

Work Summary And Development Strategy Of APAC **FPP**



Asia-Pacific **F**light **P**rocedure **P**rogramme

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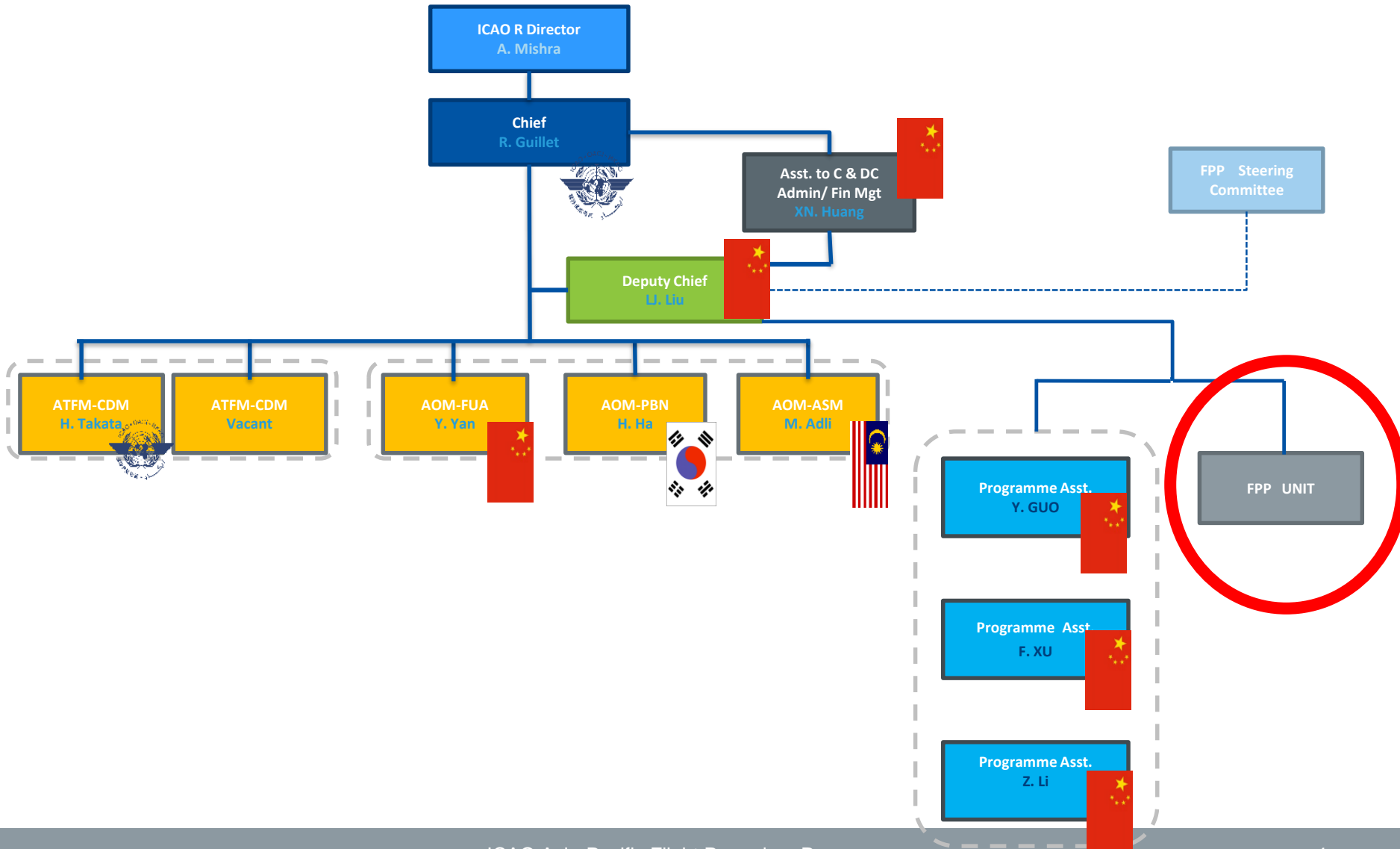
- Where we are?
- Who we are?
- When we are?
- What we are?
 - What we need to do?
 - What we have done?
 - What we will do? (Development Strategy)



