

An aerial photograph of a vast, dense forest of tall, green coniferous trees. The trees are packed closely together, creating a textured, green canopy. The lighting is bright, highlighting the vibrant green of the foliage. In the center of the image, the text "N°RRA" is overlaid in a large, bold, white, sans-serif font. The text is centered horizontally and vertically, standing out prominently against the green background.

N°RRA

Airline's point of view

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Operations Controller/
Flight Planning Administrator



Nordic Regional Airlines - NoRRA

- Finnish airline
- Originally founded in 1993, previously served as Finnish Commuter Airlines and Flybe Finland
- Nordic Regional Airlines since June 2015
- Ownership base: 100% Finnair
- Home base Helsinki airport, ~ 670 employees
- 26 aircrafts
 - 12 ATR 72-500 (68/72 seats)
 - 12 Embraer 190 (100 seats)
 - 2 Embraer 170 (76 seats)

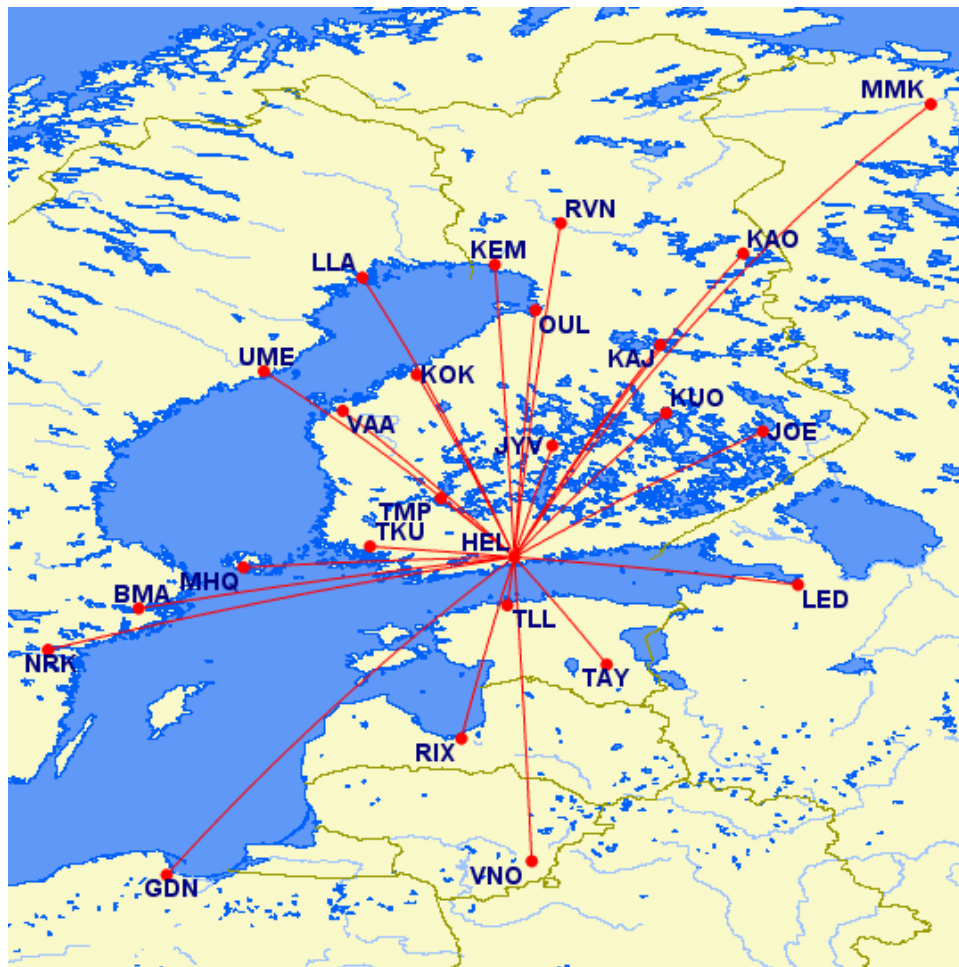


Nordic Regional Airlines - NoRRA

- Purchase traffic for Finnair
- Operates a significant part of Finnair's domestic and European traffic
- 2015: ~57 500 flights to over 50 destinations
 - ATR: approx. 680 flights/week
 - ERJ: approx. 460 flights/week



ATR routes



ERJ routes



Our flightplanning system

- Automated flight planning according to preset rules
 - STD -11h System will compare company routes according to forecasted winds and validates the most cost efficient (IFPS and RAIM)
 - STD -10,25h System will file FPL and send flight documents
- Automation will stop if no company route is validated (IFPS/RAIM) -> manual interaction
- If there is any changes to a/c reg, ETD, payload, fuel etc the system will give an alert
- No flight dispatch, PIC is responsible



