

BOBASIO/7-PT03



Myanmar's CNS/ATM Development Master Plan



Assistance by JICA

Project name “**Capacity Development on Communication, Navigation, Surveillance/ Air Traffic Management (CNS/ATM) Systems**”.

- JICA & DCA signed in MoU on 31 July 2013
- Started in September 2014
- Duration of Project is (4) years
(from Sept 2014 to August 2018)



Objective:

to improve safety and efficiency of Air Transport especially on CNS/ATM Systems

project is only Technical Assistance and No spend ODA Loan or US\$.



Outputs of Project:

- (1) DCA's capability to produce **CNS/ATM Development Master plan** is enhanced.
- (2) DCA's capability to introduce and implement **PBN flight procedures** is enhanced.
- (3) A System to **analyze problems of ADS-C/ CPDLC** is developed for DCA.
- (4) **ATM Training Courses** at CATI are improved.
- (5) **CNS Training Courses** at CATI are improved



Outline of CNS/ATM Master Plan



Chapter 1 (Purpose)

Purpose of CNS/ATM Master Plan is to produce a plan to smoothly transfer from existing CNS/ATM systems based on ground systems to new CNS/ATM systems based on new technologies

This Plan is the same as Phased Long-term Development Plan and consists of

- Short-term Development Plan which lasts until 2018**
- Medium-term Development Plan which is from 2019 to 2023**
- Long-term Development Plan which is from 2024 to 2028**

CNS/ATM Master Plan Taskforce members produced Plan since September 2014.



Chapter 2

(Evaluation of existing CNS/ATM Systems)

- **T/F has evaluated existing CNS/ATM systems of Myanmar and studied the following CNS/ATM Master Plan by conducting training in Japan and training in Philippines and Vietnam.**
 - **Air Traffic Management Modernization Plan in Myanmar**
 - **CARATS in JAPAN**
 - **NextGen in USA**
 - **European ATM Master Plan in EU**
 - **ICAO GANP and ASBUs**
 - **Roadmap for Transition from AIS to AIM**
 - **Asia Pacific Seamless ATM Plan**
 - **etc.**



Chapter 2

Evaluation of existing CNS/ATM Systems

Contents of Chapter 2 which T/F has produced are as follows;

2.1 Existing CNS/ATM systems

- 1) Air Traffic in Yangon FIR**
- 2) Air Traffic Services**
- 3) Communication**
- 4) Navigation**
- 5) Surveillance**
- 6) AIS**