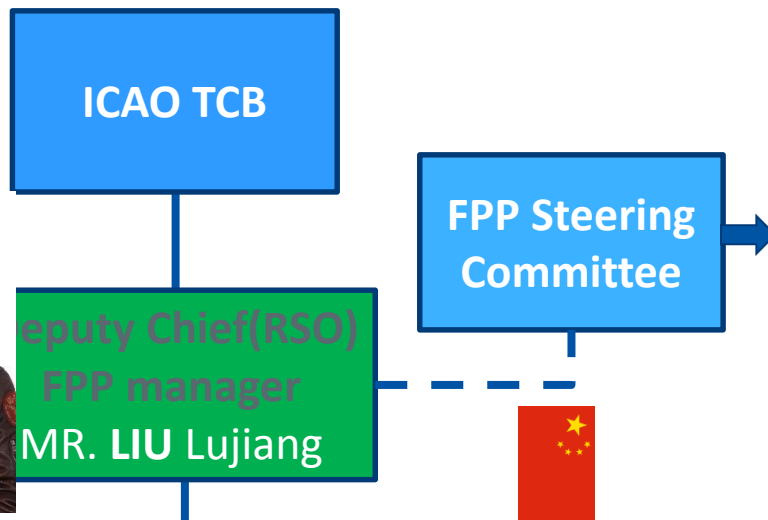
OVERVIEW OF Where



OVERVIEW OF Where



OVERVIEW OF Who



OVERVIEW OF Who

- **10 Active Members(SCM members)**
 - Funding By
Annual Contribution (\$20,000)



Australia



China



France



Hong Kong



Macau



Phillipines



Rep. of Korea



Singapore



Sri Lanka



Thailand

OVERVIEW OF Who

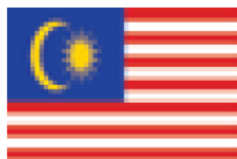
- **10 User States**

- **Only** need to Sign the Programme Document for **each** phase(3 years)

