached

Monitoring Sheet I Version 3

Monitoring Sheet-1 (Ver.3.0)

	mitoring Sne				T						
	Project Goal, Purpo		Verifiable Indicators	Base line	Sub-activities (Bold is done)	Percentag				%)	Progress
	Taskforces Activities	3	for three outputs	by CP's activities	CP side / 3rd Country Training by Project	Progress					Problem
				as of April, 2016	Expert Team side activities	16/1 16/	2 17/1	17/2	18/1	Final	Remarks
	To improve Air	Indicaror:1	All ATC officers working at ATC u	nits maintain ATC		0					
	Traffic Services		ratings in line with ICAO standard	s through TAN's				1			
≡_	(ATS) in Tajikistan		continuing training program.	3							
era		Indicaror:2	The contingency plan and SMS for	or ATC have been		0					
Overall Goal			kept in operation.			<u> </u>	ı	1			
0		Indicaror:3	Aeronautical Information Publicat	ion (AIP) has		0			1		
		indicaror.5	been updated in line with ICAO st								+
	To ambanas	l ali a a a 1				0		ı	1		
Φ		indicaror: i	All ATC officers working at ATC up	ills nave passed		0					
os	capacity of		training in line with ICAO standard								
랖	Tajikairnavigation	l	OJT instructors and Simulator tra			0 1		1	1		
4		Indicaror:2	The contingency plan and SMS for	or ATC have been		0					
Project Purpose	Services (ATS)		implemented.								
oje		Indicaror:3	The draft AIP of the model airport			0					
<u>r</u>			accepted as confirming to ICAO s	tandards by JICA							
			Experts.								
Op-1			ng for Air Traffic Control (ATC) o								
1-1	To conduct training			No. of ATCs	10 ATC to MAvA (2.5-3M) / Jul 06	55.6 10		-	-	-	Completed.
	officers on aerodron		OJT instructors/Simulator	D: 75	8 ATC to MAvA (2.5 M) / Oct 06	Certificate	es 18/18	3: 1009	%		
	approach and area	control	trainers who attended training	H: 37	F/U Training on Aerodrome (4days)						
	services		courses have completed	K: 13	F/U Training on Approach (4days)						
			trainings successfully.	Q: 11	F/U Training on En-route (4days)						
1-2	To conduct OJT inst	tructor	1	No. of Instructors	6 OJT-I to MAvA (2wks) / Jan 2017	0 83.	3		1		Partially Completed.
	training for selected			D: 16 +1 OJT-I	(TF-1 Management Training in MAvA)	Certificate		100%	1		One candidate canceled on 2017/1.
	officers	7110		H: 9	(11 - 1 Wanagement Training in WAVA)	Ochinoatt	55 0/0.	10070			Replaced to 2017/5 (Mr. Ikromov Qayum)
	To conduct instructo	or training	1	K: 1	8 GIT to MAvA (1wk) / Feb 2017	0 10	0 -	_	_	-	Completed.
	for simulator trainers			Q: 2		Certificate		100%		_	Completed.
	ioi simulatoi trainer	3		Q. Z	(3 rd Country Experts Radar Sim En-route)	Certificate	25 0/0.	100%			
1-4	To review and if nee	200051	Operation Manual has been	No. of Manuals	Mr. Gafarov reviewed few Manuals	0 20.	^	ı	1		Mr. Gafarov (KQT) reviewed few Operation
1-4	To review and if ned		reviewed and improved if						l	1.00/	
	improve Operation I	wanuais	•	Common: 4	O/M Review W/G/Sharing Tech-Find mtg					·M: 10%	Manuals and presented it on 22 Oct 2016.
			necessary	D: 14	WS on O/M Review (1day x 3)	Implemer	ited W/S	S: 10%	x3		Two months are were non-directed on O Feb
				H:10	Seminar on Result P/M Review (1day)	Implemer	nted Ser	minar:	15% x	1	Two meetings were conducted on 8 Feb.
				K: 7	Study Seminar on Shearing (1day)	Implemer	nted Stu	dy Sei	minar	15% x1	First review result WS on AD-C on 2017/3/30
				Q: 6	New Technical Task Training (1wk x3?)	Implemer					E/I I Too to to so on A and do not a sound to to d
					(F/U Trainings x3 from Activity 1-1)	F/U Train		1 1-1: 1	10% x	3	F/U Training on Aerodrome completed.
1-5		,		No. of OJT-I	-	D0 0					There is no trained OJT instructor in Klyab.
	approach and area	control	conducted OJT on aerodrome,	D:3 +1(May)		H0 0					
	services		approach and/or area control	H:1		K0 0					
			services at least 2 times.	K:0		Q0 0					
				Q:1	OJT-I Training (1wk)	Implemen	nted OJ	T-I trai	ning: 2	20%	
					W/S OJT-I Material & Tr Plan Dev. (1wk)	Implemer	nted W/S	S: 20%	, J		
					Observation of OJT by CP (1day x6)	Observati	ion + led	cture: 5	5% x6		
						All CPs co				es: 30%	
1-6	To procure aerodror	ne	Aerodrome simulator has been	Approach and	Provided all necessary data by CP	10 40.				-	Room with desk and chair ready in 2017/2/13
	simulator		operational.		Prepared training room and UPS	Provided		arv Da	ata: 5%	x 4	Delivery date was postponed from 2017/3 to 8
			'	Simulator are	, 3	Prepared	Room	and UF	PS: 10	% x 2	55" monitors will be procured by Coordinator.
				available in	Planning Simulator Installation	Complete	d Instal	lation.	20%	· - · · -	in the product of the same of
				DYU and LBD	User Training on Simulator by ND	Conducte				6	
					Maintenance and Operation Training by ND						
4 7	To a conduct to the first	A for f	Factor of the advantage of the	No. of OUT	Training by ND			Tanin	.g. 20	, ,	Formard will account the Account
1-7	To conduct simulate	or trainings	Each of the simulator trainers	No. of GIT	- O: T.T.(1 ! O)	D0 0		<u> </u>	0/ 2		Expert will cover the Aerodrome Control
			has been conducting simulator	D:4	Aerodrome Sim-ToT (1wk x3)	Conducte					with using new aerodrome simulator in DYU
			training at least 3 times per	H:2	W/S on Sim Tr's Material & Plan (1wk)	Implemen				0 0	
			month.	K:1	Observation of Sim Training (1d x8 x2)	Observati					
				Q:1		CP's cond	ducted (stimes.	/M: 30	%	

Op-2	To enhance capacity of ATC of	officers with regard to ICAO reco	mmendations			
2-1-1	To conduct basic training on	2 ATC officers have completed	0	-	70.0 70.0	Two CP obtained certificate Basic CP in 2016/7
	contingency plan	basic course on contingency plan successfully.		Basic Training on CP (0.5day) / Jul 2016	Implemented basic training: 70% Training material reused by CP: 30%	
2-1-2	To improve the draft contingency plans	Exercise of contingency procedures has been conducted		Initial Draft completed W/S on CP Improvement (3days)	0 0 Implemented W/S: 50%	
		successfully.	in 2016/4	Seminar CP Completion (1day)	Implemented Seminar: 50%	
2-1-3	To conduct exercise of contingency procedures		0	Instruction/Advise on CP exercise (1wk x2)	0 25.0 Scenario designed by CP: 25% x2 Conducted exercise by CP: 25% x2	
2-1-4	To request approval of CAA on	The contingency plans have	0	-		Approval procedure is TAN's internal matter
	the contingency plans for implementation	been approved by CAA for implementation.		Instruction of Approval for CP (1wk)	TAN DG/DDG approval: 25% CAA approval: 50%	,
2-2-1	To obtain necessary		0	SAF-SA1:2, -SA2:1, -INV:2 (1wk each)	0 80.0	2 CP participated SAF-SMS by TAN in 2015/2
	knowledge of SMS	courses on SMS successful.		F/U Training on SMS (1day x2)	Certificates: 100%	Completed SAF-SA1 and SAF-INV
2-2-2	To develop and update SMS		Draft was	Initial Draft completed	0 0	
	Manual			Study on SMS Implementation (3days) (F/U Trainings x2 from Activity 2-2-1) W/S on Developing SMS Manual (3days) Seminar on completion SMS-M (1day)	Conducted F/U trainings: 10% x2 Implemented W/S: 40% Implemented Seminar: 40%	
2-2-3	To establish risk management	Risk management process has	0	-	0 0	5 procedures are 1. Voluntary Hazard Report,
	process	been established		W/S on Dev. Risk/M Process (3days) Seminar on Voluntary Reporting Sys (1day)		Risk Management, 3. Incident Report, Analysis and 5. Changes
					Developed 5 Procedures: 10% x5	
2-2-4	To implement safety risk management and safety assurance	Safety risk management and safety assurance have been implemented	0	W/S on Safety R/M and S/A (3days) Training on Human Factors (3days)	0 0	
					Audit was conducted by TAN: 25%	
2-2-5	To conduct SMS training and education for ATC officers	all ATC officers have been conducted	K: 13 Q: 11	Conducted training Mod. 1-5 in D&H W/S on SMS training (3days) W/S on Runway Safety Program (3days) Instruction on SMS Training Imple.(3ds x4) Seminar on CP and SMS Imple.(1day)	10.0 10.0	Module 1-5 by TAN for KQT and TJU: 2017/6 Module 6-10 by TAN for DYU: 2017/12 for LBD: 2017/7
Op-3	To enhance capacity of Aeror	nautical Information Services (Al	S) officers with r	egard to ICAO recommendations		
	To conduct basic training on AIS	2 AIS officers have successfully completed basic course on AIS.	0	4 AIS to GroupEAD (3wks) / Jul 16	100 100 - - - - - -	Completed.
3-2	To conduct basic training on	2 AIS officers have successfully	0	4 AIS to GroupEAD (3wks) / Jul 16	20.0 60.0	Exercise drawing-1 completed.
	aeronautical charts	completed basic course on aeronautical charts.		Catch-up exercise drawing-1 (5days x1) Catch-up exercise drawing-2 (5days x1)	Conducted exercise drawing-2:40%	For lack of Chart drawing exercise in the training by GroupEAD, AIS Expert provides catch-up trainings.
	for Notice to Airman (NOTAM), Aeronautical Information Circulars (AIC) and Aeronautical Information Publication (AIP)	Operation manuals for Notice to Airman (NOTAM), Aeronautical Information Circulars (AIC) and Aeronautical Information Publication (AIP) have been developed		- AIS Seminar (1day) NOTAM / AIP Procedure Dev W/S (4dx3)	Implemented W/S: 10% x3 Developed NOTAM Procedure: 20% Developed AIC Procedure: 20% Developed AIP Procedure: 20%	AIS seminar and one Dev. W/S completed. AIS Expert requests TF-3 to make presentation about current situation of NOTAM/AIC/AIP, and present it as country report in AIS seminar. AIS Expert explains pamphlet of AIS center.
3-4	To conduct basic training on	2 flight procedure designers have successfully completed basic course on PANS-OPS.	0	- Training on Basic PANS-OPS FPD (6wks)		Simulator room will be diverted training venue before arriving Equipment. (TF1 agreed)
	procedure designers for a model airport	2 flight procedure designers have successfully completed OJT on conventional flight procedure design.		FPD in DYU OJT on FPD (6wks) Observation for FPD in DYU (2wks) (PBN introduction Seminar 0.5day x1)	0 0 Conducted OJT:70% Conducted Observation: 30%	
	To produce draft of AIP of the model airport	Draft of Aeronautical Information Publication (AIP) of the model airport has been produced.	0	AIP design work AIP design exercise on DYU Seminar on AIP development completion	0 0 implemented exercise: 50% implemented seminar: 50%	Completion target date is 2018/4

Monitoring Sheet II Version 3

AWP-2016 /Monitoring Sheet-2 (Admin.)

				Y2016 Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2017 Jan	Feb	Mar		
			Ex P/A	befor 1wk 2wk 3wk 4wk	1wk 2wk 3wk	4wk 1wk 2wk 3wk 4wk	1wk 2wk 3wk 4wk	1wk 2wk 3wk 4wk	1wk 2wk 3wk 4wk	1wk 2wk 3wk 4wk	k 1wk 2wk 3wk 4wl	k 1wk 2wk 3wk 4v	vk after Remark	(S			
Project	JCC/n		A1 Plan	JCC												∇4/17 JCC/2	
Meeting	Joint Cod	ordination Committee	Actual	▼4	/26 (JCC/1)												
	PCM/n		PC Plan										∇	∇			
	Project C	oordination Meeting	Actual				▼7/11 (PCM/	1)					▼1/23 (PCM/2) ▼2/20 ((PCM/3) ▼	3/31 (PCM/4)	
	TF1M/n		A1 Plan	TF1M/1						TF1M/2				TF1M/3			
		e-1 Meeting	Actual							▼1	10/27 (TF1M1)	▼12/15 (TF1N	1/2)		▼3/3 (TF1M/3)		
	TF2M/n		A2 Plan	TF2M/1				TF2M/2				TF2M/3					
	Taskforo	e-2 Meeting	Actual	▼4	/26 (TF2M/1)		▼7/20 (TF2M/2)				▼12/2 (TF2M/3)					
	TF3M/n		A1 Plan	TF3M/1										TF3M/2			
	Taskforo	e-3 Meeting	Actual											▼2/2 (TF3M/1)	▼3/3 (TF3M/2)		
	Other Me	etings	Plan											2/3 TV-conf			
			Actual											▼2/3 TV-conf			
Monitor	Joint Mor	nitoring	A1 Plan						Moi	nitoring(v.2)				Monitorii	ng(v.3)		
			Actual							▼1	10/27						
Reporting	Expert	Monitoring Report	A1 Plan							∇						∇	
		(Summary, Sheat-1/2)	Actual								▼11/2 (1H)					▼4/1(2H)	
		Inception Report	Plan														
			Actual	▼(Inception)													
			PC Plan							∇					▽	'	
		(Administrative part only)	Actual							▼ 10/3 (1H)						73/31(2H)	
		Quatary Accounting Report	PC Plan				∇			∇			∇		▽	'	
			Actual				▼7/8 1Q			▼10/11 2Q			▼1/10 3Q		▼	3/27 4Q	
		Business Trip Report	PC Plan														
			Actual			▼6/21 K	JL ▼7/1 TSE				▼11/27 I	KUL ▼12/11 LBD ▼	12/27 LBD				
Expert	TF-1	Cheif Advisor / ATC-1 Expert															
team		Mr. Yoshida	Actual	3/28		6/9				10/3			1/11		-		
			SE Plan														
		Mr. Nakatsugawa	Actual													postpor	ned till 2017.
	TF-2		A2 Plan										-				
		Mr. Watanabe	Actual	4/1			7/10				11/14						
			IS Plan														
		Mr. Shirai	Actual											1/30			
			FP Plan														
		Mr.Yamane	Actual														
JICA PC			PC Plan				leav		home leave		leave			leave	home leave (JP)		
		Mr.Orita	Actual	4/7 arrival		6/11(KUL) 6/26	(TSE) leav	re (KG)	home leave (JP)		leave(E) 11/23(KU	L) 12/11(LBD) 12/2	7(LBD)	leave(D)	home leave (JP)		
Mission	JICA HQ	mission	Plan														
			Actual	JCC/1			Sim	ulator		İ							

AWP-2016 / Monitoring Sheet-2 (TF-1)

		wk 1wk 2wk 3wk 4wk 1wk 2wk 3wk 4v					1wk 2wk 3wk 4wk 1wk 2wk 3wk 4v	vk 1wk 2wk 3wk 4wk 1w	k 2wk 3wk 4wk after	Progress	Remarks
To conduct training of ATC officers on	P (selected candidates)			-(AWP-2016)	(AWF	P-2016)					
aerodrome, approach and area control services	Α									100%	
	PC P 10		7/04			D .				4	
2.5 M (2016 July Group)	A 10		7/24		Rpt▼	Rpt			-	completed	d
	PC P 8 A 8				10/17		▼ Rpt Rpt Rpt			4	a.
2.5M (2016 Oct Group) Lecture Follow-up training on	A1 P 18+				10/17		▼ Rpt Rpt Rpt	2/21-24		completed	included 1-4 inc
4days aerodrome control	A 10+							2/21-24 (done	0)	completed	
Lecture Follow-up training on	A1 P 18+							2/21=24 (0011	4/11-4		included 1-4 inc
4days approach control	A								,,,,	1	
Lecture Follow-up training on	A1 P 18+								17/7		included 1-4 in
4days En-route control	A										
To conduct OJT instructor training for selected	P (select candidates)				(select candidates)		(AWP-2016)	-			
ATC officers	A									83.3%	
	PC P 6										
2wks (2017 Jan Group)	A 5						1/7▼ Rpt			partial	1 OJT-1 on 20
3rd Tr TF-1 Management Training F	C P 6								17/5	4	(out of % indic
1wk in MAvA	A				() () ()		(AMD 0040)				
To conduct instructor training for simulator	P (select candidates)				(select candidates)		(AWP-2016)	-		100%	
trainers	A ROLD 8									100%	
3rd Tr GIT Training in MAvA F 1wk (2017 Feb Group)	PC P 8 A 8							2/11▼ Rpt			.
3rd Exp. 3rd Country Expert for Radar F								2/11 ▼ Rpt	17/7	completed	out of % indic
1.5wk Sim Approach control	A								1111	4	(out or 78 maic
3rd Exp. 3rd Country Expert for Radar F									17/10		(out of % indic
1.5wk Sim En-route control	A								11/10	1	(out or 70 maio
To review and if necessary improve	P	(Tr	anslation doc. / Ru-En)		(Develop and update	e/ AWP-2016)					
Operation Manuals	A		uals translated for Expert		1, , ,		▼Complehensive List Ready ▼	Obtained 33 manuals		20%	
Meeting Operation Manual review	A1 P 18+		·	·			▽1/24				
0.5d x1 Working Group formation	A							▼2/8		completed	d
W/S W/S on Operation Manual	A1 P 18+								3/30▽ 17/7		(AD: 3/30)
1day x3 Review and Task assign	A										
Seminar Presentation seminar on	A1 P all								17/10	4	
1day result of O/M review	A							1			
Meeting Shearing Tech. Findings of							∇	1/27		4	
0.5d x1 MAvA among 18 & Expert	A1 P all							▼2/8	17/4-5	completed	đ
Seminar Study seminar on shearing	AT P all								17/4-3	4	
1day x1 knowledge of MAvA trngs Training New technical tasks	A1 P all								17/7-	_	-
1wk x3? introducing Training	A								1111-	4	
To conduct OJT on aerodrome, approach and	P										
area control services	A									0%	
Lecture OJT-Instructors Training	A1 P 6+								4/3-7	0,0	
1wk	A									1	
W/S Workshop on OJT-I Material	1 P 6+								17/7		
1wk and Training Plan Dev.	A										
Observ Observation of OJT by CP	A1 P 6+								18/1-		
1day x6 Instructors	A										
To procure aerodrome simulator	P								∇(Original Plan)	40%	Delayed till 20
	A						▼Contract by JIC				
Others Planning of Aerodrome	A1 P N/A							∇Room Ready in ACC	17/9		
3d x1 Simulator Installation	A				▼55"monitor, Local I	Market Survey ▼Ro	om Request ▼Photo ▼UPS selec	ction		partial	NITT C
Lecture User Training on Aerodrome \$									17/9	A .	NTT-Data lect
	ND A								4710		
Lecture Maintenance and Operation									17/9	4	NTT-Data lect
1day Training on Aerodrome Sim N To conduct simulator trainings	ND A									_	
To conduct simulator trainings	A									0%	
Lecture Aerodrome Simulator	SE P 8+								17/12-		
									11/12-	4	
			1								_
1wk x3 Trainer's Training (4x3time)	A SE P 8+								18/1	1	
1wk x3 Trainer's Training (4x3time) W/S Workshop on Simulator Tr's	SE P 8+								18/1		
1wk x3 Trainer's Training (4x3time)	SE P 8+ A								18/1		

AWP-2016 / Monitoring Sheet-2 (TF-2)

Activity Type Cub Activity			6 Apr	May	Jun	Jul July Durk Durk Ande	Aug	Sep	Oct	Nov	Dec	2017 Jan 1wk 2wk 3wk 4wk 1wk	Feb	Mar		Monitoring Remarks
Activity Type Sub-Activity E -1-1 To conduct basic training on contingency plan	X P/A	# befor	r 1wk 2wk 3wk 4w	k 1wk 2wk 3wk 4wk	TWK 2WK 3WK 4WK	1WK 2WK 3WK 4WK	1WK 2WK 3WK 4WK	1WK 2WK 3WK 4WK	1WK 2WK 3WK 4WK	TWK 2WK 3WK 4WK	TWK 2WK 3WK 4WK	TWK 2WK 3WK 4WK TWK	2WK 3WK 4WK 1	wk 2wk 3wk 4wk after	Progress	Remarks
1-1 To conduct basic training on contingency plan	A														70%	
Training Contiengency Basic Training A		2					1									30%: reuse text
0.5day		2				▼7/21(de	ono)								completed	30 %. Teuse lext
1-2 To improve the draft contingency plans	P			(Trans	slation doc. / Ru-En)-			CP / AWP-2016)								
1-2 To improve the draft contingency plans	A			▼5/1 Order CP Tra		/30 Checked Eng-ver		/31 developed draft C	D						0%	
TAN Draft Contiengency Plan C	P P	▼20	115	V 3/1 Older Of The	Instation + o	Too Onecked Eng-ver	1. 5 11 2 + 0	l developed drait c							070	
Passins	Α	▼ 20													completed	
W/S W/S on CP improvment A	2 P	2+												4/19	Completed	-
3days	A	2.												1710		
Seminar Seminar on CP completion A	2 P	all												17/7		1
1day	A													1177		
1-3 To conduct exercise of contingency procedures	P									(Make Fy	ercise Plan)					
To conduct excision of contingency procedures	A									(mano 2x		raft CP Exercise Plan Deve	eloned		25%	
Others Instruction and advice on CP A											, ,	Lak or Expressor lan Born	o.opou	4/7-1		18/4
1wk x2 Exercise	A														1	partial in 2016
-4 To request approval of CAA on the contingency	P															partial in 2010
plans for implementation	A														0%	
	2 P													17/7	1 770	1
1wk process for CP	A														1	
-1 To obtain necessary knowledge of SMS	P		(select candidates)												
	Α														20%	
TAN SAF-SMS C	P	2														
Baseline in EUROCONTROL		2 ▼20	015												completed	
	C P	2														
1wk in EUROCONTROL	Α	2							10/15▼			Rpt			completed	
	C P	1														canceld
1wk in EUROCONTROL	Α										▼cancel	ed		17/7		Postpone 2017
3rd Tr SAF-INV P	C P	2														
1wk in EUROCONTROL	Α	2												3/18▼	completed	
Training Follow-up training on SMS A	2 P	2+												4/3		17/7
1d x2	Α															
2-2 To develop and update SMS Manual	Р			(Tran:	slation doc. / Ru-En)-		(Develop	SMS Manual / AWP-	2016)							
	Α					▼ 7/22 O	rder SMS Tr. ▼8	31 Checked Eng-ver	by TF2	▼11	/30 Developed SMS	Manual			0%	
TAN Draft SMS Plan C	PP															
Baseline wi/o attachment	Α		015												completed	
W/S Study on SMS A	2 P		015											4/4-6		-
W/S Study on SMS A 3days Implementation	2 P A	2+	015													
W/S Study on SMS 3days Implementation W/S W/S on Developing SMS A	2 P A 2 P	2+	J15											4/4-6		_
W/S Study on SMS A 3days Implementation W/S W/S on Developing SMS A 3days Manual	2 P A 2 P A	2+	115											17/7		
W/S Study on SMS 3days Implementation W/S W/S on Developing SMS A 3days Manual Seminar Seminar on Completion of A	2 P A 2 P A 2 P	2+ 2+ all	015													
W/S Study on SMS 3days Implementation W/S W/S on Developing SMS A 3days Manual Seminar Seminar on Completion of A 1day SMS Manual	2 P A 2 P A 2 P A	2+ 2+ all	115											17/7		
W/S Study on SMS 3days Implementation W/S W/S on Developing SMS A 3days Manual Seminar on Completion of A 1day SMS Manual	2 P A 2 P A 2 P A	2+ 2+ all	115											17/7		
W/S Study on SMS A 3days Implementation W/S W/S on Developing SMS A 3days Manual Seminar Seminar on Completion of 1day SMS Manual 2-3 To establish risk management process	2 P A 2 P A 2 P A P A	2+ 2+ all	715											17/7	0%	
W/S Study on SMS A 3days Implementation W/S on Developing SMS A 3days Manual Seminar Seminar on Completion of A 1day SMS Manual SMS Manual SMS Manual W/S W/S on Developing Risk A A A A A A A A A	2 P A 2 P A P A 2 P A 2 P	2+ 2+ all 2+	115											17/7	0%	
W/S Study on SMS A	2 P A 2 P A P A 2 P A	2+ 2+ all 2+	115											17/7 17/11	0%	
W/S Study on SMS 3days Implementation W/S on Developing SMS A 3days Manual Seminar Seminar on Completion of A 1day SMS Manual 2-3 To establish risk management process W/S W/S on Developing Risk A 3days Managment Process Seminar Seminar on Voluntary A	2 P A 2 P A P A 2 P A 2 P A 2 P A 2 P A 4 2 P A 4 2 P A 4 2 P A 4 2 P A 4 2 P A 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	2+ 2+ all 2+ all	715											17/7	0%	
W/S Study on SMS A 3days Implementation W/S W/S on Developing SMS A 3days Manual Seminar Seminar on Completion of 1 1day SMS Manual SMS Manual SMS W/S on Developing Risk 3days Management Process Seminar Seminar on Voluntary A 1day Reporting System A 1day A 1day Reporting System A	2 P A 2 P A 2 P A 2 P A 2 P A 2 P A	2+ 2+ all 2+ all	115											17/7 17/11	0%	-
W/S Study on SMS 3days Implementation W/S W/S on Developing SMS A 3days Manual Seminar Seminar on Completion of 1day SMS Manual 2 P A 2 P A A 2 P A P A P A P A P A P A	2+ 2+ all 2+ all	115											17/7 17/11	0%		
W/S Study on SMS A 3days Implementation W/S W/S on Developing SMS A 3days Manual Seminar Seminar on Completion of A 1day SMS Manual SMS Manual SMS Manual SMS Manual SMS Manual A MANUAL M	2 P A 2 P A P A P A P A	2+ 2+ all 2+ all	115											17/7 17/11 17/11 18/4	0%	
W/S Study on SMS 3days Implementation W/S on Developing SMS A 3days Manual Seminar Seminar on Completion of A 1day SMS Manual 3 To establish risk management process W/S W/S on Developing Risk A 3days Managment Process Seminar Seminar on Voluntary A 1day Reporting System 1 To implement safety risk management and safety assurance W/S W/S on safety Risk/Mng. and A	2 P A 2 P A P A 2 P A P A 2 P A 2 P A 2 P A 2 P A 2 P A 2 P A 2 P A 2 P A 4 P	2+ 2+ all 2+ all	715											17/7 17/11	0%	
W/S Study on SMS 3days Implementation W/S W/S on Developing SMS A 3days Manual Seminar Seminar on Completion of A 1day SMS Manual -3 To establish risk management process W/S W/S on Developing Risk A 3days Management Process Seminar Seminar on Voluntary A 1day Reporting System -4 To implement safety risk management and safety assurance W/S W/S on safety Risk/Mng. and A 3days Safety Assurance	2 P A 2 P A A 2 P A A 2 P A A 2 P A A 2 P A A 2 P A A 2 P A A 2 P A A 2 P A A 2 P A A 2 P A A 2 P A A A A	2+ 2+ all 2+ all	115											17/7 17/11 17/11 18/4	0%	
W/S Study on SMS 3days Implementation W/S W/S on Developing SMS A 3days Manual Seminar Seminar on Completion of A 1day SMS Manual 3 To establish risk management process W/S W/S on Developing Risk A 3days Managment Process Seminar Seminar on Voluntary A 1day Reporting System 1 To implement safety risk management and safety assurance W/S W/S on safety Risk/Mng. and A	2 P A 2 P A A A 2 P A A A 2 P A A A A	2+ 2+ all 2+ all	115											17/7 17/11 17/11 18/4	0%	
W/S Study on SMS 3days Implementation W/S W/S on Developing SMS A 3days Manual Seminar Seminar on Completion of A 1day SMS Manual 3days Ms Manual W/S W/S on Developing Risk A 3days Managment process Seminar Seminar on Voluntary A 1day Reporting System 4 To implement safety risk management and safety assurance W/S W/S on Safety Risk/Mng. and A 3days Safety Assurance Training Training on Human Factors A 3days A	2 P A 2 P A 2 P A 2 P A 2 P A 2 P A 2 P A 4 2 P A 4 2 P A 4 2 P A 4 2 P A 4 2 P A 4 2 P A 4 2 P A 4 2 P A 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	2+ 2+ all 2+ all	715							Mala CMC territory	plan in AMID 2046).			17/7 17/11 17/11 18/4	0%	
W/S Study on SMS 3days Implementation W/S W/S on Developing SMS A 3days Manual Seminar Seminar on Completion of A 1day SMS Manual 3 To establish risk management process W/S W/S on Developing Risk A 3days Managment Process Seminar Seminar on Voluntary A 1day Reporting System 4 To implement safety risk management and safety assurance W/S W/S on safety Risk/Mng. and A 3days Safety Assurance Training Training on Human Factors A 3days 5 To conduct SMS training and education	2 P A A P A A A A A A A A A A A A A A A	2+ 2+ all 2+ all 2+ 2+	115							(Make SMS training	plan in AWP-2016)			17/7 17/11 17/11 18/4	0%	
W/S Study on SMS 3days Implementation W/S W/S on Developing SMS A 3days Manual Seminar Seminar on Completion of 1day SMS Manual 3 To establish risk management process W/S W/S on Developing Risk 3days Managment Process Seminar Seminar on Voluntary A 1day Reporting System 4 To implement safety risk management and safety assurance W/S W/S on safety Risk/Mng. and A 3days Safety Assurance Training Training on Human Factors A 3days 5 To conduct SMS training and education for ATC officers	2 P A A A A A A A A A A A A A A A A A A	2+ 2+ all 2+ all 2+ 2+ 2+	115							(Make SMS training	plan in AWP-2016)			17/7 17/11 17/11 18/4	0%	
W/S Study on SMS A 3days Implementation W/S On Developing SMS A 3days Manual Seminar Seminar on Completion of A 1day SMS Manual 3 To establish risk management process W/S W/S on Developing Risk A 3days Management Process Seminar on Voluntary A 1day Reporting System 4 To implement safety risk management and safety assurance W/S W/S on safety Risk/Mng. and A 3days Safety Assurance Training Training on Human Factors A 3days 5 To conduct SMS training and education for ATC officers	2 P A A A A A A A A A A A A A A A A A A	2+ 2+ all 2+ all 2+ 2+								(Make SMS training	plan in AWP-2016)			17/7 17/11 17/11 18/4	0%	Mo.1-5: K&Q 1
W/S Study on SMS 3days Implementation W/S W/S on Developing SMS 3days Manual Seminar Seminar on Completion of A 1day SMS Manual -3 To establish risk management process W/S W/S on Developing Risk A 3days Managment Process Seminar Seminar on Voluntary A 1day Reporting System 4 To implement safety risk management and safety assurance W/S W/S on Safety Risk/Mng. and A 3days Safety Assurance Training Training on Human Factors A 3days 5 To conduct SMS training and education for ATC officers TAN Conduct SMS training C Baseline Module 1-5 to DYU & LBD	2 P A A 2 P A A A A A A A A A A A A A A	2+ 2+ all 2+ 2+ 2+ 2+ v 20 v								(Make SMS training	plan in AWP-2016)			17/7 17/11 17/11 18/4 18/7	0%	Mo.1-5: K&Q 1
W/S Study on SMS 3days Implementation W/S W/S on Developing SMS A 3days Manual Seminar Seminar on Completion of A 1day SMS Manual 3 To establish risk management process W/S W/S on Developing Risk A 3days Managment Process Seminar Seminar on Voluntary A 1day Reporting System 4 To implement safety risk management and safety assurance W/S W/S on safety Risk/Mng. and A 3days Safety Assurance Training Training on Human Factors A 3days Training and education for ATC officers TAN Conduct SMS training Baseline Module 1-5 to DYU & LBD W/S W/S on SMS training A	2 P A A 2 P A A A A A A A A A A A A A A	2+ 2+ all 2+ 2+ 2+ ▼20								(Make SMS training	plan in AWP-2016)			17/7 17/11 17/11 18/4	0%	Mo.1-5: K&Q 1
W/S Study on SMS A 3days Implementation W/S W/S on Developing SMS A 3days Manual Seminar Seminar on Completion of A 1day SMS Manual 3 To establish risk management process W/S W/S on Developing Risk A 3days Management Process Seminar on Voluntary A 1day Reporting System 4 To implement safety risk management and safety assurance W/S W/S on safety Risk/Mng. and A 3days Safety Assurance Training Training on Human Factors A 3days Training and education for ATC officers TAN Conduct SMS training C Baseline Module 1-5 to DYU & LBD W/S W/S on SMS training A 3days A 3days A 3days A	2 P A A P A A A P A A A A A A A A A A A	2+ 2+ all 2+ 2+ 2+ 2+ 2+								(Make SMS training	plan in AWP-2016)			17/7 17/11 17/11 18/4 18/7 18/7	0% 0% 10% partial	Mo.1-5: K&Q 1
W/S Study on SMS 3days Implementation W/S W/S on Developing SMS A 3days Manual Seminar Seminar on Completion of A 1day SMS Manual 3 To establish risk management process W/S W/S on Developing Risk 3days Management Process Seminar Seminar on Voluntary A 1day Reporting System 4 To implement safety risk management and safety assurance W/S W/S on safety Risk/Mng. and A 3days Safety Assurance Training Training on Human Factors A 3days -5 To conduct SMS training and education for ATC officers TAN Conduct SMS training Baseline Module 1-5 to DYU & LBD W/S W/S on SMS training 3days W/S W/S on Runway Safety A	2 P A A P A A A P A A A P A A A P A A A P A A A P A A A P A A A P A A A P A A A P A A A P A A A P A A A A P A A A A P A A A A A P A	2+ all 2+ 2+ 2+ 2+ 2+								(Make SMS training	plan in AWP-2016)			17/7 17/11 17/11 18/4 18/7	0% 0% 10% partial	Mo.1-5: K&Q 17
W/S Study on SMS 3days Implementation W/S W/S on Developing SMS A 3days Manual Seminar Seminar on Completion of A 1day SMS Manual 2-3 To establish risk management process W/S W/S on Developing Risk A 3days Managment Process Seminar Seminar on Voluntary A 1day Reporting System 1-4 To implement safety risk management and safety assurance W/S W/S on safety Risk/Mng. and A 3days Safety Assurance Training Training on Human Factors A 3days Training and education for ATC officers TAN Conduct SMS training C Baselinc Module 1-5 to DYU & LBD W/S W/S on SMS training A 3days W/S W/S on Runway Safety A 3days Program	2 P A A P A A P A A P A A A A A A A A A	2+ 2+ all 2+ 2+ 2+ 2+ 2+								(Make SMS training	plan in AWP-2016)			17/7 17/11 17/11 18/4 18/7 18/7	0% 0% 10% partial	Mo.1-5: K&Q 17 Mo.6-10: D&H 1
W/S Study on SMS 3days Implementation W/S W/S on Developing SMS A 3days Manual Seminar Seminar on Completion of A 1day SMS Manual 3 To establish risk management process W/S W/S on Developing Risk A 3days Managment Process Seminar Seminar on Voluntary A 1day Reporting System 4 To implement safety risk management and safety assurance W/S W/S on safety Risk/Mng. and A 3days Safety Assurance Training Training on Human Factors A 3days Training and education for ATC officers TAN Conduct SMS training Baseline Module 1-5 to DYU & LBD W/S W/S on SMS training A 3days W/S W/S on SMS training A 3days W/S W/S on Runway Safety A 3days W/S W/S on Runway Safety A 3days Program Others Instraction on SMS Training A	2 P A A P A A P A A P A A A P A A A A A	2+ 2+ all 2+ 2+ 2+ 2+ 137								(Make SMS training	plan in AWP-2016)			17/7 17/11 17/11 18/4 18/7 18/7	0% 0% 10% partial	Mo.1-5: K&Q 17
W/S Study on SMS 3days Implementation W/S W/S on Developing SMS A 3days Manual Seminar Seminar on Completion of A 1day SMS Manual 2-3 To establish risk management process W/S W/S on Developing Risk A 3days Management Process Seminar on Voluntary A 1day Reporting System 2-4 To implement safety risk management and safety assurance W/S W/S on safety Risk/Mng. and A 3days Safety Assurance Training Training on Human Factors A 3days 2-5 To conduct SMS training and education for ATC officers TAN Baseline Module 1-5 to DYU & LBD W/S W/S on SMS training A 3days W/S W/S on Runway Safety A 3days Program Others Instraction on SMS Training A 3ds x4 Implementation	2 P A A P A A A P A A P A A A A P A	2+ 2+ all 2+ 2+ 2+ 137								(Make SMS training	plan in AWP-2016)			17/7 17/11 17/11 18/4 18/7 18/7 17/7 18/11	0% 0% 10% partial	Mo.1-5: K&Q 17 Mo.6-10: D&H 1
W/S Study on SMS Adays Implementation W/S W/S on Developing SMS Adays Manual Seminar Seminar on Completion of Aday SMS Manual 2-3 To establish risk management process W/S W/S on Developing Risk Adays Management Process Seminar on Voluntary Adays Reporting System 2-4 To implement safety risk management and safety assurance W/S W/S on safety Risk/Mng. and Adays Safety Assurance Training Training on Human Factors Adays 2-5 To conduct SMS training and education for ATC officers TAN Conduct SMS training Baseline Module 1-5 to DYU & LBD W/S W/S on SMS training Adays W/S W/S on Runway Safety Adays Program Others Instraction on SMS Training Adays Implementation	2 P A A P A A P A A P A A A P A A A A A	2+ all 2+ 2+ 2+ 137 30								(Make SMS training	plan in AWP-2016)			17/7 17/11 17/11 18/4 18/7 18/7	0% 0% 10% partial	Mo.1-5: K&Q 17 Mo.6-10: D&H 1

