



2018
World ATM Congress



PROJECT OVERVIEW



+ A-Team



Lufthansa



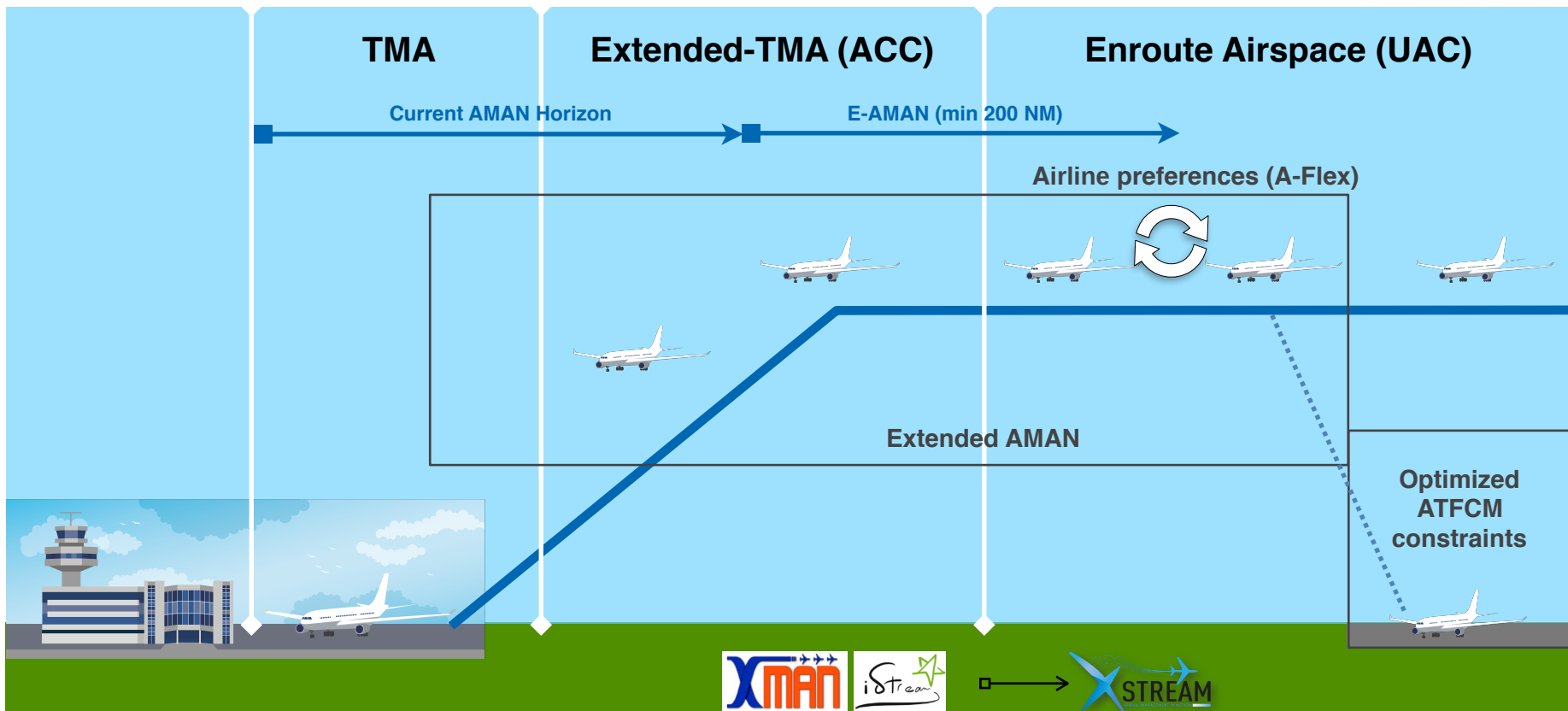
RYANAIR



DEMONSTRATION AREAS

- London area (Heathrow and Gatwick)
- Paris area (Paris ACC with CDG and Orly)
- Zurich area
- Integration of multiple AMAN in UAC (Karlsruhe, MUAC, Reims)

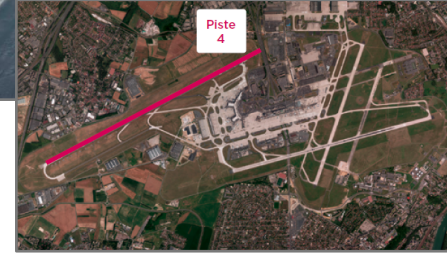
CONCEPT OF OPERATION



FIRST PARIS TRIAL

Extended AMAN Orly
25 Jul - 25 Aug 2017

Context: North runway resurfacing work



IFR Traffic at Paris-Orly:

- 240,000 movements per year
- 2nd airport in France

Major works achieved in 2 steps:

