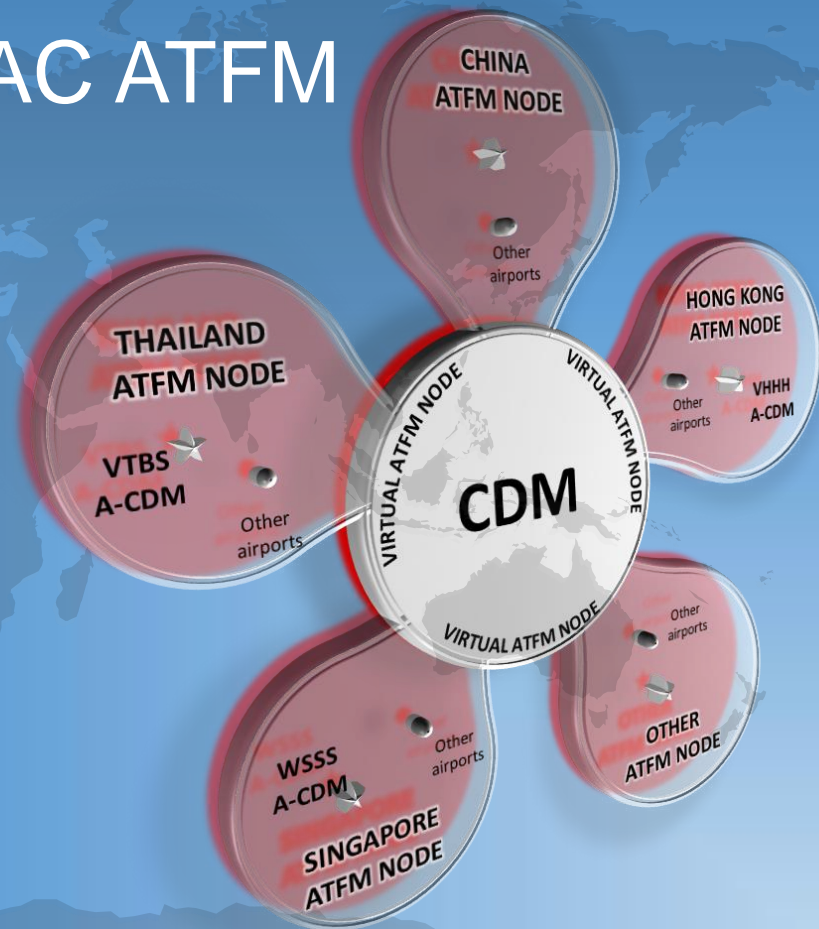


Are We Doing the “Right” Thing?

Development Story of APAC ATFM Post-Operations Analysis Framework

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Senior ATM Data Officer
AEROTHAI
22 November 2017



Where It All Began...

The image shows a stack of Microsoft Excel spreadsheets. The top spreadsheet displays a flight schedule with columns for flight number, departure time, arrival time, delay, and other metrics. A large red text overlay reads "This..." followed by a large red exclamation mark and a question mark. A small white 3D figure stands next to the question mark, looking thoughtful.

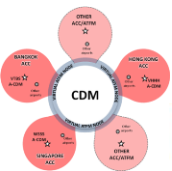
ELDT	ELDT	CLDT	CLDT	EIBT	Delay	EET	ATOT	ALDT	ALDT	DEP Com	Arr Com	AET	ETDIFF	ETDIF BL	Rema	Calculat	Multi-nc	
07:30	7	07:30	7	07:45	0	00:50	50	06:40	07:30	7	0	0	50	0	-15	Yes	Domestic	
07:37	7	07:37	7	07:52	0	00:50	50	06:40	07:30	7	0	0	50	0	-15	Yes	Domestic	
07:40	7	07:40	7	07:45	0	00:50	50	06:40	07:30	7	0	0	50	0	-15	Yes	Domestic	
07:41	7	07:48	7	07:55	8	01:05	65	06:32	07:34	7	0	0	50	0	-15	Yes	Domestic	
07:42	7	07:52	7	07:57	11	05:11	311	02:43	08:04	8	-3	-6	62	-3	-18	Yes	Domestic	
07:43	7	07:59	7	07:58	13	01:07	67	06:46	08:22	8	0	2	12	321	10	-5	Yes	Domestic
07:44	7	08:03	8	07:59	16	00:43	43	07:11	08:10	8	-2	-2	27	96	29	-5	Yes	Domestic
07:47	7	08:07	8	08:02	19	01:04	64	06:59	08:28	8	-5	-5	11	59	16	14	Yes	Domestic
07:48	7	08:10	8	08:03	20	03:07	187	04:44	08:25	8	0	0	25	59	16	1	Yes	Domestic
07:51	7	08:14	8	08:06	22	00:58	58	07:07	08:16	8	-16	-16	18	89	25	10	Yes	Domestic
07:57	7	08:18	8	08:12	21	03:16	150	04:30	08:17	8	-5	-5	18	221	34	10	Yes	Domestic
08:00	8	08:22	8	08:15	22	00:47	47	07:45	08:35	8	-28	-28	6	69	34	19	Yes	Domestic
08:02	8	08:25	8	08:17	23	01:32	92	06:54	08:45	8	0	0	20	197	1	-4	Yes	Domestic
08:07	8	08:29	8	08:17	27	00:47	47	07:37	08:38	8	0	0	27	197	1	-14	Yes	Domestic
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08:25	8	09:16	9	08:39	48	00:51	51	08:09	09:13	9	-2	-						

