

Traffic Sample Data from

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Monitoring Agency for Asia Region (MAAR)



# About MAAR

- Monitoring Agency for Asia Region (MAAR) was established by Aeronautical Radio of Thailand, Ltd. (AEROTHAI) under the approval of the Asia/Pacific Air Navigation Planning and Implementation Regional Group (APANPIRG) to assume the duties and responsibilities of the Regional Monitoring Agency (RMA) for the Asia Region.
- The principal role of the MAAR is to assist the International Civil Aviation Organization (ICAO) in the continuation of the safety assessment program for the implementation of Reduced Vertical Separation Minimum (RVSM) and other monitoring requirements as determined by the APANPIRG.



## Notes to the Data (1)

- The data is from Dec 2013 traffic data from Bangkok, Hanoi, Ho Chi Minh, Hong Kong, Kota Kinabalu, Manila, Phnom Penh, Sanya, Singapore, Vientiane (missing Kuala Lumpur)
- One movement is defined as a flight entering a point or a flight exiting a point. So, a flight passing through a significant point will be counted as 2 movements.

# Traffic Sample Data (along a route)

route	fix	fl	num_mvt
N892	MAVRA	310	2
N892	MAVRA	320	134
N892	MAVRA	330	11
N892	MAVRA	340	27
N892	MAVRA	350	708
N892	MAVRA	360	1426
N892	MAVRA	370	5
N892	MAVRA	380	16
N892	MAVRA	390	702
N892	MAVRA	400	513
N892	MUMOT	320	200
N892	MUMOT	340	12
N892	MUMOT	350	708
N892	MUMOT	360	1452
N892	MUMOT	380	16
N892	MUMOT	390	688
N892	MUMOT	400	502



## Notes to the Data (2)

- Flight levels may be actual flight levels or planned flight levels from the flight plan. This depends on how each State generates its TSD.
- Metric FL is converted into feet and rounded to the nearest 1000 feet.
- MAAR also interpolates movements on the parallel routes based on entry and exit fixes. However, this process wasn't executed on Singapore FIR 2013 TSD because of insufficient points in the data.

# Traffic Sample Data (crossing a fix)

route	fix	fl	num_mvt
A461	MUMOT	290	6
A461	MUMOT	320	2
A461	MUMOT	330	411
A461	MUMOT	350	17
A461	MUMOT	370	152
A461	MUMOT	380	6
A461	MUMOT	410	4
N892	MUMOT	320	200
N892	MUMOT	340	12
N892	MUMOT	350	708
N892	MUMOT	360	1452
N892	MUMOT	380	16
N892	MUMOT	390	688
N892	MUMOT	400	502



## Notes to the Data (3)

- The original purpose of the traffic sample data is to be used as a dataset for determining the mid-air collision risk estimate for the region, which will be compare against the accepted target level of safety (TLS)
- Thus, in order to make it useful for identity major traffic flows (MTFs) or review FLAS/FLOS in the South China Sea , some more analysis needs to be done.

# Number of Movements at Fixes (combined all FLs)







# Conclusion

- The meeting is invited to note the information regarding the 2013 Traffic Sample Data from MAAR.
- The Traffic Sample Data up to Dec 2014 is expected to be available in mid-2015