Our flightplanning today

Route	SID	Rwy	STAR	Rwy	Fuel	Dist	Time	FuelCost	DOC	OFC	Cost ▲
Route 1 CAP	GIDKI	01	LAKU5M	15	620	240	00:53	477	N/A	132	609
Route 2 CAP	BAPTU	01	LAKU5M	15	646	249	00:55	496	N/A	132	628

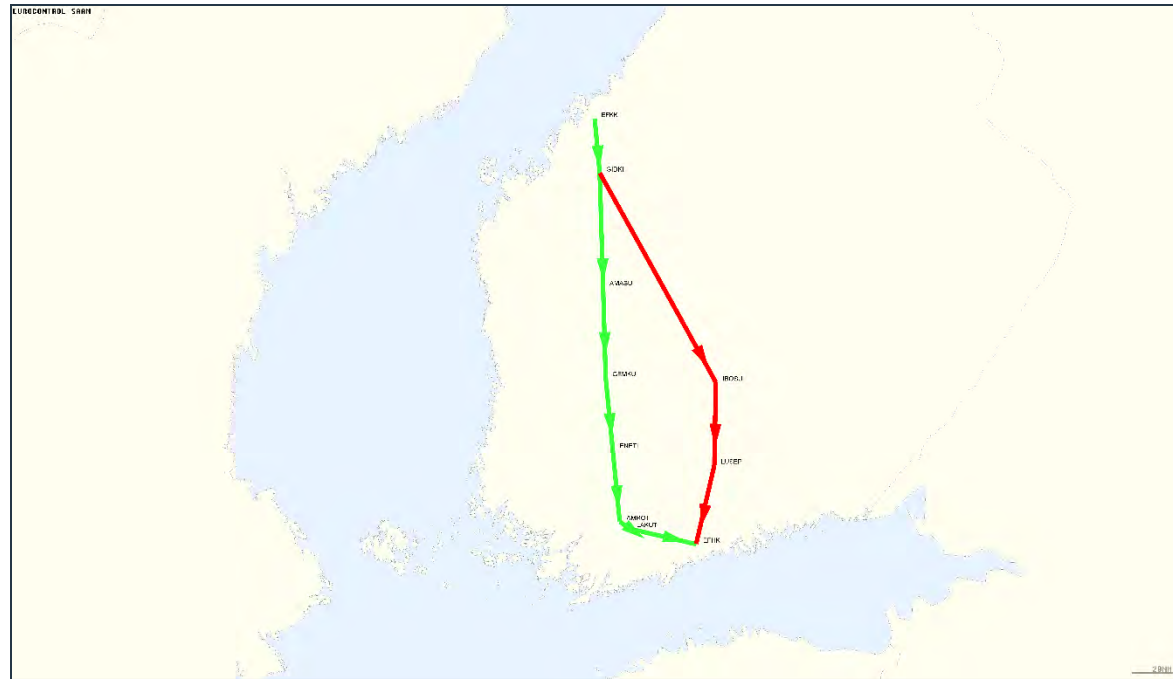
EFKK-EFHK

- Predefined SID/STAR
- Most cost efficient



Flightplanning in FRA

- EFKK-EFHK potential savings/flight
 - 13 NM
 - 2,823 min
 - 35, 995 kg fuel
 - 113,740 CO² (kg)
 - 0,618 NOx (kg)
- Yearly savings:
 - 10 920 NM
 - 23 71,32 min
 - 30 235,800 kg
 - 95 541,600 CO² (kg)
 - 519,120 Nox (kg)



Our flightplanning today

Route	SID	Rwy	STAR	Rwy	Fuel ▲	Dist	Time	FuelCost	DOC	OFC	Cost
Route 1 CRP	ENUT3N	22R	PELOR6	13	2018	632	02:46	1371	N/A	440	1812

EFHK-ULMM

- No available ATS routes
- RUS permit (KELEK)