AWP-2016 / Monitoring Sheet-2 (TF-3)

		JPFY2016	6 Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2017 Jan	Feb	Mar			Monitoring
		P/A # before	r 1wk 2wk 3wk 4wk	1wk 2wk 3wk 4wk	1wk 2wk 3wk 4wk	1wk 2wk 3wk 4wk	1wk 2wk 3wk 4w	1wk 2wk 3wk 4wk	after	Progress	Remarks						
3-1	To conduct basic training on AIS	P	(select candidates)														
		Α														100%	i
		P 2			(AWP-2016)											i
	3wks in GroupEAD (same as 3-2)	A 4					8/13	▼	Rpt							completed	
3-2	· · · · · · · · · · · · · · · · · · ·	Р	(select candidates)														i
	charts	A														60%	i
		P 2			(AWP-2	016)											Due to the lack of
	3wks in GroupEAD (same as 3-1)	A 4					8/13	▼	Rpt							completed	hands-on in G-EAD
		P 4											2/13				Tr, Expert team
	5days Aerodrome Chart drawing-1	A											▼2/13-17 (dor	ne)		completed	commited to provide
		P 4													17/7		catch-up training by
	5days Aerodrome Chart drawing-2	A															AIS expert
3-3	To develop operation manuals for NOTAM,	Р															i
	AIC and AIP	A														20%	i
		P all											2/9				i
	1day Service(AIS) Seminar	A											▼2/9 (done)			completed	i
		P 4											2/27-				i
	4ds x3 Manual Development W/S	A											▼2/	27-3/2 (done)	17/7	partial	
3-4	To conduct basic training on	Р															i
	flight procedure design	Α														0%	i
		P 4													4/10-		i
	6wks OPS FPD	A															
3-5	3 1	Р															i
	for a model airport	A														0%	i
	3	P 4													17/11-		i
	6wks Design	A															i
	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	P 4													18/2		i
	2wks in DYU	Α															i
		P 2													17/6-7		2 in 2017, 2 in 2018
	1.5M Procedure Design in Japan	A															i
		P all													17/11		i
	0.5day	Α															
3-6	To produce draft of AIP of the model airport	Р													17/11		i
		Α														0%	•
		P 7													18/4		•
	5days Dushanbe Airport FP																•
	Seminar Seminar on AIP development IS														18/4		•
	0.5day completion FP	A															

Monitoring Sheet Summary Version 3



The Joint Monitoring, for "The Project for Capacity Development in Air Traffic Services" in Tajikistan

Ver. 3.0

Dushanbe, 1st April, 2017





Sheraliev Bakhtyor Project Manager / TF-2 Leader SUE "TAJIKAIRNAVIGATION" Toshio Yoshida Project Chief Advisor / TF-1/3 Expert JICA / ATCA-Japan



Monitoring Sheet Summary (Ver. 3.0)

1. Introduction

The Monitoring (Ver.3.0) covered from 1st April 2016 to 31st March 2017 was jointly conducted by TAN and JICA with the following objectives:

- (1) To monitor a progress and operational efficiency of the Project in accordance with AWP-2016 (Ver. 1.0) and AWP-2016 (Ver. 2.0), indicating the percentage of progress in each activity at the timing of the end of March 2017 for reporting on it at the 2nd Joint Coordination Committee (JCC/2) in 17th April 2017.
- (2) To provide an actual situation and future prospective of the Project to stakeholders for designing detail sub-activities as AWP-2017 (Ver. 1.0) which is going to be approved at the JCC/2.
- (3) To judge propriety of existing PDM, PO and line up of sub-activities for operating the Project properly for the rest term.

2. Outline of Project Activities

There are 22 various activities related to 3 Outputs in the PDM of this Project structure. All activities could be categorized (A), (B) and (C) from an objective point of view in the outcomes, and each Outputs also could be resolved into several technical subjects as given Table-1 below.

Table-1

			Training by Ja	apanese Expert	Procurement
		Trainings abroad	Training of Trainers /	Improving Procedures,	Support for
			Capacity Development	Manuals & Regulations	Aerodrome Sim.
Op	Technical subjects Category	(A)		(B)	(C)
1	Improving ATC Operation	1-1 ATCs (18)		1-4 review manuals	
	OJT Instructor's Training	1-2 OJT-Instructor (6)	1-5 OJT-I ToT		
	Aerodrome Simulator Trainer's Training	1-3 GIT (8)	1-7 Sim trainers ToT		1-6 Simulator
2	Contingency Plan (CP)		2-1-1 Basic Training	2-1-2 draft improve	
			2-1-3 Exercise	2-1-4 CAA approval	
	Safety Management System (SMS)	2-2-1 SAF-# (2+1+2)	2-2-5 SMS trainer	2-2-2 SMS Manual	
				2-2-3 Risk Management	
				2-2-4 Improve R/M&S/A	
3	Aeronautical Information Services (AIS)	3-1 AIS basic (2)		3-3 Procedure Dev. AIP	
	Flight Procedure Design (FPD)	3-2 Aero Chart (2)	3-4 Basic Training	3-6 Develop draft AIP	
			3-5 OJT of FPD		

The category (B), "Training by Japanese Expert" activities which will be implemented by Japanese Expert team are primary components of this Japanese ODA Project. However, providing opportunity of ICAO autholized trainings abroad as the category (A) is not less significant than others, because an essential knowledge in line with ICAO standard and regulations is a precondition of receiving Japanese Expert's trainings in accordance with structure of the Project. In general, at an early phase in the Project, all activities in the PDM and PO ought to be resolved into specific sub-activities on an Inception Report by the Expert team, and accurately indicate terms and schedules of each sub-activities into the Annual Working Plan (AWP).

Due to a unique structure of the Project mentioned above, it was premature to determine the detail of sub-activities under the (B) as "Training by Japanese Expert" at the moment of JCC/1 in 27 April 2016 before finalizing the activities of the (A) as "Trainings abroad". This is the reason why many activities in the category (B) have not been activated before December 2016.

As this report clarifies the progress of activities from April to December in 2016 in accordance with AWP-2016 (ver.1.0), Project has been making good progress on the (A) as "Trainings abroad" activities in each Outputs, but the rest part of the Output-1 and -3 have slow or no progress thus far. Regarding the Output-2, the progress of several activities in the category (B) could be seen.

Since almost of all sub-activities under the category (A) as "Trainings abroad" in three Outputs could be completed by the end of March 2017, the Expert team precisely determined the sub-activities for February and March as AWP-2016 (ver.2.0) in January 2017 for incorporating those outcomes into this monitoring, and for designing precise AWP-2017(ver.1.0) which become effective by JCC/2. This measures produce accurate result of this monitoring especially for the category (B) activates of Output-1 and -3 in February 2017.



3. Progress of Inputs

All inputs by TAN and JICA were successfully done in accordance with PDM as tables below.

(A) Training abroad

Op1	: MAvA		TAN	Project	t Input (USE	/EUR)	Comp	letion Date	of Checkpo	ints (from A	April 2016	to March 2	2017)
Op2	: EURO	CONTROL	side	Tuition	Air Ticket	Others	Selection	Eng-CHK	Paid	VISA	Dept.	Training	Report
Op3	: Group	EAD	input	Fee	Insurance	wo/VISA	by TFs	by Expert	Tuition-F	Obtained	Briefing	Start	Session
1	1-1	ATC Jul	10 ATC	\$74,394	\$11,313	\$23,828	26 Apr	25 Apr	7 Jun	29 Jun	14 Jul	27 Jul	7 Oct
		ATC Oct	8 ATC	\$60,750	\$12,671	\$16,000	17 Jun	17 Jun	19 Aug	21 Jun	7 Oct	18 Oct	13 Jan
	1-2	OJT-I	6 ATC	\$10,600	\$7,500	\$13,260	28 Oct	29 Oct	29 Nov	N/A	22 Dec	9 Jan	27 Jan
	1-3	GIT	8 ATC	\$7,359	\$10,000	\$9,840	28 Oct	29 Oct	19 Nov	N/A	22 Dec	13 Feb	24 Feb
2	2-2-1	SAF-SA1	2 Safe	€3,000	\$2,093	\$2,854	26 Apr	N/A	5 Aug	31 Aug	7 Oct	17 Oct	13 Jan
		SAF-INV	2 Safe	€3,000	\$1,992	\$2,846	26 Apr	N/A	7 Jan	27 Feb	30 Jan	20 Mar	31 Mar
		SAF-SA2	1 Safe	€1,500	TBD	TBD	26 Apr	N/A	TBD	TBD	TBD	3 Jul	TBD
3	3-1/2	AIS Basic	4 AIS	€22,680	\$3,251	\$15,784	8 May	N/A	7 Oct	11 Aug	9 Aug	15 Aug	7 Oct

^{*}Project Coordinator has reported more detail of administrative issue on "Training abroad" by "Project Progress Report" in Japanese.

(B) Training by Japanese Expert

Ор	TAN side input	JICA side input by Expert Team in JPFY2016 (Number of implemented Sub-activities)
1	Taskforce-1 Leader, Sub-leader and CPs	Chief Advisor / ATC-1 Expert: Total 5 Months in 4 times assignments
2	Taskforce-2 Leader, Sub-leader and CPs	ATC-2 Expert: Total 3 Months in 3 times assignments
3	Taskforce-3 Leader, Sub-leader and CPs	AIS Expert: total 34 days in 1 time assignment

^{*}All sub-activities and actual assignment terms are mentioned in Monitoring Sheet-2.

(C) Procurement Support Aerodrome Simulator

	TAN side input (planned in 2017)	JICA side input (planned in 2017)
Equipment	(UPS and air conditioner till July 2017)	Aerodrome Simulator System / 340,000USD, contact with NTT-Data done in Jan 2017
Facilities	Simulator Room with furniture in ACC	N/A
Input data	AIP, Photo for 4 airports and drawings	N/A
On-site	N/A	("User Training on Aerodrome Simulator" x 2times in Aug 2017?)
Trainings		("Maintenance and Operation Training on Aerodrome Simulator" in Aug 2017?)

*1USD=115.00JPY.

(D) Others

	TAN side input	JICA side input, under the JICA direct control
Human Recourses	Project Director (DG) Project Deputy Director (1st DDG) Project Manager (TF-2 Leader) Interpreters / English Teacher	Project Coordinator / Training Planning Expert: Total 359 days Contract Assistant: Total 350 days (– approximately 100 days no-paid leave) Contract Driver with Rent-a-car: Total 350 days
Facility	Project office in TAN and utility Expert desk in the simulator room Meeting Venue for JCC/1	Projector, Safe box, Scanner, Printers, 2 set of digital camera and 2 set of laptop-PC Project Web site (www.tj-ats.com)
Local Budget	N/A	371,600USD (Under control of Project Coordinator) Including all expenditure for Training abroad

4. Progress Measuring Method

The result of this monitoring requires to indicate the progress of each activities in "%".

If verifiable indicators are exactly equal to an outcome of single sub-activity, it is easy to show the progress in "%". However, several verifiable indicators are difficult to measure by only progress of outcomes, and taking completion of sub-activities into account is appropriate method for some activities which is consisted several sub-activities. This monitoring provides that several activities are evaluated by verifiable indicators in outcome, several ones are evaluated by completion of each sub-activities and the rest by combination of these methods in the Monitoring Sheet-1 as Table-2. For avoiding over quality measures, all activities have "%" indicators, but progress of each sub-activities was indicated "completed or blank" instead of "%" indicators in the Monitoring Sheet-2.

Table-2

Ор	"%" = Verifiable indicator in outcome	"%" = Completion of consisted sub-activities	"%" = Combination of two methods
1	1-1, 1-2, 1-3	1-4, 1-6	1-5, 1-7
2	2-2-1	2-1-2, 2-1-4, 2-2-2, 2-2-3, 2-2-4	2-1-1, 2-1-3, 2-2-5
3	3-1, 3-4	3-6	3-2, 3-3, 3-5



5. Achievement of the Project Purpose

It is premature to evaluate the achievement of the Project Purpose at this stage, but all sub-activities which was determined by Expert team as AWP-2016 (ver.2.0) are harmonized reciprocally and aligned with three Project purposes accordingly by the Taskforces. Therefore, "%" progress indicators for achievement of the three Project purpose in Monitoring Sheet-1 is blank until reasonable verifiable indicators will be determined by Taskforces at JCC/3 in 2018.

6. Progress of Activities and Achievement of Output

This chapter are divided into three categories in dedicated tables. All activities in the tables have description of "Progress of Activities", "Achievement of Output", "Progress of Actions undertaken by JICA", "Changes of risks and actions for mitigation", and "Delay of work schedule and/or Problems" in highlighted red. The "Progress of Actions undertaken by TAN" is described above it as TAN, and a baseline as of April, 2016 is mentioned under it as Table for aiding reader's comprehensions.

(A) Trainings abroad

The activities in this category have been making good progress in 2016.

Regarding the level of achievements, both the Output-1 and -2 are considered to be completion except several inevitable postponements, thanks to the JICA headquarters to bring budget forward for implementing it as much as possible within the first Project year, and also thanks to TAN's management for appropriate selection of 37 candidates for such 1 week to 3 months long trainings.

However, with regard to the Output-3, several sub-activities by the AIS Expert are required for complementing an Aeronautical Cartography part, due to the lack of contents in AIS basic training by GroupEAD as a reason in a Table-3 below.

Table-	-3		
			TAN Progress of Actions undertaken by TAN, if any.
	Trainings abroad		Progress of Activities, Achievement of Output, Progress of Actions undertaken by JICA, Changes of
			risks and actions for mitigation, and Delay of work schedule and/or Problems, if any.
		%	BL Baseline by TAN as of April 2016, if any.
1	1-1 ATCs (18)	100	Eighteen (18) ATC officers successfully completed ICAO autholized #052-055 trainings in Malaysia Aviation Academy (MAvA) until December 2016.
			It is worthy of special mention that Mr. Ikromov Qayum from Khujand airport in October group was awarded "The Best Student" by MAvA as a photo on the left.
9		6	Project was reported by MAvA that the July group had taken a makeup exam in theoretical achievement test due to their English writing ability, in addition to that, July group reported Project that it took one or two weeks for accustoming to hearing Malaysian Instructor's Malay-English pronunciation. Immediately responding to this urgent issue, TAN and Project jointly provided a supplementary English
4	The Best Student by MA	X-	writing training for two months to the October group in Dushanbe and Khujand then, consequently, the October group didn't face same difficulty.
	1-2 OJT-Instructor (6)	83.3	Five (5) instructors successfully completed ICAO autholized #219 training in MAvA in January 2017. One candidate canceled his participation, but MAvA kindly re-allocated one seat in May 2017, and TF-1 selected Mr. Ikromov Qayum as a new participant.
			Project provided them the #219 textbook and a video clip of final presentation test before their departure for enabling familiarization of Malay-English pronunciation quickly.
	1-3 GIT (8)	100	Eight (8) instructors successfully completed ICAO autholized #211 training in MAvA in February 2017. Project provided them the #211 textbook and a video clip of final presentation test before their departure for enabling familiarization of Malay-English pronunciation quickly.
2	2-2-1 SAF-# (2+1+2)	80.0	Two (2) Safety officers successfully completed SAF-SA1 in October 2016 and SAF-INV in March 2017 by EUROCONTROLE Luxemburg. SAF-SA2 in December 2016 was postponed until July 2017 because of health reason of a candidate.
			BL Two (2) Safety officer had completed SAF-SMS training in 2015
3	3-1 AIS basic (2)	100	4 AIS officers successfully completed "AIS Basic" training provided by GroupEAD in Frankfurt in August
	3-2 Aero Chart (2)	60.0	2016. Due to the cartography part in this course was not enough for implementing project objective,
			especially making draft AIP by staff of ATFM center independently, Project provides catch-up trainings
			of aeronautical chart drawing exercise as Sub-activities by AIS Expert from February 2017.
			If series of these catch-up trainings will be successfully implemented until July 2017, the progress
			indicator for the activity 3-2 may become 100%.



(B) Training by Japanese Expert

3-6 Develop draft AIP

It is because the situation which was accounted for in Chapter-2 that the activities of this category have been making slow in the first Project year. Regarding the level of achievements, both the Output-1 and -3 are considered to be null, but ATC-1 and AIS Experts have recovered from a delay within February 2017. With regarding to the Output-2, several activities were relatively making progress by both side of TAN and ATC-2 Expert beyond the baseline until November 2016.

It is premature to evaluate the level of achievements in this category at this moment, because precise sub-activities as AWP-2016 (ver.2.0) was finalized by the Expert team in January 2017.

		%	TAN Progress of Actions undertaken by TAN, if any.
	Trainings by	,,	Progress of Activities, Achievement of Output, Progress of Actions undertaken by JICA, Changes of
	Japanese Experts		risks and actions for mitigation, and Delay of work schedule and/or Problems, if any.
			BL Baseline by TAN as of April 2016, if any.
1	1-4 review manuals	20.0	TAN Mr. Gafarov Bakhiddin (KQT) has started to improve two manuals (1Q and 6Q in the list) from November 2016 before starting ATC-1 Expert activities. His contribution was reported at study
	Including Follow-up		meeting in 22 December 2016, and recorded as video clips for sharing TF-1 via Website.
	trainings in activity 1-1		TF1 confirmed that 4 regulations and 37 manuals (DYU:14, LBD:10, KQT:7 and TJU:6) are mainly
			being used by ATCs in four airports at TF1M/2 in December 2016.
			ATC-1 Expert organized "Manual Review Working Group Formulation Meeting" and "Shearing technica
			findings of MAvA among July, October groups and Expert Meeting" in 8 February 2017 for launching
			out on this activity with trained 18 ATC officers. 8 officers attended these meetings and a M/M was
			made by ATC-1 Expert.
			ATC-1 Expert conducted 4days theoretical lecture of "Follow-up Training on Aerodrome Control" from
			21 to 24 February 2017 for teaching his experience, technique, trend technology in Japan and others
			for carrying the manual review forward by working groups. nn participants obtained Project certified.
	1-5 OJT-I ToT	0	No progress thus far.
	1-7 Sim trainers ToT	0	No progress thus far.
2	2-1-1 Basic Training	70.0	
CP			2 Safety officers successfully obtained Project certificate, and other 4 ATC officers observed. Project
	0.4.0 de-ft in-	_	expects that TAN will re-use the developed training materials for penetrating CP knowledge into TAN.
	2-1-2 draft improve	0	No progress thus far.
			Draft CP (TAN) was 100% completed referred to the Annex11, Asia Pacific version by ICAC
			Bangkok, guideline of EUROCONTROL, India, Pakistan and Russian CPs at Project started timing. Due to the no SSP and nationwide CP in Tajikistan, TAN's management is facing difficulty
			to clarify how much portions which exceeded the ANSP layer should take in.
	2-1-3 Exercise	25.0	· · · · · · · · · · · · · · · · · · ·
	2-1-4 CAA approval	0	TAN TF-2 counterpart recognized that after approved draft by TAN's management, CAA approval will
	2 14 OAA approvai		be Government side internal process.
			No Progress thus far.
2	2-2-2 SMS Manual	0	No Progress thus far.
SMS	L L L GIVIO Mariadi		BL Draft SMS Manual was 100% completed without attachment referred to Annex19, the Doc9859
			(Chapter-5) and Russian SMS at Project started timing.
	2-2-3 Risk	0	No Progress thus far.
	Management		The Friegram and tall
	2-2-4 Improve	0	No Progress thus far.
	R/M & S/A		
	2-2-5 SMS trainer	0	TAN Module 1-5 for remaining two airports will be completed until July 2017.
			Module 6-9 will be convened one package to provide all airports within 2017 by safety staffs.
			No Progress thus far.
			BL Module1-5 training by safety staffs completed in DYU and LBD within 2016.
			be involute 1-3 training by safety stans completed in bit of and Ebb within 2010.
3	(3-2 Aero Chart)	60.0	AIS Expert conducted 5 days training of "Catchup exercise on Aeronautical Chart drawing -1" from
3	(3-2 Aero Chart)	60.0	
3	(3-2 Aero Chart) 3-3 Procedure Dev.	60.0	AIS Expert conducted 5 days training of "Catchup exercise on Aeronautical Chart drawing -1" from 13 February 2017. 3 AIS officers successfully obtained Project certificate.
3	,		AlS Expert conducted 5 days training of "Catchup exercise on Aeronautical Chart drawing -1" from 13 February 2017. 3 AlS officers successfully obtained Project certificate. AlS Expert conducted one day "AlS seminar" in 9 February 2017 for clarifying the procedure of
3	3-3 Procedure Dev.		AlS Expert conducted 5 days training of "Catchup exercise on Aeronautical Chart drawing -1" from 13 February 2017. 3 AlS officers successfully obtained Project certificate. AlS Expert conducted one day "AlS seminar" in 9 February 2017 for clarifying the procedure of
3	3-3 Procedure Dev.		AIS Expert conducted 5 days training of "Catchup exercise on Aeronautical Chart drawing -1" from 13 February 2017. 3 AIS officers successfully obtained Project certificate. AIS Expert conducted one day "AIS seminar" in 9 February 2017 for clarifying the procedure of NOTAM, AIC and AIP in accordance with country report by Mr. Ilhom (TF-3 sub-leader), then AIS Expert explained pamphlet or AIS center in Japan. 21 audiences participated in this seminar.
3	3-3 Procedure Dev.		AIS Expert conducted 5 days training of "Catchup exercise on Aeronautical Chart drawing -1" from 13 February 2017. 3 AIS officers successfully obtained Project certificate. AIS Expert conducted one day "AIS seminar" in 9 February 2017 for clarifying the procedure o NOTAM, AIC and AIP in accordance with country report by Mr. Ilhom (TF-3 sub-leader), then AIS
3	3-3 Procedure Dev.		AIS Expert conducted 5 days training of "Catchup exercise on Aeronautical Chart drawing -1" from 13 February 2017. 3 AIS officers successfully obtained Project certificate. AIS Expert conducted one day "AIS seminar" in 9 February 2017 for clarifying the procedure of NOTAM, AIC and AIP in accordance with country report by Mr. Ilhom (TF-3 sub-leader), then AIS Expert explained pamphlet or AIS center in Japan. 21 audiences participated in this seminar. AIS Expert conducted 4 days "NOTAM and AIP Procedure Manual Development Workshop 1/3" from
3	3-3 Procedure Dev. AIP	20.0	AIS Expert conducted 5 days training of "Catchup exercise on Aeronautical Chart drawing -1" from 13 February 2017. 3 AIS officers successfully obtained Project certificate. AIS Expert conducted one day "AIS seminar" in 9 February 2017 for clarifying the procedure o NOTAM, AIC and AIP in accordance with country report by Mr. Ilhom (TF-3 sub-leader), then AIS Expert explained pamphlet or AIS center in Japan. 21 audiences participated in this seminar. AIS Expert conducted 4 days "NOTAM and AIP Procedure Manual Development Workshop 1/3" from 27 February. 4 AIS officers successfully obtained Project certificate.
3	3-3 Procedure Dev. AIP	20.0	AlS Expert conducted 5 days training of "Catchup exercise on Aeronautical Chart drawing -1" from 13 February 2017. 3 AlS officers successfully obtained Project certificate. AlS Expert conducted one day "AlS seminar" in 9 February 2017 for clarifying the procedure on NOTAM, AlC and AlP in accordance with country report by Mr. Ilhom (TF-3 sub-leader), then Als Expert explained pamphlet or AlS center in Japan. 21 audiences participated in this seminar. AlS Expert conducted 4 days "NOTAM and AlP Procedure Manual Development Workshop 1/3" from 27 February. 4 AlS officers successfully obtained Project certificate. No Progress thus far. TF1/3 confirmed availability of participants for 8 weeks long training in April to May, 2017. No Progress thus far.
3	3-3 Procedure Dev. AIP 3-4 Basic Training	20.0	AlS Expert conducted 5 days training of "Catchup exercise on Aeronautical Chart drawing -1" from 13 February 2017. 3 AlS officers successfully obtained Project certificate. AlS Expert conducted one day "AlS seminar" in 9 February 2017 for clarifying the procedure o NOTAM, AlC and AlP in accordance with country report by Mr. Ilhom (TF-3 sub-leader), then AlS Expert explained pamphlet or AlS center in Japan. 21 audiences participated in this seminar. AlS Expert conducted 4 days "NOTAM and AlP Procedure Manual Development Workshop 1/3" from 27 February. 4 AlS officers successfully obtained Project certificate. No Progress thus far. TF1/3 confirmed availability of participants for 8 weeks long training in April to May, 2017.

0 No Progress thus far.



(C) Procurement Support for the Aerodrome Simulator

In order to evaluate the progress properly in this category, it is need to be considered in terms of roles and responsibilities by each stakeholder such as JICA Headquarters, JICA Regional Office, System Integrator (NTT-Data Corp.), Software Vender (TechnoBrain Corp.) and Project which could be divided into TAN, Taskforce-1, Expert team and Coordinator.

A delay in a delivery of the system and confirming tax-free customs formalities were uncontrollable factors by the Project. Project anticipates receiving the equipment up to July 2017.

The room renovation with installing desks and chairs was ready in the 2 February, 2017 and the room was diverted AIS / FPD trainings by Taskforce-3 from February to June 2017. The rest necessary actions are proceeding accordingly by Taskforce-1 and Coordinator as Table-5 below. The ATC-1 and Simulator Training Experts will arrange the operation and maintenance trainings which will be conducted by NTT-Data in July 2017.

Tab	ole-5										
		%	TAN	Progress of Actions undertaken by TAN, if any.							
	Procurement Support		Prog	ress of Activities, Achievement of Output, Progress of Actions undertaken by JICA, Changes of risks							
	for the Aerodrome Sim		and a	actions for mitigation, and Delay of work schedule and/or Problems, if any.							
			BL	Baseline by TAN as of April 2016, if any.							
1	1-6 Simulator	40.0	TAN	TAN provided all necessary data and photos for developing software till the end of December 2016.							
				TAN provided a room in ACC with essential renovation, desks and chairs until 2 February 2017,							
				and they are going to procure the appropriate UPSs before arriving equipment before July 2017.							
			The	delivery date of the grant equipment of an Aerodrome Simulator was postponed from March to July							
			2017	, due to a delay of procurement process in JICA Headquarters.							
			Coor	dinator has completed local market survey for procuring 3 sets of 55" displays and stands.							
			As fo	or the simulated viewpoints in DYU and LBD were placed at new ATC towers which are planning to							
			cons	truct by TAN till the end of 2018. Project is paying attention to the progress of those new tower							
			proje	cts for avoiding obstructs of Project outcomes.							
			BL	TAN has had the Radar Approach and En-route simulator in DYU and LBD.							
				Project activities 1-3 (Trainings abroad) covers simulator instructors those who are using the							
				existing equipment above, however 1-7 (Training by Japanese Expert) covers only Aerodrome							
				Control with using newly installing system. Filling this gap is one of expected sub-activities by TF-1.							

7. Findings on Joint Monitoring

This monitoring opportunity made it possible for the Project to grasp further necessity of sub-activities and hidden expectations in TAN side for attaining closely Project outcomes during the rest of Project term.

Taskforce-1 counterparts regard the result of trainings in Malaysia highly valued, and they are hoping that the Project will continue to provide the further training opportunities in Malaysia, especially for management staffs for enabling proper evaluation for the proposal of improvement by 32 ATCs based on their acquired new knowledge such as a FPS, an Aldis Lamp in MAvA. They are also seeking measures for filling the gap of capacity development between an Aerodrome Control and Radar Approach / En-route Control, because technical assistance for simulator instructors by Simulator Expert will be limited to the Aerodrome Control only with using new simulator system, despite several trainers those who are using existing simulator system in DYU and LBD are trained by MAvA.

A progression of new ATC towers in DYU (Grant aid by French Gov.) and LBD (Seeking loan from EBRD, IFC or grant opportunity by donor community) are an urgent issue for securing quality of outcomes by the Project, because Project set the simulated viewpoints in the software into new ATC towers in both airports.

Taskforce-2 counterparts has recognized that the baselines of several activities were relatively ascended by their own activities as of Project started in April 2016, and SMS/QMS department staffs have had an essential skill for implementing several Project activities by themselves, because TRACECA provided Georgian Safety Expert in 2015 and TAN is frequently inviting Russian QMS Expert for improving capacity of safety officers. They expect that Project tackles further definite safety issues like introducing the Runway Safety Program, improving transparency of minor incident reporting system, trainers of training



for SMS instructors in Russian language, Human factor issues, further opportunities of trainings abroad, and improving comprehension of no SSP and nationwide-CP in Tajikistan by regulator and ANSP's management for smoothly approving CP and SMS by TAN and CAA.

Taskforce-3 counterparts are contended with the line-up of sub-activities by AIS and FPD Experts for the present, excluding burden of binding 1AIS and 3ATC officers for several 6 weeks long trainings. Project is planning to provide the PBN training opportunity in Japan from middle of June 2017 for two certified participants of PANS-OPS FPD training mentioned above. In this regard, TAN requested further training opportunity in Japan for remaining two participants in 2018.

8. Modification of the Project Implementation Plan

The PDM will probably not be changed by JCC/2.

The Expert team is going to modify accordingly the PO in accordance with AWP-2017.

9. Preparation of TAN toward after completion of the Project

There is no particular measure at this phase.