Where It All Began...

So we have a lot of data...but...

What should we **do** with them?

How do we **know** whether we are doing the **right thing**?



DISTRIBUTED MULTI-NODAL ATFM NETWORK



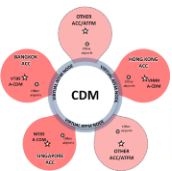
Where It All Began...

4.1.4.4 Post-operations Analysis

Recommend...

- Collect and assess data against target
- Hold review briefings
- Assess results and recommend changes
- Periodic review meetings

HOW?



DISTRIBUTED MULTI-NODAL ATFM NETWORK



So We Asked Questions...

How **accurate** is it?

Are there **any**
changes?
How often?

When did we get this?



How **“good”** is our
traffic demand prediction?



DISTRIBUTED MULTI-NODAL ATFM NETWORK



From the Beginning...

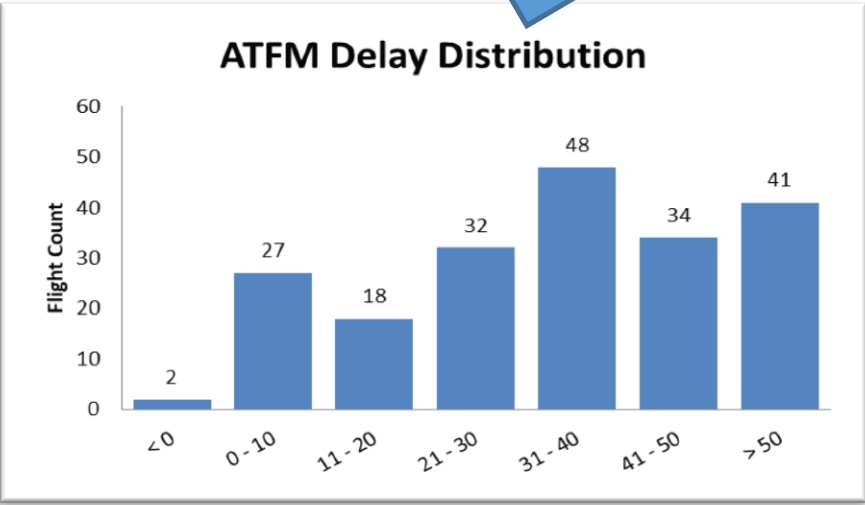
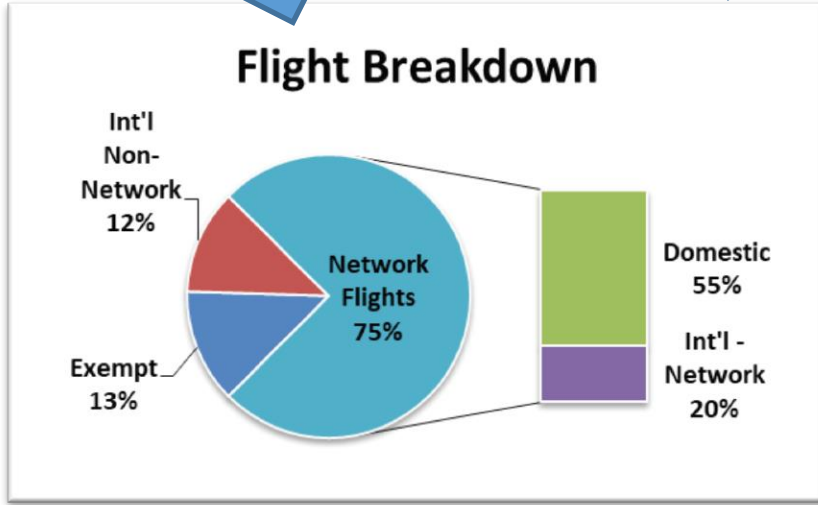
Who are involved?



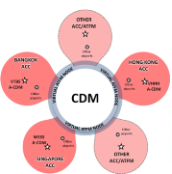
How **many**?



How **big** are the delays?



What does our ATFM program look like?