WAITING
FOR YOU



Lao



Malaysia



Mongolia



Myanmar



Pakistan



Vietnam



Cambodia



Nepal



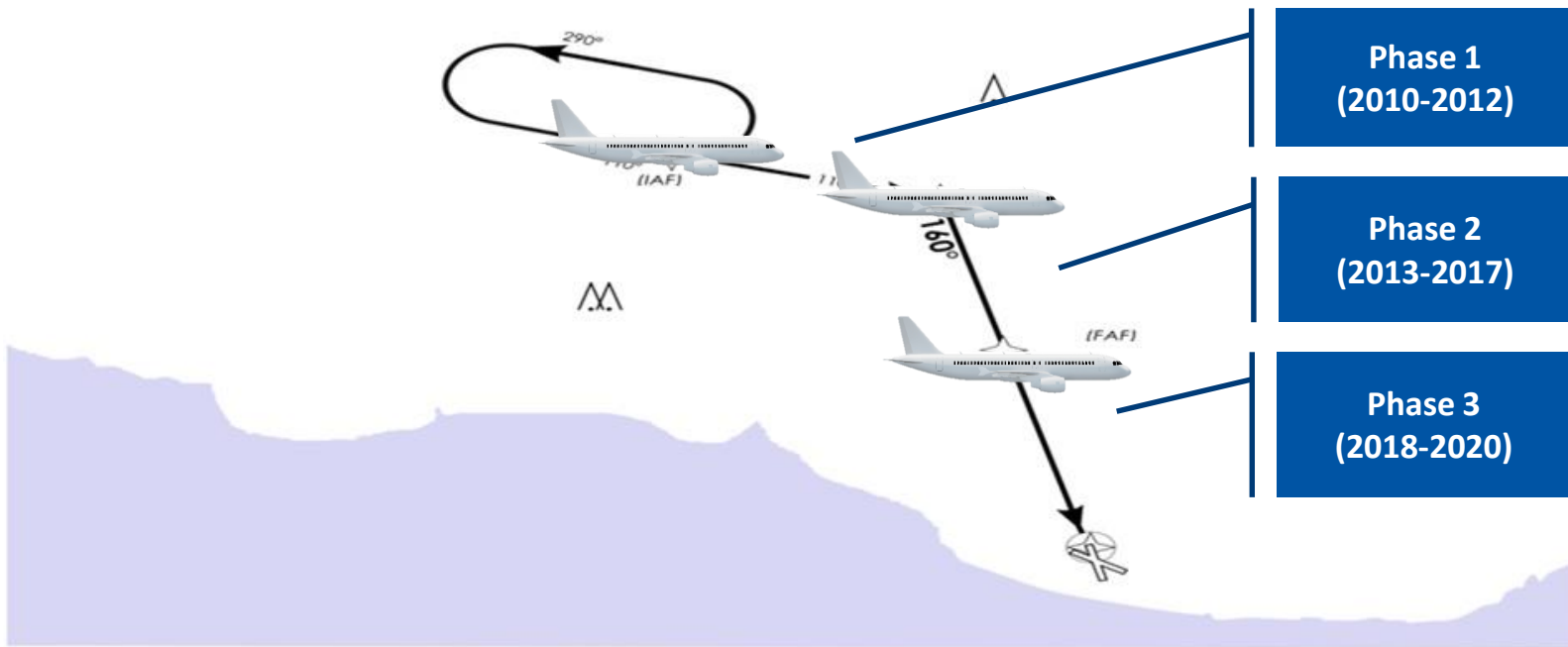
Timor-Leste



Maldives

OVERVIEW OF **When**

FPP Phases



Next APAC FPP Steering Committee is in November in China

OVERVIEW OF What

- FPP OBJECTIVES**

“No Country Left Behind”

in the instrument flight procedure domain

- To develop **APAC States’** capabilities in IFP design

- APAC FPP /AFI FPP/ MID FPP**



WHAT WE NEED TO DO?



Making Global Progress in terms of Safety, Efficiency and Environmental Improvement.