- End -



Table of abbreviations

Table of a	bbreviations		
	General		Monitoring Sheet-2
ACC	Area Control Center	A1	ATC-1 Expert
AIC	Aeronautical Information Circular	A2	ATC-2 Expert
AIP	Aeronautical Information Publication		Counterpart
AIS	Aeronautical Information Services		FPD Expert
ANSP	Air Navigation Service Provider	IS	AIS Expert
	Air Traffic Controller		MAvA Expert
	Air Traffic Services		NTT-Data
	Air Traffic Flow Management Center		Project Coordinator
	Annual Working Plan		Aerodrome Simulator Expert
	Baseline	-	7 to real of the control of the cont
	Chief Advisor		
	Civil Aviation Authority		
	Communication, Navigation and Surveillance		IATA Airport Code
	Counterpart	DVII	Dushanbe International Airport (D)
	Contingency Plan		
	Chief Representative		Qurghonteppa International Airport (Q)
	Department of Civil Aviation	LBD	,
	•	130	Kulob International Airport (K)
	Deputy Director General		
	Director General		Almaty
	European Bank for Reconstruction and Development		Dubai
	Flight Procedure Design		Frankfurt (Group EAD)
	Flight Progress Strip		Kuala Lumpur (MAvA)
	General Instructor Training		Luxembourg (IANS/EUROCONTROL)
	International Air Transport Association	TSE	Astana
	International Civil Aviation Organization		
	Japan Civil Aviation Bureau		
	Joint Coordination Committee		
	International Finance Corporation		
	Malaysia Aviation Academy		
	Notice To Airmen		
	Official Development Assistance		
	On the Job Training		
	Operation Manual		
	Operating System		
	Procedure for Air Navigation Services Aircraft Operations		
	Performance Based Navigation		
PCM/n	Project Coordination Meeting		
	Project Director		
	Project Design Matrix		
	Plan of Operation		
	Project Manager		
	Quality Management System		
R/M&S/A	Risk Management and Safety Assurance		
	Standers and Recommendation Practices -ICAO		
SID/STAR	Standard Instrument Departure / Standard Terminal Arrival Route		
SSP	State Safety Program		
	Safety Management System		
	Tajikairnavigation		
	To Be Define		
TFnM	Taskforce-n Meeting		
TOR	Terms of Reference		
ToT	Training of Trainers		
TRACECA	Transport Corridor Europe-Caucasus-Asia		
	Uninterruptible Power Supply		
VOR/DME	VHF Omnidirectional Range / Distance Measuring Equipment		
W/G	Working Group		
W/S	Work Shop		
		_	

List of Attachment

Attachment-A: Monitoring Sheet-1 (Ver. 3.0) Attachment-B: Monitoring Sheet-2 (Ver. 3.0)

Monitoring Sheet I Version 4

Monitoring Sheet-1 (Ver.4.0)

IVIC	onitoring She								
	Project Goal, Purpo		Verifiable Indicators	Base line	Sub-activities (Bold is done)	Percentage of Ac			Progress
	Taskforces Activities	S	for three outputs	by CP's activities	CP side / 3rd Country Training by Project	Progress calculat			Problem
				as of April, 2016	Japanese Expert Team side activities	16/1 16/2 17/1			Remarks
	To improve Air	Indicaror:1	All ATC officers working at ATC u	nits maintain ATC		0			
	Traffic Services		ratings in line with ICAO standard	ls through TAN's					
₩ _	(ATS) in Tajikistan		continuing training program.	•					
Overall Goal	` , ,	Indicaror:2	The contingency plan and SMS for	or ATC have been		0			
ی ج			kept in operation.					•	
•		Indicaror:3	Aeronautical Information Publicat	ion (AIP) has		0			
			been updated in line with ICAO s				L	I	
	To enhance	Indicaror:1	All ATC officers working at ATC u			0			
é	capacity of	indicaron i	training in line with ICAO standard	ds conducted by		•	l I		1
ő	Tajikairnavigation		OJT instructors and Simulator tra	iners					
Ē	(TAN) in Air Traffic	Indicaror:2	The contingency plan and SMS for	or ATC have been		0			
τĐ	Services (ATS)	indicaron.2	implemented.	of ATO Have been			l		
Project Purpose		Indicaror:3	The draft AIP of the model airport	has boon		0			
Ō		indicaror.s	accepted as confirming to ICAO s			0 1 1			-
Δ.			Experts.	standards by JICA					
On 1	To onhonos conso	ity of traini	ng for Air Traffic Control (ATC) o	ffices in line with	ICAO etandard				
						55.0 400			O-market d
1-1	To conduct training	OTAIC	At least 80% of ATC officers/	No. of ATCs	10 ATC to MAVA (2.5-3M) / Jul 2016	55.6 100 -			Completed.
	officers on aerodron		OJT instructors/Simulator	D: 75	8 ATC to MAvA (2.5M) / Oct 2016	Certificates 18/18	3: 100%		(AD Elliterining and a second and
	approach and area	control	trainers who attended training	H: 37	F/U Training on AD (4days)				(AD F/U training was changed to a seminar.)
	services		courses have completed	K: 13	F/U Training on Approach (4days)				(Other F/U trainings were canceled at JCC/2.)
			trainings successfully.	Q: 11	F/U Training on En-route (4days)				
1-2	To conduct OJT inst				6 OJT-I to MAvA (2wks) / Jan 2017	0 83.3 100			Completed.
	training for selected	ATC			(TF-1 Management Training in MAvA)	Certificates 6/6: 1			
	officers			H: 9		TF1 Management	t Training	j:100%	
1-3	To conduct instructo	or training		K: 1	8 GIT to MAvA (1wk) / Feb 2017	0 100 -	-		Completed.
	for simulator trainers	s		Q: 2	(3rd Country Experts MAvA Rader Sim)	Certificates 8/8: 1	00%		
					,	MAvA Expert: 100	0%		
1-4	To review and if neo	essarv	Operation Manual has been	No. of Manuals	Mr. Gafarov reviewed few Manuals	0 20.0 40.0			Expert Reporting Session was conducted by
	improve Operation I		reviewed and improved if	Common: 4	O/M Review W/G meeting (1day)	3W/Gs formulated		ing-M: 10%	new ATC-1 Expert for 0.5days on 8/14.
			necessary	D: 14	Expert Reporting Session (2days): 0.5d	Completed Repor	rting See	sion: 30%	PM follow-up on 8/16-17.
			,	H:10	WS on O/M Review (2days x 2)	Implemented W/S	11119 003	31011. 30 /0	ATC-1 Expert catch-up on 9/25-29.
				K: 7	Seminar on Result O/M Review (1day)	Implemented Sen	oinar: 10	<u>^</u> 0/ ₂ v1	o . 2port sator ap on 6,20 20.
				Q: 6	(F/U Trainings x3 from Activity 1-1)	F/U Training from			
4.5	To conduct OIT on		Fook of the OIT instructions has		(F/O Trainings x5 from Activity 1-1)		1-1.10%	x3-canceled	Head ICAD OIT I handback (Fin)
1-5			Each of the OJT instructors has	No. of OJT-I	-	D0 0 20.0			Used JCAB OJT-I handbook (En)
	approach and area	control	conducted OJT on aerodrome,	D:4		H0 0 20.0			
	services		approach and/or area control	H:1		K0 0 0			
			services at least 2 times.	K:0	0.17.17	Q0 0 20.0		000/	-
				Q:1	OJT-I Training (1wk)	Implemented OJT	i -i trainin	g: 20%	
					W/S OJT-I Material & Tr Plan Dev. (1wk)	Implemented W/S	5: 20%	•	
					Observation of OJT by CP (1wk)	Observation + led			
						All CPs conducted			
1-6	To procure aerodror	me	Aerodrome simulator has been	Approach and	Provided all necessary data by CP	10 40.0 100			Completed
	simulator		operational.	En-route Radar	Prepared training room and UPS	Provided Necessa			Hand-over ceremony on 9/8
				Simulator are		Prepared Room a	and UPS:	10% x 2	One user training was merged M/T training
				available in	Planning Simulator Installation (3days)	Completed Install	ation: 20	%	
				DYU and LBD	User Training on Simulator (2days): x1	Conducted User	Training:	20%	
					Maintenance & Operation Training (2d)	Conducted M&O			
1-7	To conduct simulate	r trainings	Each of the simulator trainers	No. of GIT		0 0 40%			One training was convert to "basic training"
1-7	TO CONTROL SITUATION	n nannings			Agradrama Sim ToT (4wk v4)			<u> </u>	
			has been conducting simulator	D:4	Aerodrome Sim-ToT (1wk x4)	Conducted Sim-T		X 4	for 4days in Sep.
			training at least 3 times per	H:2	W/S on Sim Tr's Material & Plan (1wk)	Implemented W/S		,	
			month.	K:1	Observation of Sim Training (1wk)	Observation + led			
				Q:1		CP's conducted 3	times/M:	30%	
				1					

process been established R/M training abroad (add at JCC/2) Incidental-INV trainard (add at JCC/2) Incidental-INV trainard (add at JCC/2) R/M training abroad (25% R/M traini						I	
Dosis course on contingency plans Dosis contingency plans Dosis course on							
Successfully, Description of contingency parts procedures has been conducted contingency parts for the conti	2-1-1				-		
2-1-3 To conduct eversite of more procedures has been conducted successfully. 2-1-4 To request approval of CAAn of the contingency procedures has been conducted successfully. 2-1-5 To obtain necessary and the contingency procedures have been approved by CAA for implementation. 2-1-6 To obtain necessary and the contingency plans have been approved by CAA for implementation. 2-1-7 To obtain necessary and the contingency plans have been approved by CAA for implementation. 2-1-8 To request approval of CAAn of The contingency plans have been approved by CAA for implementation. 2-1-9 To obtain necessary and the contingency plans have been approved by CAA for implementation. 2-1-1 To obtain necessary and the contingency plans for implementation. 2-1-1 To obtain necessary and the contingency plans for implementation. 2-1-2 To obtain necessary and the contingency plans for implementation. 2-1-2 To obtain necessary and the contingency plans for implementation. 2-2-2 To obtain necessary and the contingency plans for implementation. 2-2-3 To establish risk management in 2010.4 2-2-3 To establish risk management in 2010.4 2-2-4 To implement safely risk management and safely sessionnec have been implementation. 3-3 To conduct SMS training and education for in 2010.4 2-2-5 To conduct SMS training and education for in 2010.4 2-2-6 To conduct SMS training and education for in 2010.4 2-2-7 To implement safely risk management and safely sessionnec have been in 2010.4 2-2-8 To conduct SMS training and education for in 2010.4 2-2-9 To conduct SMS training and education for in 2010.4 2-2-9 To conduct SMS training and education for in 2010.4 2-2-1 To implement safely risk management and safely sessionnec have been in 2010.4 2-2-1 To implement safely risk management and safely sessionnec have been in 2010.4 2-2-2 To observe the conduction of the conduction for in 2010.4 2-2-3 To enduct SMS training and education for in 2010.4 2-2-4 To implement safely risk management and safely sessionnec have been in 2010.4		contingency plan			Basic Training on CP (0.5day)	Implemented basic training: 70%	
contingency plans successfully, accessfully contingency procedures as been conducted accessfully configured from the contingency procedure accessfully configured from the contingency plans favored by CAA for implementation or implementation or implementation in the contingency plans from the contingency plans for implementation in the continue plans for implementation in t							
Seminar CP Completion (riday): 0.5day Implemented Seminar 50% 1.826 [8.01]	2-1-2			Draft was	Initial Draft completed by TAN		Completed
2-14 To request approval of CAA on The confringency plans have been implementation and the content of the contribution of the contribution of the content of the contribution of the contr		contingency plans					
contingency procedures 2-1-1 For request approval of CAA on the contingency plans have been approved by CAA for been app			successfully.	in 2016/4	Seminar CP Completion (1day) :0.5day	Implemented Seminar: 50%	
Conducted exercise by CP-5 0%	2-1-3	To conduct exercise of		0	-	0 25.0 50.0	
2-14 To request approval of CAA on The contingency plans for the contingency plans for implementation or implementat		contingency procedures			W/S on CP exercise (1dayx2) :0.5day	Conducted exercise by Expert: 50%	
the contingency plans for implementation or impl							
mplementation implementation. 2-2-1 To obtain necessary knowledge of SMS converse on SMS successful courses on SMS successful course on SMS successful cours	2-1-4	To request approval of CAA on	The contingency plans have	0	-		
2-2-21 To obtain necessary Cart Officers have completed Course on SMS successful Course on SMS successful Cart Officers with regard to ICAD recommendations Cart Officers with regard to ICAD recommendations Cart Officers with regard to ICAD recommendations Cart Officers with regard to ICAD recommendation Cart Officers with regard to ICAD recommendation Cart Officers Cart Officers with regard to ICAD recommendation Cart Officers Cart		the contingency plans for	been approved by CAA for		Monitoring on approval process (1d) 0.5	TAN finalization: 25%	MOT approved CP on 7/25
Rowledge of SMS Courses on SMS successful, Completed SMS SMS Manual has been developed and updated SMS Manual part of the state of the stat		implementation	implementation.			MOT approval: 50%	
Rowledge of SMS Courses on SMS successful, Completed SMS SMS Manual has been developed and updated SMS Manual part of the state of the stat	2-2-1	To obtain necessary	2 ATC officers have completed	0	SAF-SA1:2, -SA2:1, -INV:2 (1wk each)	0 80.0 100	Completed
2-2-2 To develop and update SMS Manual has been developed and updated with the process of th							
Manual developed and updated completed 100% was attaining as 2 from 2 - 1 thm x2 time was attained as 1 to 2 feather the process and been established establish	2-2-2			Draft was			Completed
wo attachment in 2016/4 (FU Trainings x2 from 22-1) thr. x2 flow Conducted FU trainings: 10% x2 flow x38 Manual (3days) 1.5 ds Seminar on completion SMS(1day) 2.5 ds flower process in process in process in process has been established. Risk management process has been established been established been established. Risk management process has been established been established been established. TAIN is developing Reporting System (RM training abroad (add at JCCZ) (Risk Training abroad (add at						0 0 1.00	
2-2-3 To establish risk management process has been established Risk management process has been established To implement safety risk management and safety assurance Safety risk management and safety assurance have been implemented Safety risk management and safety assurance Safety risk management and safety assurance have been implemented Training in abroad (at J.C.C.2) Incidental-INV training abroad (at J.C.C.2) Incidental-INV training abroad (at J.C.C.2) Incidental-INV training abroad (at J.C.C.2) RN training abroad 25% RN training 25% RN training abroad 25% RN training abroad 25% RN training 25% RN training abroad 25% RN training abroad 25% RN tr				w/o attachment	(F/II Trainings x2 from 2-2-1) :1hr x2time	Conducted F/U trainings: 10% x2	
Seminar on completion SMS(fday) 3.6.5 Implemented Seminar. 40% TAN is developing Reporting System MR training abroad (add at JCC/2) TAN's reporting system working:50% River International Process has been established TAN is developing Reporting System MR training abroad (add at JCC/2) TAN's reporting system working:50% River International Process has been established TAN is developing Reporting System MR training abroad (add at JCC/2) TAN's reporting system working:50% River International Process has been established TAN is developing Reporting System MR training abroad (add at JCC/2) TAN's reporting system working:50% River International Process has been established TAN is developed at JCC/2 TAN's reporting system working:50% River International Process has been established TAN is developed at JCC/2 TAN's reporting system working:50% River International Process has been established TAN is developed at JCC/2 TAN's reporting system working:50% River International Process has been established TAN is developed at JCC/2 TAN's reporting system working:50% River International Process has been established at JCC/2 Tan's reporting system working:50% TaN's reporting s					W/S on Dev. SMS Manual (3days) :0.5d		
Table Section Process Proces				20 . 0, .			
process been established RM training and acid at JCC/2 Incidental-INV training of abroard (ast JCC/2) RM training abroard 25% RM training abroard 25% Incidental train	2-2-3	To establish risk management	Risk management process has	n	TAN is developing Reporting System		Two trainings abroad were approved at JCC/2.
Incidental-IMV training abroad 25% No ATC-2 Expert activities	220	•		ľ		1 - 1 - 1 - 1 1	Two trainings abroad were approved at 000/2.
Complete the conducted basic training on a parameter than the conducted basic training on a parameter than the conducted basic training on a parameter than the conducted basic training on a product basic training on a produc		process	Sour Soupherion		Incidental-INV training abroad (at JCC/2)	RM training abroad:25%	
2-2-5 To conduct SMS training and education for all ATC officers have been miplemented and safety of absorber to assurance assurance and safety assurance have been miplemented assurance					ů ,		
management and safety assurance have been implemented with procedure designers have been assurance assurance assurance implemented with procedure designers have been assurance implemented with some process (Alg.) and the successfully completed basic course on aeronautical Information Publication (AIP) 3-6 To conduct SMS training and education for all conducted with procedure designers have successfully completed basic course on aeronautical Information Publication (AIP) 3-7 To conduct basic training on aeronautical Information Publication (AIP) 3-8 To conduct OJT of flight procedure designers have model airport to model airp	2 2 4	To implement actaty risk	Cafaty rial, management and				Due to the contents of basis UE training TAN
assurance implemented WS on Runway Safety (2day x4) HF training abroad Certificate: 25% Implemented RWN Safety WS: 25% Audit was conducted by TAN: 25% Audit was conduct	2-2-4				Training in abroad (add at JCC/2)	Implemented Resignar Training, 250/	
Implemented RWY Safety WS: 25% Additional SMS training and education for ATC officers							
Audit was conducted by TAN: 25% Audit was conducted Tr. Mod. 1-5 in D&H		assurance	Implemented		W/S on Runway Salety (2day x4)	Implemented PMV Sefety MS: 25%	JCC/2. JICA approved additional budget for it.
22-5 To conduct SMS training and education for ATC officers and a part of the ducation for ATC officers and a part of officers an							
education for ATC officers all ATC officers have been conducted in D and H	225	To conduct CMC training and	CMC training and advection for	D. 75 U. 27	Conducted training Med. 4 5 in DOLL		Additional CMC TaT in Du was done
Conducted Mod.1-5 finished No ATC-2 Expert activities) Conducted Tr. Mod.1-5: 5% x4 airports Conducted Tr. Mod.1-5: 5% x4 airports Conducted Tr. Mod.1-6: 5% x4 airports Conducted Tr. Mod.6-9: 5% x4 airports Conducted Cr. Mod.6-9:	2-2-3		SWS training and education for				
In D and H Conducted Tr. Mod.6-9: 5% x4 airports		education for ATC officers		Mod 1 5 finished	(No ATC 2 Funert estivities)		
Op-3 To enhance capacity of Aeronautical Information Services (AIS) officers with regard to ICAO recommendations			Conducted	in D and H	(No ATC-2 Expert activities)		Module 0-10 by TAN 101 DTO. 17/12, LBD.17/1
To conduct basic training on AIS AIS officers have successfully completed basic course on AIS AIS to GroupEAD (3wks) /Jul 2016 AIS to SAR in MAVA (2wks) /Sep 2017 AIS Basic Certificate: 100% Additional SAR Admin in MAVA w Additional SAR Admin in MAVA w Additional SAR Admin in MAVA w Additional SAR activity were added AIS to GroupEAD (3wks) / Jul 2016 AIS to GroupEAD (3wks) / Jul 2016 Completed basic course on aeronautical charts AIS to GroupEAD (3wks) / Jul 2016 Completed basic course on aeronautical charts Catch-up exercise drawing-1 (5ds) Conducted exercise drawing-1 (4N)	0- 2	To ambourse consoits of Assess	autical Information Complete (Al			Conducted 11. Mod.6-9. 5% x4 airports	
AIS completed basic course on AIS. 4 AIS to SAR in MAVA (2wks) /Sep 2017 AIS Basic Certificate: 100% Additional SAR Admin in MAVA w Additional SAR Admin in MAVA w Additional SAR Admin in MAVA w Additional SAR activity were adde 4 AIS to GroupEAD (3wks) / Jul 2016 20.0 [6.0.0] 100 . . . Completed SID/STAR, WGS-84 (DYU), VISIC Catch-up exercise drawing-1 (5ds) Catch-up exercise drawing-1 (5ds): 2wks To develop operation manuals for Notice to Airman (NOTAM), Aeronautical Information Circulars (AIC) and Aeronautical Information Circulars (AIC) and Aeronautical Information Publication (AIP) 3-4 To conduct basic training on flight procedure designers for a model airport AIS Basic Certificate: 100% AAR Additional SAR Admin in MAVA w Additional SAR activity were adde 4 AIS to GroupEAD (3wks) / Jul 2016 Catch-up exercise drawing-1 (5ds) Conducted exercise drawing-1:40% Conducted exercise drawing-1:40% Was done by FPD Expert on Augus Catch-up exercise drawing-1 (5ds) Conducted exercise drawing-1:40% Madditional SAR Admin in MAVA w Additional SAR activity were adde SID/STAR, WGS-84 (DYU), VISIC Conducted exercise drawing-1:40% Madditional SAR activity were adde SID/STAR, WGS-84 (DYU), VISIC Conducted exercise drawing-1:40% Conducted exercise drawing-1:40% Conducted North Procedure designers have successfully completed basic course on PANS-OPS FPD (6wk) Conducted Disruption (AIP) o	Op-3			S) officers with r		400 400 440	0 14 15 410 4 11
SAR W/S, Exercise and Seminar SAR: 100% (C/40, W/20, E/20 S/20%) Additional SAR activity were added to complete the sacronautical charts 2 AlS officers have successfully completed basic course on aeronautical charts 2 AlS officers have successfully completed basic course on aeronautical charts Certificates: 20% Conducted exercise drawing-1:40% Certificates: 20% Conducted exercise drawing-1:40% Conducted exercise drawing-2:40% Conducted exercise drawing-1:40% Conducted exercise drawing-2:40% Conducted exercise drawing-2:40% Conducted exercise drawing-1:40% Conducted exercise	3-1					100 100 140	Completed for AIS training
To conduct basic training on aeronautical charts 2 AIS officers have successfully completed basic course on aeronautical charts 3-3 To develop operation manuals for Notice to Airman (NOTAM), Aeronautical Information Circulars (AIC) and Aeronautical Information Publication (AIP) have been developed developed developed designers for a model airport 3-5 To conduct OJ of flight procedure designers for a model airport 3-6 To produce draft of AIP of the model airport 3-1 To develop operation manuals for Notice to Catch-up exercise drawing-1 (5ds) (Catch-up exercise drawing-1 (5ds) (Conducted exercise drawing-1:40% (SID/STAR, WGS-84 (DYU), VISIG Catch-up exercise drawing-1 (5ds) (Conducted exercise drawing-2:40% 3-1 To develop operation manuals for Notice to Airman (NOTAM), Aeronautical Information Circulars (AIC) and Aeronautical Information Publication (AIP) have been developed Aeronautical Information Publication (AIP) have been developed developed developed developed AIP procedure designers have successfully completed basic course on PANS-OPS. 3-5 To conduct OJT of flight procedure designers have successfully completed OJT on conventional flight procedure designers for a model airport around the model around the		AIS	completed basic course on AIS.				Additional SAR Admin in MAVA was done
aeronautical charts completed basic course on aeronautical charts. Catch-up exercise drawing-1 (5ds) Conducted exercise drawing-1:40% Conducted exercise drawing-2:40% 3-3 To develop operation manuals for Notice to Airman (NOTAM), Aeronautical Information Circulars (AIC) and Aeronautical Information Publication (AIP) 3-4 To conduct basic training on flight procedure design 3-5 To conduct OJT of flight procedure designers for a model airport 3-6 To produce draft of AIP of the model airport are of the develope of AIP of the model airport Catch-up exercise drawing-1 (5ds): 2wks Conducted exercise drawing-1:40% Conducted exercise drawing-2:40% Algoria drawing-1:40% Conducted exercise drawing-2:40% Acronautical Information Circulars (AIC) and Aeronautical Information Publication (AIP) have been developed AIP Pro. Dev W/S-1 (4day) Implemented Wesinan:10% Implemented Wesinan:10% Implemented Wesinan:10% Implemented Seminar:10% Implemented Wesinan:10% Implemented Wesinan:10% Implemented Wesinan:10% Implemented Seminar:10% Implemented Wesinan:10% Implemented Wesinan:10% Implemented Wesinan:10% Implemented Seminar:10% Implemented Wesinan:10% Impl							
aeronautical charts. Catch-up exercise drawing-1 (5ds) Catch-up exercise drawing-1:40% Catch-up exercise drawing-2 (5ds):2wks Conducted exercise drawing-1:40% Conducted exercise drawing-2:40% Conducted exercise drawing-1:40% Conducted exercise drawing-2:40% Conducted exercise drawing-1:40% Conducted exercise drawing-2:40% Conducted exercise drawing-1:40% Conducted exercise drawing-1:40% Conducted exercise drawing-2:40% Conducted exercise drawing-1:40% Conducted exercise drawing-2:40% Conducted exercise drawing-1:40% Condu	3-2				4 AIS to GroupEAD (3wks) / Jul 2016	20.0 60.0 100 - - -	
3-3 To develop operation manuals for Notice to Airman (NOTAM), Aeronautical Information Circulars (AIC) and Aeronautical Information Publication (AIP) 3-4 To conduct basic training on flight procedure designers for a model airport 3-5 To conduct OJT of flight procedure designers for a model airport 3-6 To produce draft of AIP of the model airport 3-7 To develop operation manuals for Notice to Airman (NOTAM), Aeronautical Information Circulars (AIC) and Aeronautical Information Circulars (AIC) and Aeronautical Information Publication (AIP) 3-8 To produce draft of AIP of the model airport 3-9 To produce draft of AIP of the model airport 3-1 To produce draft of AIP of the model airport 3-1 To produce draft of AIP of the model airport 3-1 To produce draft of AIP of the model airport 3-2 To produce draft of AIP of the model airport 3-3 To develop operation manuals for Notice to Airman (NOTAM), Aeronautical Information Circulars (AIC) and Airman (NOTAM), Aeronautical Information Information Circulars (AIC) and Aeronautical Information Information Publication (AIP) Airman (NOTAM), Aeronautical Information Information Circulars (AIC) and Aeronautical Information Information Publication (AIP) of the model Information Publication (AIP) of the Information Publication (AIP) of the Information Publication (AIP) of the Information Publicat		aeronautical charts					
To develop operation manuals for Notice to Airman (NOTAM), Aeronautical Information Circulars (AIC) and Aeronautical Information Publication (AIP) Aeronautical Information Publication (AIP) Aeronautical Information Publication (AIP) To conduct basic training on flight procedure designers for a model airport To produce draft of AIP of the model airport To produce draft of AIP of the model airport To produce draft of AIP of the model airport To develope personautical Information Publication (AIP) AIS Seminar (1day) Implemented Seminar: 10% Implemented Seminar: 10% Implemented Seminar: 10% Implemented Wis: 10% x3 Implemented Wis: 10% x			aeronautical charts.				was done by FPD Expert on August
for Notice to Airman (NOTAM), Aeronautical Information Circulars (AIC) and Aeronautical Information Circulars (AIC) and Aeronautical Information Publication (AIP) 3-4 To conduct basic training on flight procedure design 5-5 To conduct OJT of flight procedure designers for a model airport 5-6 To produce draft of AIP of the model 5-6 To produce draft of AIP of the model 5-7 To produce draft of AIP of the model 5-8 To produce draft of AIP of the model 5-9 To produce draft of AIP of the model 5-1 To produce draft of AIP of the model 5-1 To produce draft of AIP of the model 5-1 To produce draft of AIP of the model 5-2 To produce draft of AIP of the model 5-3 To produce draft of AIP of the model 5-4 To produce draft of AIP of the model 5-5 To produce draft of AIP of the model 5-6 To produce draft of AIP of the model 5-7 To produce draft of AIP of the model 5-7 To produce draft of AIP of the model 5-8 To produce draft of AIP of the model 5-9 To produce draft of AIP of the model 5-1 To produce draft of AIP of the model 5-1 To produce draft of AIP of the model 5-1 To produce draft of AIP of the model 5-1 To produce draft of AIP of the model 5-1 To produce draft of AIP of the model					Catch-up exercise drawing-2 (5ds):2wks		
Aeronautical Information Circulars (AIC) and Aeronautical Information Publication (AIP) 3-4 To conduct basic training on flight procedure design To conduct OJT of flight procedure designers for a model airport Aeronautical Information Publication (AIP) of To produce draft of AIP of the model airport Aeronautical Information Publication (AIP) have been developed AUT of Dev W/S-3 (2wk) Developed AIC Procedure: 20% Developed AI	3-3				-		NOTAM-P was developed by new AIS Expert
Circulars (AIC) and Aeronautical Information Publication (AIP) have been developed 3-4 To conduct basic training on flight procedure design 5-5 To conduct OJT of flight procedure designers for a model airport 5-6 To produce draft of AIP of the model airport Aeronautical Information AIP) have been developed Aeronautical Information Publication (AIP) have been developed Aeronautical Information Publication (AIP) have been developed Aeronautical Information Publication (AIP) have been developed AIP Procedure: 20% Developed AIP Procedur							AIP(AIC) procedure was started
Aeronautical Information Publication (AIP) 3-4 To conduct basic training on flight procedure design To conduct OJT of flight procedure designers for a model airport Aeronautical Information Publication (AIP) have been developed NOTAM/AIP Pro. Dev W/S-3 (2wk) Developed AIC Procedure: 20% Developed AIP							
Publication (AIP) 3-4 To conduct basic training on flight procedure design successfully completed basic course on PANS-OPS. 3-5 To conduct OJT of flight procedure designers have successfully completed OJT on model airport 3-6 To produce draft of AIP of the model Developed AIP Procedure: 20% FPO with 1PC +2VISIO by TAN in 2017/8 0 0 100 Completed Training on Basic PANS-OPS FPD (6wk) Conducted Training:100% 4 AIS/ATCs were certified. 2 attended PBN(I-FPD) in TIC on WGS-84 in 3 regional airports by TAN WGS-84 survey DYU (add at April 2017) OJT on FPD (7wks) Observation for FPD in DYU (2wks) PBN introduction Seminar (0.5dayx1) PBN Seminar: 10% 3-6 To produce draft of AIP of the model Developed AIP Procedure: 20% Completed Training on Basic PANS-OPS FPD (6wk) WGS-84 in 3 regional airports by TAN WGS-84 in DYU:30% Conducted OJT:40% Conducted OJT:40% Conducted OJT:40% Conducted Observation: 20% PBN Seminar: 10% - AIP design exercise on DYU (5 days) implemented exercise: 50%							
To conduct basic training on flight procedure design successfully completed basic course on PANS-OPS. To conduct OJT of flight procedure designers have procedure designers for a model airport around airport with a conduct of the model airport around airport with a conduct of the model airport around airport with a conduct of training on pasic PANS-OPS FPD (6wk) accessfully completed basic course on PANS-OPS. FPO with 1PC +2VISIO by TAN in 2017/8 0 0 100 Completed on the procedure design around airport sold airport by TAN or on the model of the model					NOTAM/AIP Pro. Dev W/S-3 (2wk)		
flight procedure design successfully completed basic course on PANS-OPS. To conduct OJT of flight procedure designers have procedure designers for a model airport Taining on Basic PANS-OPS FPD (6wk) Conducted Training:100% 4 AIS/ATCs were certified. 2 attended PBN(I-FPD) in TIC on UVGS-84 in 3 regional airports by TAN O							
Course on PANS-OPS. 2 attended PBN(I-FPD) in TIC on	3-4						·
3-5 To conduct OJT of flight procedure designers have procedure designers for a model airport		flight procedure design			Training on Basic PANS-OPS FPD (6wk)		
procedure designers for a model airport successfully completed OJT on conventional flight procedure design. WGS-84 survey DYU (add at April 2017) WGS-84 in DYU:30% Conducted OJT:40% Conducted		T					
model airport conventional flight procedure design. OJT on FPD (7wks) Conducted OJT:40% Conducted OJT:40% Conducted OJT:40% Conducted Observation: 20% PBN introduction Seminar (0.5dayx1) PBN Seminar:10% To produce draft of AIP of the model airport Publication (AIP) of the model Publication (AIP) of the mode	3-5						Start UTDL and UTDQ in Sep 2017 by TAN.
design. Observation for FPD in DYU (2wks) PBN introduction Seminar (0.5dayx1) To produce draft of AIP of the model airport Draft of Aeronautical Information Publication (AIP) of the model AIP design exercise on DYU (5 days) Conducted Observation: 20% PBN Seminar: 10% O 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0							
PBN introduction Seminar (0.5dayx1) PBN Seminar:10%		model airport					
3-6 To produce draft of AIP of the model airport			design.			Conducted Observation: 20%	
model airport Publication (AIP) of the model AIP design exercise on DYU (5 days) implemented exercise: 50%					PBN introduction Seminar (0.5dayx1)		
					-		
Comingr on AID day as well-time (0 Edays) linear languages (00)		model airport					
airport has been produced. Seminar on AIP dev. completion (U.sdays) Implemented seminar: 50%			airport has been produced.		Seminar on AIP dev. completion (0.5days)	implemented seminar: 50%	

Monitoring Sheet II Version 4

AWP-2017 / Monitoring Sheet-2 (Admin.)

					Y2017		May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2018 Jan	Feb	Mar		_
					befor			1wk 2wk 3wk 4wl	k 1wk 2wk 3wk 4wk	1wk 2wk 3wk 4wk	1wk 2wk 3wk 4wk	1wk 2wk 3wk 4wk	1wk 2wk 3wk 4wk	1wk 2wk 3wk 4wl	1wk 2wk 3wk 4wk	1wk 2wk 3wk 4wk	1wk 2wk 3wk 4wk		
	JCC/n			Plan		∇ 4/17(J												4/16?	
		ordination Committee		Actual					e to delay on TF1 act	ivity)									_
	PCM/n			Plan			▽5/19 (F				∇								
		Coordination Meeting		Actual			▼5/19 (F	PCM/4) ▼6/20 (PCM/5)		▼9	/25 (PCM/6)							_
	TF1M/n			Plan		∇													
		ce-1 Meeting		Actual						TF1M/4) ▼ ▼	▼ (TF1M/5,6 and 7	7)							_
	TF2M/n			Plan		∇			∇										
		ce-2 Meeting		Actual		▼ 4/21(1			▼ 7/24 (TF2M/5) ▼ 8/17 (_
	TF3M/n			Plan			∇				∇			∇		∇			
		ce-3 Meeting		Actual		▼ 4/17(1	F3M/3)	▼ 6/8 (TF3M	1/4)	▼ 8/23 (TF3M/5)								_
	Other M	eetings		Plan															
				Actual															_
Monitor	Joint Mo	nitoring		Plan															
				Actual							▼ 9/11-22								_
Reporting		Monitoring Report	A1	Plan							∇						∇		
	team	(Summary, Sheat-1/2)		Actual			▼5/19 (2	2016/2H)			▼ 9	9/25 (2017/1H)							_
		Inception Report	A1	Plan															
				Actual															_
	PC	Project Progress Report		Plan		∇					∇						∇		
		(Administrative part only)		Actual		▼ 4/4					▼ 9								_
		Quatary Accounting Report		Plan		∇			∇			∇			∇		∇		
				Actual		▼3/31						▼ 10/2							_
		Business Trip Report		Plan				∇											
				Actual					▼ 7/19 (_
•	TF-1	Cheif Advisor / ATC-1 Exp.			3/27	4/2	8			2 weeks			2 weeks		2 weeks			2wks	cha
team		Mr.Watanabe		Actual					7/22	8/19	9/24		(11/20		(1/14	2/12)			_
		Simulator Expert		Plan							9/3		10/30	12/1	31				ne
		Mr. Sakae		Actual							9/2	10/10							_
	TF-2	ATC-2 Expert				4/2	8		7/1021										
		Mr. Watanabe		Actual		4/54/22			7/22	8/19	9/24	10/10							_
	TF-3	AIS Expert	-	Plan						8/115			2weeks					2wks	ne
		Mr.Sukegawa		Actual						8/58/25			(11/20						_
		FPD Expert		Plan		4/3						9/30 10/3	30	12/21		2/2	-3/2	6wks	
		Mr.Yamane		Actual				6/10		8/20	9	9/29							_
JICA PC	PC	Project Coordinator		Plan		/one year	>												
		Mr.Orita	_	Actual				6/2	5-7/2 (leave)			10/6-29 (home leav	/e)						_
Mission	JICA HO) mission		Plan			5/2327											4/?	
				Actual			5/24-27												

		JPFY2017	Apr May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2018 Jan	Feb	Mar	
Activity	Type Sub-Activity		lwk 2wk 3wk 4wk 1wk 2wk 3wk										1wk 2wk 3wk 4wk after	Remark
-1 To condu	uct training of ATC officers on	Р												
aerodror	me, approach and area control services	A												100%
	3rd Tr ATC Training in MAvA	PC P 10												
	2.5 M (2016 July Group)	A 10 done												_
	3rd Tr ATC Training in MAvA	PC P 8												
	2.5M (2016 Oct Group)	A 8 done												_
	Seminor F/U Training on AD Control	A1 P 18+												
40 T	0.5x4ds (changed Seminor)		no completed / no report)											
1-2 To condi	uct OJT instructor training for selected	P A												100%
ATCOM	3rd Tr OJT-I Training in MAvA	PC P 6	5/819											100%
	2wks (2017 May Group)	A 6	▼done (1ATC	1										
	3rd Tr TF-1 Management Training		5/812	7										
	1wk in MAvA	A 6	▼done (6 TF)										
1-3 To condi	uct instructor training for simulator	P	▼ dolle (0 11)										
trainers		A												100%
Halliers	3rd Tr GIT Training in MAvA	PC P 8												10070
	1wk (2017 Feb Group)	A 8 done												
		PC P 8+												
	1.5wk for Radar Sim Approach	A 8				▼8/212	9 (4 MAvA)							
		PC P 8+				7 0/21 2								
	1.5wk for Radar Sim En-route	A 8				▼8/212	9 (4 MAvA)							
1-4 To review	w and if necessary improve	P				¥ 0/21 2	. (+ 1415 to 1 t)							
	on Manuals	A												40%
	Meeting Operation Manual review	A1 P 18+												
	1d x1 Working Group formation	A 8 done (n	no report)											
	Others Expert Reporting Session for					2days								
	2days O/M Review	A 8				8/14 (0.5d / no	completed) cate	:h-up						
	W/S Workshop on Operation	A1 P all				(, , ,		2days		2days			
	2ds x2 Manual Review	A							1		,			
	Seminar Presentation seminar on	A1 P all											18/4	
	1day result of O/M review	A												
1-5 To condi	uct OJT on aerodrome, approach and	Р												
area con	ntrol services	Α												20%
	Lecture OJT-Instructors Training	A1 P 6+				1week								
	1wk	A 5				▼8/711								
	W/S Workshop on OJT-I Material	A1 P 6+							1week					
	1wk and Training Plan Dev.	A												
	Observ Observation of OJT by CP	A1 P 6+									1week		18/4	
	1wk Instructors	A												
1-6 To procu	ure aerodrome simulator	P												
		A												100%
	Others Planning of Aerodrome	PC P N/A				TV +stand								
	3d x1 Simulator Installation	A N/A			▼:	7/27 ▼ 8/	30-9/1							
	Lecture User Training on Aerodrome	PC P 8+1					2days x2							
	2d x2 Simulator	N A 8					▼9/4-5							
	Lecture Maintenance and Operation						1day							
	1day Training on Aerodrome Sim						▼9/6-7							
1-7 To condi	uct simulator trainings	P												
		A												40%
	Lecture Aerodrome Simulator	SE P 8+					1week x				1week			
	1wk x4 Trainer's Training (4 times)	A 13					▼9/12-15 & 9)/18-10/6 (x3)						_
	W/S Workshop on Simulator Tr's										1week			
	1wk Material & Training Plan Dev	A												_
	Observ Observation of Aerodrome	SE P 8+									1week			
	1wk Simulator by CP Trainers	A												

