



CIVIL AVIATION BUREAU of JAPAN

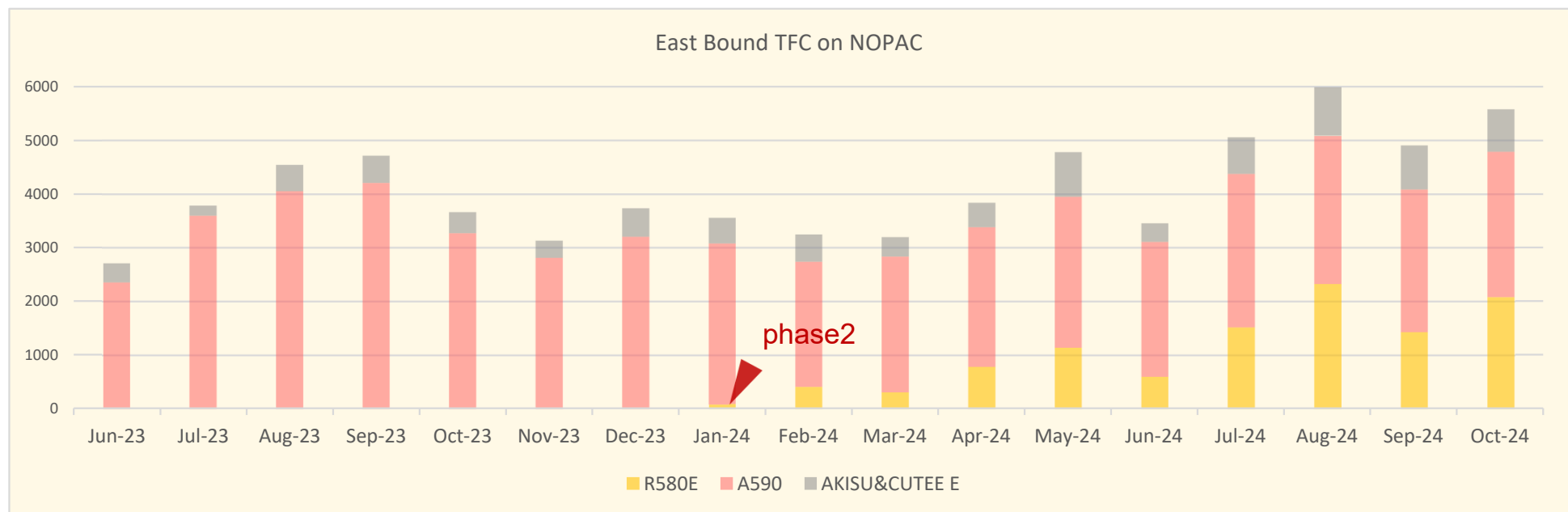
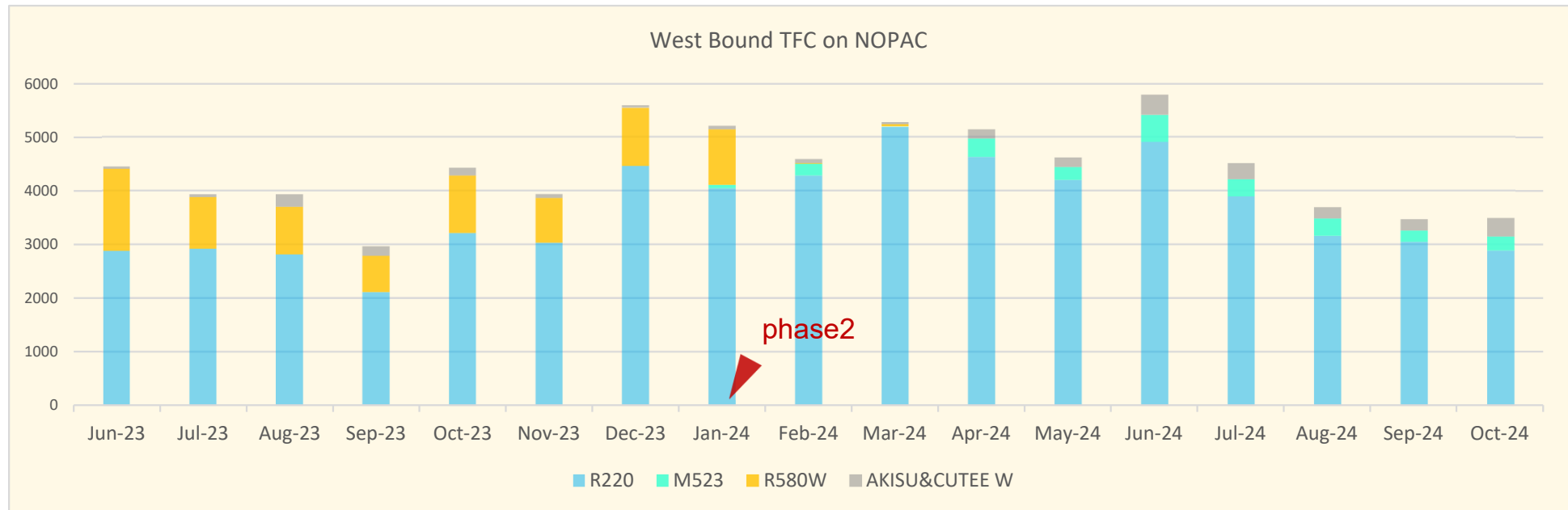
NOPAC redesign proposal