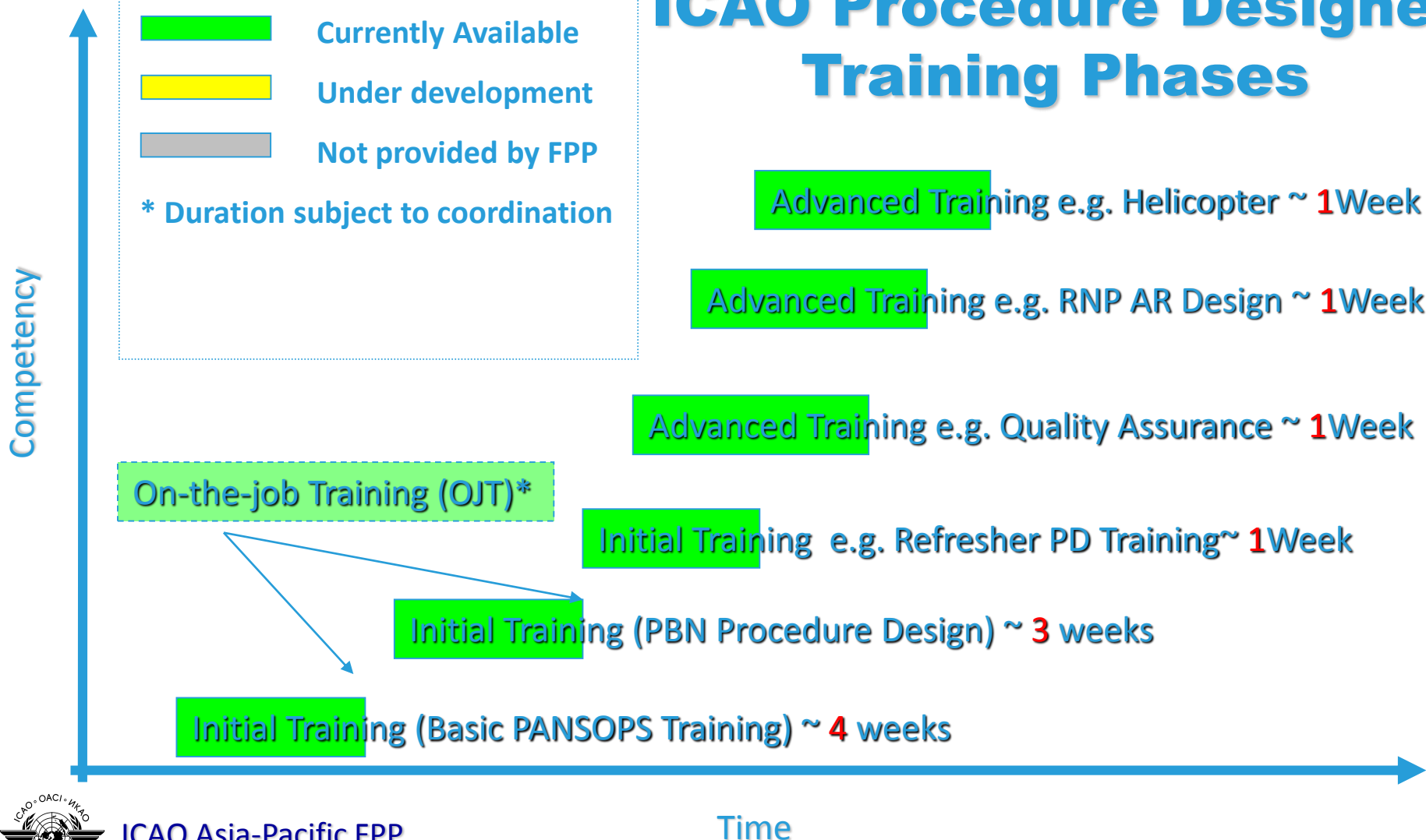
Phase III What's new in training ?



Legend

- Currently Available
 - Under development
 - Not provided by FPP
- * Duration subject to coordination

