Airspace next step: FRA/DCT routing in the Americas

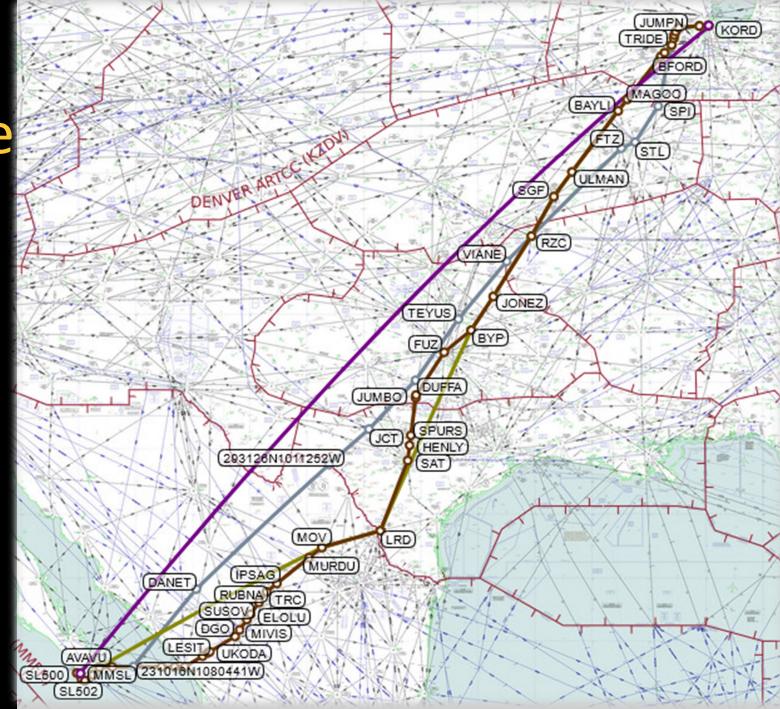
ICAO 07-10-2021

P/02 IATA



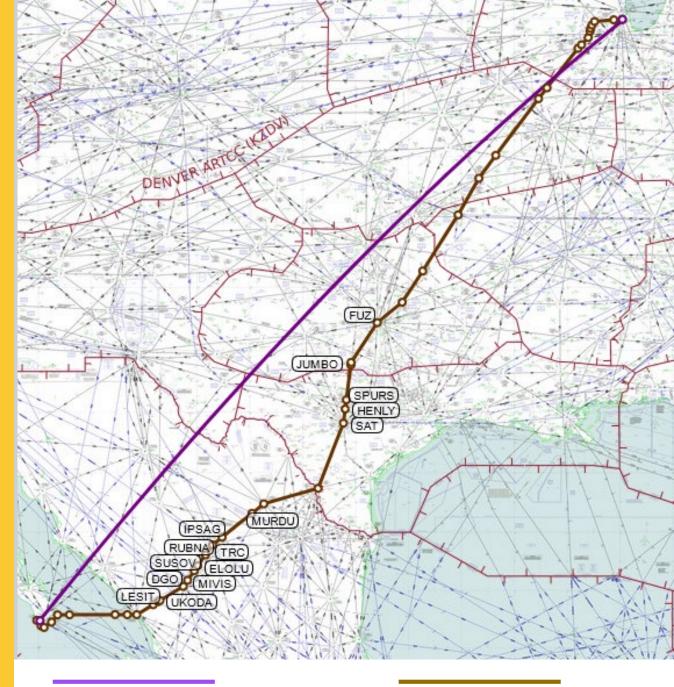
# Concept comparison vs the "ideal flight" (GCD)

- Fixed ATS routes
- DCT routing
- FRA (Free Route Airspace)



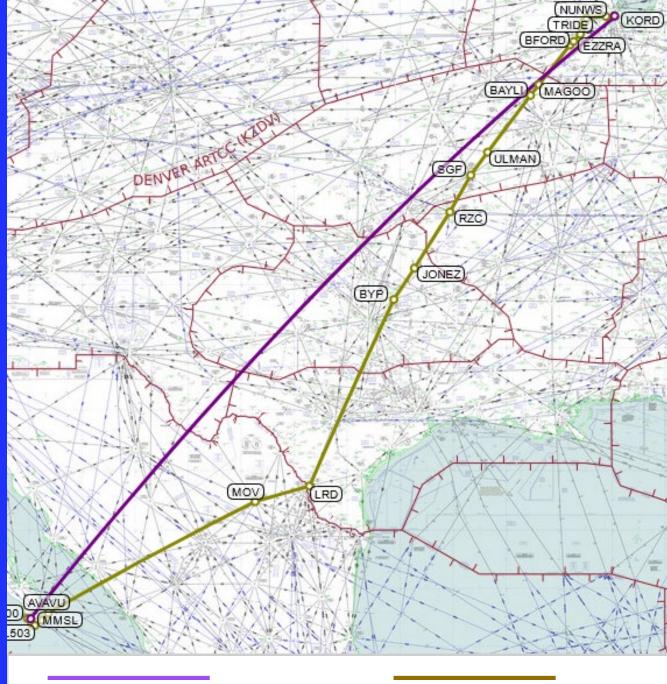
## Fixed ATS routes

- Allow only the use of the fixed ATS structure to <u>plan</u> the flight with some exemptions (Ex. Class G, FPL Z/Y no SIDs/STARs, etc.)
- Operation conditions and flows to use the ATS fixed structure are published and coordinated (ATFM)
- <u>Tactical</u> "DCTs" are allowed if cleared by ATC after a crew request or initiated by ATC.
- Not many efficient alternatives for planning in case of disruptions (WX, NAVAIDS, Ash, flight degradation, etc.)