Fukuoka Area Control Center
(Fukuoka ACC)

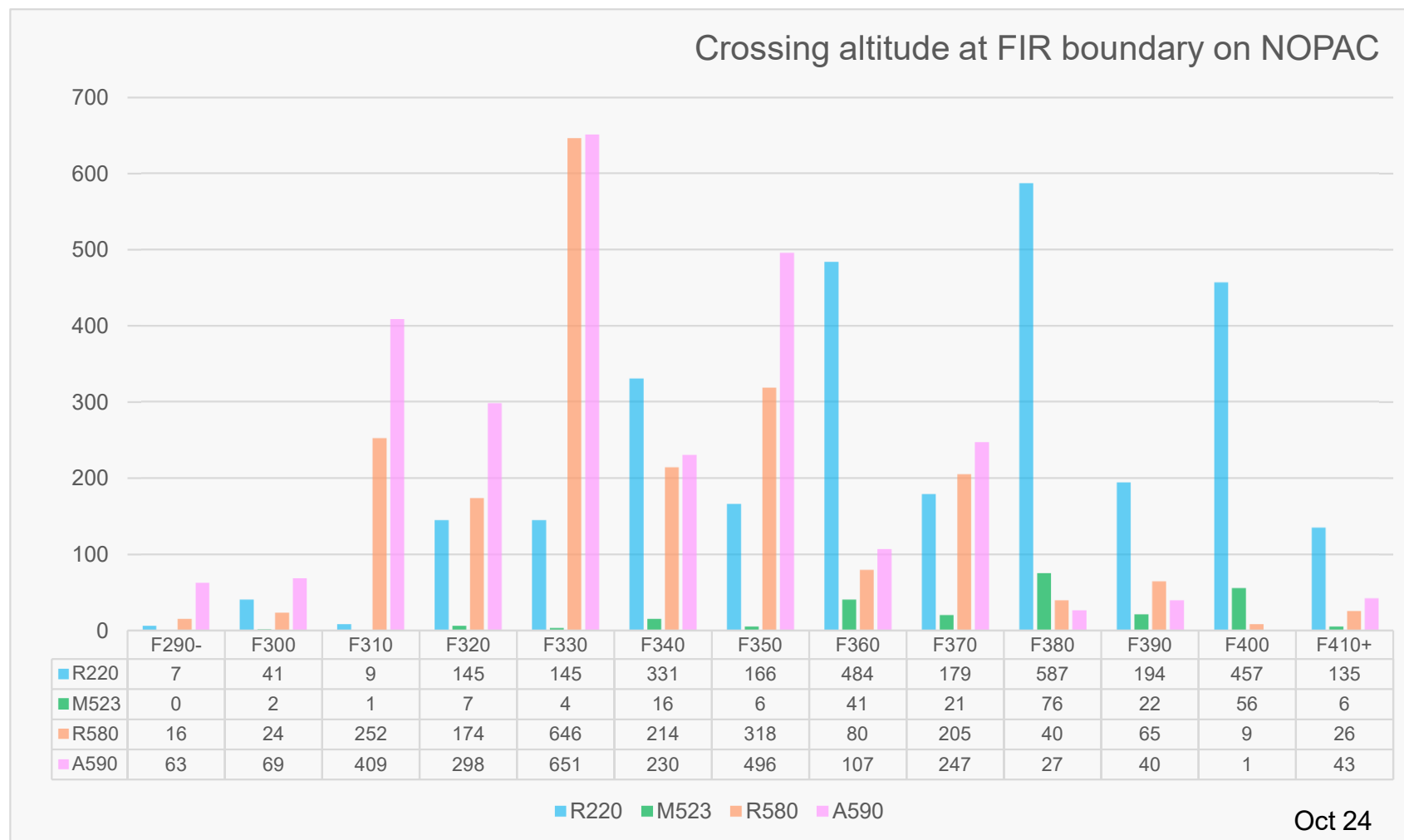
PM31
Dec 2024

- ➔ NOPAC traffic volume
- ➔ NOPAC RNP4/PBCS approval rate
- ➔ For efficient operation
 - East bound
 - West bound
 - Expansion of altitude stratum for RNP4/PBCS