Autority Transport		PFY2017	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2018 Jan	Feb	Mar	
Activity Type Sub-Activity 1-1 To conduct basic training on contingency plan	Ex P/A :	# befor 1wl	CZWK 3WK 4WK	TWK 2WK 3WK 4WK	TWK 2WK 3WK 4WK	TWK 2WK 3WK 4W	TWK 2WK 3WK 4WK	Twk 2wk 3wk 4wk	Twk 2wk 3wk 4wk	Twk 2wk 3wk 4wk	TWK 2WK 3WK 4WK	TWK 2wk 3wk 4wk	Twk 2wk 3wk 4wl	1wk 2wk 3wk 4wk after	r Remar
1-1 To conduct basic training on contingency plan	A														70%
Training Contiengency Basic Training		2													
0.5day		2 done													_
1-2 To improve the draft contingency plans	Р														
	Α														100%
TAN Draft Contiengency Plan	CP P														
Baseline	Α														_
·	A2 P 2		4/19-21												
3days	Α			0.5day / no report)											_
·	A2 P a		▼4/20 (0) Edou)											
1-3 To conduct exercise of contingency procedures	P	ſ	▼ 4/20 ((J.Suay)											
1-5 To conduct exercise of contingency procedures	A														50%
W/S Workshop on CP Exercise	A2 P 2	2+	4/713											18/4	
1d x2 (title/term changes)	A		▼4/18 (0.5da	y)											
1-4 To request approval of CAA on the contingency	Р		,	ĺ											
plans for implementation	Α														100%
	A2 P 2					∇									
1day process for CP (changed)	Α	?				▼7/? (0.5da)	/ no report)								
2-1 To obtain necessary knowledge of SMS	Р														
TAN CAE CMC	A	2													100%
TAN SAF-SMS Baseline in EUROCONTROL		2													
	PC P														
1wk in EUROCONTROL		2 done													
	PC P					7/37									
1wk in EUROCONTROL	Α					▼done (1 Safety)									_
		2				, ,,,									
1wk in EUROCONTROL	A	2 done													_
Training Follow-up training on SMS	A2 P 2	2+	∇			∇									
1d x2	Α	1	▼4/12 (1hr /	no report)		▼7/26 (1hr / no report)								
2-2 To develop and update SMS Manual	Р														
	A														100%
	CP P														
Baseline wi/o attachment W/S Study on SMS	A2 P 2).				∇									_
1day Implementation	A						0.5day / no report)								
	A2 P 2					▼ 1/21 (0.5day / Ho report)		▽10/2-						
3days Manual	A						7/31 (0.5day / no repo	ort)	10/2						
	A2 P a					∇									
1day SMS Manual	A 1	15					▼8/3 (0.5day)								_
2-3 To establish risk management process	Р														
	Α														0%
	PC P														add
1wk in EUROCONTROL	A														at JC
	PC P														add
1wk in Moscow? TAN (No ATC2 Expert activities)	CP P	4													at JC
(NO ATOZ EXPERT ACTIVITIES)	A														
2-4 To implement safety risk management and	P														
safety assurance	A														25%
	A2 P 2	2+	∇4/5-11												
5days Factors (changed title)	Α	3	▼4/10-14 (ne	ed F/U by IANS train	ning)										
W/S W/S on Runway Safety	A2 P 2	2+	· ·						▽10/5-6					▽	
1dx2 Program	Α														
-5 To conduct SMS training and education	Р														
for ATC officers	A														70%
	CP P														
Baseline Module 1-5 to DYU & LBD	A	2													
	PC P						 7/31-8/4 (SMS ToT in	AL A)							add
1wk in Swan Aviation in KZ TAN (No ATC2 Expert activities)	CP P	4				V	101 6W6) #10-101	ALA)							at JC0
UNO ATUZ EXDERT ACTIVITIES)															

1	JPFY2017 Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2018 Jan	Feb	Mar	_
Activity Type Sub-Activity	Ex P/A # befor 1wk 2wk 3wk 4v	vk 1wk 2wk 3wk 4wk	1wk 2wk 3wk 4w	k 1wk 2wk 3wk 4w	k 1wk 2wk 3wk 4w	k 1wk 2wk 3wk 4wk	1wk 2wk 3wk 4wl	1wk 2wk 3wk 4wl	1wk 2wk 3wk 4wk	1wk 2wk 3wk 4wk	1wk 2wk 3wk 4wl	1 1wk 2wk 3wk 4wk aftr	er Rer
To conduct basic training on AIS	P A												140
3rd Tr AIS Basic Training	PC P 4												
3wks in GroupEAD (same as 3-2													(1
3rd Tr SAR Training	PC P 4												
2wks in MAvA	A 4					▼9/25-1	0/9 (1AIS+3ATC)						(4
W/S W/S on SAR coordination	IS P 4											∇	
4days manual development	A												Ad
Exerice SAR Coordination Exercise												∇	at
2days	A												!
Seminar on SAR	IS P All											∇	
1day Coordination Manual	A												
To conduct basic training on aeronautical	P											4	40
charts 3rd Tr AIS Basic Training	PC P 4												10
3wks in GroupEAD (same as 3-1													
W/S Catchup exercise on													
	IS P 4												
5days Aerodrome Chart drawing-													
W/S Catchup exercise on 2wks Aerodrome Chart drawing-						0/4 (OID/OTAD 14/0	0.041/(000)						
To develop operation manuals for NOTAM,	2 A 4				▼ 8/21-	9/1 (SID/STAR, WG	iS-84,VISIO)						
AIC and AIP	A												50
Seminar Aeronautical Information	IS P all												
1day Service(AIS) Seminar W/S NOTAM & AIP Procedure	A done (no report)				4days			4days					
4ds x3 Manual Development W/S					▼8/711			4uays				-	
To conduct basic training on	P P				₩ 0/111								
flight procedure design	A											1	10
Training Training on basic PANS-	FP P 4 4/10	5/23											
6wks OPS FPD	A 4 ▼4/12	5/24											
To conduct OJT of flight procedure designers		0/2 :											
for a model airport	A												30
Others WGS-84 data survey	PC P 4	5/29-	6/9										
2wks (Step-1)	FP A 2		▼ 6/69										
OJT WGS-84 data survey	PC P 4					9/130							
4wks (Step-2a/2b + Maps)	FP A 2					▼9/422							
Others WGS-84 data survey	CP P 4					UTDQ UTD	DL				∇	18/	1/4
(Remort oversight)	CP P 4 FP A 2					▼9/13 ▼9							
OJT OJT on FPD	FP P 4							11/1	12/15				
6+1wks in DYU	A												
Observ Observation for FPD	FP P 4										2/1	-3/2	
2wks in DYU	A												
CP-T Jp PBN IFPD in Japan	PC P 2		6/17	7/29									
1.5M	A		▼(done	1AIS+1ATC)									
Seminar PBN Introduction Seminar	FP P all		,					∇					
0.5day	A												
To produce draft of AIP of the model airport	P												
	A												09
W/S AIP design Exercise on	IS P 7											18/	/4
5days Dushanbe Airport	FP A												
Seminar Seminar on AIP developme												18	1/5
0.5day completion	FP A			1								1.0	

Monitoring Sheet Summary Version 4



The Joint Monitoring, for "The Project for Capacity Development in Air Traffic Services" in Tajikistan

Ver. 4.0

Dushanbe, 29 September 2017





Sheraliev Bakhtyor Hideo Watanabe
Project Manager / TF-2 Leader Project Chief Advisor / TF-1/2 Expert
SUE "TAJIKAIRNAVIGATION" ATCA-Japan

Tamanani Orita

Tomonori Orita Project Coordinator JICA



Monitoring Sheet Summary (Ver. 4.0)

1. Introduction

The Monitoring (Ver.4.0) from 1st April 2017 to 30th September 2017 was jointly conducted by TAN and JICA with the following objectives:

- (1) To monitor a progress and operational efficiency of the Project in accordance with AWP-2017(V.1.0) indicating the percentage of progress in each activity at the timing of the end of September 2017.
- (2) To provide an actual situation and future prospective of the Project to stakeholders.
- (3) To judge propriety of existing PDM, PO and line up of sub-activities for remaining Project term.

2. Outline of Project Activities

There are 22 various activities related to 3 Outputs in the PDM of this Project structure. All activities could be categorized (A), (B) and (C) from an objective point of view in the outcomes, and each Outputs also could be resolved into several technical subjects as given Table-1 below. The Blue Highlighted activities in the table were newly added at JCC/2.

_			
Та	h	e-	

				Activities by Ja	apanese Expert	Procurement
			Trainings abroad	Training of Trainers /	Improving Procedures,	Support for
				Capacity Development	Manuals & Regulations	Aerodrome Sim.
C	р	Technical subjects Category	(A)	(i	B)	(C)
1		Improving ATC Operation	1-1 ATCs (18)		1-4 review manuals	
		OJT Instructor's Training	1-2 OJT-Instructor (6)	1-5 OJT-I ToT		
			1-2 TF1-Mangment (6)			
		Aerodrome Simulator	1-3 GIT (8)	1-7 Sim trainers ToT		1-6 Simulator
		Trainer's Training		(1-3 MAvA Experts)		
2		Contingency Plan		2-1-1 Basic Training	2-1-2 draft improve	
		(CP)		2-1-3 Exercise	2-1-4 CAA approval	
		Safety Management System	2-2-1 SAF-# (2+1+2)	2-2-5 SMS trainer	2-2-2 SMS Manual	
		(SMS)	2-2-3 R/M, I-INV (1+2)		2-2-3 Risk Management	
			2-2-4 HF training (1)		2-2-4 Improve R/M&S/A	
			2-2-5 SMS ToT (2)			
3		Aeronautical Information Services	3-1 AIS basic (2)	3-1 SAR	3-3 Procedure Dev. AIP	
		(AIS)	3-1 SAR training (4)		3-6 Develop draft AIP	
		Flight Procedure Design	3-2 Aero Chart (2)	3-4 Basic Training		
		(FPD)		3-5 OJT FPD/ WGS84		

The category (B), "Training by Japanese Expert" activities which will be implemented by Japanese Expert team are primary components of this Japanese ODA Project. However, providing opportunity of ICAO autholized trainings abroad as the category (A) is not less significant than others, because an essential knowledge in line with ICAO standard and regulations is a precondition of receiving Japanese Expert's trainings in accordance with structure of the Project. In general, at an early phase in the Project, all activities in the PDM and PO ought to be resolved into specific sub-activities on an Inception Report by the Expert team, and accurately indicate terms and schedules of each sub-activities into the Annual Working Plan (AWP).

Due to a unique structure of the Project mentioned above, it was premature to determine the detail of sub-activities under the (B) as "Training by Japanese Expert" at the moment of JCC/1 in 27 April 2016 before finalizing the activities of the (A) as "Trainings abroad". This is the reason why many activities in the category (B) have not been activated before December 2016.

As this report clarifies the progress of activities from April to September in 2017 in accordance with AWP-2017 (ver.1.0) and Sub-Activity Plan (agreed on JCC/2), Project has been making good progress on the (A) as "Trainings abroad" activities in each Outputs same as last monitoring period. Remaining activities in this category are several additional trainings abroad which were newly approved at JCC/2.

The 1-6 "AD simulator procurements" in category (C) was successfully completed in September 2017.

The various progress of category (B) as "Activities by Japanese Expert" for three Outputs are reported by the paragraph 6 in this report.



3. Progress of Inputs

All inputs by TAN and JICA were successfully done in accordance with PDM as tables below.

(A) Training abroad

			TAN	Projec	t Input (USE)/EUR)	Com	pletion Dat	e of Check	points (from	Apr 2016	to Sep 20)17)
			side	Tuition	Air Ticket	Others	Selection	Eng-CHK	Paid	VISA	Dept.	Training	Report
			input	Fee	Insurance	wo/VISA	by TFs	by Expert	Tuition-F	Obtained	Briefing	Start	Session
1	1-1	ATC Jul	10 ATC	\$74,394	\$11,313	\$23,828	26 Apr	25 Apr	7 Jun	29 Jun	14 Jul	27 Jul	7 Oct
		ATC Oct	8 ATC	\$60,750	\$12,671	\$16,000	17 Jun	17 Jun	19 Aug	21 Jun	7 Oct	18 Oct	13 Jan
	1-2	OJT-Inst	6 ATC	\$10,600	\$7,500	\$13,260	28 Oct	29 Oct	29 Nov	N/A	22 Dec	9 Jan	27 Jan
	1-3	GIT/BIT	8 ATC	\$7,359	\$10,000	\$9,840	28 Oct	29 Oct	19 Nov	N/A	22 Dec	13 Feb	24 Feb
	1-3	TF1-Mgr	6 ATC	\$3,900	\$9,100	\$10,631	10 Apr	N/A	18 Apr	20 Apr	25 Apr	8 May	19 May
2	2-2-1	SAF-SA1	2 Safe	€3,000	\$2,093	\$2,854	26 Apr	N/A	5 Aug	31 Aug	7 Oct	17 Oct	13 Jan
		SAF-INV	2 Safe	€3,000	\$1,992	\$2,846	26 Apr	N/A	7 Jan	27 Feb	30 Jan	20 Mar	31 Mar
		SAF-SA2	1 Safe	€1,500	\$1,236	\$1,375	26 Apr	N/A	18 May	21 Jun	31 May	3 Jul	26 Jul
	2-2-5	SMS-ToT	2 Safe	\$908	\$722	\$2065	21 Jul	N/A	31 Jul	N/A	24 Jul	31 Jul	11 Aug
3	3-1/2	AIS Basic	4 AIS	€22,680	\$3,251	\$15,784	8 May	N/A	7 Oct	11 Aug	9 Aug	15 Aug	7 Oct
	3-1	SAR Adm	4 AIS	\$6,812	\$6147	\$9,869	27 Jul	28 Jul	4 Aug	23 Aug	7 Sep	25 Sep	T.B.D.

^{*}Project Coordinator has reported more detail of administrative issue on "Training abroad" by "Project Progress Report" in Japanese.

(B) Training by Japanese Expert

Ор	TAN side input	JICA side input by Expert Team in JPFY2017 (from April 1st, 2017)
1	Taskforce-1 Leader, Sub-leader and CPs	Chief Advisor / New ATC-1 Expert, AD Simulator Training Expert
2	Taskforce-2 Leader, Sub-leader and CPs	ATC-2 Expert (same as New ATC-1 Expert)
3	Taskforce-3 Leader, Sub-leader and CPs	New AIS Expert, FPD Expert

^{*}All sub-activities and actual assignment terms are mentioned in Monitoring Sheet-2.

(C) Procurement Support Aerodrome Simulator

1-7	aromonic capporer toroaromic ci	
	TAN side input	JICA side input
Equipment	(UPS and air conditioner till July 2017)	Aerodrome Simulator System / 340,000USD was installed in August 2017
		3 set of 55" 4k UHD TV and stand were procured Project Coordinator in July 2017
Facilities	Simulator Room with furniture in ACC	1 UPS for TV, HDD, backup note-PC, power cables, cable rack by Project Coordinator
Input data	AIP, Photo for 4 airports and drawings	Detail of "Master" display configurations
On-site	N/A	"User Training on Aerodrome Simulator" 4-5 Sep. 2017
Trainings		"Maintenance and Operation Training on Aerodrome Simulator" 6-7 Sep. 2017
Others	N/A	Handover ceremony on 8th September 2017 (photos below)

*1USD=115.00JPY.



Photo of AD Simulator System Handover Ceremony

(D) Others

	TAN side input	JICA side input, under the JICA direct control
Human	New Project Director (DG)	Project Coordinator / Training Planning Expert: Total 182 days
Recourses	Project Deputy Director (1st DDG)	Contract Assistant: Total 182 days (till 23 September 2017)
	Project Manager (+TF-2 Leader)	Contract Driver with Rent-a-car: Total 182 days
	Interpreters	
Facility	Project office in TAN and utility charge	Project Web site (www.tj-ats.com)
	Expert desk in the simulator room	
	Meeting Venue for JCC/2	
Local	N/A	138,804USD (Under control of Project Coordinator) from April to Sep 2017.
Budget		Including all expenditure for Training abroad.



4. Progress Measuring Method

This was explained by Monitoring Report Summary (Ver3.0)

5. Achievement of the Project Purpose

It is premature to evaluate the achievement of the Project Purpose at this stage, but all sub-activities which was determined by Expert team as AWP-2017 (ver.1.0) and the latest version of Sub-Activity Plan at JCC/2 are harmonized reciprocally and aligned with three Project purposes accordingly by the Taskforces. Therefore, "%" progress indicators for achievement of the three Project purpose in Monitoring Sheet-1 is blank until reasonable verifiable indicators will be determined by Taskforces at JCC/3 in 2018 April.

6. Progress of Activities and Achievement of Output

This chapter are divided into three categories in dedicated tables. All activities in the tables have description of "Progress of Activities", "Achievement of Output", "Progress of Actions undertaken by JICA", "Changes of risks and actions for mitigation", and "Delay of work schedule and/or Problems" in highlighted red. The "Progress of Actions undertaken by TAN" is described above it as TAN, and a baseline as of April 2016 is mentioned under it as Torontomic actions three categories in dedicated tables. All activities in the tables have described with the schedule and/or Problems in highlighted red. The "Progress of Actions undertaken by TAN" is described above it as TAN, and a baseline as of April 2016 is mentioned under it as

(A) Trainings abroad

The activities in this category had almost completed by the end of March 2017. In this monitoring term, several remaining trainings and TF1 management training in MAvA were done successfully. An additional five trainings abroad which was newly added in TF-2 and SAR training in TF-3 are explained at paragraph (B) as light blue highlighted.

Table	-3		
			TAN Progress of Actions undertaken by TAN, if any.
	Trainings abroad	0/	Progress of Activities, Achievement of Output, Progress of Actions undertaken by JICA, Changes of risks and actions for mitigation, and Delay of work schedule and/or Problems, if any.
		%	BL Baseline by TAN as of April 2016, if any.
1	1-1 ATCs (18)	100	Completed.
	1-2 OJT-Instructor (6)	100	Completed.
	1-2 Management (6)		(Project invited 4 Malaysian instructors and taken advice for existing radar simulator trainings.)
	1-3 GIT (8)	100	Completed
2	2-2-1 SAF-# (2+1+2)	100	Completed
			BL Two (2) Safety officer had completed SAF-SMS training in 2015
	2-2-3 R/M	(B)	R/M and Incidental investigation trainings (add at JCC/2)
	2-2-4 Improve RM,SA	(B)	HF training (add at JCC/2)
	2-2-5 SMS ToT (2)	(B)	SMS trainer's training in Almaty (add at JCC/2) was completed successfully.
3	3-1 AIS basic (2)	100	An exercise part Aero Chart training (SID/STAR by VISIO) was filled by FPD expert in August 2017.
	3-1 SAR Admin.(2)	(B)	SAR Admin (ICAO #057A) was added at JCC/2 and completed training by MAvA in Sep-Oct 2017.
	3-2 Aero Chart (2)	100	



Photo of ATC Management Training in Malaysia



(B) Training by Japanese Expert

It is because the situation which was accounted for in Chapter-2 that the activities of this category have been making slow in the first Project year. However, several activities were progressed newly assigned experts within this monitoring term.

_		
Та	h	4۔4ا

Table	-4		
		%	TAN Progress of Actions undertaken by TAN, if any.
	Trainings by		Progress of Activities, Achievement of Output, Progress of Actions undertaken by JICA, Changes of
	Japanese Experts		risks and actions for mitigation, and Delay of work schedule and/or Problems, if any.
			BL Baseline by TAN as of April 2016, if any.
1	1-4 review manuals	40.0	TAN
			Follow-up trainings (Technical transfer by Japanese Expert for 18 MAvA trainees) for aerodrome,
	Including Follow-up		approach and ACC were canceled by ATC-1 Expert in April 2017.
	trainings in activity 1-1		Expert input session (report findings by observation in 2016 and analyzing all manuals in four airports)
			in 14 th Aug didn't fully cover the description on 1-4 in Sub-activity plan.
			PM and new ATC-1 Expert recovered it in 17-18 Aug and 25-29 Sep.
	1-5 OJT-I ToT	20.0	OJT-I trainers training with using JCAB OJT instructor handbook was completed by new ATC1 Expert.
	1-7 Sim trainers ToT	40.0	Basic AD Sim training (4days) and 3 times of AD Sim training (5days) were completed by Sim Expert.
2	2-1-1 Basic Training	70.0	If developed training material on CP will be used by TAN, remaining 30% will be completed.
CP	2-1-2 draft improve	100	W/S CP improvement (0.5day) and Seminar on CP completion (0.5day) were done by ATC-2 Expert.
	·		BL Draft CP (TAN) was 100% completed referred to the Annex11, Asia Pacific version by ICAO
			Bangkok, guideline of EUROCONTROL, India, Pakistan and Russian CPs at Project started
			timing.
	2-1-3 Exercise	50.0	CP exercise (0.5day) were done by ATC-2 Expert.
			If TAN conducts CP exercise in 2018, remaining 50% will be completed.
	2-1-4 CAA approval	100	TAN MOT approved CP on 25 th July 2017
			ATC-2 Expert monitored this progress for one day in July 2017.
2	2-2-2 SMS Manual	100	Study on SMS Implementation (0.5day), W/S on Development of SMS manual (0.5day) and Seminar
SMS			on SMS manual completion (0.5 day) were completed by ATC-2 Expert.
			BL Draft SMS Manual was 100% completed without attachment referred to Annex19, the Doc9859
			(Chapter-5) and Russian SMS at Project started timing.
	2-2-3 Risk	0	TAN Reporting System is developed by TAN
	Management		Additional two trainings abroad were approved by JICA at JCC/2.
			(No activity was planned in "AWP-2017" and "Sub-Activity Plan" by ATC-2 Expert)
	2-2-4 Improve	25.0	
	R/M & S/A		TAN requested JICA to add HF training abroad for optimizing ANSP.
			Several activities for a runway safety were planned in 2018.
	2-2-5 SMS trainer	70	TAN Module 1-5 for remaining two airports will be completed until July 2017.
			Module 6-9 will be convened one package to provide all airports within 2017 by safety staffs.
			Additional SMS Trainer's Training in Almaty (Swan aviation academy) is completed.
			(No activity was planned in "AWP-2017" and "Sub-Activity Plan" by ATC-2 Expert)
			BL Module1-5 training by safety staffs completed in DYU and LBD within 2017.
3	(3-1 AIS): 100%	140	Completed basic AIS training (100%)
	+SAR: 100%		On top of above, SAR activities were added in this sub-activity at JCC/2.
			SAR Admin (ICAO #057A) was added at JCC/2 and completed training by MAvA in Sep-Oct 2017.
	(3-2 Aero Chart)	100	FPD Expert conducted 2 weeks training for SID/STAR by VISIO using WGS-84 DYU map in Aug.2017.
	3-3 Procedure Dev.	50.0	· · · · · · · · · · · · · · · · · · ·
	NOTAM/AIP		NOTAM procedure was developed and started AIP part.
	3-4 Basic Training	100	FPD Expert conducted PANS-OPS FPD training in April to May 2017.
			4 AIS/ATC participants successfully obtained certification.
	3-5 OJT of FPD	30.0	WGS-84 survey (newly included Project activity in May 2017) was completed in DYU.
	3-6 Develop draft AIP	0	No Progress thus far.
	10 0 Dovolop diait All		ino i regress and rai.

Лоиҳа оид ба баланд намудани потенсиал дар самти хизматрасонии ҳаракати ҳавой Проект по повышению потенциала в сфере обслуживания воздушного движения The Project for Capacity Development in Air Traffic Services



(C) Procurement Support for the Aerodrome Simulator

The grant equipment of AD Simulator system was successfully handed over to TAN on 8th September. TAN is planning to divert this system to Radar Simulator Training in 2018.

Table-5

	Procurement Support for the Aerodrome Sim	%	Progre	Progress of Actions undertaken by TAN, if any. ess of Activities, Achievement of Output, Progress of Actions undertaken by JICA, Changes of risks ctions for mitigation, and Delay of work schedule and/or Problems, if any.
			BL	Baseline by TAN as of April 2016, if any.
1	1-6 Simulator	100	TAN	TAN side fulfilled their responsibility for receiving AD simulator system.
			for imp NTT-d trainin Projec	t procured 3 sets of 55" 4k UHD TV and stand in July and coordinate tax waiver custom clearance porting equipment in August 2017. lata Cooperation installed AD simulator system, then conducted "user training" and "maintenance g" successfully from August to September 2017. tt conducted hand-over ceremony in 8th September 2017.
			BL	TAN has "Master" radar simulator

7. Findings on Joint Monitoring

TF-1:

In responding TAN's additional training needs, Project had conducted TF-1 management training in MAvA for six managements with Ru/En interpreter, then Project invited 4 Malaysian MAvA Managements and radar simulator instructors to Tajikistan for accelerating TF-1 activities especially 1-4 and 1-7. Project expects that TAN and MAvA will have continually further cooperation in accordance with the MoU which was signed on further cooperation thorough this opportunity.

Monitoring found that an outcome 1-4 of 18 ATCs those who were trained by MAvA are still below expectation. Project is expecting that visible outcomes for improving ATC operation in four airports will be available within next monitoring period from three working groups on manual review.

The other activities, especially 1-6 and 1-7 were making steady progress during this monitoring period.

TF-2:

The "Contingency Plan" which was supported by Project was approved by CAA/MOT on 25th July 2017.

In accordance with TAN's requirement, JICA replaced several TF-2 Expert activities with additional trainings abroad at JCC/2 as listed below. Only SMS trainer's training was provided to two Safety officers at "Swan Aviation Academy" by Russian language in Almaty Kazakhstan during this monitoring period.

- 1) Incidental Investigation Course in Russian for two SMS officer
- 2) Trainer Course for trainers for SMS trainer in Russian for two SMS officer
- 3) Human Factors Course for optimizing ANSP in English for one SMS officer
- 4) Risk Management Implementation Course in English for one SMS officer

TF-3:

New AIS Expert successfully had recovered an activity 3-3 which was stuck from February 2017.

FPD Expert also recovered an activity 3-2 "catch-up exercise drawing-2" with using VISIO for teaching SID/STAR charts in Dushanbe aerodrome WGS-84 maps for adapting on expected outcome of TF-3 AIS/FPD activities. In this regard, JICA HQ allocated budget for implementing WGS-84 survey and map procurement in UTDD for obtaining appropriate outcomes from 3-3 to -6activities. Project is expecting that TF-3 will officially publish the actual AIP for the flight procedures of newly installed ILS system in RWY27 within next monitoring period.



JICA approved SAR activities in accordance with TAN's requirement at JCC/2.

Project coordinated to conduct ICAO #057A (SAR Admin.) training in MAvA for 1AIS and 3ATC officers from 25th September 2017. After completing this training, new AIS Expert will have remaining three activities for four officials on SAR in 2018.

8. Modification of the Project Implementation Plan

The indicator for newly added SAR in PDM was changed in accordance of discussion at JCC/2. TFs and Expert team slightly modifies the AWP-2017 (ver.1.0) and Sub-Activities Plan at PCM/6 on 25th September for harmonizing actual progress.

9. Preparation of TAN toward after completion of the Project

TAN is considering diverting this AD Simulator system to Radar training in 2018.

TAN had started to implement WGS-84 survey for three regional airports from September 2017.

Ministry of Transportation requested PBN-implementation Project to JICA on 31st August 2017.

TAN was planning to make an official request of the grant aid for UTDL new ATC tower constriction.



Table of abbreviations

Table of a	bbreviations		
	General		Monitoring Sheet-2
ACC	Area Control Center	A1	ATC-1 Expert
AIC	Aeronautical Information Circular	A2	ATC-2 Expert
AIP	Aeronautical Information Publication		Counterpart
	Aeronautical Information Services		FPD Expert
	Air Navigation Service Provider	IS	AIS Expert
	Air Traffic Controller		MAvA Expert
	Air Traffic Services		NTT-Data Corporation
	Air Traffic Flow Management Center		Project Coordinator
	Annual Working Plan		Aerodrome Simulator Expert
	Baseline	OL	Acrodionic officiator Expert
	Chief Advisor		
_	Civil Aviation Authority		
	•		LATA Aims and Carda
	Communication, Navigation and Surveillance Counterpart	DVIII	IATA Airport Code
	•		Dushanbe International Airport (D)
	Contingency Plan		Qurghonteppa International Airport (Q)
	Chief Representative	LBD	,
	Department of Civil Aviation	TJU	Kulob International Airport (K)
	Deputy Director General		
	Director General		Almaty
	European Bank for Reconstruction and Development		Dubai
	Flight Procedure Design	FRA	Frankfurt (Group EAD)
	Flight Progress Strip	KUL	Kuala Lumpur (MAvA)
	General Instructor Training	LUX	Luxembourg (IANS/EUROCONTROL)
	International Air Transport Association	TSE	Astana
ILS	Instruments Landing System		
ICAO	International Civil Aviation Organization		
JCAB	Japan Civil Aviation Bureau		
JCC	Joint Coordination Committee		
IFC	International Finance Corporation		
MAvA	Malaysia Aviation Academy		
NOTAM	Notice To Airmen		
ODA	Official Development Assistance		
OJT	On the Job Training		
O/M	Operation Manual		
os	Operating System		
	Procedure for Air Navigation Services Aircraft Operations		
	Performance Based Navigation		
	Project Coordination Meeting		
	Project Director		
PDM	Project Design Matrix		
	Plan of Operation		
	Project Manager		
	Quality Management System		
	Risk Management and Safety Assurance		
	Search and Rescue		
	Standard Instrument Departure / Standard Terminal Arrival Route		
	State Safety Program		
	Safety Management System		
	Tajikairnavigation		
	To Be Define		
	Taskforce-n Meeting		
	Terms of Reference		
	Training of Trainers		
	Transport Corridor Europe-Caucasus-Asia		
	VHF Omnidirectional Range / Distance Measuring Equipment		
	Work Shop		
VV/S	Work Shop		

List of Attachment

Attachment-A: Monitoring Sheet-1 (Ver. 4.0) Attachment-B: Monitoring Sheet-2 (Ver. 4.0)

Monitoring Sheet I Version 5

Monitoring Sheet-1 (Ver. 5.0)

IVIC	mitoring Sne	et-i (ve	er. 5.u)				
	Project Goal, Purpo	se and	Verifiable Indicators	Base line	Sub-activities (Bold is done)	Percentage of Achievement (%)	Progress
	Taskforces Activities		for three outputs	by CP's activities	CP side / 3rd Country Training by Project		Problem
							Remarks
	To improve Air	Indicaror:1					
		indicaror. i	ratings in line with ICAO standard	e through TAN'e			-
	or three outputs by CP 3 advises of provided and a control of the contingency plan and SMS of a Cauthy Training to Project of the contingency plan and SMS for ATC have been keep in operation. Indicancy Ind						
_	(ATS) III Tajikistati	l= di= = = = 0	The continuing training program.	ATC have been			
Overall Goal		indicaror:2		or ATC have been		- - -	
S <			kept in operation.				
0							
			been updated in line with ICAO st	andards.			
					as independent in caiga.ru Web site.		
	To enhance						
se	capacity of	as of April, 2016 apanese Expert Team side activities spring spring apanese Expert Team side activities spring spring apanese Expert Team side activities spring					
<u>6</u>	Tajikairnavigation	improve Air affice Services and Continuing training and Air Courts and Services (19) in Tayloidan (Indicance). All AIR Cofficers working at AIR continuing training program. Indicance (19) in Tayloidan (Indicance). All AIR Cofficers working at AIR continuing training program. Indicance (19) in Tayloidan (Indicance). All AIR Cofficers working at AIR continuing training to group (Indicance). All AIR Cofficers working at AIR continuing training training to severe (Indicance). All AIR Cofficers with the AIR Control (Indicance). All AIR Continuing training to severe (Indicance). All AIR Control (Indicance). All AIR Contro					
ın _c	(TAN) in Air Traffic	Indicaror:2	The contingency plan and SMS for	or ATC have been	CP and SMS Manual will be approved by		
Project Purpose	Services (ATS)				CAA.		
jec		Indicaror:3	The draft AIP of the model airport	has been	4 (FPs) and 1(WGS-84) AIP(AD) in		
J.			accepted as confirming to ICAO s	tandards by JICA	UTDD will be drafted by VISIO and Expert		
ш.					confirmed it as ICAO standard quality		
Op-1	To enhance canaci	ity of traini		ffices in line with			
1-1		of ATC	At least 80% of ATC officers/			55.6 100	Completed
						Cartificates 19/19: 1000/	Completed.
						Certificates 10/10. 100%	(AD E/LI training was abanged to a cominer)
					F/U Training on AD (4days)		
	services						(Other F/O trainings were canceled at JCC/2.)
			trainings successfully.				
						0 83.3 100 - - -	Completed.
		ATC			(TF-1 Management Training in MAvA)		
				K: 1			Completed.
	for simulator trainers	S		Q: 2	(3 rd Country Experts MAvA Rader Sim)	Certificates 8/8: 100%	
1-4	To review and if nec	essary		No. of Manuals	Mr. Gafarov reviewed few Manuals	0 20.0 40.0 50.0	Expert Reporting Session was conducted by
	improve Operation I	Manuals	reviewed and improved if	Common: 4	O/M Review W/G meeting (1day)		new ATC-1 Expert for 0.5days on 8/14.
			necessary	D: 14			Input catch-up on 9/27 (TWR/ACC observation)
			-	H:10	WS on O/M Review (2 days x 2): 0.5d		W/S (catch-up Input): 2018/1/23
				K: 7			Add ATS Capacity Survey (Not Complete)
				Q: 6	(F/U Trainings x3 from Activity 1-1)		Completion Seminar: change to 0.5 day W/S
1-5	To conduct O.IT on a	aerodrome	Fach of the O.IT instructors has	No. of O.IT-I	-		Used JCAB O.IT-I handbook (En)
				H·1			
	301 11003						(o days for o to 1 day for o only o 1 bb)
			oor vices at least 2 times.		O IT-I Training (1wk)		Catch-up W/S for improving Examination
				Q. 1		Implemented W/S: 20%	
							(2 days iii 20 10/0)
					Observation of Our by Of (TWK) Fallort		
1-6	To procure aerodror	no	Aaradrama simulatar has boon	Approach and	Provided all pages any data by CP		Completed
1-0	•	116					
	Simulator		орегацопат.		Prepared training room and 0P3		
					Discontinuo Olescolatare I. d. II. di . do .		One upon training was marged M/T training
						Completed Installation: 20%	F Problem Benerts in 2040/0
							o Froblem Reports in 2016/2
					Maintenance & Operation Training (2d)		
1-7	To conduct simulato	r trainings			-		Completed Expert Activity
			,				
			month.		Observation of Sim Training (1wk)		for 4 days in Sep.
				Q:1		CP's conducted 3 times/M: 30%	