2.2 Existing Plan

2.3 Plans of advanced countries

2.4 ICAO Policy

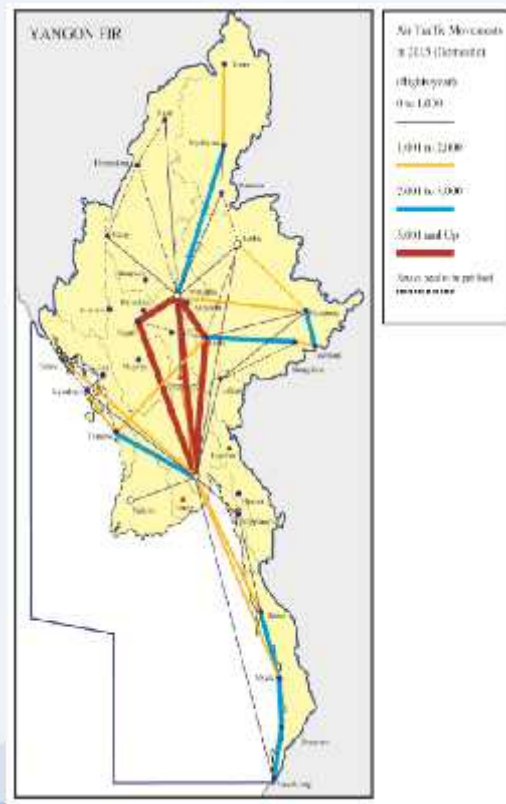
2.5 Situation of neighboring countries



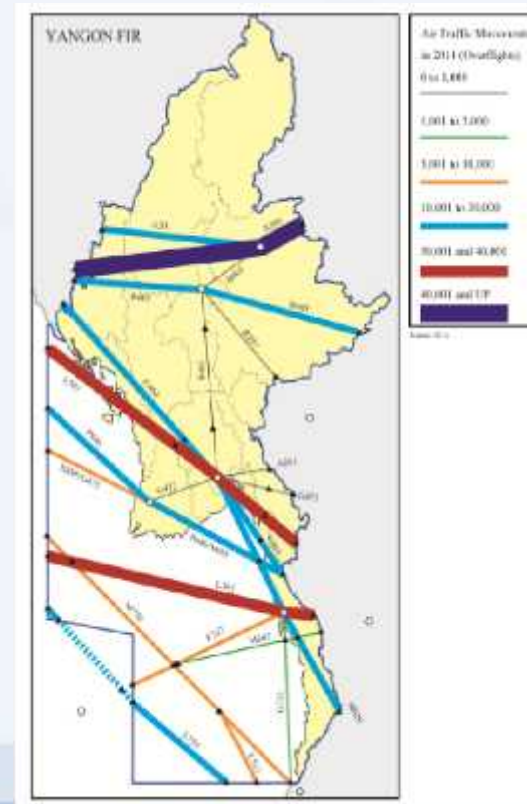
Chapter 3

Evaluation of future Air Traffic Demand Forecast

T/F studied Air Traffic Demand Forecast until 2018 and T/F produced “Chapter 3 future Air Traffic Demand Forecast”.



Domestic Traffic Movements



International Traffic (over-flights) Movements

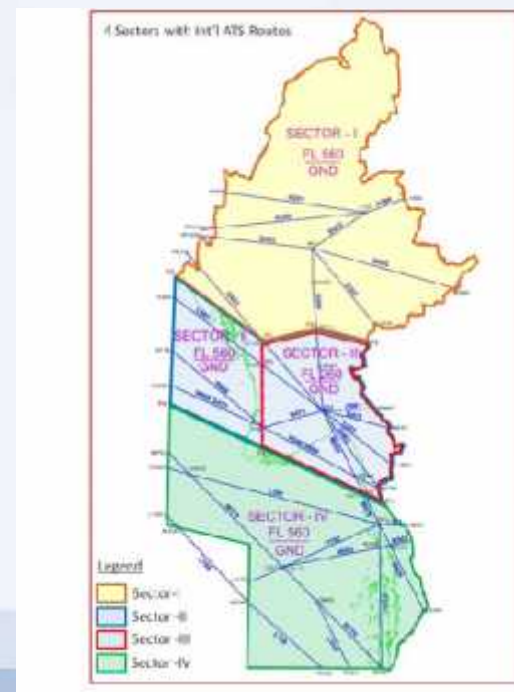


Chapter 4 Phased Long-term Development plan (2018/2023/2028)

T/F produced phased long-term development plans (-2018: Short-term, 2019-2023: Medium-term, 2024-2028: Long-term) based on the results of evaluation of existing CNS/ATM systems and Demand Forecast in Yangon.



Old 2 Sectors



New 4 Sectors



Chapter 4

Phased Long-term Development plan (2018/2023/2028)

Contents of Chapter 4 which T/F has produced are as follows;

4.1 Future ATM Development Plan

- 1) Future Air Space Plan**
- 2) Air Traffic Services**
- 3) ATFM**
- 4) ASM**

4.2 Future CNS/ATM Systems Development Plan

- 1) ATM Center**
- 2) Control Towers**
- 3) Communications Systems**
- 4) Navigation Systems**
- 5) Surveillance Systems**

