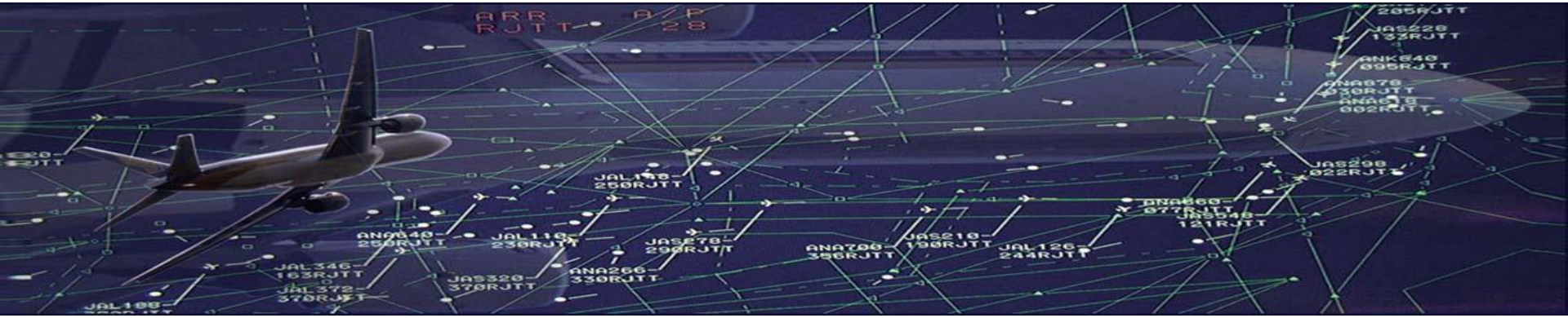
Cross-Border ATFM Workshop

Jakarta, Indonesia

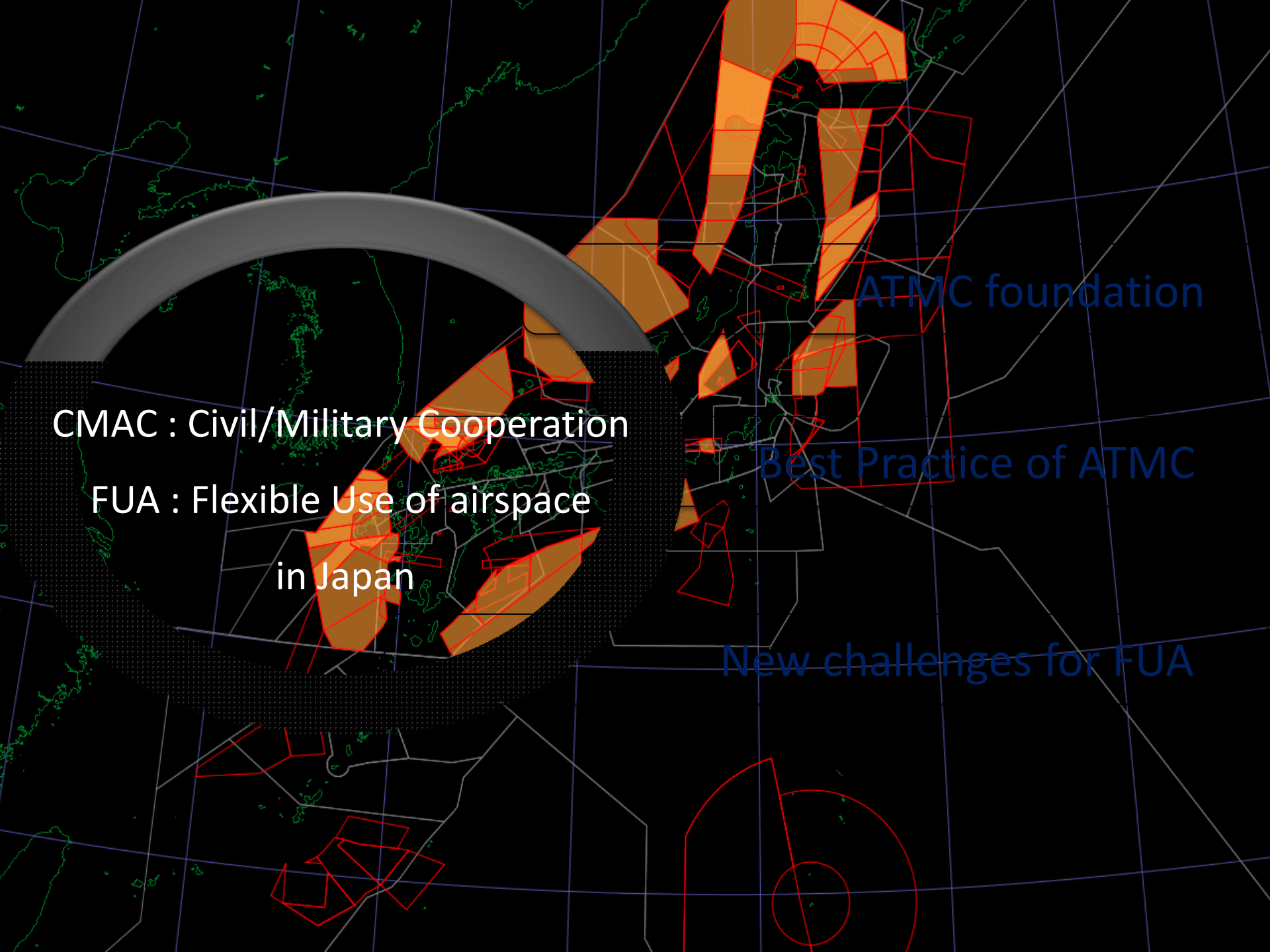
21 – 22 Oct. 2015



CMAC/FUA in Japan

Japan Civil Aviation Bureau

Ministry of Land, Infrastructure, Transport and Tourism


CMAC : Civil/Military Cooperation
FUA : Flexible Use of airspace
in Japan
ATMC foundation
Best Practice of ATMC
New challenges for FUA

ASM initiatives

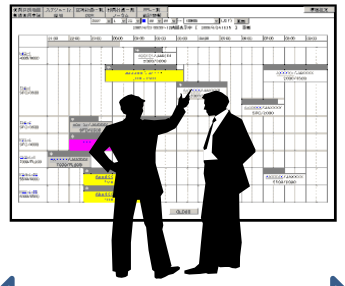
Fixed and segregated use of airspace limits airspace capacity

CDR (Conditional Routes) since 2006