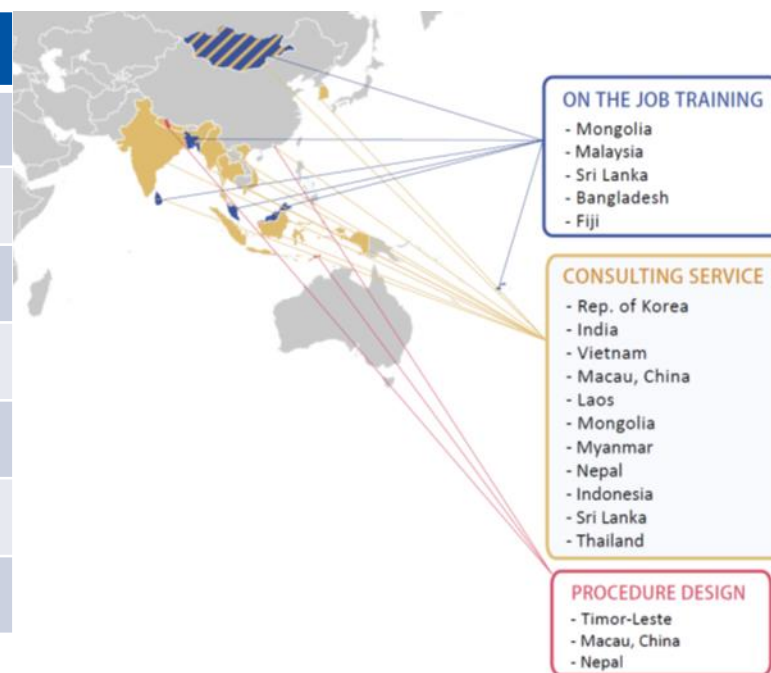
ICAO Procedure Designer Training Phases



What we have done

AS OF END 2018

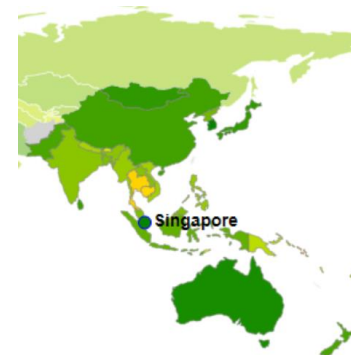
COURSE/WORKSHOP	PERSON-Time
PANs-Ops Course	256
PBN Course	255
PD Refresh Course	56
Quality Assurance Course	48
RNP AR Workshop	47
Flight Validation Course	22
OJT	10



What we have done

• In 2019

4 finished training courses(**352**hours)
with **70** participants from **14**
States/Administrations have been
delivered.



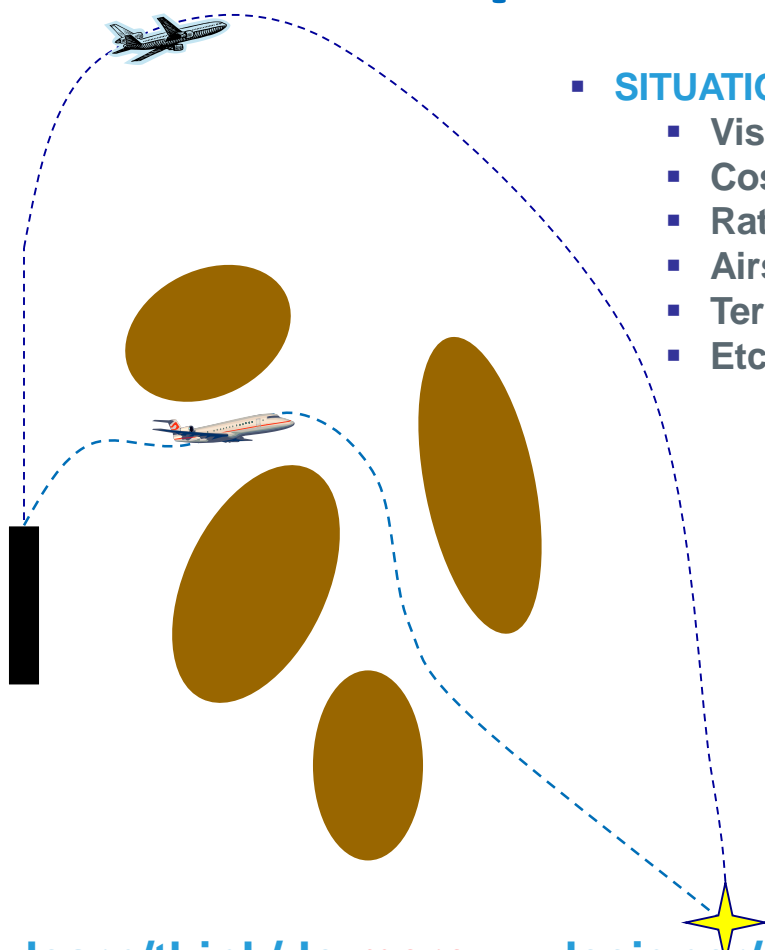
1	14- 18 Jan	PD Quality Assurance Course	Beijing	FPP
2	25 Mar -19 Apr	Pans-Ops PD Initial Course	Beijing	FPP
3	20 -24 May	PD Refresher Course 2019 (including all new amendments 8 th in Doc8168)	Beijing	FPP
4	09-26 Jul	PBN Procedure Design Course	Beijing	FPP
5	16 -20 Sep	PD seminar	Singapore	FPP
6	28Oct-1Nov	RNP AR workshop	Beijing	FPP
7	12-15Nov	Helicopter PinS Workshop	Beijing	FPP