approved aircraft only (change of lower altitude limit)
 - Activation of M523

✈ NOPAC traffic volume

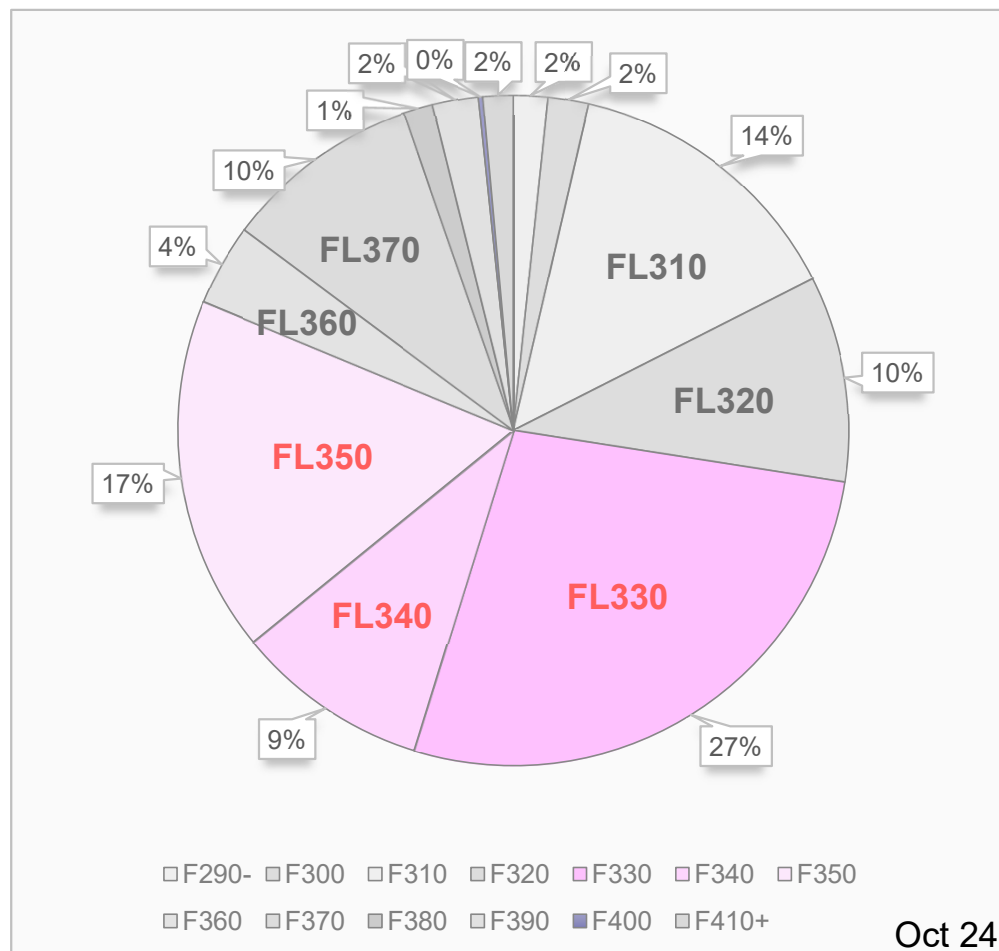


✈ NOPAC traffic volume each route/altitude



→ NOPAC traffic volume

Altitude used in East bound on NOPAC
(R580 & A590)



