A-CDM @YYZ

2019 Airports@ >>Work

April 3, 2019

GTAA NAV CANADA MENZIES AVIATION dnata AIR CANADA swissport WESTJET

Toronto Pearson

The Challenge of Growth and Complexity

A-CDM @YYZ

2018

- 49.5 million Passengers
- 473,000 Total aircraft movements
- 114 Passengers/movement
- 560,000 Tonnes of cargo

2037

- 85 million Passengers
- 632,000 Total aircraft movements
- 140 Passengers/movement
- 950,000 Tonnes of cargo

The Challenge of Growth and Complexity

Managing operational complexity:

- Aircraft up-gauging
- More GSE / apron congestion
- Arrival OTP / off-schedule ops
- Rolling delays
- Facility constraints
- Complex gating scenarios
- Airline gating preferences
- 2 terminals, 3 sectors each
- US Pre-clearance
- Passenger / Baggage connection processes and flows (ITI, ITPC, ITD, BIWIS, OSS, Non-OSS)
- Aircraft deicing/winter ops
- E-W v. N-S Runway productivity
- Airside bussing (Hardstands / IFC /ITD)
- Airside construction /restoration
- Passenger Rights Legislation
- Tows
- Ground handling performance

Attribute	Profile
Complexity of the operation	
Customer expectations (airlines, passengers, stakeholders)	
Scale of operation	
Potential for something to go wrong ('events')	
Potential impact of events	
Potential reputational risk	
Decision time / Response time	

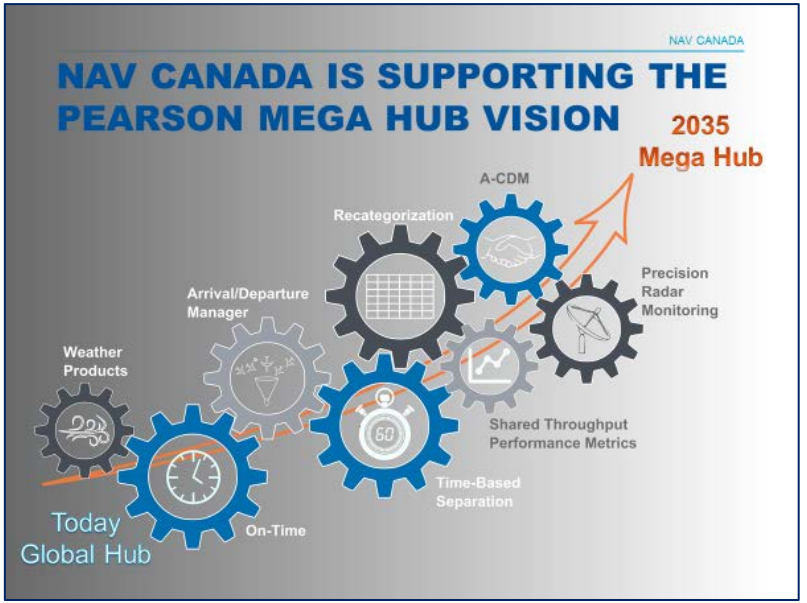
The Challenge of Growth & Complexity

A-CDM @YYZ

A World-Class Airside Operation

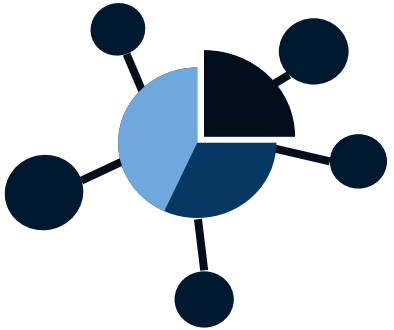
Improve the delivery of our “day of” airside operation

- Improve the **safety**, **efficiency** and **consistency** of **aircraft flow**
- Transition from **1st come – 1st served** to a **Best planned – Best served operation** through **A-CDM**
- Work with Nav Canada to **optimize runway capacity** and **flows of aircraft** – **in the air** and **on the ground**



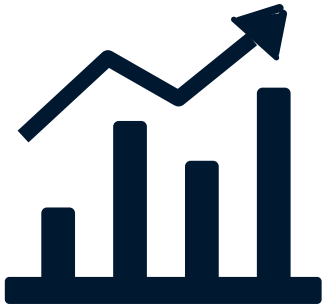
What is A-CDM?