Non-permanent ATS route network which is established for civil aircraft use through military training airspace when military operation is not active

ATMC

ASM Officers



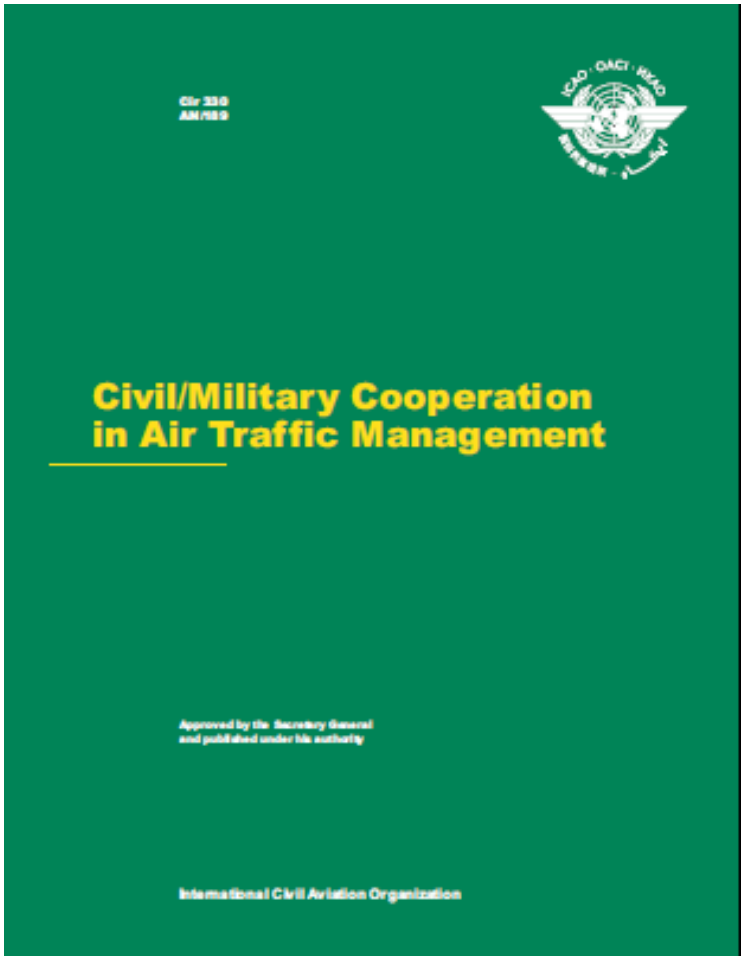
Military Officers

Ministry of Land, Infrastructure, Transport and Tourism

CDR enablers and Operational Improvements

- Close coordination and cooperation between Civil/Military authority and liaison at ATMC.
- CDR contributes not only to shorten flight distance, decreasing fuel consumption, but also to increase airspace and ATC capacity.
- Collaborative efforts among neighboring ANSPs and military are crucial to expand international CDR.