◆ Over 50% of eastbound aircraft in FL330-FL350 flights only

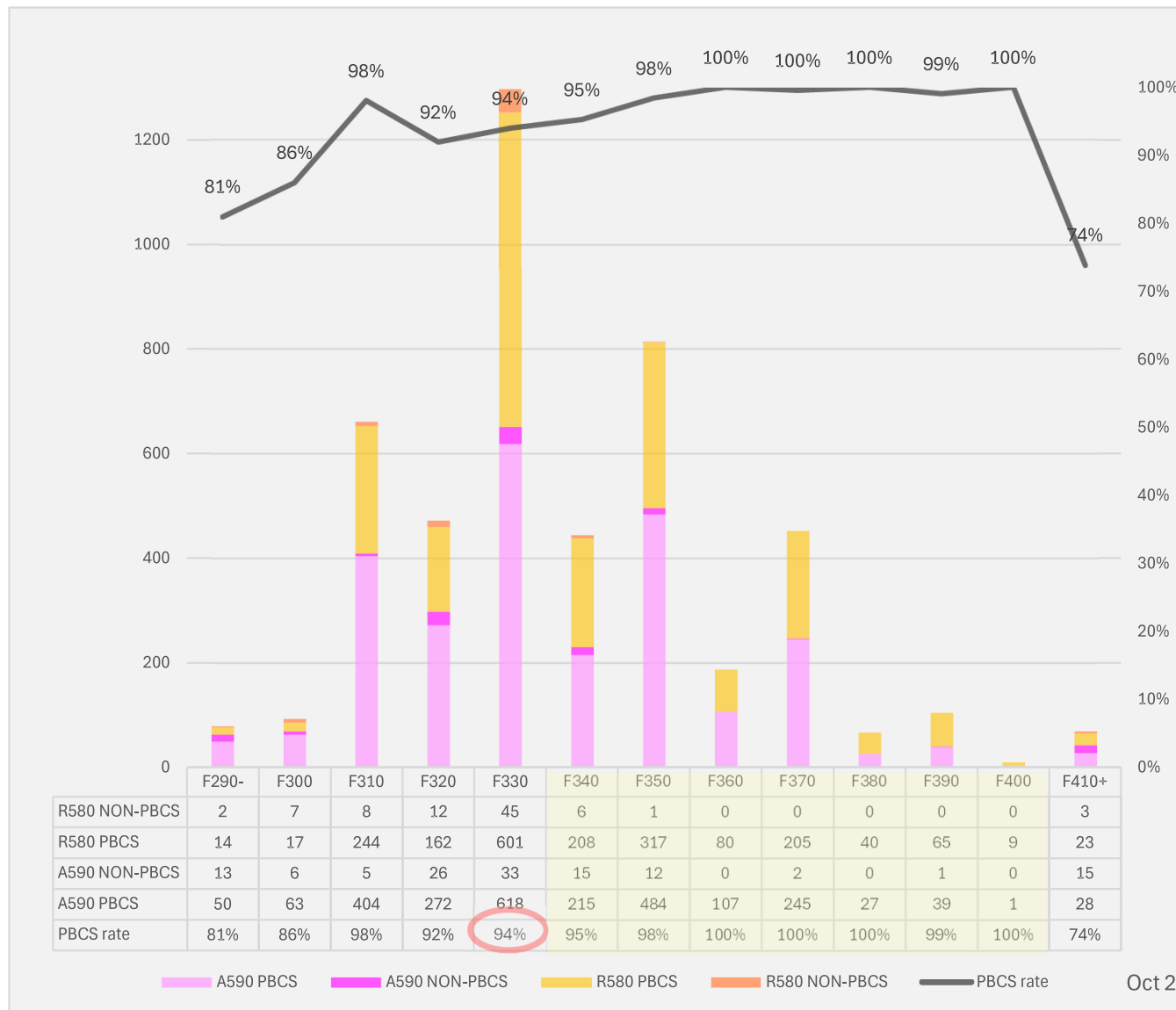
◆ Aircraft flying eastbound on NOPAC are very popular in these altitude stratum

◆ This is the altitude at the boundary with the Anchorage ARTCC.

For example, aircraft at FL340 and FL350 in this data often enter the ocean airspace at FL330. Then, they climb in the ocean airspace and cross FIR boundary at FL340 or FL350.