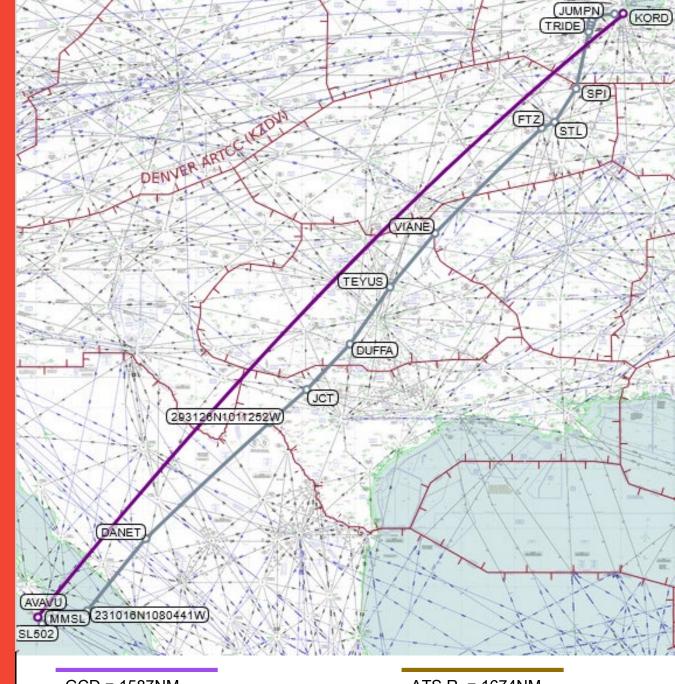
# DCT routing

- Airlines could use the ATS route structure
  + published waypoints (linked or not to an AWY) to plan their flights.
- Operation conditions for DCTs are published and coordinated (ATFM) like under ATS an route structure.
- Conditions could be but are not limited to hours of the day, FL blocks (Ex. +370), designed areas, etc. (single condition or a combination of them)
- DCT routing increases the possible planning options in an efficient manner in case of disruptions



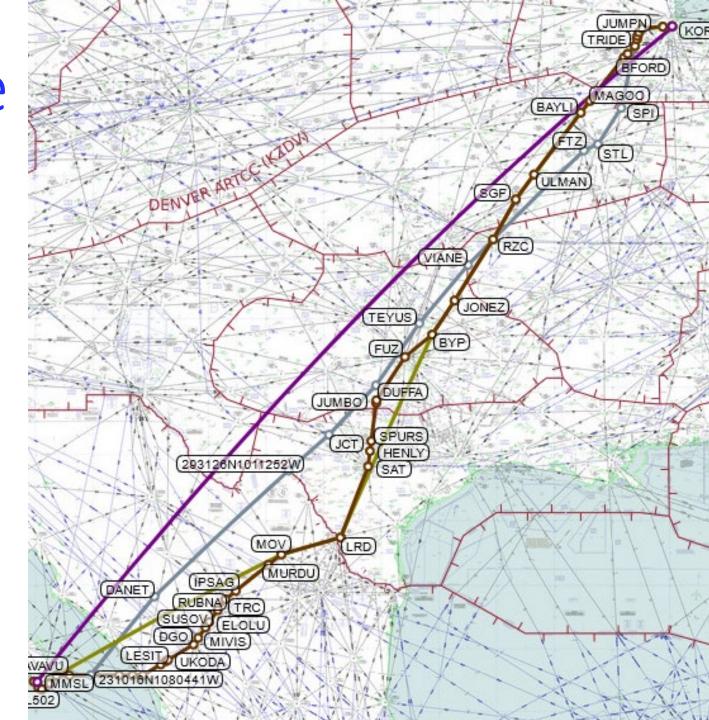
### **FRA**

- Airlines could use the ATS route structure + published waypoints + Lat/Long's to plan their flights.
- Operation conditions for FRA are published and coordinated (ATFM) like under an ATS route structure.
- Conditions could be but are not limited to hours of the day, FL blocks (Ex. +370), designed areas, etc. (single condition or a combination of them)
- FRA maximizes the efficiency of the flights options and stills subject to ATCO clearences



# Comparison of the 3 scenarios

- fixed ATS routes
- DCT routing
- FRA



## DCT routing

- After the COVID impact on operations IATA requested to ANSPs in Latin America and Caribbean to allow flights use the DCT routing (FRTO-B0/1).
- This was a unique opportunity taking advantage the low traffic demand to test this operational change while helping the industry reducing the impact.
- 16 FIRs provided publications (AICs, NOTAMs, AIPs) allowing DCT routing.

# FRA airspace

- This temporary opportunity shows the great collaboration environment we have in the region to upgrade the airspace system without any further investment in technology.
- 2 FIRs have tested Free routing between their FIRs by reconfiguring their ATM system.
- The lessons learnt in DCT/FRA routing are a great milestone to continue the upgrade of the whole airspace system.





# What's currently happening in the Americas region

#### DCT routing:

- **Available (Published):** Colombia, Ecuador, Peru, Brazil, Dominican Republic, Guyana, Jamaica, Chile.
- **Allowed it under coordination**: Panama, Cuba, CENAMER, Trinidad and Tobago, Mexico, (Curacao FIR is waiting for ATM system upgrade).
- Target: change the "allowed under coordination" status FIRs into "published" status.

#### - FRA:

- Tested and configured Ecuador, Peru (CENAMER WIP), under testing per demand.
- Next in the following months: CENAMER, Colombia, Venezuela.

#### - FRA/DCT:

- Agree on Testing/implementation plan with FAA and neighboring boundaries



#### **Rotas Diretass**

- Resultados -





ABR 2020 a JULHO 2021 (15 meses)

10.432

Trechos de Ponte Aérea RJ - SP



20.863.035 KG



65.927.191 KG