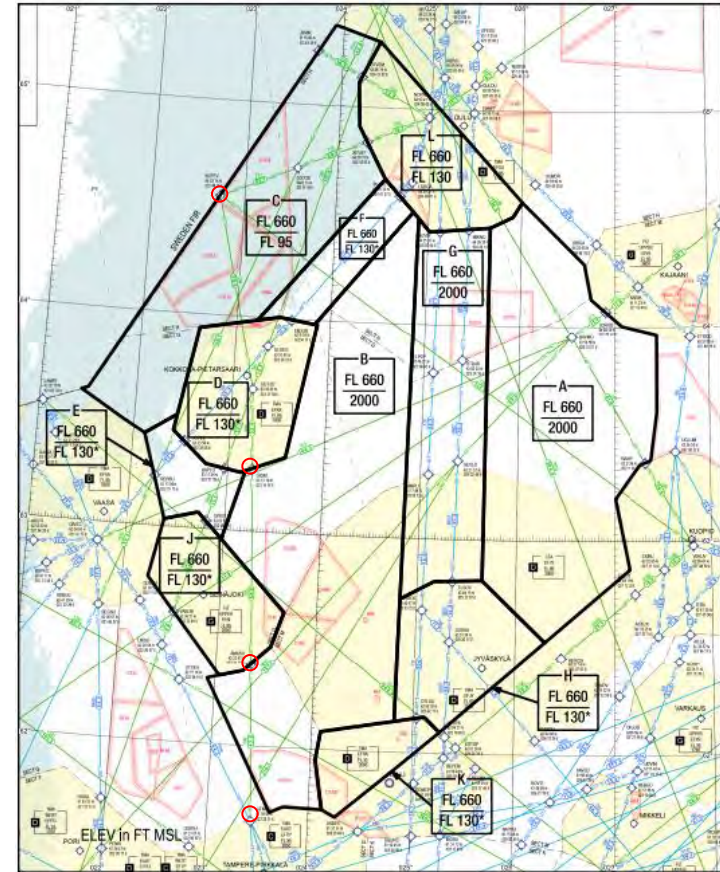


Flightplanning in FRA

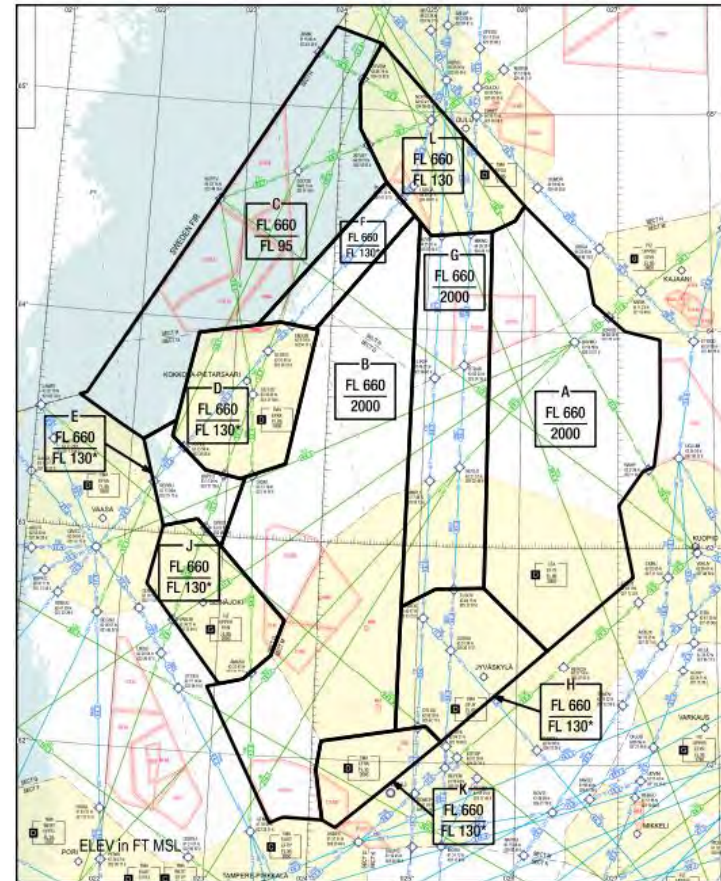
- EFHK-ULMM potential savings/flight:
 - 16 NM
 - 3,423 min
 - 46,79 kg fuel
 - 147,84 CO² (kg)
 - 0,825 Nox (kg)



Flightplanning today with active TSA's



Flightplanning today with active TSA's



What can we gain?

- More optimized flight planning
- Less restrictions with RAD, flow management etc.
- ASM procedures-> FBZ
- True FRA, no pre-defined DCT
- Cost efficiency



Implementing FRA

- AIP/AUP/UUP
- NEFAB flightplanning rules
- Vertical entry into FRA
- Intermediate points for planning purposes
- Lower the FRA FL in DK/SE FAB?
- CFSP's ready?
- Inflight systems ready?