What we have done

- FPP have **completed** PD design/ground validation/consulting in **6 States/Administrations (7 airports)**
 - Bangladesh,
 - East-Timor,
 - Macao China
 - Nepal
 - Sri Lanka
 - Thailand



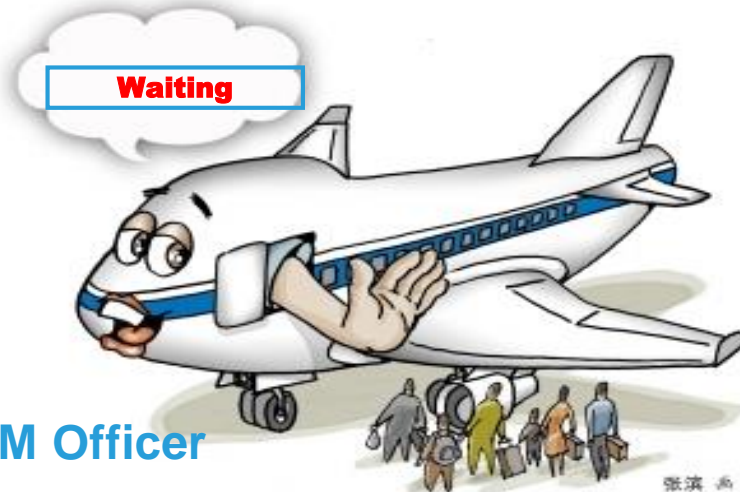
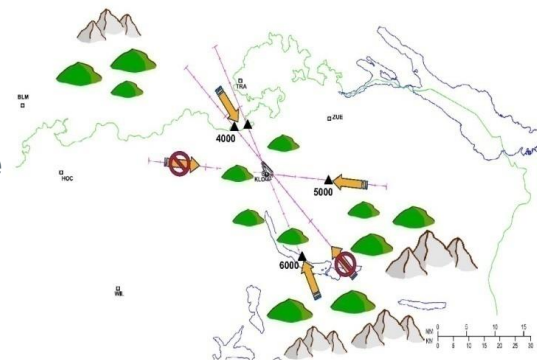
Development Strategy



SITUATION:

- Visibility
- Cost
- Rate
- Airspace
- Terrain
- Etc.

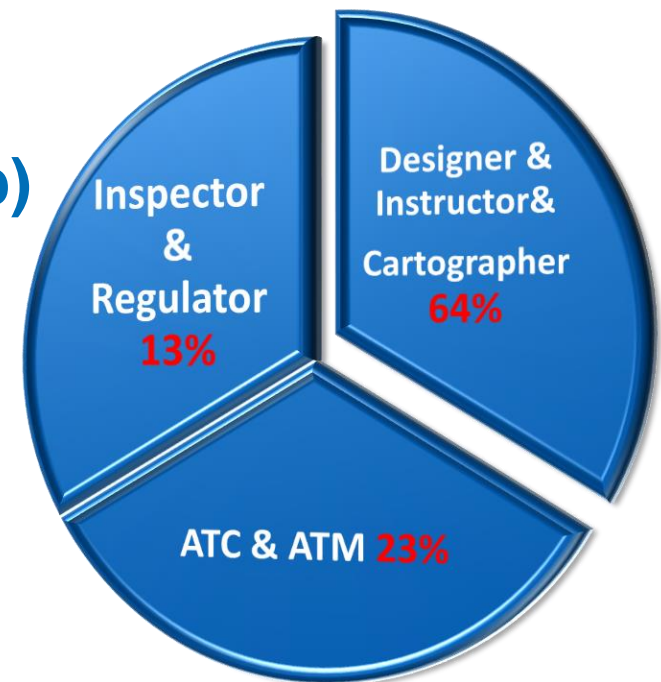
Constraints: Terrain



You need to learn/think/do **more** as designer/ATM Officer

Development Strategy

- **Achievement(training)**
 - Score **after** training:93.8
 - Score **before** training:78.7
- **Proportion(training and workshop)**
 - 64%
 - **23%**
 - 13%
- **Requirements:**
 - Short-term Comprehensive workshop
 - Short-term targeted training