- 18th July 2016 – 28th August 2016
- 25th July 2017 – 25th August 2017

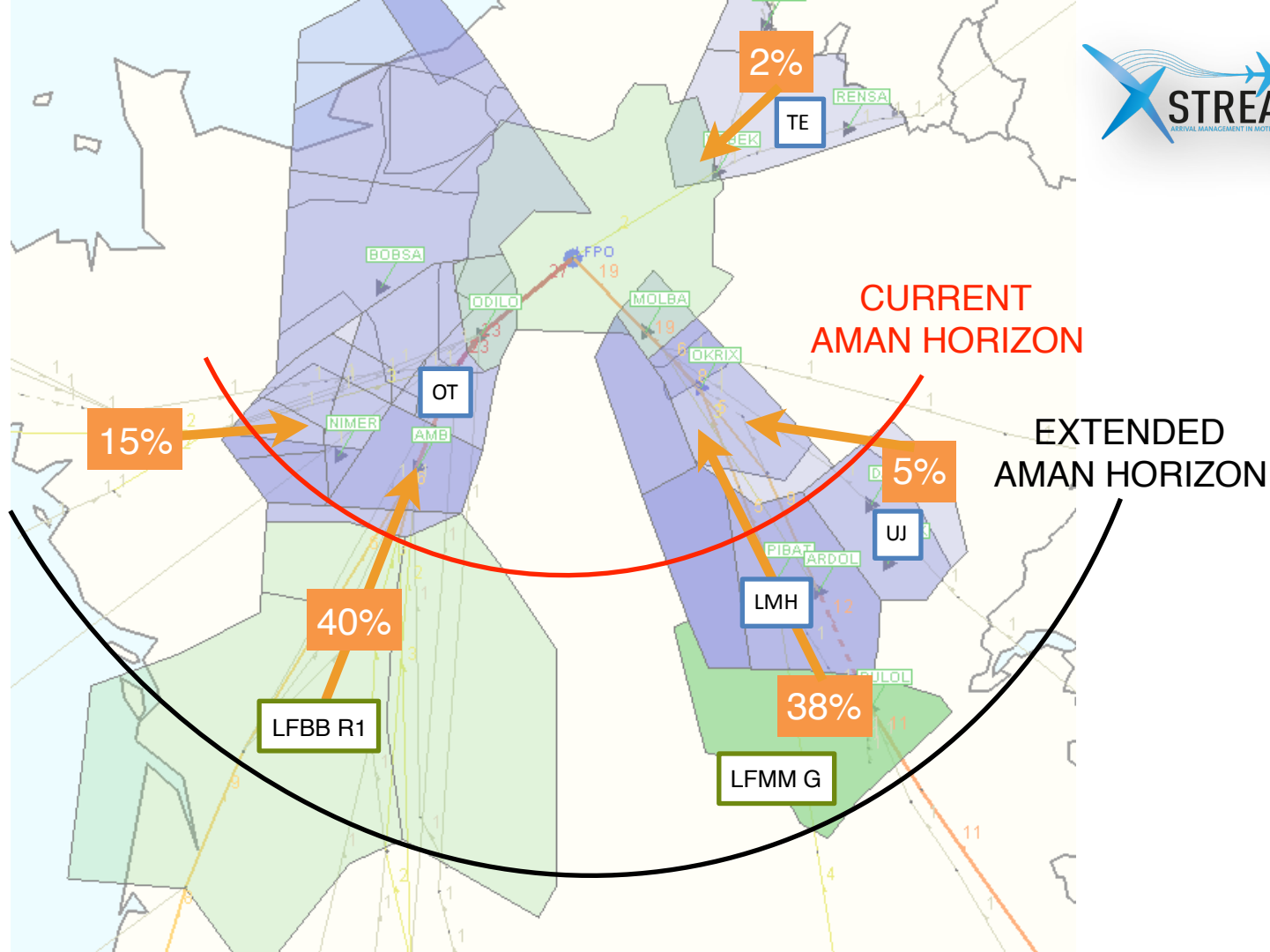
In 2016:

- High ATFCM delays due to Orly arrival regulations
- High pressure in TMA / Paris ACC with lots of air delay
- Increased use of holding patterns during late morning peak
- Lack of predicability on ELDT for curfew management



Paris-Orly
AMAN
extended
to 220 NM

→
Arrival morning
peak flow repartition



PROMISING RESULTS



170 flights experimented
xStream procedure

17 trial days

45% by Bordeaux ACC
55% by Paris ACC

- Horizon of action between **200 and 270 NM**
- Safety: not compromised
- Flight efficiency: 30% of Additional airborne time per flight (ASMA) delay absorbed in Paris ACC sectors
- Capacity: optimal and continuous runway feed
- Positive feedback both from ATCOs (Only APP, Paris ACC, Bordeaux ACC), Paris FMP, and Airspace Users

11.00-13.30 peak

xStream trials 2017 vs runway works 2016*

	2017	2016
Additional time per flight	2.8	4.43
Holding patterns per 100 flights	0.04	1.54

** « Nominal » peaks - no runway configuration change nor unusual weather conditions*

WHAT'S NEXT ?

HORIZON

Flights on
ground

200 NM
to 300 NM

100 NM
to 250 NM

Improved arrival planning: optimise ATFCM constraints by matching FMP & Airspace Users' needs

- Current trials in Paris ACC for SKI arrival flows each SKI week-ends from 16th December 2017 to 01st April 2018
- Next trials in Paris ACC for CDG arrival flows from North-East, from mid-May 2018

COP sequencer: initiate pre-sequencing of arrivals ahead of a detected hotspot in Paris ACC sectors

- Next trials in Paris ACC for CDG arrival flows from South-East, starting early March 2018 until June 2018

Extended AMAN: AMAN horizon extended > 200 NM

- Next trials in Paris ACC for Orly arrival flows end of S1 2018



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