✈ NOPAC RNP4/PBCS approval rate

Number of aircraft and RNP4/PBCS approval rate on R580&A590



- ◆ Optimum altitude for eastbound aircraft is FL330
- ◆ Most non RNP4/PBCS approved aircraft at or below FL300 are military aircraft.
- ◆ Currently, traffic on R580 and A590 is nice and spread out, and traffic at FL330 is almost exactly half and half.
- ◆ RNP4/PBCS approval rate at FL330 is 94%, which is high.

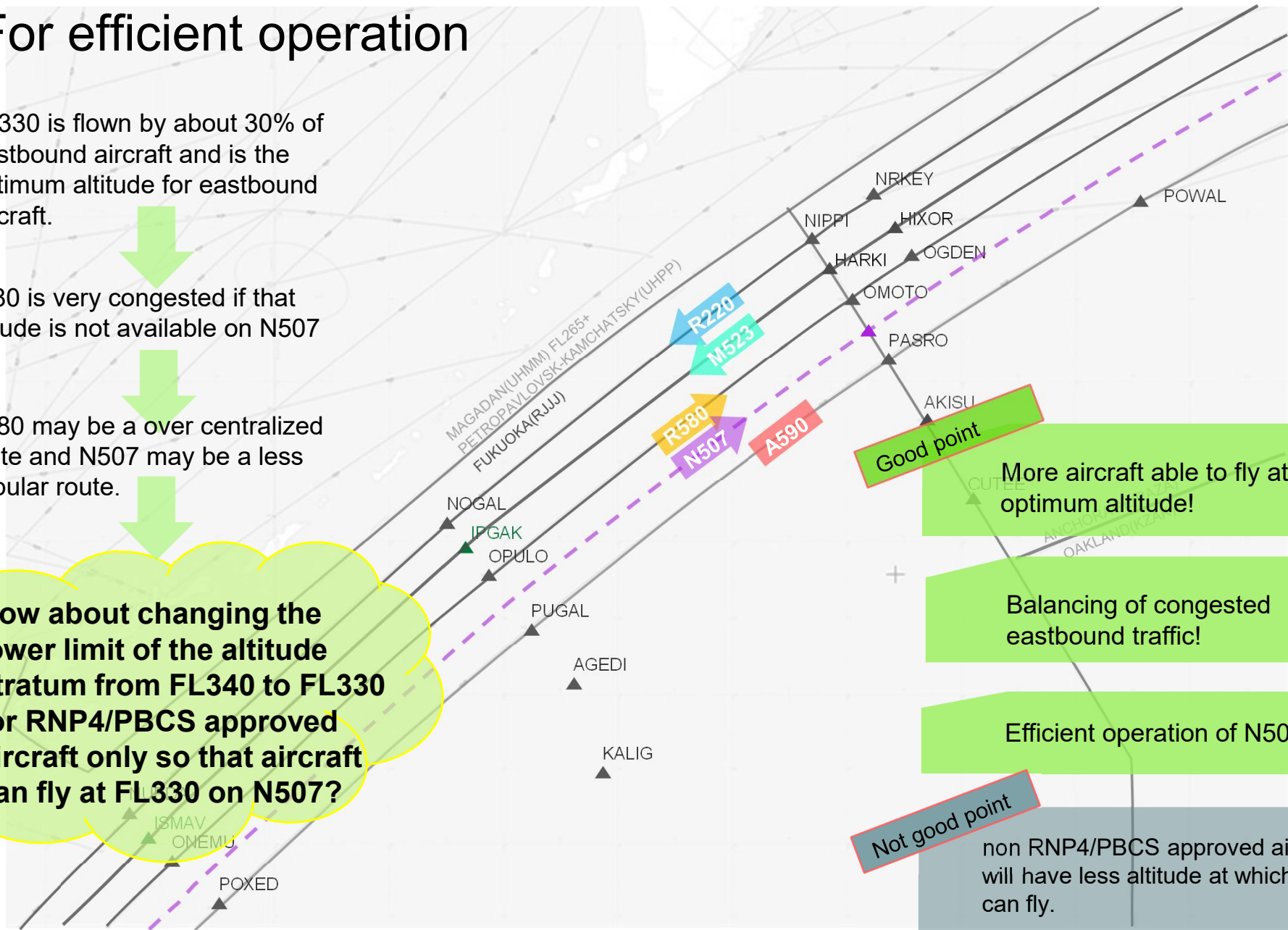
✈ For efficient operation

FL330 is flown by about 30% of eastbound aircraft and is the optimum altitude for eastbound aircraft.