DISTRIBUTED MULTI-NODAL ATFM NETWORK



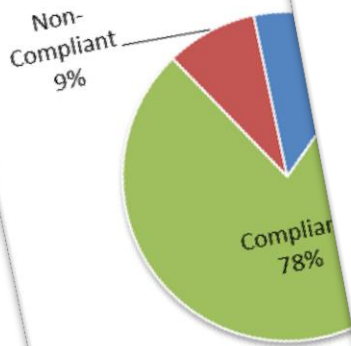
To The End...

How's the **compliance?**

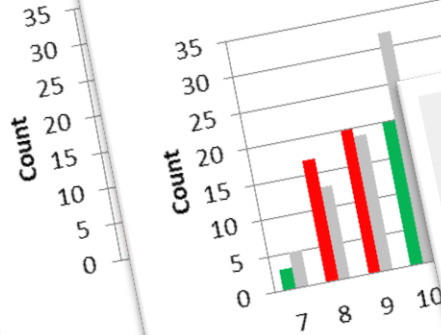
How was the **delivered traffic?**

Did we **save** on **delays?**

Overall DEP Compliance

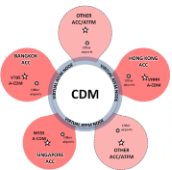


Estimate (FPL) Landing Count vs Capacity
Actual Landing Count vs Capacity



		GDP-1	GDP-2	GDP-3	GDP-4	GDP-5	GDP-6
Exempt	Total Program Delay	0	0	0	0	0	0
	Total Air Delay	641	328	178	288	333	87
Non-Exempt	Total Program Delay	526	337	155	220	192	228
	Total Air Delay	244	249	56	81	61	53

Did we achieve what we wanted?



DISTRIBUTED MULTI-NODAL ATFM NETWORK



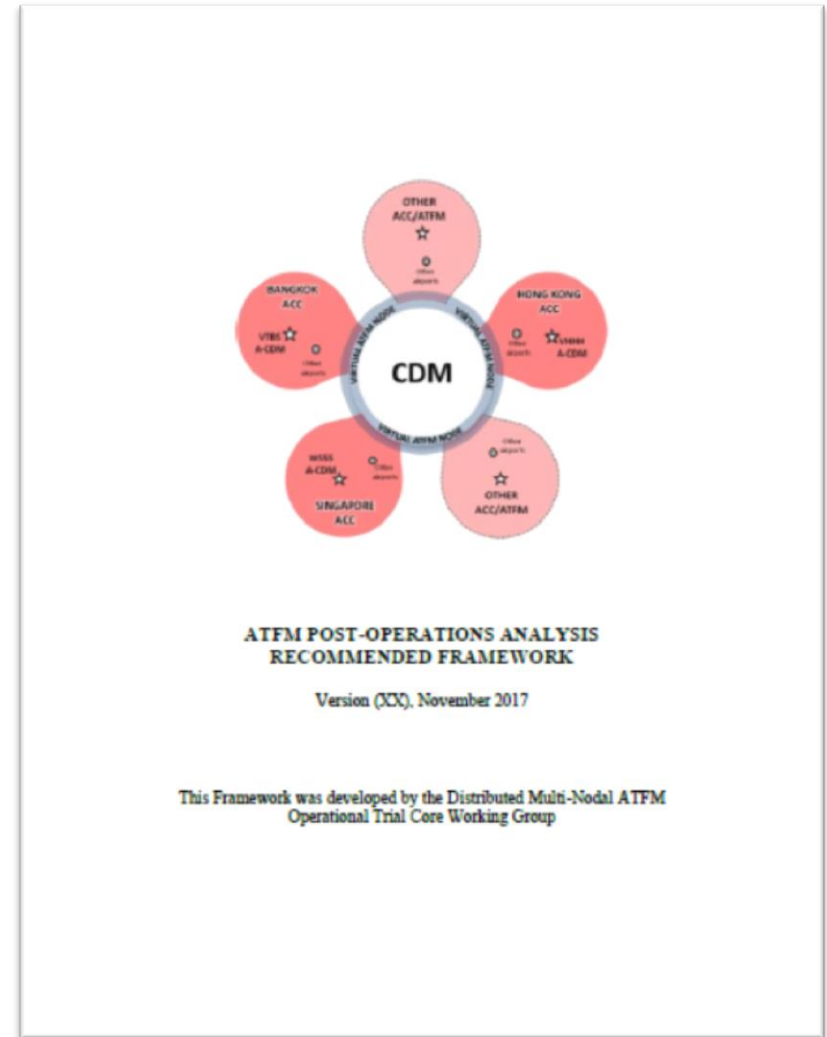
Our (WIP) Textbook!

Encourage and guide States to:

- Collect **good data**
(and know where to get them)
- Ask the **right questions**
(and know the basics of answering them)

and...

Start Simple



DISTRIBUTED MULTI-NODAL ATFM NETWORK



Thank You!

(and help us...)