Airport Collaborative Decision Making **(A-CDM)** is a new way of working based on **information sharing** where:



- **A-CDM partners use shared information to make decisions** based on up-to-date knowledge

- There is a **common situational awareness** providing all partners with the same information at the same time



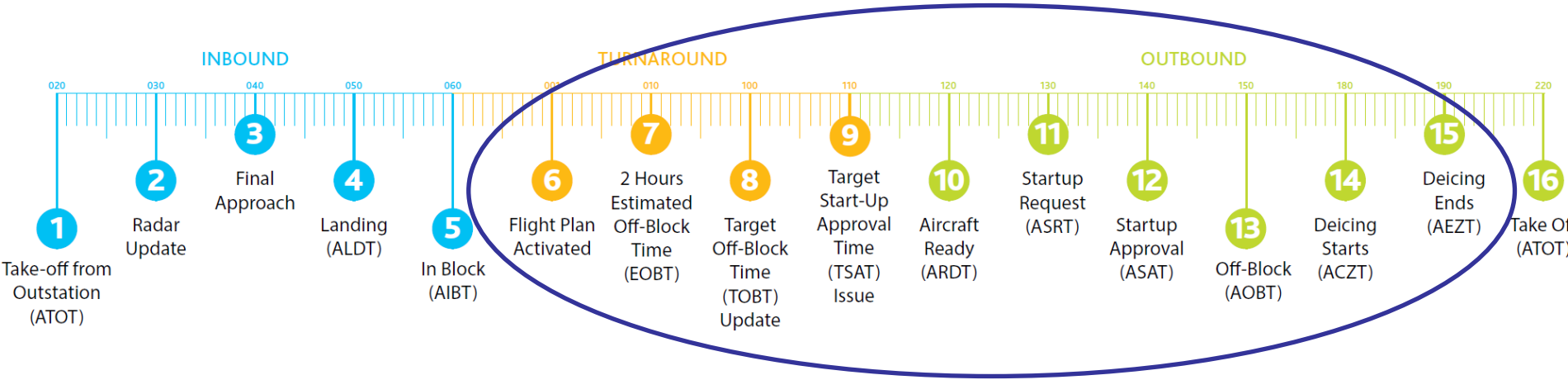
“Best Planned Best Served”

A-CDM @ YYZ vs Eurocontrol

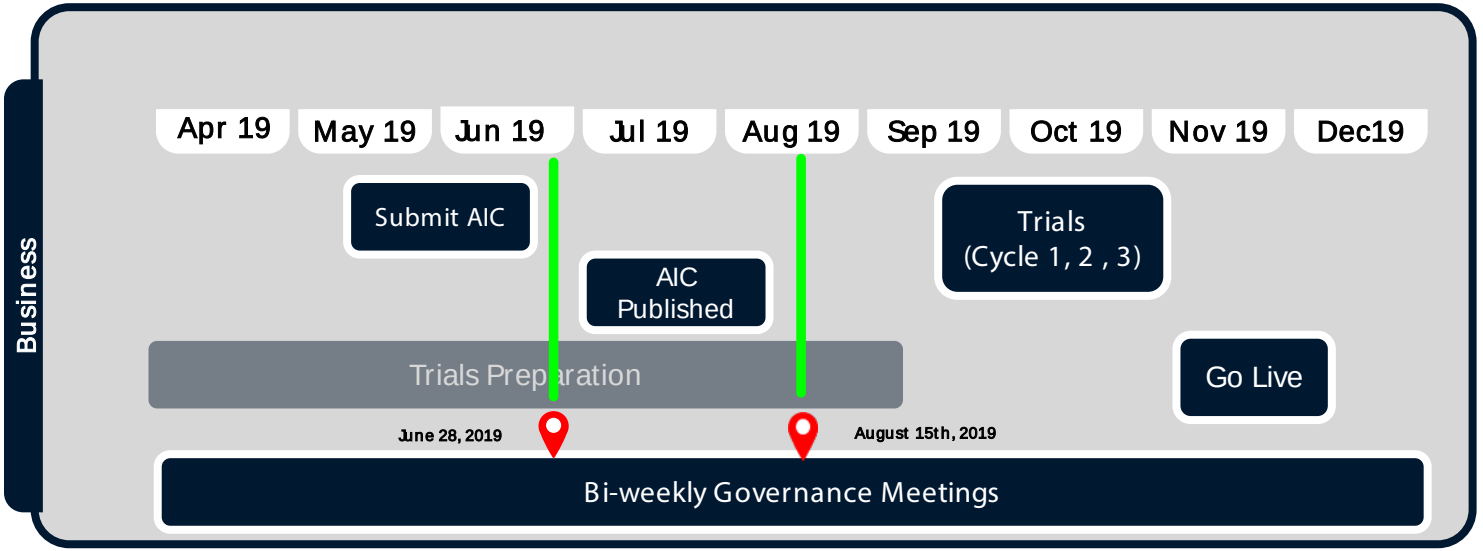
Trajectory Based, Process and Service Oriented approach