R580 is very congested if that altitude is not available on N507

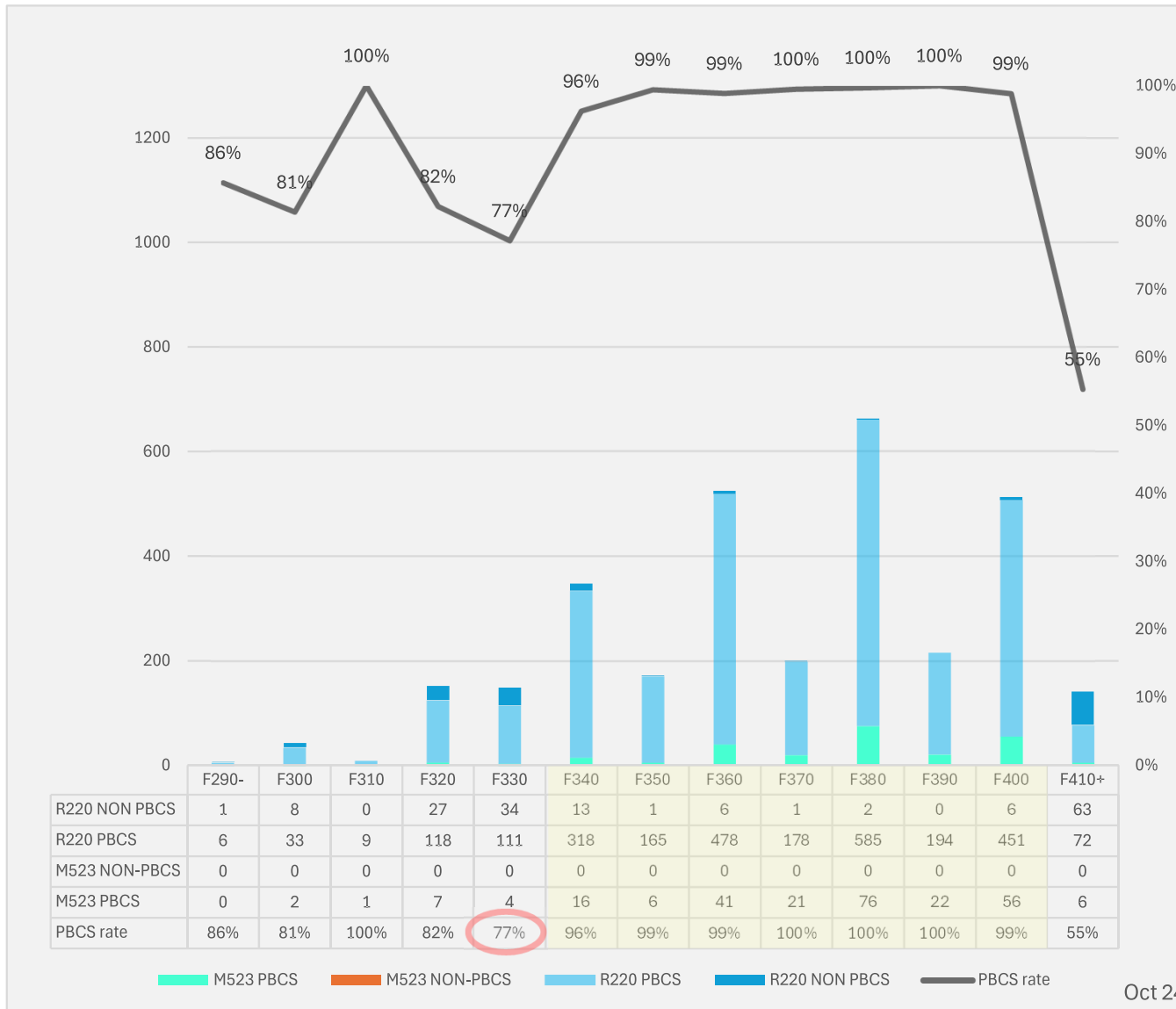
R580 may be a over centralized route and N507 may be a less popular route.

How about changing the lower limit of the altitude stratum from FL340 to FL330 for RNP4/PBCS approved aircraft only so that aircraft can fly at FL330 on N507?