OP-2	To enhance capacity of ATC of	officers with regard to ICAO reco	mmendations			
		2 ATC officers have completed	0	<u> -</u>	70.0 70.0 70.0 70.0	
	contingency plan	basic course on contingency plan		Basic Training on CP (0.5 day)	Implemented basic training: 70%	
		successfully.		, , , , , , , , , , , , , , , , , , ,	Training material reused by CP: 30%	
2-1-2	To improve the draft	Exercise of contingency	Draft was	Initial Draft completed by TAN	0 0 100	Completed
	contingency plans	procedures has been conducted	completed 100%	W/S on CP Improvement (3 days) :0.5 d	Implemented W/S: 50%	'
	3 , .	successfully.		Seminar CP Completion (1 day) :0.5 day	Implemented Seminar: 50%	
2-1-3	To conduct exercise of	1	0	-	0 25.0 50.0 50.0	TAN is planning to have 2 nd CP Exercise in
	contingency procedures			W/S on CP exercise (1 day x2) :0.5 day	Conducted exercise by Expert: 50%	2018/5/4
					Conducted exercise by CP: 50%	
2-1-4	To request approval of CAA on	The contingency plans have	0	-	0 0 100	Completed
	the contingency plans for	been approved by CAA for		Monitoring on approval process (1d) 0.5	TAN finalization: 25%	MOT approved CP on 7/25
	implementation	implementation.			MOT approval: 50%	
2-2-1	To obtain necessary	2 ATC officers have completed	0	SAF-SA1:2, -SA2:1, -INV:2 (1wk each)	0 80.0 100	Completed
	knowledge of SMS	courses on SMS successful.		F/U Training on SMS (1day x2)	Certificates: 100%	
	To develop and update SMS	SMS Manual has been	Draft was	Initial Draft completed by TAN	0 0 100	Completed
	Manual	developed and updated		Study on SMS Implementation(1day):0.5	0 0 190	Completed
		as to to to pour and appeared			Conducted F/U trainings: 10% x2	
			in 2016/4	W/S on Dev. SMS Manual (3days) :0.5d	Implemented W/S: 40%	
				Seminar on completion SMS(1day) :0.5d	Implemented Seminar: 40%	
2-2-3	To establish risk management	Risk management process has	0	TAN is developing Reporting System	0 0 0 50.0	Two trainings abroad were approved at JCC/2
	process	been established		R/M training abroad (CHG visit Ru)	TAN's reporting system working: 50%	(VOICE seminar (No AWP) done 2017/10)
	p. 55555			Incidental-INV training abroad (in Ru)	RM training abroad: 25%	RM Training: Replaced by Visit Rus ANSP
				(No ATC-2 Expert activities)	Incidental training abroad: 25%	Incidental-INV Training: Done
2-2-4	To implement safety risk	Safety risk management and		HF training in abroad (add at JCC/2)	0 0 25.0 50.0	Due to the contents of basic HF training, TAN
	management and safety	safety assurance have been		Training on Basic Human Factors (5d)	Implemented Basic HF Training: 25%	requested additional training abroad in IANS at
	assurance	implemented		W/S on Runway Safety (2day x4): 0.5dx2	HF training abroad Certificate: 25%	JCC/2. JICA approved additional budget for it.
	assurance	Implemented		W/S off Ruffway Safety (2day x4). 0.3dx2	Implemented RWY Safety WS: 25%	SAF-HFA in IANS: June 2018
					Audit was conducted by TAN: 25%	RST Meeting by CAA: done
2-2-5	To conduct SMS training and	SMS training and education for	D: 75, H: 37	Conducted training Mod. 1-5 in D&H	10.0 10.0 70.0 70.0	Additional SMS ToT in Ru was done
	education for ATC officers				SMS ToT abroad :60%	Module 1-5 by TAN for KQT and TJU: 2017/6
	education for ATC officers	conducted	Mod 1-5 finished	(No ATC-2 Expert activities)	Conducted Tr. Mod.1-5: 5% x4 airports	Module 6-10 by TAN for DYU: 17/12, LBD:17/7
			in D and H	(NO ATC-2 Expert activities)	Conducted Tr. Mod. 1-5: 5% x4 airports	Moddle o To by TAIN for BTO. TITTE, EBB. TITT
On-3	To enhance canacity of Aeron			egard to ICAO recommendations	Conducted 11: Mod.0 3: 370 X4 airports	
		2 AIS officers have successfully		4 AIS to GroupEAD (3wks) /Jul 2016	100 100 140	Completed (AIS part) / Total 200%
	AIS	completed basic course on AIS.			AIS Basic Certificate: 100%	Additional SAR Admin in MAvA was done
	AIS	completed basic course on Als.			SAR: 100% (C/40, W/20, E/20 S/20%)	Additional SAR activity were added by JCC/2
3-2	To conduct beside toolining on	2 AIS officers have successfully		SAR W/S, Exercise and Seminar	20.0 60.0 100 - - -	Completed
	To conduct basic training on aeronautical charts	completed basic course on		4 AIS to GroupEAD (3wks) / Jul 2016		SID/STAR, WGS-84 (DYU), VISIO in drawing-2
	aeronauticai charts	aeronautical charts.		Catab un avancia a duavrina d'Eda)	Certificates: 20%	was done by FPD Expert on August
		aeronauticai charts.		Catch-up exercise drawing-1 (5ds)	Conducted exercise drawing-1:40%	was done by FPD Expert on August
3-3	To develop eneration manuals	Operation manuals for Notice to		Catch-up exercise drawing-2 (5ds):2wks	Conducted exercise drawing-2:40% 0 20.0 50.0 100 - -	Completed
				AIC Compiner (4 doub		Completed NOTAM-P was developed by new AIS Expert
		Airman (NOTAM), Aeronautical Information Circulars (AIC) and		AIS Seminar (1day)	Implemented Seminar: 10%	
	Aeronautical Information	Publication (AIP) have been		NOTAM/AIP Pro. Dev W/S-1 (4day)	Implemented W/S: 10% x3	AIP(AIC) procedure was started Need 2 days for AIS road map in April 2018
	Circulars (AIC) and				Developed NOTAM Procedure: 20%	Need 2 days for AlS road map in April 2016
	Publication (AIP)	developed			Developed AIP(AIC) Procedure: 40% 0 0 100	Completed
.5-4	To conduct basic training on	2 flight procedure designers have		FPO with 1PC +2VISIO by TAN in 2017/8		Completed 5 ED Designers were contified
-	flight propodure decima	augacafully consisted thest		Training on Basic PANS-OPS FPD (6wk)	Conducted Training: 100%	5 FP Designers were certified.
-	flight procedure design	successfully completed basic		manning on Duois 17 are of 0 11 D (only)	Ŭ	In attanded DDN/LEDD) in TIC on 2017/0
	3	course on PANS-OPS.		, ,	0 0 20 440	2 attended PBN(I-FPD) in TIC on 2017/6
3-5	To conduct OJT of flight	course on PANS-OPS. 2 flight procedure designers have		WGS-84 in 3 regional airports by TAN	0 0 30 140	Completed (OJT part) / Total 200%
3-5	To conduct OJT of flight procedure designers for a	course on PANS-OPS. 2 flight procedure designers have successfully completed OJT on		WGS-84 in 3 regional airports by TAN WGS-84 survey DYU (add at April 2017)	WGS-84 in DYU:30%	Completed (OJT part) / Total 200% Pre-survey UTDT/K/L by TAN : Done
3-5	To conduct OJT of flight procedure designers for a	course on PANS-OPS. 2 flight procedure designers have successfully completed OJT on conventional flight procedure		WGS-84 in 3 regional airports by TAN WGS-84 survey DYU (add at April 2017) OJT on FPD (7wks)	WGS-84 in DYU:30% Conducted OJT:40%	Completed (OJT part) / Total 200% Pre-survey UTDT/K/L by TAN : Done Supplementary OJT for 2 weeks in 2018/2
3-5	To conduct OJT of flight procedure designers for a	course on PANS-OPS. 2 flight procedure designers have successfully completed OJT on		WGS-84 in 3 regional airports by TAN WGS-84 survey DYU (add at April 2017) OJT on FPD (7wks) Observation for FPD (2wks): 4wks	WGS-84 in DYU:30% Conducted OJT:40% Conducted Observation: 20%	Completed (OJT part) / Total 200% Pre-survey UTDT/K/L by TAN: Done Supplementary OJT for 2 weeks in 2018/2 Visit Russia Contractors, Kyrgyz: Done 2018/3
3-5	To conduct OJT of flight procedure designers for a	course on PANS-OPS. 2 flight procedure designers have successfully completed OJT on conventional flight procedure		WGS-84 in 3 regional airports by TAN WGS-84 survey DYU (add at April 2017) OJT on FPD (7wks) Observation for FPD (2wks): 4wks PBN introduction Seminar (0.5dayx1)	WGS-84 in DYU:30% Conducted OJT:40% Conducted Observation: 20% PBN Seminar: 10%	Completed (OJT part) / Total 200% Pre-survey UTDT/K/L by TAN: Done Supplementary OJT for 2 weeks in 2018/2 Visit Russia Contractors, Kyrgyz: Done 2018/3 Expert FPD-QA Training: 2018/8?
3-5	To conduct OJT of flight procedure designers for a model airport	course on PANS-OPS. 2 flight procedure designers have successfully completed OJT on conventional flight procedure design.		WGS-84 in 3 regional airports by TAN WGS-84 survey DYU (add at April 2017) OJT on FPD (7wks) Observation for FPD (2wks): 4wks PBN introduction Seminar (0.5dayx1)	WGS-84 in DYU:30% Conducted OJT:40% Conducted Observation: 20% PBN Seminar: 10% QA, GV/FV (Visit 40, TR40, ICAO20)	Completed (OJT part) / Total 200% Pre-survey UTDT/K/L by TAN: Done Supplementary OJT for 2 weeks in 2018/2 Visit Russia Contractors, Kyrgyz: Done 2018/3 Expert FPD-QA Training: 2018/8? ICAO FPD-QA Training 2018/7?
3-5	To conduct OJT of flight procedure designers for a model airport To produce draft of AIP of the	course on PANS-OPS. 2 flight procedure designers have successfully completed OJT on conventional flight procedure design. Draft of Aeronautical Information		WGS-84 in 3 regional airports by TAN WGS-84 survey DYU (add at April 2017) OJT on FPD (7wks) Observation for FPD (2wks): 4wks PBN introduction Seminar (0.5dayx1) FPD-QA, GV/FV, ICAO Training in China	WGS-84 in DYU:30% Conducted OJT:40% Conducted Observation: 20% PBN Seminar: 10% QA, GV/FV (Visit 40, TR40, ICAO20) 0 0 0 0 0	Completed (OJT part) / Total 200% Pre-survey UTDT/K/L by TAN: Done Supplementary OJT for 2 weeks in 2018/2 Visit Russia Contractors, Kyrgyz: Done 2018/3 Expert FPD-QA Training: 2018/8?
3-5	To conduct OJT of flight procedure designers for a model airport	course on PANS-OPS. 2 flight procedure designers have successfully completed OJT on conventional flight procedure design.		WGS-84 in 3 regional airports by TAN WGS-84 survey DYU (add at April 2017) OJT on FPD (7wks) Observation for FPD (2wks): 4wks PBN introduction Seminar (0.5dayx1)	WGS-84 in DYU:30% Conducted OJT:40% Conducted Observation: 20% PBN Seminar: 10% QA, GV/FV (Visit 40, TR40, ICAO20)	Completed (OJT part) / Total 200% Pre-survey UTDT/K/L by TAN: Done Supplementary OJT for 2 weeks in 2018/2 Visit Russia Contractors, Kyrgyz: Done 2018/3 Expert FPD-QA Training: 2018/8? ICAO FPD-QA Training 2018/7?

Monitoring Sheet II Version 5

AWP-2017 / Monitoring Sheet-2 (Admin.)

					Y2017		May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2018 Jan	Feb	Mar	
					befor			1wk 2wk 3wk 4wk	1wk 2wk 3wk 4wk	1wk 2wk 3wk 4wk	1wk 2wk 3wk 4wk	1wk 2wk 3wk 4wk	1wk 2wk 3wk 4wk	1wk 2wk 3wk 4wk	1wk 2wk 3wk 4wk	1wk 2wk 3wk 4wk	1wk 2wk 3wk 4w	_
Project	JCC/n			Plan		▽ 4/17(4/16?
Meeting		ordination Committee		Actual			▼:	5/26 (Postponed due	e to delay on TF1 acti	ivity)								
	PCM/n			Plan			▽5/19 (∇							
		Coordination Meeting		Actual			▼5/19 (PCM/4) ▼6/20 (PCM/5)		▼9	/25 (PCM/6)					▼3/9 (PCM/	7)
	TF1M/n			Plan		∇												
		ce-1 Meeting		Actual						ΓF1M/4) ▼ ▼	▼ (TF1M/5,6 and 7	▼10/9 (TF1M/8)	▼13 (9) ▼	▼(10-11) ▼ (TF1I	M/12)	▼ ▼ ▼(TF1M13	3-15)	
	TF2M/n		A2	Plan		∇			∇									
		ce-2 Meeting		Actual		▼ 4/21(▼ 7/24 (TF2M/5) ▼ 8/17 (▼10/9 (TF2M/7)				▼ 2/2 (TF2M/8)		
	TF3M/n			Plan			∇				∇			∇		∇		
		ce-3 Meeting		Actual		▼ 4/17(TF3M/3)	▼ 6/8 (TF3M	/4)	▼ 8/23 (TF3M/5) ▼9	/27 (TF3M/6)	▼11/21	▼12/11 ▼20 (TF3	BM/7-9 ▼(10 & 11) ▼	▼ 2/1(TF3M/12)	▼ 3/6(TF3M/13)	
	Other M	eetings	-	Plan														
				Actual														
Monitor	Joint Mo	nitoring		Plan														
				Actual							▼ 9/11-22					▼ 2	2/263/6	\perp
Reporting		Monitoring Report		Plan							∇						∇	
	team	(Summary, Sheat-1/2)		Actual			▼5/19 (2016/2H)			▼ 9	9/25 (2017/1H)					▼	4/3(2H)
		Inception Report	A1	Plan														
				Actual														
	PC	Project Progress Report	-	Plan		∇					∇						∇	
		(Administrative part only)		Actual		▼4/4					▼ 9							3/28
		Quatary Accounting Report	PC	Plan		∇			∇			∇			∇		∇	
				Actual		▼3/31						▼ 10/2			▼ 1/4		▼	3/27
		Business Trip Report		Plan				∇										
				Actual					▼ 7/19 (▼10/12 (JIC.						
Expert	TF-1	Cheif Advisor / ATC-1 Exp.	A1	Plan	3/27	4/2	28			2 weeks			2 weeks		2 weeks			2wks
team		Mr.Watanabe		Actual					7/22			10/10 (additional)	11/18		1/20	2/4		
		Simulator Expert		Plan							9/3			12/1	31			
		Mr. Sakae		Actual							9/2	10/10	11/1226	(-2wks, pre-loaded)		2/418 (+2w	ks, additional)	
	TF-2	ATC-2 Expert		Plan		4/2	28		7/1021									
		Mr. Watanabe		Actual		4/54/22				8/19 (ma	arged New ATC-1 E	expert)						
	TF-3	AIS Expert		Plan						8/115			2weeks					2wks
		Mr.Sukegawa		Actual						8/58/25				L	1/728 (+	-1wk, postphoned)		1
		FPD Expert	FP	Plan			5/26			**				12/21		2/2		6wks
		Mr.Yamane		Actual				6/10		8/20		9/29 10/3	31	12/22	1/3	1	-3/9 (+1wk)	
JICA PC	PC	Project Coordinator	-	Plan		/one year-	>											
		Mr.Orita	_	Actual					5-7/2 (leave)			10/6-29 (home leav	re)	12-2	24-1/7 (leave)			\perp
Mission	JICA HO) mission		Plan			5/2327											4/?
				Actual		1	5/24-27											

		JI	PFY20	017 Ap	or May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2018 Jan	Feb	Mar		
F	Activity Type Sub-Activity E	P/A	# be	efor 1wk 2wk 3	3wk 4wk 1wk 2wk 3wk 4wk	1wk 2wk 3wk 4wk	1wk 2wk 3wk 4wk	k 1wk 2wk 3wk 4wk	1wk 2wk 3wk 4wk	1wk 2wk 3wk 4wl	k 1wk 2wk 3wk 4wk	1wk 2wk 3wk 4wl	1wk 2wk 3wk 4wl	1wk 2wk 3wk 4wk	1wk 2wk 3wk 4wk aff	er l	Remarks
	To conduct training of ATC officers on	Р															
_ 2	aerodrome, approach and area control services	Α															100%
		C P															
	2.5 M (2016 July Group)	Α ΄		one													
		C P															
	2.5M (2016 Oct Group)	Α		one													
	Seminor F/U Training on AD Control A	1 P 1	-														
	0.5x4ds (changed Seminor)	/ (? dc	one (no complet	ted / no report)												
	To conduct OJT instructor training for selected	Р															
<u> </u>	ATC officers	A			-10 10												100%
		P			5/819												
	2wks (2017 May Group)	A			▼done (1ATC) 5/812												
	3rd Tr TF-1 Management Training Pr				****												
1-3 1	1wk in MAvA	A P	ь		▼done (6 TF1)												
	To conduct instructor training for simulator																100%
	trainers	A C P	0														00%
	3rd Tr GIT Training in MAvA Pi 1wk (2017 Feb Group)	A		one													
		C P 8		one													
	1.5wk for Radar Sim Approach	A						T 0/04	1 29 (4 MAvA)								
		C P 8						▼ 0/21	29 (4 IVIAVA)								
	1.5wk for Radar Sim En-route	A						₩8/21	1 29 (4 MAvA)								
1-4 1	To review and if necessary improve	P	-					▼ 0/21	29 (4 IVIAVA)								
	Operation Manuals	A															50%
	Meeting Operation Manual review A	1 P 1	18+													—`	070
	1d x1 Working Group formation			one (no report)													
	Others Expert Reporting Session for A	1 P 1		one (no report)				2days									
	2days O/M Review	A						8/14 (0.5d / No	n completed) ▼9	I /27 (observation TV	VR&ACC) for C/LI						
	W/S Workshop on Operation A	1 P a						0/14 (0.00 / 14	J completed) + 5	IZI (ODGGIVALIGII IV	2days		2days				
	2ds x2 Manual Review	A									(Cancelled)		▼1/23 (0 5d)			
	W/S ATC Capacity Assesment A	1 P V									(Gariociica)	(data	a collection)	0.00)			
	(new request)	Α	-									(000		। 29-30 (Not complete	d)		
1-5 1	To conduct OJT on aerodrome, approach and	Р											7 1/22,	- Co Co (Not complete			
	area control services	A														-	10%
-	Lecture OJT-Instructors Training A	1 P 6	6+					1week									
	1wk	Α	-					▼8/711									
	W/S Workshop on OJT-I Material A	1 P 6	6+								1week						
	1wk and Training Plan Dev.	Α									▼ 11/20-	23 (No completed)	▼1/25-2	26 (catach-up W/S, w	//UTDL&T)		
	Observ Observation of OJT by CP A	1 P 6	6+										1week		18	/4	
	1wk Instructors	Α											(Postphoned to Ma	y 2018 for one day)			
1-6	To procure aerodrome simulator	Р															
		Α															100%
_		C P N						TV +stand									
	3d x1 Simulator Installation	A N					▼7	7/27 ▼8	/30-9/1			▼12/21	Certificate by CAA				
	Lecture User Training on Aerodrome P	C P 8	3+1						2days x2								
	2d x2 Simulator N	Α							▼9/4-5 (marged or	ne time)							
	Lecture Maintenance and Operation P		4+1						1day								
-	1day Training on Aerodrome Sim N		3+						▼9/6-7								
1-7 1	To conduct simulator trainings	Р															
_		Α															70%
_		P 8	-						1week x3				1week				
	1wk x4 Trainer's Training (4 times)	Α ΄							▼9/12-15 & 9	/18-10/6 (x3)							
	W/S Workshop on Simulator Tr's S												1week				
	1wk Material & Training Plan Dev	Α									▼11/13-23 (c	only UTDD 3 Insts. /		▼2/12-14 (ca	tch-up W/S for UTDL,T	and K	1)
		P 8											1week				
	1wk Simulator by CP Trainers	Α	^ I		1	1	1	1	1	1	1	1	1	▼2/5-9 (for 3 UTD	D 1 1)		

	JPFY2017		May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2018 Jan	Feb	Mar	
Activity Type Sub-Activity 1 To conduct basic training on contingency plan	Ex P/A # befor	r 1wk 2wk 3wk 4wk 1	lwk 2wk 3wk 4wk	1wk 2wk 3wk 4w	k 1wk 2wk 3wk 4wk	1 1wk 2wk 3wk 4wk	1wk 2wk 3wk 4w	k 1wk 2wk 3wk 4wk	1wk 2wk 3wk 4wk	1 1 wk 2wk 3wk 4wk	1wk 2wk 3wk 4wk	1wk 2wk 3wk 4w	1wk 2wk 3wk 4wk after	er Rema
1 To conduct basic training on contingency plan	A													70%
Training Contiengency Basic Training														
0.5day	A 2 done													_
2 To improve the draft contingency plans	P A													100%
TAN Draft Contiengency Plan	CP P													100%
Baseline	A													
W/S on CP improvment	A2 P 2+	4/19-21												
3days	A ?	▼ 4/19 (0.5	5day)											_
Seminar Seminar on CP completion 1day	A2 P all A ?	▼4/20 (0.5	da. A											
3 To conduct exercise of contingency procedures	P	▼ 4/20 (0.3	ouay)											
o to communication of commission, procedures	A													50%
	A2 P 2+	4/713											18/-	4
1d x2 (title/term changes)	A ?	▼4/18 (0.5day)												
4 To request approval of CAA on the contingency plans for implementation	P A													100%
	A2 P 2+				∇									100%
1day process for CP (changed)	A ?				▼7/? (0.5day)								
1 To obtain necessary knowledge of SMS	P				,									
0.15.0110	A													100%
TAN SAF-SMS Baseline in EUROCONTROL	CP 2 2													
	PC P 2													
1wk in EUROCONTROL	A 2 done													
	PC P 1				7/37									
1wk in EUROCONTROL	A 1				▼done (1 Safety)									_
	PC P 2 A 2 done													
1wk in EUROCONTROL Training Follow-up training on SMS	A 2 done A2 P 2+				∇									
1d x2	A 1	▼4/12 (1hr)			▼7/26 (1hr)								
2 To develop and update SMS Manual	P													
2 0 0 0 0 0	A													100%
TAN Draft SMS Plan Baseline wi/o attachment	CP P A													
	A2 P 2+				∇									
1day Implementation	A ?				▼7/27 (0.5day)								
	A2 P 2+				▽			∇10/2-						
3days Manual	A ?					/31 (0.5day)		▼10/2 (2hrs)						_
Seminar Seminar on Completion of SMS Manual	A2 P all A 15				∇	▼8/3 (0.5day)								
3 To establish risk management process	P P					▼ 6/3 (0.3uay)								
	A													50%
	PC P 1													add
1wk in EUROCONTROL	A 1												▼3/19-20 (Vi	
3rd Tr Incidential-Investigation/Ru 1wk in Moscow?	PC P 2 A 2											- 0/42	 -3/3 (Rus AirNav Institute:	add
	CP P											▼ 2/13	-3/3 (Rus Airnav institute:	.) at JCt
(NO THE EXPERT GOLVISOS)	A													
4 To implement safety risk management and	P													
safety assurance	A													50%
	A2 P 2+ A 3	∇4/5-11 ▼4/10 14 (Filling	ag gane by IANC CA	NE HE (for ANICO)	raining in July 2018)									
5days Factors (changed title) W/S W/S on Runway Safety	A2 P 2+	▼ 4/10-14 (Fillir	ig gaps by IAINS SA	AF-MF (IOI AINSP) I	raining in July 2016)			▽10/5-6					∇	
1dx2 Program	A							▼10/5 (2hrs)			▼1.	I /31 (RST Meeting b	y CAA) ▼3/19 RST (
5 To conduct SMS training and education	P							` '				,g		
for ATC officers	Α													70%
	CP P													
Baseline Module 1-5 to DYU & LBD 3rd Tr SMS Instractor	PC P 2													add
1wk in Swan Aviation in KZ	A 2				₩7	 /31-8/4 (SMS ToT in	ALA)							at JC
	CP P				*	, 5 . 5/4 (SIVIO 101 III								a.u.o
(*************************************	A													

Australia. Trans. Crob Australia.		Y2017 Apr befor 1wk 2wk 3wk 4wl	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2018 Jan	Feb	Mar	day Day
Activity Type Sub-Activity		befor 1wk 2wk 3wk 4wl	K TWK 2WK 3WK 4WK	TWK 2WK 3WK 4WI	1WK 2WK 3WK 4V	VK TWK ZWK 3WK 4WK	TWK 2WK 3WK 4WK	TWK 2WK 3WK 4WI	k 1wk 2wk 3wk 4w	k 1wk 2wk 3wk 4wk	TWK 2WK 3WK 4WK	TWK 2WK 3WK 4W	k 1wk 2wk 3wk 4wk a	atter Rer
To conduct basic training on AIS	P													140
3rd Tr AIS Basic Training	PC P 4													140
3wks in GroupEAD (same as 3-2														(1
3rd Tr SAR Training	PC P 4													'('
2wks in MAvA	A 4						▼9/25-1	0/9 (1AIS+3ATC)						(4
W/S W/S on SAR coordination	IS P 4						▼ 3/23-1	I (IAIS+SATO)					7	▽ (4
4days manual development	A A										▼ 1/25 F	I Pre-coordination me		V I
Exerice SAR Coordination Exercise	7.										▼ 1/25 F	re-coordination me		A
	A A												\	V la
2days Seminar Seminar on SAR	IS P All												-	▽
													\	v
1day Coordination Manual	A													
To conduct basic training on aeronautical	P													40
charts	A													10
3rd Tr AIS Basic Training	PC P 4													
3wks in GroupEAD (same as 3-1			1											
W/S Catchup exercise on	IS P 4													
5days Aerodrome Chart drawing-		done (no report)												
W/S Catchup exercise on	FP P 4						-							
2wks Aerodrome Chart drawing-						▼8/21	-9/1 (SID/STAR, WG	S-84,VISIO)						
To develop operation manuals for NOTAM,	P													
AIC and AIP	Α													10
Seminar Aeronautical Information	IS P all													
1day Service(AIS) Seminar	A	done (no report)												
W/S NOTAM & AIP Procedure	IS P 4					4days			4days					
4ds x3 Manual Development W/S	A 5	done (no report)				▼8/722 (Comp.	NOTAM)		(postphoned)		▼1/924 (Comp.	AIP(AIC))		
To conduct basic training on	Р					, , ,			" · · · · · ·		, ,			
flight procedure design	Α													10
Training Training on basic PANS-	FP P 4	4/10	5/23											
6wks OPS FPD	A 4	▼4/12	5/24											
To conduct OJT of flight procedure designers	P	7 17.12	1											
for a model airport	A													14
Others WGS-84 data survey	PC P 4		5/20	96/9										
2wks (Step-1)	FP A 2		0/20	▼6/69										
OJT WGS-84 data survey	PC P 4			▼ 0/03			9/130							
4wks (Step-2a/2b + Maps)	FP A 2						▼9/422							
Others WGS-84 data survey							UTDT				UTDK	▽ UTDL	1	18/4
	CP P 4 FP A 2						▼9/13				▼1/12	▼2/8-10	1	10/4
(Remort oversight) OJT OJT on FPD	FP P 4						▼9/13		44/4	40/45	▼ 1/12	▼ 2/0-10		
									11/1	12/15		oten OIT)		
6+1wks in DYU	A 5								▼1/1	12/15 (R	lequested Suppleme		212	
Observ Observation for FPD	FP P 4												3/2	
2wks in DYU	A 5											▼2/1	3/6 (Inc. Suppleme	entary OJ
Others FPD-QA, GV/FV	FP P 2													
(New Request)	PC A												▼3/12-14(Kg/Kz) ▼	
CP-T Jp PBN IFPD in Japan	PC P 5				7/29								1.	18/6- (3 FI
1.5M	A 2			▼(done	1AIS+1ATC)									
Seminar PBN Introduction Seminar	FP P all								▽					
0.5day	A all									▼12/15	(0.5day)			
To produce draft of AIP of the model airport	Р													
	A													09
W/S AIP design Exercise on	IS P 7												1	18/4
5days Dushanbe Airport	FP A													
													1	18/4/30
Seminar Seminar on AIP developme	nt IC D all													

Monitoring Sheet Summary Version 5



The Joint Monitoring, for "The Project for Capacity Development in Air Traffic Services" in Tajikistan

Ver. 5.0

Dushanbe, 1 April 2018





Sheraliev Bakhtyor Project Manager / TF-2 Leader SUE "TAJIKAIRNAVIGATION"

Hideo Watanabe Project Chief Advisor / TF-1/2 Expert ATCA-Japan

Tomonori Orita **Project Coordinator**

JIĆA



Monitoring Sheet Summary (Ver. 5.0)

1. Introduction

The Monitoring (Ver. 5.0) from 1st October 2017 to 31th March 2018 was jointly conducted by TAN and JICA with the following objectives:

- (1) To monitor a progress and operational efficiency of the Project in accordance with AWP-2017(Ver. 1.0) indicating the percentage of progress in each activity at the timing of the end of March 2018.
- (2) To provide an actual situation and future prospective of the Project to stakeholders.
- (3) To judge propriety of existing PDM, PO and line up of sub-activities for remaining Project term.

2. Outline of Project Activities

There are 22 various activities related to 3 Outputs in the PDM of this Project structure. All activities could be categorized (A), (B) and (C) from an objective point of view in the outcomes, and each Outputs also could be resolved into several technical subjects as given Table-1 below. The Blue Highlighted activities in the table were newly added during this monitoring period.

Table-1

			Activities by	Japanese Expert	Procurement
		Trainings abroad	Training of Trainers /	Improving Procedures,	Support for
			Capacity Development	Manuals & Regulations	Aerodrome Sim.
Ор	Technical subjects Category	(A)		(B)	(C)
1	Improving ATC Operation	1-1 ATCs (18)		1-4 review manuals	
				1-4 ATS(ATC+AD) Capacity	
				Assessment Methodology	
	OJT Instructor's Training	1-2 OJT-Instructor (6)	1-5 OJT-I ToT		
		1-2 TF1-Mangment (6)			
	Aerodrome Simulator	1-3 GIT (8)	1-7 Sim trainers ToT		1-6 Simulator
	Trainer's Training		(1-3 MAvA Experts)		
2	Contingency Plan		2-1-1 Basic Training	2-1-2 draft improve	
	(CP)		2-1-3 Exercise	2-1-4 CAA approval	
	Safety Management System	2-2-1 SAF-# (2+1+2)	2-2-5 SMS trainer	2-2-2 SMS Manual	
	(SMS)	2-2-3 R/M, I-INV (1+2)		2-2-3 Risk Management	
		2-2-4 HF training (1)		2-2-4 Improve R/M&S/A	
		2-2-5 SMS ToT (2)			
3	Aeronautical Information Services	3-1 AIS basic (2)	3-1 SAR	3-3 Procedure Dev. AIP	
	(AIS)	3-1 SAR training (4)		3-6 Develop draft AIP	
	Flight Procedure Design	3-2 Aero Chart (2)	3-4 Basic Training		
	(FPD)		3-5 OJT FPD/ WGS84		
			3-5 FPD-QA, GV/FV		

The category (B), "Training by Japanese Expert" activities which will be implemented by Japanese Expert team are primary components of this Japanese ODA Project. However, providing opportunity of ICAO autholized trainings abroad as the category (A) is not less significant than others, because an essential knowledge in line with ICAO standard and regulations is a precondition of receiving Japanese Expert's trainings in accordance with structure of the Project. In general, at an early phase in the Project, all activities in the PDM and PO ought to be resolved into specific sub-activities on an Inception Report by the Expert team, and accurately indicate terms and schedules of each sub-activities into the Annual Working Plan (AWP).

Due to a unique structure of the Project mentioned above, it was premature to determine the detail of sub-activities under the (B) as "Training by Japanese Expert" at the moment of JCC/1 in 27 April 2016 before finalizing the activities of the (A) as "Trainings abroad". This is the reason why many activities in the category (B) have not been activated before December 2016, but Project caught up it in AWP-2017.

As this report clarifies the progress of activities from October 2017 to March 2018 in accordance with AWP-2017 (ver.1.0) and related Sub-Activity Plan, Project has been making good progress on the (A) as "Trainings abroad" activities in each Outputs same as last monitoring period including additional trainings abroad in TF2 and TF3 which were additionally approved at JCC/2.

The various progress of category (B) as "Activities by Japanese Expert" for three Outputs are reported by the paragraph 6 in this report.



3. Progress of Inputs

All inputs by TAN and JICA were successfully done in accordance with PDM as tables below. Only two trainings abroad as "SAF-HFA" in IANS and "FPD-QA" in ICAO China are remaining at this moment.

(A) Training abroad

		ing abroa	TAN	Project Input (USD/EUR)			Completion Date of Checkpoints (from Apr 2016 to Mar 2018))18)
			side	Tuition	Air Ticket	Others	Selection	Eng-CHK	Paid	VISA	Dept.	Training	Report
	Bold is	this period	input	Fee	Insurance	wo/VISA	by TFs	by Expert	Tuition-F	Obtained	Briefing	Start	Session
1	1-1	ATC Jul	10 ATC	\$74,394	\$11,313	\$23,828	26 Apr	25 Apr	7 Jun	29 Jun	14 Jul	27 Jul	7 Oct
		ATC Oct	8 ATC	\$60,750	\$12,671	\$16,000	17 Jun	17 Jun	19 Aug	21 Jun	7 Oct	18 Oct	13 Jan
	1-2	OJT-Inst	6 ATC	\$10,600	\$7,500	\$13,260	28 Oct	29 Oct	29 Nov	N/A	22 Dec	9 Jan	27 Jan
	1-3	GIT/BIT	8 ATC	\$7,359	\$10,000	\$9,840	28 Oct	29 Oct	19 Nov	N/A	22 Dec	13 Feb	24 Feb
	1-3	TF1-Mgr	6 ATC	\$3,900	\$9,100	\$10,631	10 Apr	N/A	18 Apr	20 Apr	25 Apr	8 May	19 May
2	2-2-1	SAF-SA1	2 Safe	€3,000	\$2,093	\$2,854	26 Apr	N/A	5 Aug	31 Aug	7 Oct	17 Oct	13 Jan
		SAF-INV	2 Safe	€3,000	\$1,992	\$2,846	26 Apr	N/A	7 Jan	27 Feb	30 Jan	20 Mar	31 Mar
		SAF-SA2	1 Safe	€1,500	\$1,236	\$1,375	26 Apr	N/A	18 May	21 Jun	31 May	3 Jul	26 Jul
		Incident-I	2 Safe	\$1,180	\$1,078	\$5,160	22 Jan	N/A	26 Jan	N/A	29 Jan	14 Feb	9 Mar
	2-2-5	SMS-ToT	2 Safe	\$908	\$722	\$2,065	21 Jul	N/A	31 Jul	N/A	24 Jul	31 Jul	11 Aug
3	3-1/2	AIS Basic	4 AIS	€22,680	\$3,251	\$15,784	8 May	N/A	7 Oct	11 Aug	9 Aug	15 Aug	7 Oct
	3-1	SAR Adm	4 AIS	\$6,812	\$6147	\$9,869	27 Jul	28 Jul	4 Aug	23 Aug	7 Sep	25 Sep	18 Jan
	3-5	Visit Ru*	1 PM	\$0	\$315	\$2,400	21 Feb	N/A	N/A	N/A	27 Feb	12 Mar	28 Mar
		Visit Kg*	1 AIS	\$0	\$286	\$520	21 Feb	N/A	N/A	N/A	27 Feb	12 Mar	28 Mar

^{*)} Substituted Visiting Russian ANSP for Risk Management Training, and remaining budget was used for TF3 FPD (ILS 27) issue.