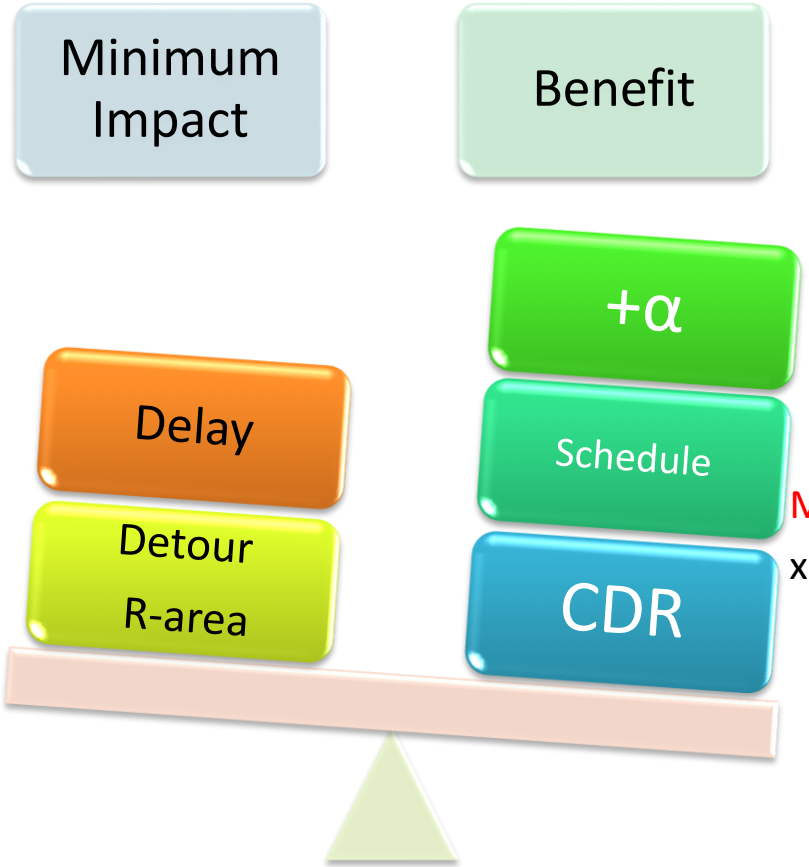
FUA : Flexible Use of Airspace



ICAO　Civil/Military Cooperation in Air Traffic Management（Circular330）:

Flexible Use of airspace (FUA) : An airspace management concept based on the principle that airspace should not be designated purely as civil or military, but rather as a continuum in which all user requirements are accommodated to the greatest possible extent.