Development Strategy

- **More comprehensive** sharing base on Stake holders, but **how?**
 - Use the **seminar or Workshop** as a sharing platform
 - Use the **QA steps(Catalogue)** to **link** every stake holders together
 - Pilot
 - ATC
 - airport
 - Regulator etc.
- **More targeted** training according to students needs , but **how?**
 - Use **short-term course** as learning platform
 - Select **one QA step** which students most interest in for deeply study
 - Coding
 - Charting
 - Flight validation
 - New technology(GLS/RNP-AR/RNAV-Visual app etc.)
- **More kinds** training for more logical and convenient
 - **On Site** training
 - **On Job** training
 - **On Line** training

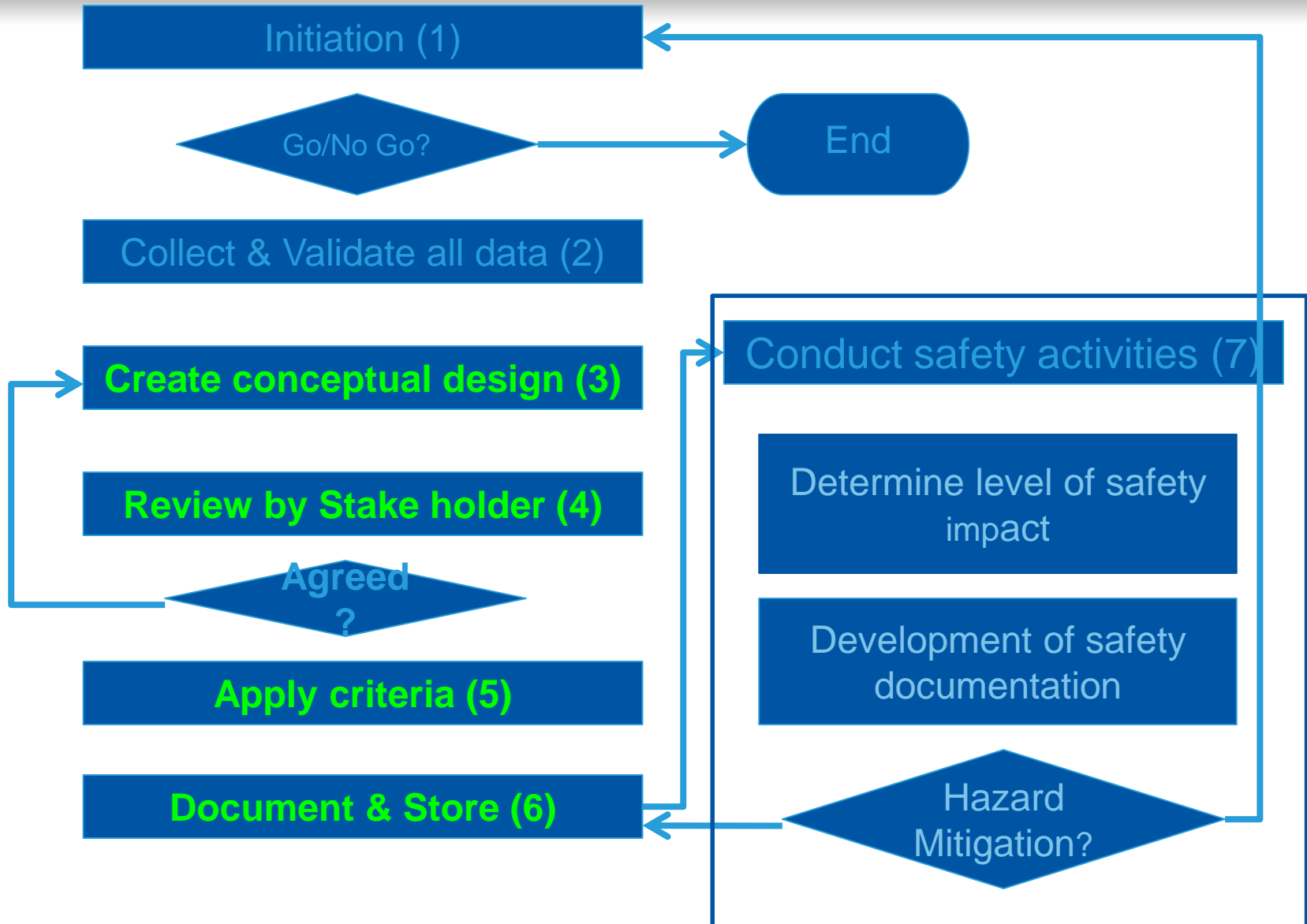


Development Strategy

- More steps will be include in FPP's **project service**
 - More **wider** (**red** items will be include step by step)
 - More **deeper**(within single step)
 - More **often** for on Job training

1.4 DESCRIPTION OF THE VALIDATION PROCESS

DESCRIPTION	INPUT	OUTPUT	PARTIES INVOLVED	QUALITY RECORDS	REFERENCE
CONDUCT INDEPENDENT IFP DESIGN REVIEW Review of the IFP design package by a flight procedure designer other than the one who designed the procedure. <ul style="list-style-type: none"> • Confirm correct application of criteria • Confirm data accuracy and integrity • Verify mitigations for deviations from procedure design criteria • Verify that a draft chart (if required) is provided and is correct • Confirm correct FMS behaviour using desktop simulation tools (if required) • Perform obstacle assessment with State approved ground-based