(B) Trainings by Japanese Experts

Ор	TAN side input	JICA side input by Expert Team in JPFY2017 (from Oct 1st, 2017)
1	Taskforce-1 Leader, Sub-leader and CPs	Chief Advisor / New ATC-1 Expert, AD Simulator Training Expert
2	Taskforce-2 Leader, Sub-leader and CPs	ATC-2 Expert (same as New ATC-1 Expert)
3	Taskforce-3 Leader, Sub-leader and CPs	New AIS Expert, FPD Expert

^{*}All sub-activities and actual assignment terms are mentioned in Monitoring Sheet-2.

(C) Procurement Support Aerodrome Simulator This part is not applicable in this monitoring period.

(D) Others

(D) Offici	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,								
	TAN side input	JICA side input, under the JICA direct control (from Oct 1st 2017)							
Human	New Project Director (DG)	Project Coordinator / Training Planning Expert: Total 182 days							
Recourses	Project Deputy Director (1st DDG)	Two Technical Assistants from 25 September 2017							
	Project Manager (+TF-2 Leader)	Contract Driver with Rent-a-car							
	Interpreters								
Facility	Project office in TAN and utility charge	Project Web site (www.tj-ats.com)							
	Expert desk in the simulator room								
	Meeting Venue for JCC/2								
Local	N/A	138,804USD (Under control of Project Coordinator) from Oct to Mar 2018.							
Budget		Including all expenditure for Training abroad.							



4. Progress Measuring Method

This was explained by Monitoring Report Summary (Ver3.0)

5. Achievement of the Project Purpose

Project set the measuring parameter for verifiable indicators in "Overall goal" and "Project purpose" for the final evaluations (planned in Oct 2018) as Table below and it will be approved by JCC/3 in 3rd May 2018.

	To improve Air	Indicaror:1	All ATC officers working at ATC units maintain ATC	100% ATCs will be trained by AD Simulator
	Traffic Services		ratings in line with ICAO standards through TAN's	instructors or OJT trainers by Project
	(ATS) in Tajikistan		continuing training program.	developed ICAO standard materials.
Overall Goal		Indicaror:2	The contingency plan and SMS for ATC have been	TAN will conduct CP exercise once per two
ğ e			kept in operation.	years, CAA will conduct annual Safety audit
60				by using Checklist in SMS manual.
		Indicaror:3	Aeronautical Information Publication (AIP) has	All Tajikistan AIPs (GEN/ AD/ ENR) will be
			been updated in line with ICAO standards.	reformed and separated from Russian AIPs
				as independent in caiga.ru Web site.
	To enhance	Indicaror:1	All ATC officers working at ATC units have passed	ICAO standard training materials
Se	capacity of		training in line with ICAO standards conducted by	(operation manuals) and AD simulator
Purpose	Tajikairnavigation		OJT instructors and Simulator trainers.	scenarios will be developed.
		Indicaror:2	3 71	CP and SMS Manual will be approved by
ಕ	Services (ATS)		implemented.	CAA.
Project		Indicaror:3		4 (FPs) and 1(WGS-84) AIP(AD) in
<u>P</u>			accepted as confirming to ICAO standards by JICA	
			Experts.	confirmed it as ICAO standard quality.

6. Progress of Activities and Achievement of Output

This chapter are divided into three categories in dedicated tables. All activities in the tables have description of "Progress of Activities", "Achievement of Output", "Progress of Actions undertaken by JICA", "Changes of risks and actions for mitigation", and "Delay of work schedule and/or Problems" in highlighted red. The "Progress of Actions undertaken by TAN" is described above it as TAN, and a baseline as of April 2016 is mentioned under it as Tank of the progress of Actions undertaken by TAN" is described above it as TAN, and a baseline as of April 2016 is mentioned under it as Tank of the progress of Actions undertaken by TAN of the pro

(A) Trainings abroad

The activities in this category had almost completed by the end of March 2017. In this monitoring term, several remaining trainings and TF1 management training in MAvA were done successfully. An additional five trainings abroad which was newly added in TF-2 and SAR training in TF-3 are explained at paragraph (B).

T	1- 0
iab	le-3

	•		
			TAN Progress of Actions undertaken by TAN, if any.
	Trainings abroad		Progress of Activities, Achievement of Output, Progress of Actions undertaken by JICA, Changes of
			risks and actions for mitigation, and Delay of work schedule and/or Problems, if any.
		%	BL Baseline by TAN as of April 2016, if any.
1	1-1 ATCs (18)	100	Completed.
	1-2 OJT-Instructor (6)	100	Completed.
	1-2 Management (6)		(Project invited 4 Malaysian instructors and taken advice for existing radar simulator trainings.)
	1-3 GIT (8)	100	Completed
2	2-2-1 SAF-# (2+1+2)	100	Completed
			BL Two (2) Safety officer had completed SAF-SMS training in 2015
	2-2-3 R/M	100	Incidental-INV trainings completed successfully in Moscow, and R/M was replaced visit Russian ANSP
	2-2-4 Improve RM,SA	0	SAF-HFA training (add at JCC/2) by IANS in June 2018
	2-2-5 SMS ToT (2)	100	SMS trainer's training in Almaty was completed successfully.
3	3-1 AIS basic (2)	100	An exercise part Aero Chart training (SID/STAR by VISIO) was filled by FPD expert in August 2017.
	3-1 SAR Admin.(2)	100	SAR Admin (ICAO #057A) was added at JCC/2 and completed training by MAvA in Sep-Oct 2017.
	3-2 Aero Chart (2)	100	
	3-4 FPD-QA (1+1)	100	Visit Russia (szrcai, gnii, GV/FV SP and Russian ANSP)
			Visit Kyrgyz (ANSP FI/FV SP) and Kazakhstan (FI/FV SP)



(B) Training by Japanese Expert

It is because the situation which was accounted for in Chapter-2 that the activities of this category have been making slow in the first Project year. However, several activities were progressed newly assigned experts within this monitoring term.

Table	-4		
		%	TAN Progress of Actions undertaken by TAN, if any.
	Trainings by		Progress of Activities, Achievement of Output, Progress of Actions undertaken by JICA, Changes of
	Japanese Experts		risks and actions for mitigation, and Delay of work schedule and/or Problems, if any.
			BL Baseline by TAN as of April 2016, if any.
1	1-4 review manuals	50.0	TAN
			(Manual Review) / original
	Including Follow-up		Follow-up trainings by Japanese Expert to 18 MAvA trainees on AD, APP and ACC (Original plan was 4
	trainings in activity 1-1		days each) were canceled by ATC-1 Expert in April 2017.
			No technical lectures were conducted by New ATC-1 Expert.
			The Expert input session (for catch-up of Aug & Nov activities) was done in 23 Jan 2018, TAN (TF1)
			decided to cancel the "1-4 O/M Review Completion Seminar" in April 2018, because of new
			technologies or procedures weren't introduced for improving TAN's operation except ALDS lamp. Also, this activity didn't find any differentials from ICAO standard in almost of all Operation Manuals of three
			regional airports. TAN accepted the New ATC-1 Expert's recommendations, then TF1 verify a necessity
			of revising documents by May and will revise it by themselves if necessary.
			To revising documents by may and will revise it by themselves if necessary.
			(ATS Capacity Assessment) / additional
			Project had added "ATS Capacity Assessment Methodology" which was requested from TF1 to New
			ATC-1 Expert in Nov 2017 into one of 1-4 activity's outcome, then New ATC-1 Expert had provided the
			survey form and conducted Workshops in 22, 28-29 Jan 2018.
			ATC capacity assessment was partially done in 28 Jan, but AD capacity was uncompleted by the end of
			Jan 2018. After TAN's verification of the result of figures in ATC part, new ATC-1 Expert recommended
			to conduct data survey again with using changed new survey form and index as follows. TF1 had
			requested a technical transfer of Japanese methodologies by written procedure for 2 days in May 2018.
			Capacity WG should consider the following (by New ATC-1 Expert in February 2018);
			1 Review of control events, 2 Change of survey form, 3 Review of difficulty index, 4 To conduct survey
			for capacity using recorded data, and 5 To calculate the capacity based on the survey
			TAN TF1 OM Review W/G is assessing Expert's recommendations by May 2018.
	4.5.0 IT LT:T	40.0	TF1 studied Uzbekistan's assessment methodology in March 2018.
	1-5 OJT-l ToT	40.0	OJT-I training material / periodical plan development W/S was done by new ATC1 Expert. The examination system will be improved as ICAO standard in May 2018.
	1-7 Sim trainers ToT	70.0	AD Sim training materials /periodical plan development W/S and observation were done by Sim Expert.
2	2-1-1 Basic Training		If developed training material on CP will be used by TAN, remaining 30% will be completed.
CP	2-1-2 draft improve	_	W/S CP improvement (0.5day) and Seminar on CP completion (0.5day) were done by ATC-2 Expert.
0.	2-1-2 diait illipiove	100	BL Draft CP (TAN) was 100% completed referred to the Annex11, Asia Pacific version by ICAO
			Bangkok, guideline of EUROCONTROL, India, Pakistan and Russian CPs at Project started
			timing.
	2-1-3 Exercise	50.0	CP exercise (0.5day) were done by ATC-2 Expert.
			If TAN conducts CP exercise in 2018, remaining 50% will be completed.
	2-1-4 CAA approval	100	TAN MOT approved CP on 25 th July 2017
			ATC-2 Expert monitored this progress for one day in July 2017.
2	2-2-2 SMS Manual	100	Study on SMS Implementation (0.5day), W/S on Development of SMS manual (0.5day) and Seminar
SMS			on SMS manual completion (0.5 day) were completed by ATC-2 Expert.
			BL Draft SMS Manual was 100% completed without attachment referred to Annex19, the Doc9859
			(Chapter-5) and Russian SMS at Project started timing.
	2-2-3 Risk	50.0	TAN Web based reporting system was developed but need to improve for safety purpose.
	Management		Additional "Incidental Investigation Training" in Moscow (AeroNav Institute) was completed.
			Risk Management Training was replaced by visiting Russian ANSP in March 2018, because of Project
			didn't find appropriate training on RM
	2-2-4 Improve	50.0	Basic HF training was conducted by ATC-2 Expert, but the contents didn't meet ANSP's needs.
	R/M & S/A		TAN requested JICA to add HF training abroad for optimizing ANSP.
	0.0.5.0110		RST was formulated in January 2018, and RST had Hazard Map making activity in 19 March 2018.
	2-2-5 SMS trainer	70.0	TAN Module 1-5 for remaining two airports will be completed until July 2017.
			Module 6-9 will be convened one package to provide all airports within 2017 by safety staffs.
			Additional "SMS Trainer's Training" in Almaty (Swan aviation academy) was completed.
			BL Module 1-5 training by safety staffs completed in DYU and LBD within 2017.



http://www.tj-ats.com

3	(3-1 AIS): 100%	140	Completed basic AIS training (100%)
	+SAR: 100%		On top of above, SAR activities were added in this sub-activity at JCC/2.
			SAR Admin (ICAO #057A) was added at JCC/2 and completed training by MAvA in Sep-Oct 2017.
			AIS Expert is planning to have WS in April and Exercise/Completion Seminar in July 2018.
	(3-2 Aero Chart)	100	FPD Expert conducted 2 weeks training for SID/STAR by VISIO using WGS-84 DYU map in Aug.2017.
	3-3 Procedure Dev.	100	New AIS Expert conducted NOTAM/AIP Procedure development WS-2nd for 2 weeks in Aug 2017.
	NOTAM/AIP		NOTAM and AIP procedures were developed.
	3-4 Basic Training	100	FPD Expert conducted PANS-OPS FPD training in April to May 2017.
			4 AIS/ATC participants successfully obtained certification.
	3-5 OJT of FPD	140	WGS-84 survey (newly included Project activity in May 2017) was completed in DYU.
	+WGS-84: 100%		FPD Expert is planning to have training on FPD-QA (GV) in September 2018.
	3-6 Develop draft AIP	0	No Progress thus far.
			AIS/FPD had decided to create 5 AIPs (4 FPD+WGS-84) by VISIO during AIP W/S in April, then they
			will have draft-AIP completion seminar in 30 th April 2018.

(C) Procurement Support for the Aerodrome Simulator

The grant equipment of AD Simulator system was successfully handed over to TAN on 8th September. Project suspended consideration of diverting this system to Radar Simulator Training. TF1 had reported five problems to NTT-data in February 2018.

In accordance with reply by NTT-data, IT specialist, instructors and PC will conduct trouble shooting in April 2018.

Table 5

lai	ble-5					
		%	TAN Progress of Actions undertaken by TAN, if any.			
	Procurement Support		Progress of Activities, Achievement of Output, Progress of Actions undertaken by JICA, Changes of risks			
	for the Aerodrome Sim		actions for mitigation, and Delay of work schedule and/or Problems, if any.			
			BL Baseline by TAN as of April 2016, if any.			
1	1-6 Simulator	100	TAN TAN side fulfilled their responsibility for receiving AD simulator system.			
			Project procured 3 sets of 55" 4k UHD TV and stand in July and coordinate tax waiver custom clearance			
			for importing equipment in August 2017.			
			NTT-data Cooperation installed AD simulator system, then conducted "user training" and "maintenance			
			aining" successfully from August to September 2017.			
			Project conducted hand-over ceremony in 8 th September 2017.			
			BL TAN has "Master" radar simulator			

7. Findings on Joint Monitoring

TF-1:

Monitoring found that the outcomes of activity 1-4 (Manual Review) are still below an expectation. The Manual Review WG should carefully verify the Expert's recommendations, then consider revising operation manuals and higher regulations will be necessary or not.

The ATS Capacity Assessment WG need to obtain the procedures of Japanese methodologies first, then compere other methodology for conducting actual assessment.

The activity 1-5 (OJT-I) is required catch-up on an examination system improvement and need to replace the training materials by the outcomes of activity 1-4 for improving OJT to be in line with ICAO standard.

The Aerodrome Simulator related activities, 1-6 and 1-7 were making steady progress during this monitoring period, but all reported problems in the hardware and software should be solved during warrantee period by September 2018.

Лоиҳа оид ба баланд намудани потенсиал дар самти хизматрасонии ҳаракати ҳавой Проект по повышению потенциала в сфере обслуживания воздушного движения The Project for Capacity Development in Air Traffic Services



TF-2:

Newly organized CAA (Civil Aviation Authority) is going to create the SSP (State Safety Program) by UK consultant under EASA (European Aviation Safety Agency) Programs. Project is carefully watching the progress of this mission for keeping consistency between TF2 outcomes and ANSP part of newly developing SSP.

TF-3:

Monitoring found that TF3 activities lacked documentation by CAA, FPD-QA, GV/FV and "QMS in AIS" for implementing actual Flight Procedure Design works. For designers will come to have more confidence in actual design work, Project allocated additional FPD Expert activity in September 2018.

New AIS Expert is going to make an AIS Road Map during his next mission in April 2018. The modernization of AIS Database, FPD automation tool and QMS in AIS should be taken into consideration.

Project is providing technical support to the outsourcing activity on ILS27-approach FPD by DIA (Dushanbe International Airport).

8. Modification of the Project Implementation Plan

TF1 and New ATC-1 Expert slightly modified the AWP-2018 and Sub-Activities Plan in 2nd April 2018.

Project temporally sets the final evaluation in late October for two weeks by Evaluation Consultant and conducting JCC/4 in 30th November 2018.

9. Preparation of TAN toward after completion of the Project

TAN is planning to complete WGS-84 survey for all airports within 2018, then waiting the Project design of new PBN implementation Project.



Table of abbreviations

Table of a	bbreviations		
	General		Monitoring Sheet-2
ACC	Area Control Center	A1	ATC-1 Expert
AIC	Aeronautical Information Circular	A2	ATC-2 Expert
AIP	Aeronautical Information Publication	CP	Counterpart
AIS	Aeronautical Information Services	FP	FPD Expert
ANSP	Air Navigation Service Provider	IS	AIS Expert
ATC	Air Traffic Controller	MA	MAvA Expert
ATS	Air Traffic Services	ND	NTT-Data Corporation
ATFM-C	Air Traffic Flow Management Center	PC	Project Coordinator
AWP	Annual Working Plan	SE	Aerodrome Simulator Expert
BL	Baseline		
CA	Chief Advisor		
CAA	Civil Aviation Authority		
CNS	Communication, Navigation and Surveillance		IATA Airport Code
CP	Counterpart	DYU	Dushanbe International Airport (D)
CP	Contingency Plan	KQT	Qurghonteppa International Airport (Q)
CR	Chief Representative	LBD	Khujand International Airport (H)
DCA	Department of Civil Aviation		Kulob International Airport (K)
DDG	Deputy Director General		. ,
DG	Director General	ALA	Almaty
EBRD	European Bank for Reconstruction and Development		Dubai
	Flight Procedure Design	FRA	Frankfurt (Group EAD)
FPS	Flight Progress Strip		Kuala Lumpur (MAvA)
GIT	General Instructor Training		Luxembourg (IANS/EUROCONTROL)
IATA	International Air Transport Association		Astana
ILS	Instruments Landing System		
ICAO	International Civil Aviation Organization		
	Japan Civil Aviation Bureau		
JCC	Joint Coordination Committee		
IFC	International Finance Corporation		
	Malaysia Aviation Academy		
NOTAM	Notice To Airmen		
ODA	Official Development Assistance		
OJT	On the Job Training		
O/M	Operation Manual		
os	Operating System		
PANS-OPS	Procedure for Air Navigation Services Aircraft Operations		
PBN	Performance Based Navigation		
PCM/n	Project Coordination Meeting		
PD	Project Director		
PDM	Project Design Matrix		
PO	Plan of Operation		
	Project Manager		
	Quality Management System		
	Risk Management and Safety Assurance		
	Search and Rescue		
SID/STAR	Standard Instrument Departure / Standard Terminal Arrival Route		
	State Safety Program		
	Safety Management System		
	Tajikairnavigation		
	To Be Define		
TFnM	Taskforce-n Meeting		
	Terms of Reference		
	Training of Trainers		
	Transport Corridor Europe-Caucasus-Asia		
	VHF Omnidirectional Range / Distance Measuring Equipment		
	Working Group		
	Work Shop		
	'		·

List of Attachment

Attachment-A: Monitoring Sheet-1 (Ver. 5.0) Attachment-B: Monitoring Sheet-2 (Ver. 5.0)

ANNEX5-15

Monitoring Sheet I Version 6

Monitoring Sheet-1 (Ver. 6.0)

	onitoring She		er. 6.0)					
	Project Goal, Purpo	se and	Verifiable Indicators	Base line	Sub-activities (Bold is done)	Percentage of Achievement (%)	Progress	
	Taskforces Activities	8	for three outputs	by CP's activities		Progress calculation basis	Problem	
				as of April, 2016	Japanese Expert Team side activities		Remarks	
	To improve Air	Indicaror:1	All ATC officers working at ATC ur		100% ATCs will be trained by AD Simulator		ICAO standard material (Operation Manual)	
	Traffic Services	indicaror. i	ratings in line with ICAO standard	e through TAN's	instructors or OJT trainers by Project		didn't develop. OJT / AD Sim Trainings are	
	(ATS) in Tajikistan			s illiough iAN s	developed ICAO standard materials.		on-going, but not 100% yet.	
_		l di	continuing training program.	ATC have have				
Overall Goal		indicaror:2	The contingency plan and SMS fo	or ATC have been	TAN will conduct CP exercise once per two		The 2nd Contingency Plan Exercise was done	
ခ် လို လိ			kept in operation.		years, CAA will conduct annual Safety audit		by TF2CPs. Internal Safety Audit is under plan	
0					by using Checklist in SMS manual.		by SMS plan.	
		Indicaror:3	Aeronautical Information Publicati		All Tajikistan AlPs (GEN/ AD/ ENR) will be		Not achieved yet.	
			been updated in line with ICAO st	andards.	reformed and separated from Russian AIPs		All existing SID/STAR FPD will be updated by	
					as independent in caiga.ru Web site.		TF3CPs by 2019.	
	To enhance	Indicaror:1	All ATC officers working at ATC ur		ICAO standard training materials		O/Ms (4 airports) were not improved to be	
Š	capacity of		training in line with ICAO standard	ds conducted by	(operation manuals) and AD simulator		ICAO standard. AD simulator scenarios	
<u>õ</u>	Tajikairnavigation		OJT instructors and Simulator trai	ners.	scenarios will be developed.		(4 airports) were developed.	
٦	(TAN) in Air Traffic	Indicaror:2	The contingency plan and SMS for	or ATC have been	CP and SMS Manual will be approved by		CP was approved by CAA. SMS Manual was	
Project Purpose	Services (ATS)		implemented.		CAA.		approved by TAN. (SSP was developed)	
<u>ĕ</u>		Indicaror:3	The draft AIP of the model airport	has been	4 (FPs) and 1(WGS-84) AIP(AD) in		Draft AIPs (SID/STAR) in UTDD were made by	
ဥ					UTDD will be drafted by VISIO, and Expert		TF3CPs. Expert provided FPD trainings in	
ш.			Experts.		confirmed it as ICAO standard quality.		accordance with Doc9906 vol2.	
Op-1	To enhance capac	ity of traini	ng for Air Traffic Control (ATC) o	ffices in line with				
	To conduct training			No. of ATCs		55.6 100	Completed.	
	officers on aerodron			D: 75		Certificates 18/18: 100%	Completed:	
	approach and area			H: 37	F/U Training on AD (4days)	Certificates 16/16. 100%	(AD F/U training was changed to a seminar.)	
	services	COITHOI		K: 13	F/U Training on Approach (4days)		(Other F/U trainings were canceled at JCC/2.)	
	SEI VICES			Q: 11	F/U Training on En-route (4days)		(Other 170 trainings were canceled at 300/2.)	
4.0	T		trainings successfully.			0 100 0 1400	0	
1-2	To conduct OJT inst				6 OJT-I to MAvA (2wks) / Jan 2017	0 83.3 100	Completed.	
	training for selected	AIC		D: 16 +1 OJT-I		Certificates 6/6: 100%		
	officers			H: 9		TF1 Management Training: 100%		
1-3	To conduct instructo			K: 1	8 GIT to MAvA (1wk) / Feb 2017	0 100	Completed.	
	for simulator trainer	S		Q: 2		Certificates 8/8: 100%		
						MAvA Expert: 100%		
1-4	To review and if nec		Operation Manual has been	No. of Manuals	Mr. Gafarov reviewed few Manuals	0 20.0 40.0 50.0 60.0	MVA map was completed by TF3 in 2018/9	
	improve Operation I	Manuals		Common: 4	O/M Review W/G meeting (1day)	3W/Gs formulated / Shearing-M: 10%	35 documents were reviewed, 29 findings were	
			necessary	D: 14	Expert Reporting Session (2days): 0.5d	Completed Reporting Session: 30%	recommended at catch-up W/S in 2018/1/23	
				H:10	WS on O/M Review (2 days x 2): 0.5d	Implemented W/S: 10% x2	Inputted Jp method of Capacity Assessment.	
				K: 7	Seminar on Result O/M Review: W/S?	Implemented Seminar: 10% x1	Seminar: Changed 0.5d W/S for one in 2018/5	
				Q: 6		F/U Training from 1-1:10%x3-canceled	Capacity Assessment: Not completed by 18/9	
)	Other recommendations: Not completed 18/9	
1-5	To conduct OJT on	aerodrome,	Each of the OJT instructors has	No. of OJT-I	-	D0 0 20.0 40.0 70.0	Completed Expert's Activity	
	approach and area	control		D:4		H0 0 20.0 40.0 40.0	Inputted JCAB OJT-I handbook (En)	
	services		approach and/or area control	H:1		K0 0 0 0	Reduced Observation date by TF1 Request	
			services at least 2 times.	K:0		Q0 0 20.0 40.0 40.0	(5 days for 6 to 1 day for 3 only UTDD)	
				Q:1	OJT-I Training (1wk)	Implemented OJT-I training: 20%		
					W/S OJT-I Material & Tr Plan Dev. (1wk)	Implemented W/S: 20%	Catch-up W/S (2ds) for improving Examination	
					Observation of OJT (1wk)->1d (3OJT-I)	Observation + lecture: 10%x3 in UTDD	Add articles to OJT-I handbook (Ru) by OJT-Is	
						All CPs conducted OJT 2 times: 30%	(not completed by 2018/9)	
1-6	To procure aerodror	ne	Aerodrome simulator has been	Approach and	Provided all necessary data by CP	10 40.0 100	Completed	
	simulator		operational.	En-route Radar		Provided Necessary Data: 5% x 4	Hand-over ceremony on 9/8	
			'	Simulator are		Prepared Room and UPS: 10% x 2	Certificate by CAA on 12/21	
				available in		Completed Installation: 20%	One user training was merged M/T training	
				DYU and LBD		Conducted User Training: 20%	5 Problem Reports in 2018/2 (solved)	
						Conducted M&O Training: 20%	(
1-7	To conduct simulate	or trainings	Each of the simulator trainers	No. of GIT	_	0 0 40.0 70.0 85.0	Completed Expert's Activity	
1-7	TO CONTROL SITUATE	n dannings		D:4	Agradrama Sim ToT (4:uk v4)	Conducted Sim-ToT: 10% x4	One training was convert to "basic training"	
			training at least 3 times per	H:2		Implemented W/S: 20%		
				п.2 К:1	•	•	for 4 days in 2017 Sep. 4 UTDD trainers conducted trainings in	
				Q:1		Observation + lecture: 10%	accordance of annual training plan,	
				ن . ۱		CP's conducted 3 times/M: 30%	accordance of annual fialling plan,	