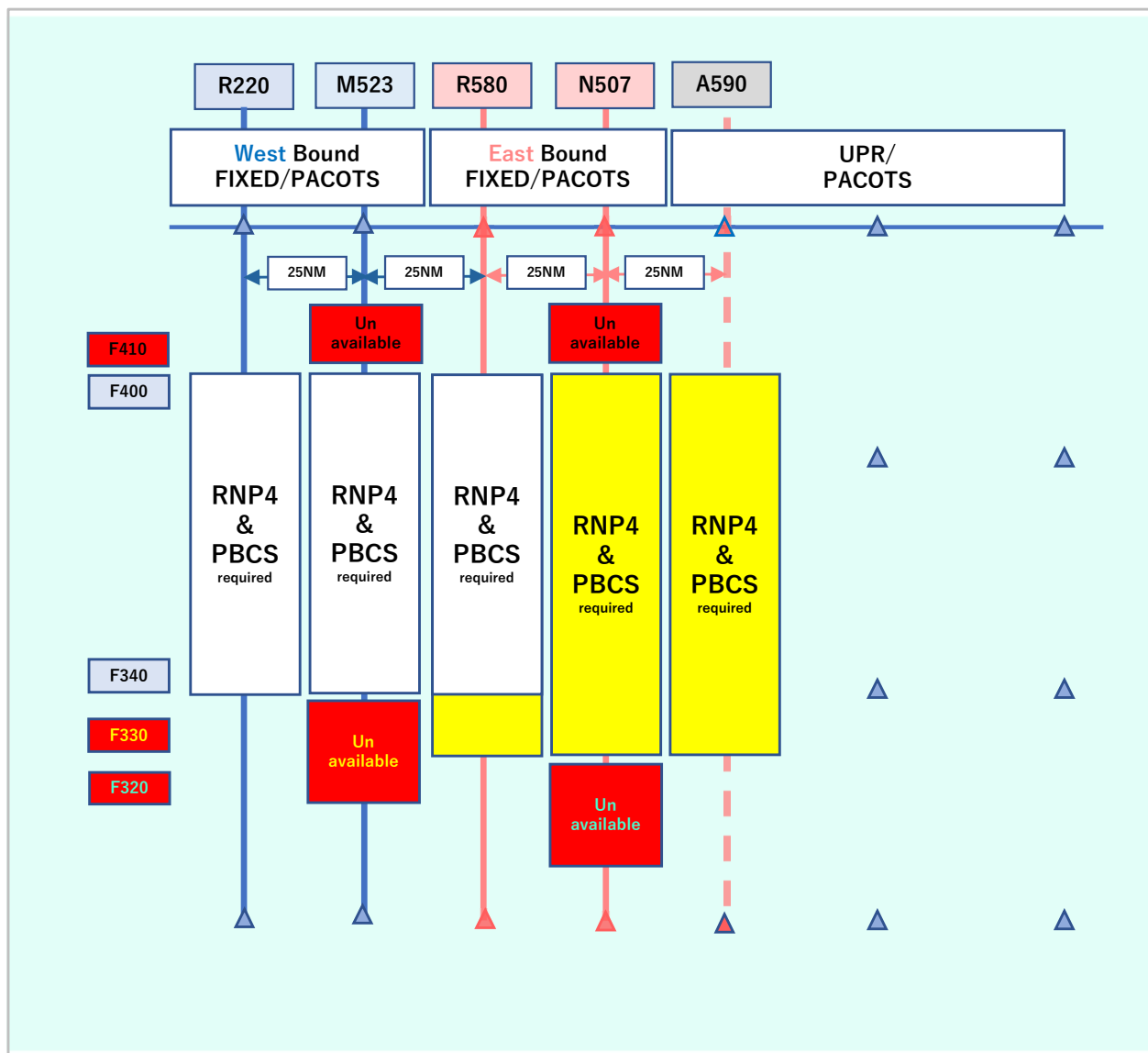
✈ NOPAC RNP4/PBCS approval rate

Number of aircraft and RNP4/PBCS approval rate on R220&M523



- ◆ Optimum altitude for westbound aircraft are FL340 and above.
- ◆ For westbound, we do not feel it is necessary enough to change the lower altitude limit from FL340 to FL330.
- ◆ RNP/PBCS approval rate on FL330 for Westbound aircraft is as low as 77%, with a significant number of non RNP4/PBCS aircraft flying.
- ◆ Since FL330 is the highest altitude for non RNP4/PBCS approved aircraft and should remain unchanged at this stage.