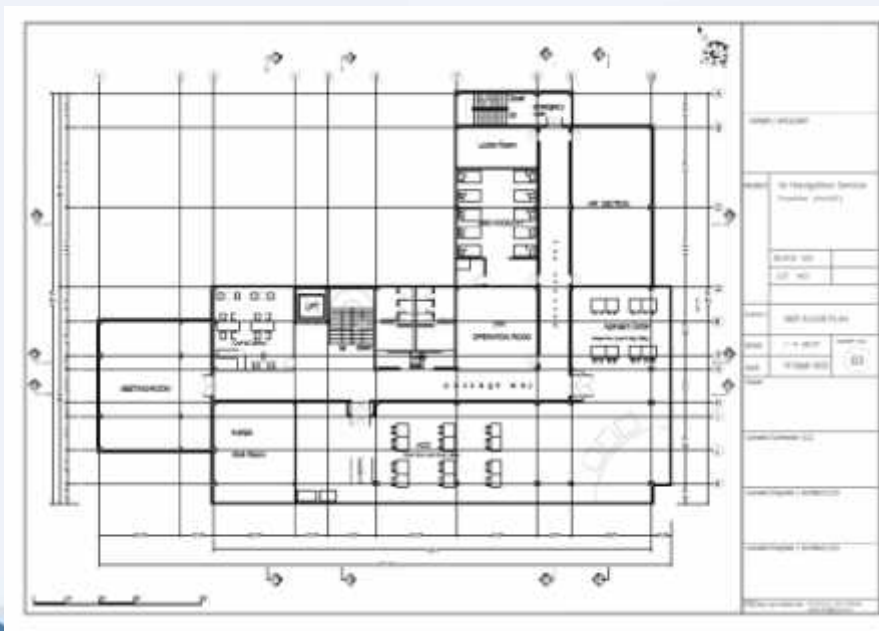
4.3 AIM Development Plan

4.4 Meteorological System Development Plan

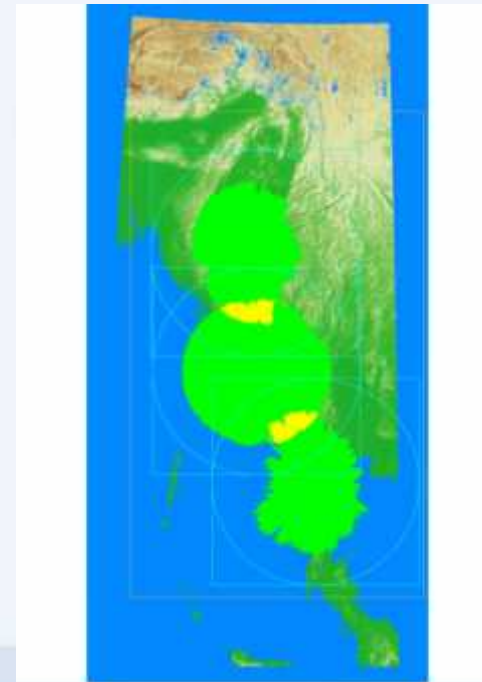


Chapter 5 Short-term Development Plan (-2018)

T/F produced Short-term Development Plan from phased long-term development plans. This plan includes action plans for results of evaluating the existing CNS/ATM systems of Myanmar.



1st Floor Layout of Yangon ATMC



Result of Analysis of Three MSSR Sites



Chapter 5

Short-term Development Plan (-2018)

Contents of Chapter 5 which T/F has produced are as follows;

5.1 Short-term development plan

- 1) ACC Upgrading Plan**
- 2) New ATM Center**
- 3) Communication System**
- 4) Navigation System**
- 5) Surveillance System**
- 6) AIM System**
- 7) Meteorological System**

5.2 Cost of the Project

5.3 Operation and Maintenance of the Systems

- 1) Staffing Requirements**
- 2) Training Plan**

5.4 Project implementation plan

- 1) Project implementation schedule**
- 2) Implementing organizations**



Chapter 6

Conclusion

A Master Plan for New CNS/ATM Systems in the Republic of the Union of Myanmar has been prepared in accordance with the ICAO's GANP, ASBUs, Roadmap for the transition from AIS to AIM, Asia/Pacific Seamless ATM Plan, plans of advanced countries and situation of neighboring countries.

Short-term Development Plan will target to end by FY2018 and DCA will implement new CNS/ATM Systems based on this Plan from now.



Thanks a lot for your kind attention