^		officers with regard to ICAO reco				
2-1-1	To conduct basic training on		0	-	70.0 70.0 70.0 70.0 70.0	Completed Expert's activity
	contingency plan	basic course on contingency plan		Basic Training on CP (0.5 day)	Implemented basic training: 70%	JICA is waiting submission of training material
		successfully.			Training material reused by CP: 30%	New SMS training material contains CP part
2-1-2	To improve the draft	Exercise of contingency	Draft was	Initial Draft completed by TAN	0 0 100	Completed
	contingency plans	procedures has been conducted		W/S on CP Improvement (3 days) :0.5 d	Implemented W/S: 50%	
	0 71		in 2016/4		Implemented Seminar: 50%	
2-1-3	To conduct exercise of	1	0	-	0 25.0 50.0 50.0 100 -	Completed
	contingency procedures			W/S on CP exercise (1 day x2) :0.5 day	Conducted exercise by Expert: 50%	TAN had 2 nd 0.5d CP Exercise in 2018/5/4
	procedures				Conducted exercise by CP: 50%	THE TIME E C.O. OF EXCICLES IN ECTO, OF T
2-1-4	To request approval of CAA on	The contingency plans have	0	_	0 0 100	Completed
2 1 7	the contingency plans for	been approved by CAA for	O	Monitoring on approval process (1d) 0.5	TAN finalization: 25%	MOT approved CP on 7/25
	implementation	implementation.		monitoring on approval process (14) 0.0	MOT approval: 50%	approved or on 1720
2 2 1	To obtain necessary	•	0			Completed
2-2-1		courses on SMS successful.	U	SAF-SA1:2, -SA2:1, -INV:2 (1wk each)		Completed
	knowledge of SMS		- ·	F/U Training on SMS (1day x2)	Certificates: 100%	
2-2-2	To develop and update SMS		Draft was	Initial Draft completed by TAN	0 0 100	Completed
	Manual		completed 100%	Study on SMS Implementation(1day):0.5		
			w/o attachment	(F/U Trainings x2 from 2-2-1) :1hr x2time	Conducted F/U trainings: 10% x2	
				W/S on Dev. SMS Manual (3days) :0.5d	Implemented W/S: 40%	
					Implemented Seminar: 40%	
2-2-3			0	TAN is developing Reporting System	0 0 0 50.0 100 -	Completed
	process	been established		R/M training abroad (CHG visit Ru)	TAN's reporting system working: 50%	RM Training: Replaced by Visit Rus ANSP
				<u> </u>	RM training abroad: 25%	Incidental-INV Training: Done
				(No ATC-2 Expert activities)	Incidental training abroad: 25%	(VOICE seminar (No AWP) done 2017/10)
2-2-4	To implement safety risk	Safety risk management and		HF training in abroad (add at JCC/2)	0 0 25.0 50.0 75.0	Completed Expert's activity
	management and safety	safety assurance have been		Training on Basic Human Factors (5d)	Implemented Basic HF Training: 25%	SAF-HFA in IANS: June 2018: done
	assurance	implemented			HF training abroad Certificate: 25%	RST WSs / hazard map for 3 / review: done
		·			Implemented RWY Safety WS: 25%	SMS (SA/RM) audits are under preparation.
					Audit SMS was conducted: 25%	
2-2-5	To conduct SMS training and	SMS training and education for	D: 75, H: 37	Conducted training Mod. 1-5 in D&H	10.0 10.0 70.0 70.0 100 -	Completed Expert's activity
	education for ATC officers				SMS ToT abroad :60%	Additional SMS ToT in Ru: done
		conducted	Mod.1-5 finished			Module 1-5 by TAN for KQT and TJU: 2017/6
			in D and H	(**************************************		Module 6-10 by TAN for DYU: 17/12, LBD:17/7
				14 1040		
Op-3	To enhance capacity of Aeror			egard to ICAO recommendations		
	To enhance capacity of Aeror	nautical Information Services (Al	S) officers with r		·	Completed (AIS part only) / Total 200%
Op-3 3-1	To conduct basic training on	nautical Information Services (Al 2 AlS officers have successfully	S) officers with r	4 AIS to GroupEAD (3wks) /Jul 2016	100 100 140 160 200 -	Completed (AIS part only) / Total 200% Additional SAR Admin training in MAyA: done
	To enhance capacity of Aeror To conduct basic training on AIS	nautical Information Services (Al	S) officers with r	4 AIS to GroupEAD (3wks) /Jul 2016 4 AIS to SAR in MAvA (2wks) /Sep 2017	100 100 140 160 200 - AIS Basic Certificate: 100%	Additional SAR Admin training in MAvA: done
3-1	To conduct basic training on AIS	nautical Information Services (Al 2 AIS officers have successfully completed basic course on AIS.	S) officers with r	4 AIS to GroupEAD (3wks) /Jul 2016 4 AIS to SAR in MAvA (2wks) /Sep 2017 SAR W/S, Exercise and Seminar	100 100 140 160 200 - AIS Basic Certificate: 100% SAR: 100% (C/40, W/20, E/20 S/20%)	Additional SAR Admin training in MAvA: done Exercise (10/4) and Seminar (10/5): done
3-1	To conduct basic training on AIS To conduct basic training on	Pautical Information Services (Al 2 AIS officers have successfully completed basic course on AIS. 2 AIS officers have successfully	S) officers with r	4 AIS to GroupEAD (3wks) /Jul 2016 4 AIS to SAR in MAVA (2wks) /Sep 2017 SAR W/S, Exercise and Seminar 4 AIS to GroupEAD (3wks) / Jul 2016	100 100 140 160 200 -	Additional SAR Admin training in MAvA: done Exercise (10/4) and Seminar (10/5): done Completed
3-1	To conduct basic training on AIS	Pautical Information Services (Al 2 AIS officers have successfully completed basic course on AIS. 2 AIS officers have successfully completed basic course on	S) officers with r	4 AIS to GroupEAD (3wks) /Jul 2016 4 AIS to SAR in MAVA (2wks) /Sep 2017 SAR W/S, Exercise and Seminar 4 AIS to GroupEAD (3wks) / Jul 2016	100 100 140 160 200 -	Additional SAR Admin training in MAvA: done Exercise (10/4) and Seminar (10/5): done Completed SID/STAR, WGS-84 (DYU), VISIO in drawing-2
3-1	To conduct basic training on AIS To conduct basic training on	Pautical Information Services (Al 2 AIS officers have successfully completed basic course on AIS. 2 AIS officers have successfully	S) officers with r	4 AIS to GroupEAD (3wks) /Jul 2016 4 AIS to SAR in MAVA (2wks) /Sep 2017 SAR W/S, Exercise and Seminar 4 AIS to GroupEAD (3wks) / Jul 2016 Catch-up exercise drawing-1 (5ds)	100 100 140 160 200 -	Additional SAR Admin training in MAvA: done Exercise (10/4) and Seminar (10/5): done Completed
3-1	To conduct basic training on AIS To conduct basic training on aeronautical charts	Pautical Information Services (Al 2 AIS officers have successfully completed basic course on AIS. 2 AIS officers have successfully completed basic course on aeronautical charts.	S) officers with r	4 AIS to GroupEAD (3wks) /Jul 2016 4 AIS to SAR in MAVA (2wks) /Sep 2017 SAR W/S, Exercise and Seminar 4 AIS to GroupEAD (3wks) / Jul 2016 Catch-up exercise drawing-1 (5ds)	100 100 140 160 200 -	Additional SAR Admin training in MAvA: done Exercise (10/4) and Seminar (10/5): done Completed SID/STAR, WGS-84 (DYU), VISIO in drawing-2 were done by FPD Expert by 2017/8
3-1	To conduct basic training on AIS To conduct basic training on aeronautical charts To develop operation manuals	Pautical Information Services (Al 2 AIS officers have successfully completed basic course on AIS. 2 AIS officers have successfully completed basic course on aeronautical charts. Operation manuals for Notice to	S) officers with r	4 AIS to GroupEAD (3wks) /Jul 2016 4 AIS to SAR in MAVA (2wks) /Sep 2017 SAR W/S, Exercise and Seminar 4 AIS to GroupEAD (3wks) / Jul 2016 Catch-up exercise drawing-1 (5ds) Catch-up exercise drawing-2 (5ds):2wks	100 100 140 160 200 -	Additional SAR Admin training in MAvA: done Exercise (10/4) and Seminar (10/5): done Completed SID/STAR, WGS-84 (DYU), VISIO in drawing-2 were done by FPD Expert by 2017/8 Completed
3-1	To conduct basic training on AIS To conduct basic training on aeronautical charts To develop operation manuals for Notice to Airman (NOTAM),	Pautical Information Services (Al 2 AlS officers have successfully completed basic course on AlS. 2 AlS officers have successfully completed basic course on aeronautical charts. Operation manuals for Notice to Airman (NOTAM), Aeronautical	S) officers with r	4 AIS to GroupEAD (3wks) /Jul 2016 4 AIS to SAR in MAVA (2wks) /Sep 2017 SAR W/S, Exercise and Seminar 4 AIS to GroupEAD (3wks) / Jul 2016 Catch-up exercise drawing-1 (5ds) Catch-up exercise drawing-2 (5ds):2wks - AIS Seminar (1day)	100 100 140 160 200 -	Additional SAR Admin training in MAvA: done Exercise (10/4) and Seminar (10/5): done Completed SID/STAR, WGS-84 (DYU), VISIO in drawing-2 were done by FPD Expert by 2017/8 Completed NOTAM-P was developed by new AIS Expert
3-1	To conduct basic training on AIS To conduct basic training on aeronautical charts To develop operation manuals for Notice to Airman (NOTAM), Aeronautical Information	2 AIS officers have successfully completed basic course on AIS. 2 AIS officers have successfully completed basic course on AIS. 2 AIS officers have successfully completed basic course on aeronautical charts. Operation manuals for Notice to Airman (NOTAM), Aeronautical Information Circulars (AIC) and	S) officers with r	4 AIS to GroupEAD (3wks) /Jul 2016 4 AIS to SAR in MAVA (2wks) /Sep 2017 SAR W/S, Exercise and Seminar 4 AIS to GroupEAD (3wks) / Jul 2016 Catch-up exercise drawing-1 (5ds) Catch-up exercise drawing-2 (5ds):2wks - AIS Seminar (1day) NOTAM/AIP Pro. Dev W/S-1 (4day)	100 100 140 160 200 -	Additional SAR Admin training in MAvA: done Exercise (10/4) and Seminar (10/5): done Completed SID/STAR, WGS-84 (DYU), VISIO in drawing-awere done by FPD Expert by 2017/8 Completed NOTAM-P was developed by new AIS Expert AIP(AIC) procedure was started
3-1	To conduct basic training on AIS To conduct basic training on aeronautical charts To develop operation manuals for Notice to Airman (NOTAM), Aeronautical Information Circulars (AIC) and	2 AIS officers have successfully completed basic course on AIS. 2 AIS officers have successfully completed basic course on AIS. 2 AIS officers have successfully completed basic course on aeronautical charts. Operation manuals for Notice to Airman (NOTAM), Aeronautical Information Circulars (AIC) and Publication (AIP) have been	S) officers with r	4 AIS to GroupEAD (3wks) /Jul 2016 4 AIS to SAR in MAVA (2wks) /Sep 2017 SAR W/S, Exercise and Seminar 4 AIS to GroupEAD (3wks) / Jul 2016 Catch-up exercise drawing-1 (5ds) Catch-up exercise drawing-2 (5ds):2wks - AIS Seminar (1day) NOTAM/AIP Pro. Dev W/S-1 (4day) NOTAM/AIP Pro. Dev W/S-2 (5day):2wks	100 100 140 160 200 -	Additional SAR Admin training in MAvA: done Exercise (10/4) and Seminar (10/5): done Completed SID/STAR, WGS-84 (DYU), VISIO in drawing-2 were done by FPD Expert by 2017/8 Completed NOTAM-P was developed by new AIS Expert
3-2	To conduct basic training on AIS To conduct basic training on aeronautical charts To develop operation manuals for Notice to Airman (NOTAM), Aeronautical Information Circulars (AIC) and Publication (AIP)	2 AIS officers have successfully completed basic course on AIS. 2 AIS officers have successfully completed basic course on AIS. 2 AIS officers have successfully completed basic course on aeronautical charts. Operation manuals for Notice to Airman (NOTAM), Aeronautical Information Circulars (AIC) and Publication (AIP) have been developed	S) officers with r	4 AIS to GroupEAD (3wks) /Jul 2016 4 AIS to SAR in MAVA (2wks) /Sep 2017 SAR W/S, Exercise and Seminar 4 AIS to GroupEAD (3wks) / Jul 2016 Catch-up exercise drawing-1 (5ds) Catch-up exercise drawing-2 (5ds):2wks AIS Seminar (1day) NOTAM/AIP Pro. Dev W/S-1 (4day) NOTAM/AIP Pro. Dev W/S-3 (2wk): 3wks	100 100 140 160 200 -	Additional SAR Admin training in MAvA: done Exercise (10/4) and Seminar (10/5): done Completed SID/STAR, WGS-84 (DYU), VISIO in drawing-were done by FPD Expert by 2017/8 Completed NOTAM-P was developed by new AIS Expert AIP(AIC) procedure was started AIS road map done
3-2	To conduct basic training on AIS To conduct basic training on aeronautical charts To develop operation manuals for Notice to Airman (NOTAM), Aeronautical Information Circulars (AIC) and Publication (AIP) To conduct basic training on	2 AIS officers have successfully completed basic course on AIS. 2 AIS officers have successfully completed basic course on AIS. 2 AIS officers have successfully completed basic course on aeronautical charts. Operation manuals for Notice to Airman (NOTAM), Aeronautical Information Circulars (AIC) and Publication (AIP) have been developed 2 flight procedure designers have	S) officers with r	4 AIS to GroupEAD (3wks) /Jul 2016 4 AIS to SAR in MAVA (2wks) /Sep 2017 SAR W/S, Exercise and Seminar 4 AIS to GroupEAD (3wks) / Jul 2016 Catch-up exercise drawing-1 (5ds) Catch-up exercise drawing-2 (5ds):2wks - AIS Seminar (1day) NOTAM/AIP Pro. Dev W/S-1 (4day) NOTAM/AIP Pro. Dev W/S-3 (2wk): 3wks FPO with 1PC +2VISIO by TAN in 2017/8	100 100 140 160 200 -	Additional SAR Admin training in MAvA: done Exercise (10/4) and Seminar (10/5): done Completed SID/STAR, WGS-84 (DYU), VISIO in drawing-2 were done by FPD Expert by 2017/8 Completed NOTAM-P was developed by new AIS Expert AIP(AIC) procedure was started AIS road map done Completed
3-2	To conduct basic training on AIS To conduct basic training on aeronautical charts To develop operation manuals for Notice to Airman (NOTAM), Aeronautical Information Circulars (AIC) and Publication (AIP)	2 AIS officers have successfully completed basic course on AIS. 2 AIS officers have successfully completed basic course on AIS. 2 AIS officers have successfully completed basic course on aeronautical charts. Operation manuals for Notice to Airman (NOTAM), Aeronautical Information Circulars (AIC) and Publication (AIP) have been developed 2 flight procedure designers have successfully completed basic	S) officers with r	4 AIS to GroupEAD (3wks) /Jul 2016 4 AIS to SAR in MAVA (2wks) /Sep 2017 SAR W/S, Exercise and Seminar 4 AIS to GroupEAD (3wks) / Jul 2016 Catch-up exercise drawing-1 (5ds) Catch-up exercise drawing-2 (5ds):2wks AIS Seminar (1day) NOTAM/AIP Pro. Dev W/S-1 (4day) NOTAM/AIP Pro. Dev W/S-3 (2wk): 3wks	100 100 140 160 200 -	Additional SAR Admin training in MAvA: done Exercise (10/4) and Seminar (10/5): done Completed SID/STAR, WGS-84 (DYU), VISIO in drawing-2 were done by FPD Expert by 2017/8 Completed NOTAM-P was developed by new AIS Expert AIP(AIC) procedure was started AIS road map done Completed 5 FP Designers were certified.
3-1 3-2 3-3	To conduct basic training on AIS To conduct basic training on aeronautical charts To develop operation manuals for Notice to Airman (NOTAM), Aeronautical Information Circulars (AIC) and Publication (AIP) To conduct basic training on flight procedure design	2 AIS officers have successfully completed basic course on AIS. 2 AIS officers have successfully completed basic course on AIS. 2 AIS officers have successfully completed basic course on aeronautical charts. Operation manuals for Notice to Airman (NOTAM), Aeronautical Information Circulars (AIC) and Publication (AIP) have been developed 2 flight procedure designers have successfully completed basic course on PANS-OPS.	S) officers with r	4 AIS to GroupEAD (3wks) /Jul 2016 4 AIS to SAR in MAVA (2wks) /Sep 2017 SAR W/S, Exercise and Seminar 4 AIS to GroupEAD (3wks) / Jul 2016 Catch-up exercise drawing-1 (5ds) Catch-up exercise drawing-2 (5ds):2wks - AIS Seminar (1day) NOTAM/AIP Pro. Dev W/S-1 (4day) NOTAM/AIP Pro. Dev W/S-2 (5day):2wks NOTAM/AIP Pro. Dev W/S-3 (2wk): 3wks FPO with 1PC +2VISIO by TAN in 2017/8 Training on Basic PANS-OPS FPD (6wk)	100 100 140 160 200 -	Additional SAR Admin training in MAvA: done Exercise (10/4) and Seminar (10/5): done Completed SID/STAR, WGS-84 (DYU), VISIO in drawing-2 were done by FPD Expert by 2017/8 Completed NOTAM-P was developed by new AIS Expert AIP(AIC) procedure was started AIS road map done Completed 5 FP Designers were certified. 2 attended PBN(I-FPD) in TIC on 2017/6
3-1 3-2 3-3	To conduct basic training on AIS To conduct basic training on aeronautical charts To develop operation manuals for Notice to Airman (NOTAM), Aeronautical Information Circulars (AIC) and Publication (AIP) To conduct basic training on flight procedure design To conduct OJT of flight	2 AIS officers have successfully completed basic course on AIS. 2 AIS officers have successfully completed basic course on AIS. 2 AIS officers have successfully completed basic course on aeronautical charts. Operation manuals for Notice to Airman (NOTAM), Aeronautical Information Circulars (AIC) and Publication (AIP) have been developed 2 flight procedure designers have successfully completed basic course on PANS-OPS. 2 flight procedure designers have	S) officers with r	4 AIS to GroupEAD (3wks) /Jul 2016 4 AIS to SAR in MAVA (2wks) /Sep 2017 SAR W/S, Exercise and Seminar 4 AIS to GroupEAD (3wks) / Jul 2016 Catch-up exercise drawing-1 (5ds) Catch-up exercise drawing-2 (5ds):2wks - AIS Seminar (1day) NOTAM/AIP Pro. Dev W/S-1 (4day) NOTAM/AIP Pro. Dev W/S-2 (5day):2wks NOTAM/AIP Pro. Dev W/S-3 (2wk): 3wks FPO with 1PC +2VISIO by TAN in 2017/8 Training on Basic PANS-OPS FPD (6wk) WGS-84 in 3 regional airports by TAN	100 100 140 160 200 -	Additional SAR Admin training in MAvA: done Exercise (10/4) and Seminar (10/5): done Completed SID/STAR, WGS-84 (DYU), VISIO in drawing-2 were done by FPD Expert by 2017/8 Completed NOTAM-P was developed by new AIS Expert AIP(AIC) procedure was started AIS road map done Completed 5 FP Designers were certified. 2 attended PBN(I-FPD) in TIC on 2017/6 Completed / Total 200%
3-1 3-2 3-3	To conduct basic training on AIS To conduct basic training on aeronautical charts To develop operation manuals for Notice to Airman (NOTAM), Aeronautical Information Circulars (AIC) and Publication (AIP) To conduct basic training on flight procedure design To conduct OJT of flight procedure designers for a	2 AIS officers have successfully completed basic course on AIS. 2 AIS officers have successfully completed basic course on AIS. 2 AIS officers have successfully completed basic course on aeronautical charts. Operation manuals for Notice to Airman (NOTAM), Aeronautical Information Circulars (AIC) and Publication (AIP) have been developed 2 flight procedure designers have successfully completed basic course on PANS-OPS. 2 flight procedure designers have successfully completed OJT on	S) officers with r	4 AIS to GroupEAD (3wks) /Jul 2016 4 AIS to SAR in MAVA (2wks) /Sep 2017 SAR W/S, Exercise and Seminar 4 AIS to GroupEAD (3wks) / Jul 2016 Catch-up exercise drawing-1 (5ds) Catch-up exercise drawing-2 (5ds):2wks - AIS Seminar (1day) NOTAM/AIP Pro. Dev W/S-1 (4day) NOTAM/AIP Pro. Dev W/S-2 (5day):2wks NOTAM/AIP Pro. Dev W/S-3 (2wk): 3wks FPO with 1PC +2VISIO by TAN in 2017/8 Training on Basic PANS-OPS FPD (6wk) WGS-84 in 3 regional airports by TAN WGS-84 survey DYU (add at April 2017)	100 100 140 160 200 -	Additional SAR Admin training in MAvA: done Exercise (10/4) and Seminar (10/5): done Completed SID/STAR, WGS-84 (DYU), VISIO in drawing-were done by FPD Expert by 2017/8 Completed NOTAM-P was developed by new AIS Expert AIP(AIC) procedure was started AIS road map done Completed 5 FP Designers were certified. 2 attended PBN(I-FPD) in TIC on 2017/6 Completed / Total 200% Pre-survey UTDT/K/L by TAN: Done
3-1 3-2 3-3	To conduct basic training on AIS To conduct basic training on aeronautical charts To develop operation manuals for Notice to Airman (NOTAM), Aeronautical Information Circulars (AIC) and Publication (AIP) To conduct basic training on flight procedure design To conduct OJT of flight	2 AIS officers have successfully completed basic course on AIS. 2 AIS officers have successfully completed basic course on AIS. 2 AIS officers have successfully completed basic course on aeronautical charts. Operation manuals for Notice to Airman (NOTAM), Aeronautical Information Circulars (AIC) and Publication (AIP) have been developed 2 flight procedure designers have successfully completed basic course on PANS-OPS. 2 flight procedure designers have successfully completed OJT on conventional flight procedure	S) officers with r	4 AIS to GroupEAD (3wks) /Jul 2016 4 AIS to SAR in MAVA (2wks) /Sep 2017 SAR W/S, Exercise and Seminar 4 AIS to GroupEAD (3wks) / Jul 2016 Catch-up exercise drawing-1 (5ds) Catch-up exercise drawing-2 (5ds):2wks - AIS Seminar (1day) NOTAM/AIP Pro. Dev W/S-1 (4day) NOTAM/AIP Pro. Dev W/S-2 (5day):2wks NOTAM/AIP Pro. Dev W/S-3 (2wk): 3wks FPO with 1PC +2VISIO by TAN in 2017/8 Training on Basic PANS-OPS FPD (6wk) WGS-84 in 3 regional airports by TAN WGS-84 survey DYU (add at April 2017) OJT on FPD (7wks)	100 100 140 160 200 -	Additional SAR Admin training in MAvA: done Exercise (10/4) and Seminar (10/5): done Completed SID/STAR, WGS-84 (DYU), VISIO in drawing-were done by FPD Expert by 2017/8 Completed NOTAM-P was developed by new AIS Expert AIP(AIC) procedure was started AIS road map done Completed 5 FP Designers were certified. 2 attended PBN(I-FPD) in TIC on 2017/6 Completed / Total 200% Pre-survey UTDT/K/L by TAN: Done Supplementary OJT for 2 weeks in 2018/2
3-1 3-2 3-3 3-4	To conduct basic training on AIS To conduct basic training on aeronautical charts To develop operation manuals for Notice to Airman (NOTAM), Aeronautical Information Circulars (AIC) and Publication (AIP) To conduct basic training on flight procedure design To conduct OJT of flight procedure designers for a	2 AIS officers have successfully completed basic course on AIS. 2 AIS officers have successfully completed basic course on AIS. 2 AIS officers have successfully completed basic course on aeronautical charts. Operation manuals for Notice to Airman (NOTAM), Aeronautical Information Circulars (AIC) and Publication (AIP) have been developed 2 flight procedure designers have successfully completed basic course on PANS-OPS. 2 flight procedure designers have successfully completed OJT on	S) officers with r	4 AIS to GroupEAD (3wks) /Jul 2016 4 AIS to SAR in MAVA (2wks) /Sep 2017 SAR W/S, Exercise and Seminar 4 AIS to GroupEAD (3wks) / Jul 2016 Catch-up exercise drawing-1 (5ds) Catch-up exercise drawing-2 (5ds):2wks AIS Seminar (1day) NOTAM/AIP Pro. Dev W/S-1 (4day) NOTAM/AIP Pro. Dev W/S-2 (5day):2wks NOTAM/AIP Pro. Dev W/S-3 (2wk): 3wks FPO with 1PC +2VISIO by TAN in 2017/8 Training on Basic PANS-OPS FPD (6wk) WGS-84 in 3 regional airports by TAN WGS-84 survey DYU (add at April 2017) OJT on FPD (7wks) Observation for FPD (2wks): 4wks	100 100 140 160 200 -	Additional SAR Admin training in MAvA: done Exercise (10/4) and Seminar (10/5): done Completed SID/STAR, WGS-84 (DYU), VISIO in drawing-were done by FPD Expert by 2017/8 Completed NOTAM-P was developed by new AIS Expert AIP(AIC) procedure was started AIS road map done Completed 5 FP Designers were certified. 2 attended PBN(I-FPD) in TIC on 2017/6 Completed / Total 200% Pre-survey UTDT/K/L by TAN: Done Supplementary OJT for 2 weeks in 2018/2 Visit Russia Contractors, Kyrgyz: Done 2018/3
3-1 3-2 3-3	To conduct basic training on AIS To conduct basic training on aeronautical charts To develop operation manuals for Notice to Airman (NOTAM), Aeronautical Information Circulars (AIC) and Publication (AIP) To conduct basic training on flight procedure design To conduct OJT of flight procedure designers for a	2 AIS officers have successfully completed basic course on AIS. 2 AIS officers have successfully completed basic course on AIS. 2 AIS officers have successfully completed basic course on aeronautical charts. Operation manuals for Notice to Airman (NOTAM), Aeronautical Information Circulars (AIC) and Publication (AIP) have been developed 2 flight procedure designers have successfully completed basic course on PANS-OPS. 2 flight procedure designers have successfully completed OJT on conventional flight procedure	S) officers with r	4 AIS to GroupEAD (3wks) /Jul 2016 4 AIS to SAR in MAVA (2wks) /Sep 2017 SAR W/S, Exercise and Seminar 4 AIS to GroupEAD (3wks) / Jul 2016 Catch-up exercise drawing-1 (5ds) Catch-up exercise drawing-2 (5ds):2wks	100	Additional SAR Admin training in MAvA: done Exercise (10/4) and Seminar (10/5): done Completed SID/STAR, WGS-84 (DYU), VISIO in drawing-were done by FPD Expert by 2017/8 Completed NOTAM-P was developed by new AIS Expert AIP(AIC) procedure was started AIS road map done Completed 5 FP Designers were certified. 2 attended PBN(I-FPD) in TIC on 2017/6 Completed / Total 200% Pre-survey / Total 200% Pre-survey / Total 200% Visit Russia Contractors, Kyrgyz: Done 2018/3 FPD Expert QA Training: 2018/9: Done
3-1 3-2 3-3 3-4 3-5	To conduct basic training on AIS To conduct basic training on aeronautical charts To develop operation manuals for Notice to Airman (NOTAM), Aeronautical Information Circulars (AIC) and Publication (AIP) To conduct basic training on flight procedure design To conduct OJT of flight procedure designers for a model airport	2 AIS officers have successfully completed basic course on AIS. 2 AIS officers have successfully completed basic course on AIS. 2 AIS officers have successfully completed basic course on aeronautical charts. Operation manuals for Notice to Airman (NOTAM), Aeronautical Information Circulars (AIC) and Publication (AIP) have been developed 2 flight procedure designers have successfully completed basic course on PANS-OPS. 2 flight procedure designers have successfully completed OJT on conventional flight procedure design.	S) officers with r	4 AIS to GroupEAD (3wks) /Jul 2016 4 AIS to SAR in MAVA (2wks) /Sep 2017 SAR W/S, Exercise and Seminar 4 AIS to GroupEAD (3wks) / Jul 2016 Catch-up exercise drawing-1 (5ds) Catch-up exercise drawing-2 (5ds):2wks	100 100 140 160 200 -	Additional SAR Admin training in MAvA: done Exercise (10/4) and Seminar (10/5): done Completed SID/STAR, WGS-84 (DYU), VISIO in drawing-2 were done by FPD Expert by 2017/8 Completed NOTAM-P was developed by new AIS Expert AIP(AIC) procedure was started AIS road map done Completed 5 FP Designers were certified. 2 attended PBN(I-FPD) in TIC on 2017/6 Completed / Total 200% Pre-survey UTDT/K/L by TAN: Done Supplementary OJT for 2 weeks in 2018/2 Visit Russia Contractors, Kyrgyz: Done 2018/3 FPD Expert QA Training: 2018/9: Done (This was instead of ICAO training in China)
3-1 3-2 3-3	To conduct basic training on AIS To conduct basic training on aeronautical charts To develop operation manuals for Notice to Airman (NOTAM), Aeronautical Information Circulars (AIC) and Publication (AIP) To conduct basic training on flight procedure design To conduct OJT of flight procedure designers for a model airport	2 AIS officers have successfully completed basic course on AIS. 2 AIS officers have successfully completed basic course on AIS. 2 AIS officers have successfully completed basic course on aeronautical charts. Operation manuals for Notice to Airman (NOTAM), Aeronautical Information Circulars (AIC) and Publication (AIP) have been developed 2 flight procedure designers have successfully completed basic course on PANS-OPS. 2 flight procedure designers have successfully completed OJT on conventional flight procedure design.	S) officers with r	4 AIS to GroupEAD (3wks) /Jul 2016 4 AIS to SAR in MAVA (2wks) /Sep 2017 SAR W/S, Exercise and Seminar 4 AIS to GroupEAD (3wks) / Jul 2016 Catch-up exercise drawing-1 (5ds) Catch-up exercise drawing-2 (5ds):2wks - AIS Seminar (1day) NOTAM/AIP Pro. Dev W/S-1 (4day) NOTAM/AIP Pro. Dev W/S-2 (5day):2wks NOTAM/AIP Pro. Dev W/S-3 (2wk): 3wks FPO with 1PC +2VISIO by TAN in 2017/8 Training on Basic PANS-OPS FPD (6wk) WGS-84 in 3 regional airports by TAN WGS-84 survey DYU (add at April 2017) OJT on FPD (7wks) Observation for FPD (2wks): 4wks PBN introduction Seminar (0.5dayx1) FPD-QA, GV/FV, ICAO Training in China	100	Additional SAR Admin training in MAvA: done Exercise (10/4) and Seminar (10/5): done Completed SID/STAR, WGS-84 (DYU), VISIO in drawing-2 were done by FPD Expert by 2017/8 Completed NOTAM-P was developed by new AIS Expert AIP(AIC) procedure was started AIS road map done Completed 5 FP Designers were certified. 2 attended PBN(I-FPD) in TIC on 2017/6 Completed / Total 200% Pre-survey UTDT/K/L by TAN: Done Supplementary OJT for 2 weeks in 2018/2 Visit Russia Contractors, Kyrgyz: Done 2018/3 FPD Expert QA Training: 2018/9: Done (This was instead of ICAO training in China)
3-1 3-2 3-3 3-4 3-5	To conduct basic training on AIS To conduct basic training on aeronautical charts To develop operation manuals for Notice to Airman (NOTAM), Aeronautical Information Circulars (AIC) and Publication (AIP) To conduct basic training on flight procedure design To conduct OJT of flight procedure designers for a model airport	2 AIS officers have successfully completed basic course on AIS. 2 AIS officers have successfully completed basic course on AIS. 2 AIS officers have successfully completed basic course on aeronautical charts. Operation manuals for Notice to Airman (NOTAM), Aeronautical Information Circulars (AIC) and Publication (AIP) have been developed 2 flight procedure designers have successfully completed basic course on PANS-OPS. 2 flight procedure designers have successfully completed OJT on conventional flight procedure design.	S) officers with r	4 AIS to GroupEAD (3wks) /Jul 2016 4 AIS to SAR in MAVA (2wks) /Sep 2017 SAR W/S, Exercise and Seminar 4 AIS to GroupEAD (3wks) / Jul 2016 Catch-up exercise drawing-1 (5ds) Catch-up exercise drawing-2 (5ds):2wks - AIS Seminar (1day) NOTAM/AIP Pro. Dev W/S-1 (4day) NOTAM/AIP Pro. Dev W/S-2 (5day):2wks NOTAM/AIP Pro. Dev W/S-3 (2wk): 3wks FPO with 1PC +2VISIO by TAN in 2017/8 Training on Basic PANS-OPS FPD (6wk) WGS-84 in 3 regional airports by TAN WGS-84 survey DYU (add at April 2017) OJT on FPD (7wks) Observation for FPD (2wks): 4wks PBN introduction Seminar (0.5dayx1) FPD-QA, GV/FV, ICAO Training in China - AIP design exercise on DYU (5 days)	100 100 140 160 200 -	Additional SAR Admin training in MAvA: done Exercise (10/4) and Seminar (10/5): done Completed SID/STAR, WGS-84 (DYU), VISIO in drawing-2 were done by FPD Expert by 2017/8 Completed NOTAM-P was developed by new AIS Expert AIP(AIC) procedure was started AIS road map done Completed 5 FP Designers were certified. 2 attended PBN(I-FPD) in TIC on 2017/6 Completed / Total 200% Pre-survey UTDT/K/L by TAN: Done Supplementary OJT for 2 weeks in 2018/2 Visit Russia Contractors, Kyrgyz: Done 2018/3 FPD Expert QA Training: 2018/9: Done (This was instead of ICAO training in China)

ANNEX5-16

Monitoring Sheet II Version 6

AWP-2018 / Monitoring Sheet-2 (Admin.)

					Y2018		May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2019 Jan	Feb	Mar		
			Ex	P/A	befor	1wk 2wk 3wk 4wl		lwk 2wk 3wk 4wl	1wk 2wk 3wk 4wk	1wk 2wk 3wk 4wk	1wk 2wk 3wk 4wk	1wk 2wk 3wk 4wl			1wk 2wk 3wk 4wk	1wk 2wk 3wk 4wk	1wk 2wk 3wk 4wk af	ter Re	ema
Project	JCC/n			Plan			∇ 5/3 (JCC/3)						▽11/	30? (JCC/4)					
Meeting	Joint Co			Actual			▼ 5/3												
	PCM/n		PC	Plan							▽ (Monitoring) ∇(I	PCR making)						
	Project	Coordination Meeting		Actual		▼4/3 PCM/7						▼10/8 PCM/8							
	TF1M/n		A1	Plan			∇												
				Actual		▼4/24 T	F1M/16 ▼5/16 17	▼▼▼6/8,12	,26 TF1M/18,19,20		▼9/14 TF1M/2	21							
	TF2M/n		A2	Plan			∇												
		ce-2 Meeting		Actual			(canceled)												
	TF3M/n			Plan		∇	∇		∇		∇								
	Taskfor			Actual		▼ 4/9 14 ▼ 4	/30 TF3M/15	▼6/12 TF3M	/16 ▼▼ 7/9,31 T	F3M/17,18	▼9/14 TF3M/1	19							
	Other M	leetings		Plan															
				Actual		▼ 4	1/26 TV-Conf (JCC/3)												
Monitor	Joint Mo			Plan								VI	PCR making						
				Actual							9/1728	10/152	5						
Reporting	Expert			Plan							∇								
	team			Actual							▼9/	28							
		Inception Report	A1	Plan															
				Actual															
	PC	Project Progress Report	PC	Plan		∇					∇			∇ (Project Co)	mpletion Report)				
		(Administrative part only)		Actual		▼3/28					▼9/								
		Quatary Accounting Report	PC	Plan		∇			∇			∇		∇					
				Actual		▼4/2			▼7/2			▼10/1							
		Business Trip Report	PC	Plan															
				Actual															
Expert	TF-1	Cheif Advisor / ATC-1 Exp.	A1	Plan			2 weeks						3 days	;					
team		Mr.Watanabe		Actual			5/25/18												
			SE	Plan															
		Mr. Sakae		Actual															
	TF-2	ATC-2 Expert	A2	Plan															
		Mr. Watanabe		Actual															
	TF-3	AIS Expert	IS	Plan			5/2		1 week										
		Mr.Sukegawa		Actual			5/2		7/88/	1 (Extended 2.5wks)									
		FPD Expert	FP	Plan			5/4				2 weeks								
		Mr.Yamane		Actual		4/8	5/4			8/28	9/16								
JICA PC	PC	Project Coordinator	PC	Plan		/till 12/26	> (5/4- home leave	e)						▽ 1	12/26 Leave				
		Mr.Orita		Actual			5/11	6/3											
Mission	JICA HO	Q mission		Plan							(PBN P/F mission?)	10/17-31	(Evaluation Consultant)						
				Actual							(canceled)	10/1426	1						

	JPFY2018	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2019 Jan	Feb	Mar	1	
Activity Type Sub-Activity		1wk 2wk 3wk 4wk 1wk 2											1wk 2wk 3wk 4wk	after	Remarks
1-1 To conduct training of ATC officers on	Р														
aerodrome, approach and area control services	Α														100%
	PC P 10														
2.5 M (2016 July Group)	A 10 done														_
3rd Tr ATC Training in MAvA	PC P 8														
2.5M (2016 Oct Group)	A 8 done														_
	A1 P 18+														
0.5x4ds (changed Seminor)		(no completed / no report)													
1-2 To conduct OJT instructor training for selected	P														
ATC officers	Α														100%
	PC P 6														
2wks (2017 May Group)	A 6 done														_
3rd Tr TF-1 Management Training															
1wk in MAvA	A 6 done														
1-3 To conduct instructor training for simulator	P														
trainers	Α														100%
3rd Tr GIT Training in MAvA	PC P 8														
1wk (2017 Feb Group)	A 8 done														
3rd Exp. 3rd Country Expert (MAvA)	PC P 8+														
1.5wk for Radar Sim Approach	A 8 done														
3rd Exp. 3rd Country Expert (MAvA)	PC P 8+														
1.5wk for Radar Sim En-route	A 8 done														
1-4 To review and if necessary improve	Р														
Operation Manuals	Α														60%
Meeting Operation Manual review	A1 P 18+														
1d x1 Working Group formation	A 8 done	(no report)													
Others Expert Reporting Session for	A1 P 18+														
2days O/M Review	A 8 done														
W/S Workshop on Operation	A1 P all	▽ 0.5	5day W/S (Inst	ead of Completion S	eminar)										
2ds x2 Manual Review	A ?		5/4 (canceled)			▼8/	30-31 (made MVA by	TF3)							
	A1 P WG	▽ 30	days Catch-up	W/S (ATC and AD)											
(new request)	A ?	,	▼5/7-10	,											
1-5 To conduct OJT on aerodrome, approach and	P														
area control services	Α														70%
Lecture OJT-Instructors Training	A1 P 6+														
1wk	A 5 done														
W/S Workshop on OJT-I Material	A1 P 6+			h-up W/S (Examinati	on System)										
1wk and Training Plan Dev.	A done		▼5/14-15												
Observ Observation of OJT by CP	A1 P 6+		✓ 1day for (3 L	JTDD OJT-ls)											
1wk Instructors	A		▼5/11	·											
1-6 To procure aerodrome simulator	Р														
	Α														100%
Others Planning of Aerodrome	PC P N/A														
3d x1 Simulator Installation	A N/A done														
Lecture User Training on Aerodrome	PC P 8+1														
	N A 8 done														1
Lecture Maintenance and Operation	PC P 4+1														
1day Training on Aerodrome Sim															1
1-7 To conduct simulator trainings	P														
· · · · · · · · · · · · · · · · · · ·	A														85%
Lecture Aerodrome Simulator	SE P 8+														
1wk x4 Trainer's Training (4 times)	A 13 done														1
W/S Workshop on Simulator Tr's															
1wk Material & Training Plan Dev	A 6 done														1
	SE P 8+														1
1wk Simulator by CP Trainers	A 3 done														II.
TWK Silliulator by GF Halliels	A 0 dolle	1			l	1	I.	1	l .	I.	l				-

Activity Type Sub-Activity E	y P/Δ	JPFY20	efor 1	wk 2wk 3wk 4wk	1wk 2wk 3wk 4wk	1wk 2wk 3wk 4wk	1wk 2wk 3wk 4wk	Aug 1wk 2wk 3wk 4wk	1wk 2wk 3wk 4wk	after Remar						
2-1-1 To conduct basic training on contingency plan	P	π υσ	5101 1	WK ZWK JWK 4WK	TWR ZWR JWR TWR	I IWK ZWK JWK 1 WK	IWK ZWK OWK TWK	TWR ZWR JWR 4WR	TWR ZWR JWR TWR	IWK ZWK JWK TWK	TWR ZWR JWR 4WR	TWR ZWR JWR TWR	TWK ZWK OWK TWK	TWR ZWR JWR 4WR	IWK ZWK JWK +WK	and Memai
	A															70%
Training Contiengency Basic Training A	2 P	2														
0.5day	Α		ne													
2-1-2 To improve the draft contingency plans	Р															
	A															100%
TAN Draft Contiengency Plan	PP															
Baselin	A	do	ne													
	2 P A															
3days Seminar Seminar on CP completion A		? do	ne													
1day	A		nne													
2-1-3 To conduct exercise of contingency procedures	P	. 00	,,,,,													
2 · · · · · · · · · · · · · · · · · · ·	A															100%
W/S Workshop on CP Exercise A		2+				for TAN's CP Exerci	se (1hr)									
1d x2 (title/term changes)	Α				▼ 5/4											
2-1-4 To request approval of CAA on the contingency	Р															
plans for implementation	Α															100%
	2 P															
1day process for CP (changed)	A	? do	ne													
2-2-1 To obtain necessary knowledge of SMS	P															1000
7.11 0.15 0.10	Α	0														100%
		2														
Baselin in EUROCONTROL 3rd Tr SAF-SA1 in F	СР									10/22-26						
1wk EUROCONTROL		2 do	nne							10/22-26						
	C P		,,,,,							10/22-20						
1wk in EUROCONTROL		1 do	ne													
	СР															
1wk in EUROCONTROL		2 do	ne													
	2 P	2+														
1d x2	Α	1 do	ne													
2-2-2 To develop and update SMS Manual	Р															
	Α															100%
	PP															
Baselin wi/o attachment	A		ne													
	2 P	2+ ? do														
1day Implementation W/S W/S on Developing SMS A	2 P		ne													
3days Manual		? do	nne													
	2 P		,,,,,													
1day SMS Manual		15 do	ne													
2-2-3 To establish risk management process	P	10 00	,													
	Α															100%
3rd Tr Risk Managment F	СР	1														
1wk in EUROCONTROL	Α		ne (R	Replaced by Visit Ru	ussian ANSP)											
3rd Tr Incidential-Investigation/Ru F																
1wk in Moscow?		2 do	ne													
TAN (No ATC2 Expert activities)	PP															
	A															
2-2-4 To implement safety risk management and	Р															750/
safety assurance	A	٥.				6/1822										75%
Training Trainig on Basic Human A 5days Factors (changed title)	2 P	3 do	ne (F	l Filling gap for ANSP	nart by SAF-HE\	Ø/1822 ▼ 6/18-2										
W/S W/S on Runway Safety A	2 P	2+	7110 (F	ming gap ioi Aivor	∇ RWY Haza											
1dx2 Program	A	2			▼ 5/4 (H/M review											
2-2-5 To conduct SMS training and education	P	İ			., . (
for ATC officers	A															100%
	PP															
Baselin Module 1-5 to DYU & LBD	Α															
	СР															
1wk in Swan Aviation in KZ		2 do	ne													
TAN (No ATC2 Expert activities)																
	Α	- 1	1													

	T 01 4 5 5	E		4 1 0 / 0 :	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2019 Jan	Feb	Mar	-
	Type Sub-Activity			r 1wk 2wk 3wk 4w	1wk 2wk 3wk 4wk	1wk 2wk 3wk 4wk	1wk 2wk 3wk 4wk	1wk 2wk 3wk 4wk	1wk 2wk 3wk 4wk	1wk 2wk 3wk 4wk	1wk 2wk 3wk 4wk	1wk 2wk 3wk 4wk	1wk 2wk 3wk 4wk	1wk 2wk 3wk 4wk	1wk 2wk 3wk 4wk after	r Re
To conduc	t basic training on AIS	P														20
	3rd Tr AIS Basic Training	PC P														
	3wks in GroupEAD (same as 3-2 3rd Tr SAR Training) A	4 done													(1
	2wks in MAvA		4 done													(′
	W/S W/S on SAR coordination		4	4/10-16												
	4days manual development	A		▼ 4/10-13				31 (catch-up W/S f)						I
	Exerice SAR Coordination Exercise		4				∇ (2day		∇?							
	2days	A					▼ 7/13 (no R			▼10/4						_!
	Seminar Seminar on SAR	IS P					▽ (1day		▽ 9/13 (r							4
	1day Coordination Manual	A					(canceled	d)	(cancel)	▼10/5						
	t basic training on aeronautical	P														
charts	0.17 410.0 : 7 : :	PC P														10
	3rd Tr AIS Basic Training 3wks in GroupEAD (same as 3-1		4 done													
	W/S Catchup exercise on		4 done	1												
	5days Aerodrome Chart drawing-	15 P	3 done	(no roport)												
	W/S Catchup exercise on	FP P	4	(no report)												
	2wks Aerodrome Chart drawing-2		4 done													
To develor	o operation manuals for NOTAM,	P														
AIC and AI		A														10
AIO alla Al	Seminar Aeronautical Information	IS P														= '`
		A		(no report)												
	1day Service(AIS) Seminar W/S NOTAM & AIP Procedure		4		5-26 (AIS road map d	lev)										
	4ds x3 Manual Development W/S		5 done		4/25-26	Ĭ										
To conduc	t basic training on	P			1,20,20											
	edure design	Α														10
	Training Training on basic PANS-	FP P	4													
	6wks OPS FPD	Α	5 done	,												_
To conduc	t OJT of flight procedure designers	Р														
for a mode		Α														20
	Others WGS-84 data survey	PC P	4													
	2wks (Step-1)		2 done													
	OJT WGS-84 data survey	PC P	4													
	4wks (Step-2a/2b + Maps)		2 done	•												
	Others WGS-84 data survey		4													
	(Remort oversight)		2 done	1					(data ver	fy)						_
	OJT OJT on FPD		4													
	6+1wks in DYU		5 done													_
	Observ Observation for FPD		4							eek (Design Review)						
	1wk in DYU		5 done	▼4/10-13 (fir	al design review)					3/29-31						_
	Training FPD-QA, GV/FV	FP P							1week (T							
	1wk (New Request)	PC A		▼4	/25-26 (Validation)					▼ 9/3-12						_
	CP-T Jp PBN IFPD in Japan	PC P				6/6	7/14									
	1.5M		2			▼ 6/4	7/13									_
	Seminar PBN Introduction Seminar		all													
_ ,	0.5day		all done	•												_
To produce	e draft of AIP of the model airport	P														.
-	INTO AID I : = :	Α														10
	W/S AIP design Exercise on		7	4/17-24												
	5days Dushanbe Airport Seminar Seminar on AIP	FP A	all	▼ 4/17-												_
			all I	4/3	0 (0.5day)											

ANNEX5-17

Monitoring Sheet Summary Version 6



The Joint Monitoring, for "The Project for Capacity Development in Air Traffic Services" in Tajikistan

Ver. 6.0

Dushanbe, 5 October 2018





Sheraliev Bakhtyor Hideo Watanabe
Project Manager / TF-2 Leader Project Chief Advisor / TF-1/2 Expert SUE "TAJIKAIRNAVIGATION"

ATCA-Japan

Tomonori Orita Project Coordinator JICA



Monitoring Sheet Summary (Ver. 6.0)

1. Introduction

The latest Monitoring (Ver. 6.0) from 1st April 2018 to 31th September 2018 was jointly conducted by TAN and JICA with the following objectives:

- (1) To monitor a progress and operational efficiency of the Project operation in accordance with AWP-2018 (Ver. 1.0) by indicating the percentage of progress in each activity.
- (2) To provide a summary and details of inputs and outcomes with objective evaluation by counterparts for preparing the Project Completion Report by Expert team.