✈ For efficient operation



Altitude stratum for
RNP4/PBCS approved
aircraft only

◆ R580 ・ N507 ・ A590

FL340-FL400



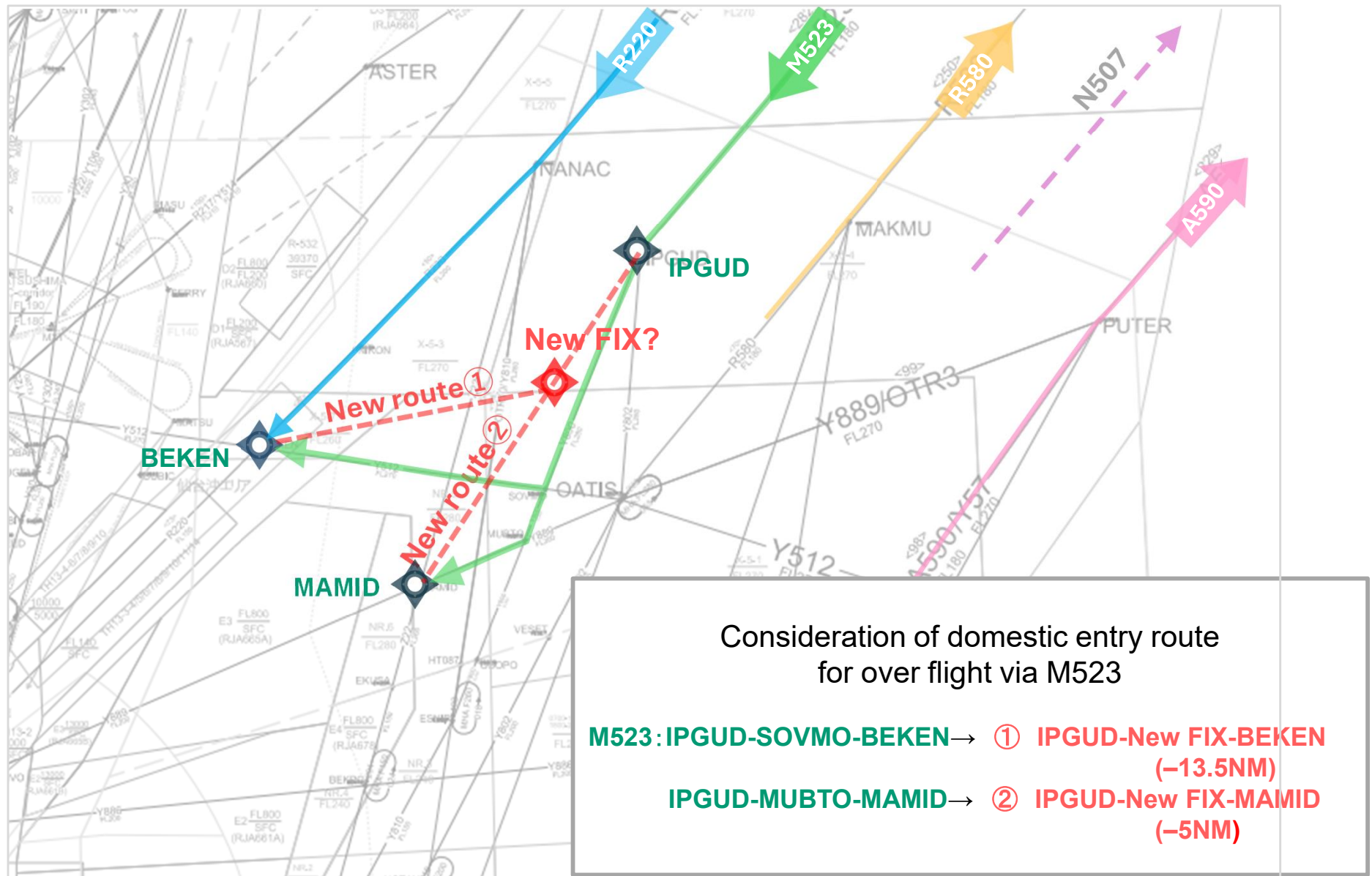
FL330-FL400

◆ R220 ・ M523

FL340-FL400

No change from current

➔ For activation of M523



The end