- Airport efficiency vs Airspace congestion
- Network based solution, considering the ATM and A/L networks
- Trajectories act as the “glue” that ties all aspects of the operation into the common situational awareness
- Focus on processes that can impact/distort the trajectories
- Business Services replace and expand the original A-CDM concept elements enabling the embedded Business Rules to drive the overall system behavior
- A-CDM Event Management (CEM) embedded

A-CDM Milestones

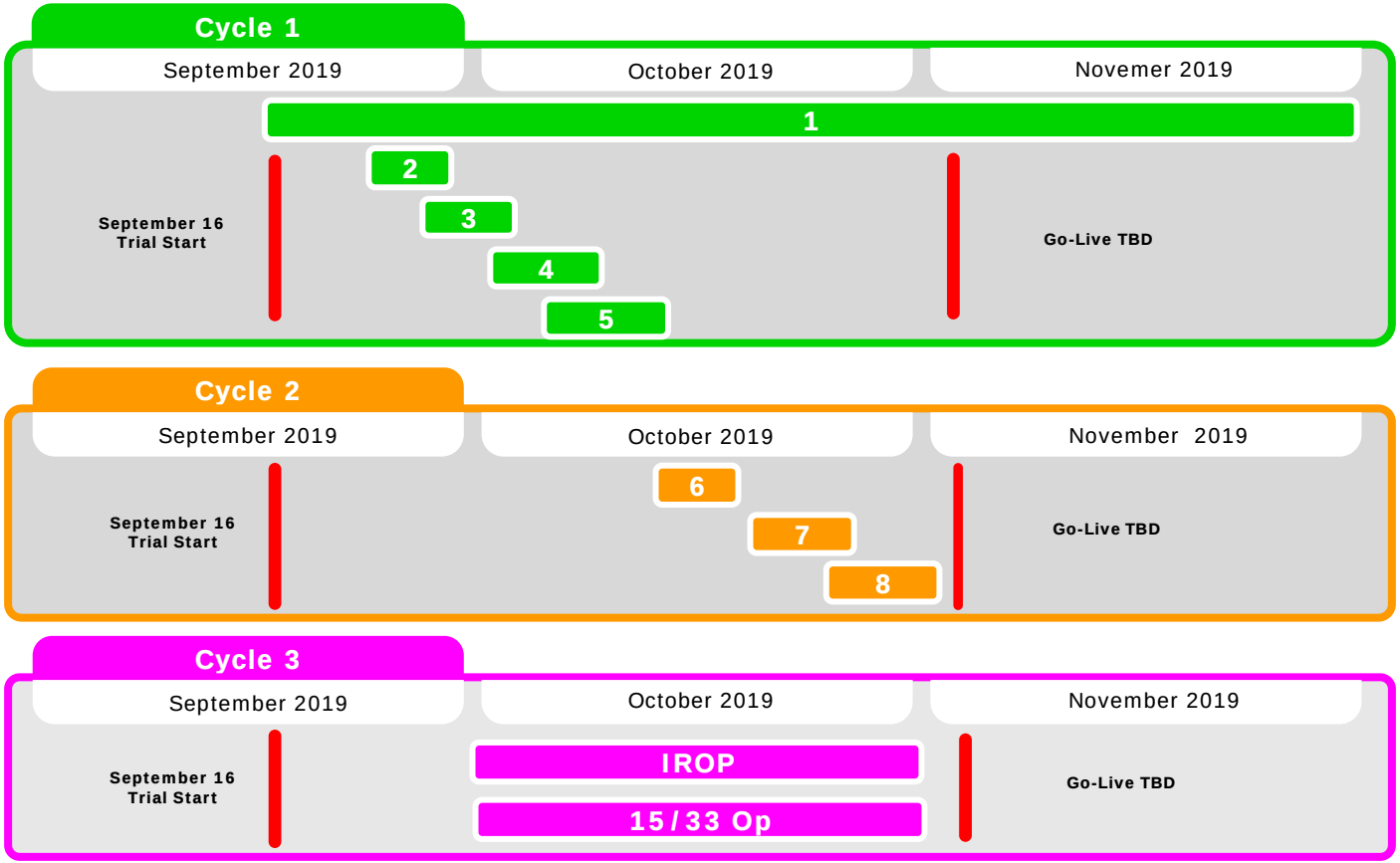


A-CDM Trial Plan



- Protect against negative impact to Ops
- Measure accuracy, compliance & performance
- Identify areas of improvement
- Quantify A-CDM added value in order to move to full production (TOBT, TSAT, ARDT, TTOT, VTT & CTOT