methods for cases where obstacle/terrain data accuracy and integrity cannot be guaranteed (if required) 	<ul style="list-style-type: none"> • Detailed report of IFP design 	<ul style="list-style-type: none"> • Approval to proceed forward in the validation process 	<ul style="list-style-type: none"> • Flight procedure designer • Any other appropriate stakeholder, such as: <ul style="list-style-type: none"> – FVP – ARINC 424 database coder – airport authorities – airspace designers 	<ul style="list-style-type: none"> • GV report 	<ul style="list-style-type: none"> • Doc 8168, Vol 1 • Annexes 4, 6, 10 • Doc 9368 • Doc 9906, Vol 1 • ARINC 424 • State AIP • State regulations



STEP 2/6

Conduct ground validation (8)

Valid?

Conduct flight validation (9)

Valid?

STEP 1

Consult with stakeholder (10)

Approve IFP (11)

Approved?

Create draft publication (12)

Verify draft publication (13)

Verified?

Publish IFP (14)

Obtain feedback (15)

STEP 1

Conduct maintenance (16)

Action
Required?

Conduct periodic review (17)

Action
Required?



ICAO

UNITING AVIATION



Asia-Pacific
Flight Procedure Programme



ICAO

North American
Central American
and Caribbean
(NACC) Office
Mexico City

South American
(SAM) Office
Lima

ICAO
Headquarters
Montréal

Western and
Central African
(WACAF) Office
Dakar

European and
North Atlantic
(EUR/NAT) Office
Paris

Middle East
(MID) Office
Cairo

Eastern and
Southern African
(ESAF) Office
Nairobi

Asia and Pacific
(APAC) Sub-office
Beijing

Asia and Pacific
(APAC) Office
Bangkok

Welcome to Join APAC **FPP**

Let's **FIND/PLAN/PLAY** Together

THANK YOU