Training in limited airspace and trade-off the impact between civil and military



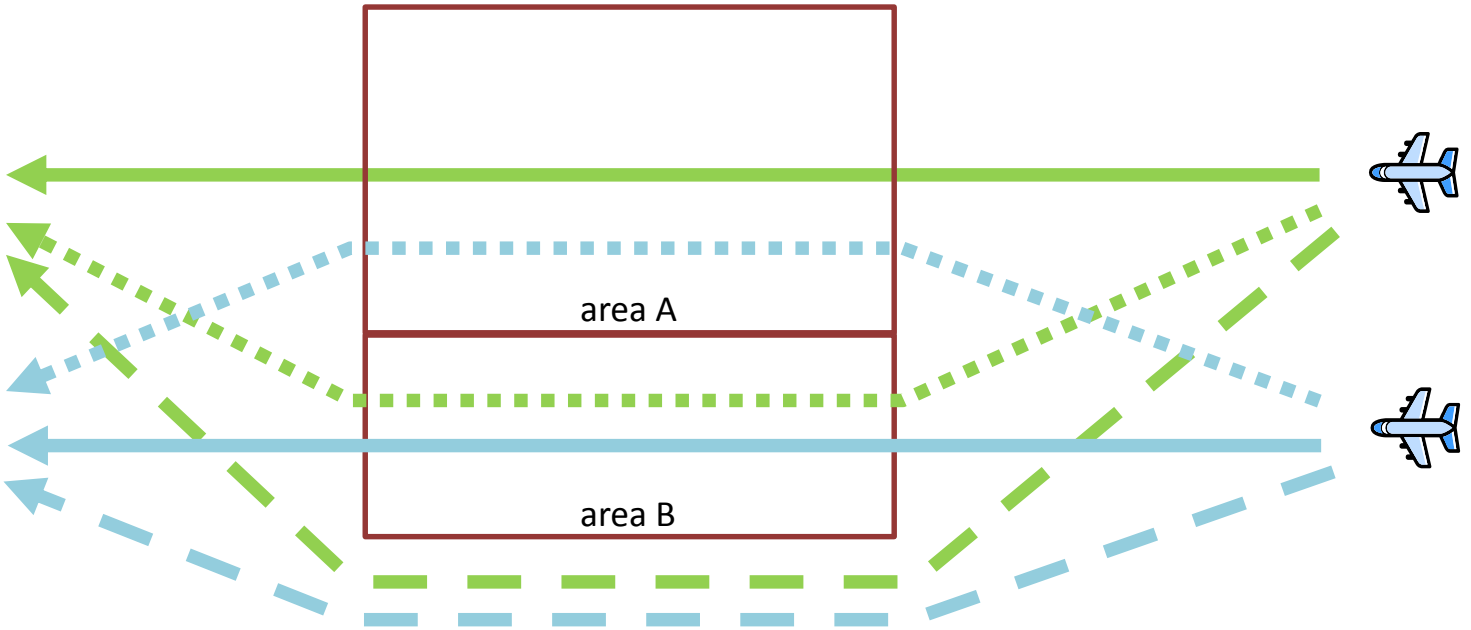
Mileage(+) x number of aircraft x days x weeks = **Impact**

Mileage(-) x number of aircraft x days x weeks = **Benefit**

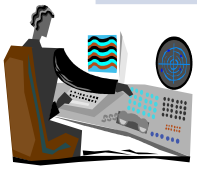
Demanding for Flexible Use Airspace

Assumption → Trial → Review

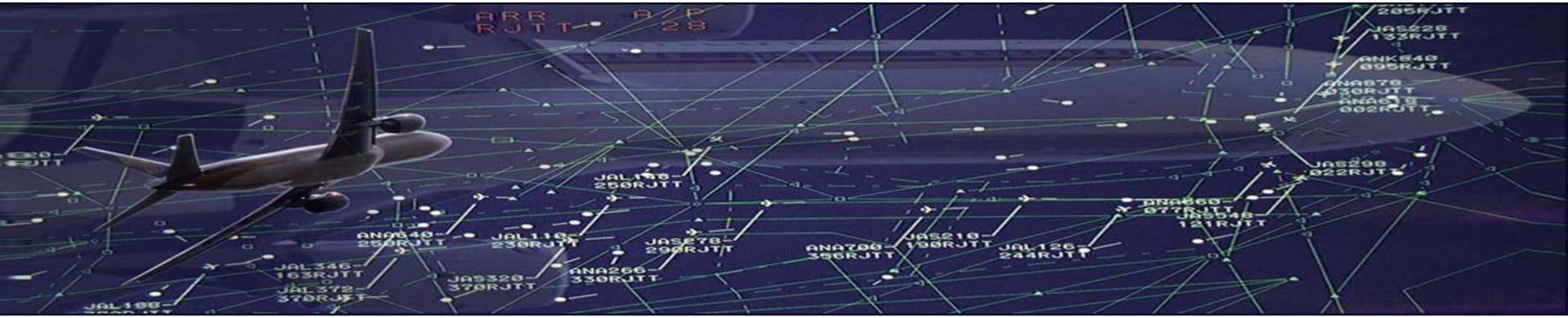
Simple image for simulation



HOT	area A	area B	A + B
10z-15z	3 flights +15nm	2 flights +10nm	5flights +40nm
11z-15z	2 flights +10nm	1 flights +5nm	3flights +25nm
12z-15z	1 flights +5nm	0 flights +0nm	1flights +10nm



Discussion & Coordination



Terima Kasih!

Thank you.