2. Outline of Project Activities

There were 33 various activities related to 3 Outputs in the PDM of this Project.

All activities could be categorized (A), (B) and (C) from an objective point of view in the outcomes, and each output also could be resolved into several technical subjects as given Table-1 below. The highlighted blue activities were additionally implemented in this monitoring terms.

Table-1

			Activities by	Japanese Expert	Procurement
		Trainings abroad	Training of Trainers /	Improving Procedures,	Support for
			Capacity Development	Manuals & Regulations	Aerodrome Sim.
Op	Technical subjects Category	(A)		(B)	(C)
1	Improving ATC Operation	1-1 ATCs (18)		1-4 Review manuals	
				1-4 Capacity Asses Method	
	OJT Instructor's Training	1-2 OJT-Instructor (6)	1-5 OJT-I ToT		
		1-2 TF1-Magmnt (6)	1-5 Exam. Sys Dev		
	Aerodrome Simulator	1-3 GIT (8)	1-7 Sim trainers ToT		1-6 Simulator
	Trainer's Training		(1-3 by MAvA Experts)		
2	Contingency Plan		2-1-1 Basic Training	2-1-2 Draft improve	
	(CP)		2-1-3 Exercise	2-1-4 CAA approval	
	Safety Management System	2-2-1 SAF-# (2+1+2)	2-2-5 SMS trainer	2-2-2 SMS Manual	
	(SMS)	2-2-3 R/M, I-INV (1+2)		2-2-3 Risk Management	
		2-2-4 HF training (1)		2-2-4 Improve R/M&S/A	
		2-2-5 SMS ToT (2)			
		2-2-5 SMS B/A Tr (2)			
3	Aeronautical Information Services	3-1 AIS basic (2)	3-1 SAR / RCC O/M	3-3 Procedure Dev. AIP	
	(AIS)	3-1 SAR training (4)		3-6 Develop draft AIP	
	Flight Procedure Design	3-2 Aero Chart (2)	3-4 Basic Training		
	(FPD)		3-5 OJT FPD/ WGS84		
			3-5 FPD-QA, GV		

Needless to say, the category (B) "Training by Japanese Expert" activities are primary components of this Project. However, the opportunities of trainings abroad as the category (A) are not less significant than others, because an essential knowledge for changing legacy Soviet-style rule to ICAO standard was a precondition of receiving Japanese Expert's trainings in particular structure of the Project. This was the reason that Project had preceded the trainings abroad in the early phase.

3. Summary of evaluation by the Monitoring (New)

In general, the required function of Project's activities is how to generate the sustainable "Outcomes" by cost-effective "Inputs" which were consisted Expert's activities, counterpart assignment and budget. The "Outcomes" will be evaluated by DAC's standard as "relevance", "effectiveness", "impact", "efficiency" and "sustainability". However, the last three times monitoring found that the base-line in each task as of April 2016, quality and quantity of the Expert's inputs and a capability of counterpart for receiving technical assistance are also should be evaluated objectively by an effectiveness view point for making Project Completion Report by the consultant.

For comprehending overall result of various outcomes, this last monitoring newly provides summary table for each sub-activity including, CPs (PM, Taskforces leader and sub-leaders) and Project Coordinator side evaluations on Outcomes, the baseline, actual figures of "inputs" and positioning of certificates before discussing outcomes in detail.



http://www.tj-ats.com

										OA J	APAN	JIG.
			Moni	AWP / Sub-activity Plan	Inte	ernal E	Ēva.	base	Inputs			Outcomes or remarks
TF	Activi	ty / Sub-Activity	-toring	Training abroad Another Expert	РМ	TF-I	РС		-	budget		(Certificate value)
1		ATC		ICAO ATC trainings in MAvA	5	5	5	Low		208,462	18	ICAO TP #052-56 certificates
	'-'	training abroad	100%		1	1			0.5x4	0	?	CHG AD to "seminar" in Feb 2017
				F/U Trainings on AD, APP, ACC			2	Low				
	1-2	OJT-Instructor	100%	ICAO OJT-I trainings in MAvA	5	5	5	Low	1.5	33,799	6	ICAO TP #211 certificate
		training abroad		TF1 Management training	5	5	4	Low	0.0	24,338	7	visited DCA and Suban ACC
	1-3	Instructor	100%	ICAO GIT trainings in MAvA	5	5	5	Low	1.5	30,463	8	ICAO TP #219 certificate
		training abroad	100 70	Radar Sim by MAvA Experts	5	5	4	Low	0.0	14,670	(4)	Made LoA for cooperation
	1-4	Operation		F/U Trainings (from 1-1)	N/A	N/A	N/A	Low	-		-	MVA chart: Created in Oct 2018
		Manual Review		O/M WG/ findings study meeting	2	2	2	Low		0	?	Light-gun: Not ready by Nov
			60%	WS on O/M Review	2	2	2	Low	38.5	(R2E)	?	Follow-me-car: Rejected in Jul
		Add:		Comp Seminar (CHG 0.5d W/S)	2	2	1	Low		,	1	Others: To change with Topsky
		ATS Capacity		(new) ATS Capacity Assessment	_	1	2	Low	12.0	0	5	Certificate of attendance/ Give-up
	1-5	OJT-I training			2	2	4		12.0	U	5	Certificate of attendance
	1-5			OJT-I Training by Expert	_			Low	47.0	0		
		by ATC-1 Expert	70%	WS Material / Annual Plan Dev.	3	2	3	Low	17.0	0	3	M: Not improved, AP: made
		Add;		Observation OJT	2	2	3	Low			3	OJT checklist was translated
		Exam Sys Dev.		(new) Examination System Dev.	2	2	2	Low	2.0	0	3?	Exam Sys (Not developed)
	1-6	AD Simulator		Procurement Support	5	5	5	Low	1.0	5,107	-	Adapted UTDL TWR change.
		Procurement	4000/	Installation Planning	5	5	5	Low	0.0		-	Handover to TAN in Sep 2017.
			100%	User training by NTT-D for Inst.	5	5	5	Low	0.0	0	3	CAA certified in Dec 2017
				M/T training by NTT-D for IT	5	5	5	Hi	0.0		3	Start using from Jan 2018
	1-7	AD-Sim training		AD-Sim training by Expert	5	4	4	Low	0.0		6	Certificate of Completion (?)
	'-'	by SIm Expert	85%	WS Material / Annual Plan Dev.	5	4	4		41.0	0	3+3	Certificate of attendance
		by Silli Expert	05%		_		1	Low	41.0	U		
				Observation Sim-training	5	4	4	Low			3	Scenario: developed, AP: made
2		CP Training	70%	CP Basic Training by Expert	3	3	3	Hi	1.0	0	2	Certificate (?)
	2-1-2	Improve	100%	WS CP Improvement	4	4	4	Hi	1.0	0	?	
		draft CP	100 /0	Seminar on CP Completion	4	4	4	Hi			-	
	2-1-3	CP Exercise	100%	WS on CP Exercise	3	4	5	Hi	1.5	0	?	CP done 2 nd Exe in May 2018
	2-1-4	CP Approval	100%	Monitoring on CP approval	1	1	1	Hi	0.0	0	-	CAA approved CP in Jul 2017
	2-2-1			SAF-SA1/2 in IANS+ (new) SMS		5	5	Low	0.0	21,001	5	EUROCONTROL Certificate +Kz
		Knowledge	100%	F/U trainings on SMS	1	1	2	Hi	1.5	0	?	Edito do initial do initiato di initiato
	2 2 2	SMS Manual		Study SMS implementation	3	3	4	Hi	1.0	0	?	
	2-2-2		4000/						44.0	0		
		Development	100%	WS on SMS Manual	3	3	4	Hi	11.0	0	?	
				Completion Seminar SMS	4	4	4	Hi			-	TAN approved SMS in Apr 2018
	2-2-3	Establish	100%	Investigation training in Rus	5	5	4	Low	0.0	7,472	2	Russian Institute Certificate
		RM Process	100 70	(Seminar Voluntary Repot Sys)	4	4	3	Hi	0.5	0	-	(This was canceled in AWP2017)
	2-2-4	Implement		SAF-HFA in IANS	5	4	5	Low	0.0	4,586	1	EUROCONTROL Certificate
		Safety RM/SA	75%	Training on HF Basic by Expert	3	4	3	Hi	5.0	0	3	Certificate of attendance
				W/S on Runway Safety	3	4	4	Low	2.0	(B trip)	-	3 Airports got RSP/T, H-Map
	2-2-5	SMS Training	100%	SMS ToT in Kazakhstan	5	5	5	Low	0.0	8,660	2	Kazakhstan Academy Certificate
3		AIS Training	10070	AIS Training in Group EAD	5	5	5		0.0	44,655	4	GroupEAD Certificate
3	3-1			'				Low	0.0			_
		Add: SAR/RCC		SAR Admin Training in MAvA	5	5	4	Low	44.5	23,125	4	ICAO TP #057A Certificate
			200%	WS on SAR Manual Dev	4	4.5	3	Low	44.5	_	3	Changed MC/ACC O/M by Sep
				SAR/RCC Exercise	4	4	3	Low		0	-	4 Oct 2018 (w/ MTS, Military)
				Completion Seminar on SAR	4	4	4	Low			-	5 Oct 2018 (w/ MTS, Military)
	3-2	Aeronautical	100%	Chart drawing-1 (ERC /Hand/w)	2	3	2	Hi	10.0	0	3	Certificate (No evaluation)
		chart training	100%	Chart drawing-2 (STAR /VISIO)	4	3	5	Low	8.0	2,166	4	Certificate (with evaluation)
	3-3	Develop AIP/	46.5	AIS Seminar	3	4	2	Low	8.0	0	-	(No report)
		NOTAM O/M	100%	NOTAM(1/2), AIP O/M Dev WS	4	2-4	3	Low	25.0		5	Certificate of attendance
	3-4	FPD Training	100%		3	4	5	Low	29.0	0	4	Certificate (with evaluation)
	3-5	OJT for FPD	10070	WGS-84 survey (step-1)	5	4	5	Low	20.0			3 PACSs were made in UTDD
	3-3	Add:		, , ,			1			20,560	2	
				WGS 84 survey (step-2a/b)	5	4	5	Low		20,300	2	Certificate of attendance
		WGS-84 survey		WGS-84 survey oversight	5	4	5	Low		_	-	FPD Expert visited UTDL & DK
		WGS-84 maps		OJT on FPD	3	3.5	5	Low		0	4	Certificates (with evaluation)
		G/V and F/V	200%	Observation for FPD	4	3.5	5	Low	00 -		4	CP made SID/STAR in UTDD
		FPD-QA (QMS)		PBN I-FPD Design in TIC	5	4	5	Low	96.0	N/A	2+2	JICA TIC Certificate
		27ILS support		PBN introduction seminar	5	4.5	5	Low		0		
		FPD Outsourcing		Business trip to Ru/Kg/Kz	4	4	5	Low		5,111	3	szrcai, RuKg/Kz ANSP, FVSP
		New PBN project		(new) FPD-QA training and WS	3	4	4	Low		0	4	Certificate of attendance
	3-6	AIP for model		AIP Design Exercise	5	3.5	5	Low	13.0	0	3	Certificate of attendance
	ا آ	airport (UTDD)	100%	Seminar AIP Dev Comp	5	4	5	Low	.5.0			CP expressed 4 Draft AIPs
		anport (OTDD)		Comman And Dev Comp					Cood	2-11-0	10	•
					J=\	/ery G	bood	4=0	Good :	3=Averag	Je 📕	2=Poor 1=No actual inputs



4. Progress of Inputs

All inputs by TAN and JICA were successfully done in accordance with PDM as tables below. The training "SMS Basic / Advance" at Aviator in Kazakhstan for two TF-2 CPs was newly implemented in October 2018 for compensating two CP in Safety Department leaved from TAN.

(A) Training abroad

	i, main	ing abroa											
			TAN	Projec	t Input (USE	/EUR)	Con	pletion Dat	e of Check	points (from	Apr 2016	to Oct 20	18)
			side	Tuition	Air Ticket	Others	Selection	Eng-CHK	Paid	VISA	Dept.	Training	Report
	Bold is	this period	input	Fee	Insurance	wo/VISA	by TFs	by Expert	Tuition-F	Obtained	Briefing	Start	Session
1	1-1	ATC /Jul	10 ATC	\$74,394	\$11,313	\$23,828	26 Apr	25 Apr	7 Jun	29 Jun	14 Jul	27 Jul	7 Oct
		ATC /Oct	8 ATC	\$60,750	\$12,671	\$16,000	17 Jun	17 Jun	19 Aug	21 Jun	7 Oct	18 Oct	13 Jan
	1-2	OJT-Inst	6 ATC	\$10,600	\$7,500	\$13,260	28 Oct	29 Oct	29 Nov	N/A	22 Dec	9 Jan	27 Jan
	1-3	GIT	8 ATC	\$7,359	\$10,000	\$9,840	28 Oct	29 Oct	19 Nov	N/A	22 Dec	13 Feb	24 Feb
	1-3	Manager	6 ATC	\$3,900	\$9,100	\$10,631	10 Apr	N/A	18 Apr	20 Apr	25 Apr	8 May	19 May
2	2-2-1	SAF-SA1	2 Safe	€3,000	\$2,093	\$2,854	26 Apr	N/A	5 Aug	31 Aug	7 Oct	17 Oct	13 Jan
		SAF-INV	2 Safe	€3,000	\$1,992	\$2,846	26 Apr	N/A	7 Jan	27 Feb	30 Jan	20 Mar	31 Mar
		SAF-SA2	1 Safe	€1,500	\$1,236	\$1,375	26 Apr	N/A	18 May	21 Jun	31 May	3 Jul	26 Jul
		SMS B/A	2 Safe	\$2,300	\$600	\$2,065	Sep	N/A	25 Sep	N/A	25 Sep	22 Oct	31 Oct
	2-2-3	Incident-I	2 Safe	\$1,180	\$1,078	\$5,160	22 Jan	N/A	26 Jan	N/A	29 Jan	14 Feb	9 Mar
	2-2-4	SAF-HFA	1 Safe	€1,600	\$1,210	\$1,374	Apr	N/A	Apr	N/A	6 Jun	18 Jun	29 Jun
	2-2-5	SMS-ToT	2 Safe	\$908	\$722	\$2,065	21 Jul	N/A	31 Jul	N/A	24 Jul	31 Jul	11 Aug
3	3-1/2	AIS Basic	4 AIS	€22,680	\$3,251	\$15,784	8 May	N/A	7 Oct	11 Aug	9 Aug	15 Aug	7 Oct
	3-1	SAR Adm	4 AIS	\$6,812	\$6147	\$9,869	27 Jul	28 Jul	4 Aug	23 Aug	7 Sep	25 Sep	18 Jan
	3-5	Visit Ru*	1 PM	\$0	\$315	\$2,400	21 Feb	N/A	N/A	N/A	27 Feb	12 Mar	28 Mar
		Visit Kg*	1 AIS	\$0	\$286	\$520	21 Feb	N/A	N/A	N/A	27 Feb	12 Mar	28 Mar
		Visit St.P	1 FPD	\$0	\$506	\$1,504	May	N/A	N/A	N/A	14 Jun	24 Jun	6 Jul

^{*)} Substituted Visiting Russian ANSP for Risk Management Training, and remaining budget was used for TF3 FPD (ILS 27) issue.

(B) Trainings by Japanese Experts

Ор	TAN side input	JICA side input by Expert Team in JPFY2018 (from April 1st, 2018)
1	Taskforce-1 Leader, Sub-leader and CPs	Chief Advisor / New ATC-1 Expert
2	Taskforce-2 Leader, Sub-leader and CPs	Included above
3	Taskforce-3 Leader, Sub-leader and CPs	New AIS Expert, FPD Expert

^{*}All sub-activities and actual assignment terms are mentioned in Monitoring Sheet-2.

(C) Procurement Support Aerodrome Simulator This part is not applicable in this monitoring period.

(D) Others

	TAN side input	JICA side input, under the JICA direct control (from April 1st 2019)
Human	Project Director (DG)	Project Coordinator / Training Planning Expert: Total 182 days
Recourses	Project Deputy Director (1st DDG)	Two Technical Assistants (Mr. Ulugbeck was resigned in July 2018)
	Project Manager (+TF-2 Leader)	Contract Driver with Rent-a-car
Facility	Project office in TAN and utility charge	Project Web site (www.tj-ats.com)
	Expert desk in the simulator room	
	Meeting Venue for JCC/3	
	Flight Procedure Office in ACC	
Local	N/A	25,040USD: Project Coordinator requested from April to September 2018.
Budget		



5. Progress Measuring Method

This was explained by Monitoring Report Summary (Ver3.0)

6. Achievement of the Project Purpose and Overall Goal

Project set the measuring parameter for verifiable indicators in "Overall goal" and "Project Purpose" for the final evaluations (planned in Oct 2018) as Table below and it will be approved by JCC/3 in 3rd May 2018.

The last monitoring evaluated the achievement of verifiable indicators in accordance with objectively assessment by the Monitoring Sheet-1 and 2 as table below.

	Project Goal, Purpose and Taskforces Activities		for three outputs by CP's activities		Sub-activities (Bold is done) CP side / 3rd Country Training by Project Japanese Expert Team side activities			
	Traffic Services (ATS) in Tajkistan		ratings in line with ICAO standards through TAN's continuing training program.		instructors or CJT trainers by Project developed ICAO standard materials.	ICAO standard material (Operation Manual) didn't develop. OJT / AD Sim Trainings are on-going, but not 100% yet.		
		Indicarur 2	The cordingency plan and Shi kept in operation.		TAN will conduct CP exercise once per two years. CAA will conduct annual Safety audit by using Checklist in SMS manual.	The 2nd Contingency Plan Exercise was done by TF2CPs, Internal Safety Audit is under plan by SMS plan.		
			Aeronautical Information Pub been updated in line with ICA	O standards.	All Tajkistan AIPs (GEN/AD/ENR) will be reformed and separated from Russian AIPs as independent in caspa ru Web site.	Not achieved yet. All existing SID/STAR FPD will be updated by TF3CPs by 2019.		
odan,	capacity of Tajikarmavigation (TAN) in Air Traffic Services (ATS)	No transaction by	All ATC officers working at AT training in line with ICAO stan OUT instructors and Simulator	dards conducted by	ICAO standard training materials (operation manuals) and AD simulator scenarios will be developed.	O/Ms (4 airports) were not improved to be ICAO standard. AD simulator scenarios (4 airports) were developed.		
		Indicatur2	The contingency plan and SN implemented.	IS for ATC have been	CP and SMS Manual will be approved by CAA.	Contingency Plan was approved by CAA. SMS Manual was approved by TAN. (SSP was developed by CAA)		
		Indicarur 3	The draft AIP of the model ar accepted as confirming to ICA Experts.	AO standards by JICA	4 (FPs) and 1(WGS-84) AP(AD) in	Draft AIPs (SID/STAR) in UTDD were made by TF3CPs. Expert provided FPD trainings in accordance with Doc9906 vol2.		

7. Progress of Activities and Achievement of Output

This chapter are divided into three categories in dedicated tables.

All activities in the tables have description of "Progress of Activities", "Achievement of Output", "Progress of Actions undertaken by JICA", "Changes of risks and actions for mitigation", and "Delay of work schedule and/or Problems" in highlighted red.

The "Progress of Actions undertaken by TAN" is described above it as TAN, and a baseline as of April 2016 is mentioned under it as BL.

(A) Trainings abroad

Table-3

	Trainings abroad	%		
1 1-1 ATCs (18) 100 Completed.		100	Completed.	
	1-2 OJT-Instructor (6)	100	Completed.	
	1-2 Management (6)	+	(Project invited 4 Malaysian instructors and taken advice for existing radar simulator trainings.)	
	1-3 GIT (8)	100	Completed	
2	2-2-1 SAF-# (2+1+2)	100	Completed, (Additional SMS basic/Advance training for two will be done in October in Kazakhstan)	
	SMS in Kz (2) + BL Two (2) Safety officer had completed SAF-SMS training in 2015			
	2-2-3 R/M	100	Incidental-INV trainings completed successfully in Moscow, and R/M was replaced visit Russian ANSP	
	2-2-4 Improve RM,SA	100	Completed (SAF-HFA in June 2018)	
	2-2-5 SMS ToT (2)	100	SMS trainer's training in Almaty was completed successfully.	
3	3-1 AIS basic (2)	100	An exercise part Aero Chart training (SID/STAR by VISIO) was filled by FPD expert in August 2017.	
3-1 SAR Admin.(2) SAR Admin (ICAO #057A) was added at JCC/2 and completed training by MAv		SAR Admin (ICAO #057A) was added at JCC/2 and completed training by MAvA in Sep-Oct 2017.		
	3-2 Aero Chart (2)	100		
	3-4 FPD-QA (1+1)	100	Visit Russia (szrcai, gnii, GV/FV SP and Russian ANSP)	
			Visit Kyrgyz (ANSP FI/FV SP) and Kazakhstan (FI/FV SP)	



(B) Trainings by Japanese Expert

Table-4

Table	Trainings by	%	
	Japanese Experts	,,,	
1	1-4 review manuals	60.0	Operation Manual Review
			The Expert had a "Confirmation Workshop" in 4 th May 2018 for finalizing the result of this activity
	Including Follow-up		instead of "completion seminar" as listed below.
	trainings in activity 1-1		1) Improve the Follow-me Car Operation: Rejected in July 2018.
			2) MVA Chart: TF-3 will create the draft (local rule) by 12 Oct 2018.
			3) Light-Guns (Procurements, O/M change and training): failed by the deadline in September 2018.
			4) Other Recommendations: Re-consider with "Topsky" in 2019
			No operation manuals or job descriptions were improved by this activity during Project term.
			Monitoring concluded that the series of this activities were failure.
			ATS (ACC/AD) Capacity Assessment
			This was additional requests from TF1 Leader to ATC-1 Expert in November 2017
			The Expert provided Catch-up Trainings for "Japanese Assessment Methodology for ACC
			(DORA/MMBB) and AD (only theoretical runway throughput)" and modification it into TAN's situation in
			7 to 10 May 2018. Unfortunately, TF1 management decided to abandon this activity at TF1M/21 in 14
			September 2018, because W/G couldn't make any outcomes before deadline in July.
			Monitoring concluded that the series of this activities were total failure.
	1-5 OJT-I ToT	70.0	
			"OJT-I Handbook" (JCAB) was not approved.
			"Annual training plan" was developed and updated, but "Training materials" (same as Operation
			Manuals) were not improved to be ICAO standard by activity 1-4.
			"OJT checklist" was translated into Russian and ready to use.
			Monitoring couldn't confirm that all OJT instructors have conducted two times of ICAO quality training.
			Monitoring concluded that this activity was partial success.
			Examination System Development
			This was additional offer by ATC-1 Expert in March 2018.
			Expert recommended "Daily work instructor" assignment and set the examination criteria in regulation,
			however it is difficult to say that the "Examination System" was developed.
			Monitoring concluded that this activity was failure.
	1-7 Sim trainers ToT	85.0	"Annual training plan" and scenarios were developed.
			Monitoring couldn't confirm that 3 instructors in Dushanbe have conducted three times per month, but it
			depends on actual training needs. Monitoring concluded that this activity was success.
2	2-1-1 Basic Training	70.0	TF2 is waiting the "Teaching Material on CP" which was developed ATC-2 Expert for conducting CP
CP	2.1.2 draft improve	100	training to all ATCs. Monitoring concluded that this activity was partial success.
	2-1-2 draft improve	100	
			EUROCONTROL, India, Pakistan and Russian CPs at Project started timing in 2016. ATC-2 Expert contributed to improve this draft. Monitoring concluded that this activity was success.
	2.1.2 Evereine	100	, , , , , , , , , , , , , , , , , , , ,
	2-1-3 Exercise	100	2 nd CP exercise was done by CP in May 2018. Monitoring concluded that this activity was success.
	2-1-4 CAA approval	100	MOT approved CP on 25th July 2017
	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2		Monitoring concluded that this activity was success.
2	2-2-2 SMS Manual	100	The draft SMS Manual was 100% completed without attachment referred to Annex19, the Doc9859
SMS			(Chapter-5) and Russian SMS at Project started timing in 2016.
			ATC-2 Expert contributed to improve this draft. Monitoring concluded that this activity was success.
	2-2-3 Establish	100	TAN Web based reporting system was developed.
	R/M Process		"Incidental Investigation Training" in Moscow (AeroNav Institute) was completed.
			Monitoring concluded that this activity was success.
	2-2-4 Improve	75.0	"SAF-HFA Training" in Luxemburg (IANS) was completed.
	R/M & S/A		3 Runway Safety Teams were formulated, and Hazard maps were made in UTDD, DL and DK.
			Safety department is preparing internal Safety Audit.
			Monitoring concluded that this activity was success.
	2-2-5 SMS trainer	100	TAN Project trained Safety officer started new SMS training program to all ATC.
			"SMS Trainer's Training" in Almaty (Swan aviation academy) was completed.
			Monitoring concluded that this activity was success.
			Module 1-5 training by safety staffs completed in DYU and LBD within 2017.



			APAN 3			
3	(3-1 AIS): 100%	200	AIS Training (100%)			
	+SAR: 100%		See Table-3, Monitoring concluded that this activity was success.			
			SAR (100%)			
			RCC Operation Manual couldn't finalize by the end of August by SAR W/G.			
			TAN decided to revise ACC and MC manuals instead of developing the dedicated aviation RCC			
			manual. Project had the RCC exercise on 4 th October and O/M Completion Seminar on 5 th October.			
			Monitoring concluded that this activity was total success.			
	(3-2 Aero Chart)	100	FPD Expert conducted 2 weeks training for SID/STAR by VISIO using WGS-84 DYU map in Aug 2017.			
			Monitoring concluded that this activity was success.			
	3-3 Procedure Dev.	100	New AIS Expert conducted NOTAM/AIP Procedure development WS-2nd for 2 weeks in Aug 2017.			
	NOTAM/AIP		Draft of NOTAM and AIP(AIC) procedures were developed.			
			Monitoring concluded that this activity was partial success, because developed manuals were not			
			translated into Russian and TAN will use it as a reference.			
	3-4 Basic Training	100	3 trained FP designers conducted G/V for ILS-approach (outsourced) and designed STAR.			
			TAN is trying to get CAA authorization for FP designers.			
Monitoring concluded that this activity was s			Monitoring concluded that this activity was success.			
	3-5 OJT of FPD	200	OJT FPD (100%)			
	+WGS-84: 100%		OJT for trained FP designers were conducted by FPD Expert.			
			WGS-84 and others (100%)			
			WGS-84 survey, Map procurements, G/V, F/V, FPD-QA (QMS), DIA's 27ILS support, technical support			
for FPD outsourcing and PBN Project formulation were add in this		for FPD outsourcing and PBN Project formulation were add in this activity.				
		Monitoring concluded those activities were total success.				
	3-6 Develop draft AIP 100 4 draft AIPs in UTDD we		4 draft AIPs in UTDD were made by FP designers.			
			Monitoring concluded that this activity was success.			

(C) Procurement Support for the Aerodrome Simulator

T-1-	
Tab	ıe-5

	Procurement Support		%			
	for the Aerodrome Sim					
1		1-6 Simulator	100	TAN TAN side fulfilled their responsibility for receiving AD simulator system.		
				Procurement support and installation were done by Project.		
				NTT-data provided user and maintenance trainings.		
				Project conducted hand-over ceremony in 8th September 2017.		
				Monitoring concluded that this activity was total success.		

8. Summary on Evaluation

The monitoring concluded that the activity of "Trainings Abroad" and "Procurement Support for the Aerodrome Simulator" were total success. Regarding the activities in Taskforce-1, "Trainings by Japanese Experts" didn't reach the expected outcomes except AD Simulator related activities.

The Taskforce-2 achieved initial outcomes since the baseline and CP's potential had been enough high. The Taskforce-3 was total success, because SAR and WGS-84 / ILS27FPD beyond an expectation.

8. Modification of the Project Implementation Plan

Project was implemented properly in accordance with AWPs and Sub-Activity Plans.

The additional activities necessary for achieving "Project Purpose" and "Overall Goal" were supplemented timely as "TF1 Management Training", "Inviting MAvA radar instructors", "Additional trainings abroad in TF2", "SAR/RCC", "WGS-84 and Map procurements", "FPD-QA and G/V" and "PBN Project formulation".

9. Preparation of TAN toward after completion of the Project

TAN organized "Development Department" including FPD team in August 2018 for proceeding "Topsky" Project and solving "m" to "ft" issue. CAA is planning to complete WGS-84 survey for all airports within 2019, then waiting the Project design mission of new PBN implementation Project.

Лоиха оид ба баланд намудани потенсиал дар самти хизматрасонии ҳаракати ҳавоӣ Проект по повышению потенциала в сфере обслуживания воздушного движения The Project for Capacity Development in Air Traffic Services



http://www.tj-ats.com

	_			
Iahi	Δnt	ahhi	reviat	ione
ıavı	C UI	abbi	CVIA	.ivii3

Table of abbreviations						
	General		Monitoring Sheet-2			
ACC	Area Control Center	A1	ATC-1 Expert			
	Aerodrome		ATC-2 Expert			
	Aeronautical Information Circular		Counterpart			
	Aeronautical Information Publication		FPD Expert			
	Aeronautical Information Services		AIS Expert			
	Air Navigation Service Provider		MAvA Expert			
	Air Traffic Controller		NTT-Data Corporation			
	Air Traffic Services		Project Coordinator			
	Air Traffic Flow Management Center	SE	Aerodrome Simulator Expert			
	Annual Working Plan					
	Baseline					
_	Chief Advisor					
	Civil Aviation Authority		Airport Code			
CNS	Communication, Navigation and Surveillance	UTDD	DYU Dushanbe International Airport			
CP	Counterpart		KQT Qurghonteppa International Airport			
CP	Contingency Plan (TF-2)		LBD Khujand International Airport (H)			
CR	Chief Representative		TJU Kulob International Airport (K)			
	Department of Civil Aviation	OIDIN	Too read memationary aport (re)			
	Deputy Director General					
	Director General					
	European Bank for Reconstruction and Development					
	Flight Procedure Design					
	Flight Progress Strip					
	General Instructor Training					
	9					
	International Air Transport Association					
	Institute Aeronavigation Service in EUROCONTROL					
	Instruments Landing System					
	International Civil Aviation Organization					
	Japan Civil Aviation Bureau					
	Joint Coordination Committee					
	International Finance Corporation					
MAvA	Malaysia Aviation Academy					
NOTAM	Notice To Airmen					
ODA	Official Development Assistance					
OJT	On the Job Training					
O/M	Operation Manual					
OS	Operating System					
PANS-OPS	Procedure for Air Navigation Services Aircraft Operations					
	Performance Based Navigation					
	Project Coordination Meeting					
	Project Director					
	Project Design Matrix					
	Plan of Operation					
	Project Manager					
	Quality Management System					
	Rescue Coordination Center					
	Risk Management and Safety Assurance					
	Search and Rescue					
	Standard Instrument Departure / Standard Terminal Arrival Route					
	State Safety Program					
	Safety Management System					
	Tajikairnavigation					
	Taskforce-n Meeting					
	Terms of Reference					
	Training of Trainers					
	Transport Corridor Europe-Caucasus-Asia					
	VHF Omnidirectional Range / Distance Measuring Equipment					
	Working Group					
W/S	Workshop					

List of Attachment

Attachment-A: Monitoring Sheet-1 (Ver. 6.0) Attachment-B: Monitoring Sheet-2 (Ver. 6.0)