A-CDM Trial Plan

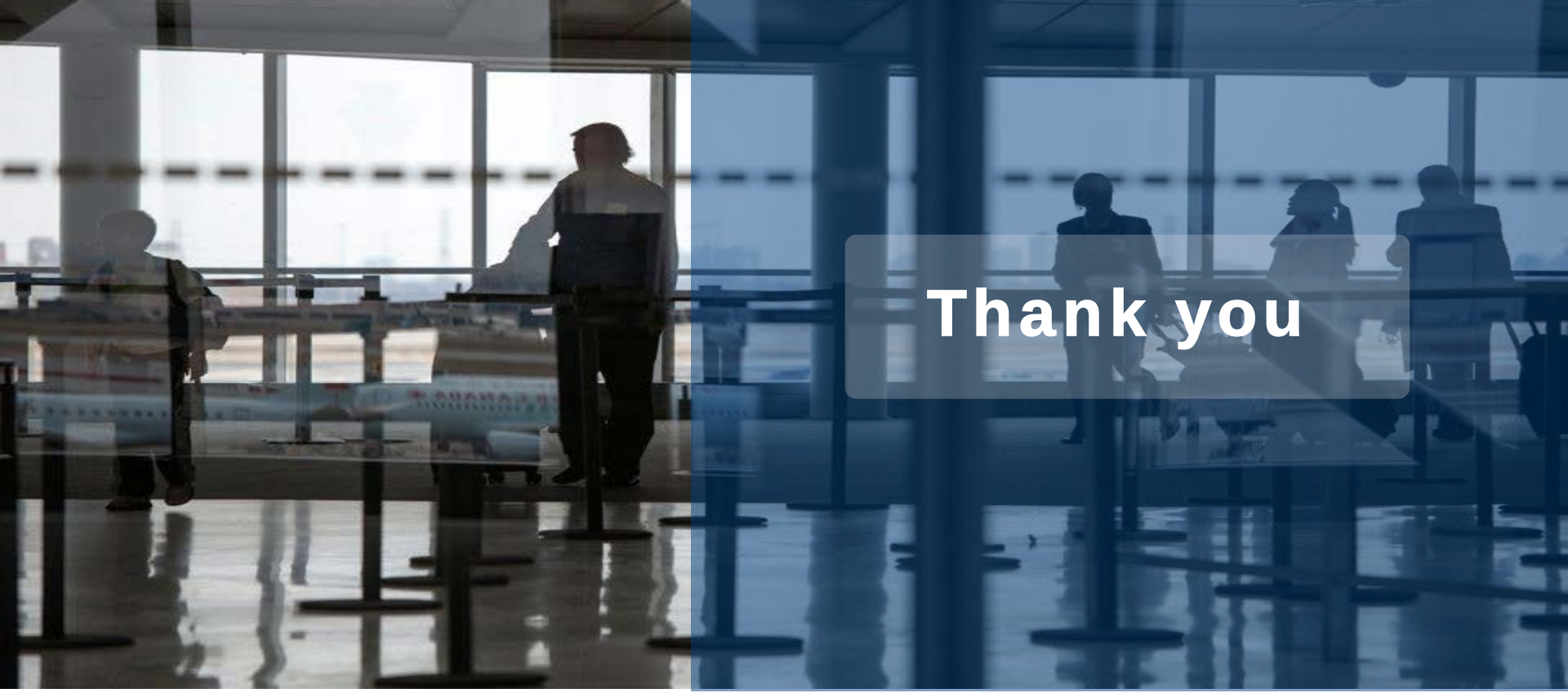


A-CDM Trial Plan

A-CDM @YYZ

GTAA · AIR CANADA · WESTJET · NAV CANADA

- Pre Trial Briefing (Expectations, Trial measures etc.)
- Go / no go decision
- Conduct trial
- Post Trial Briefing
- Data analysis
- Tune, calibrate/adjust system & procedures
- Governance WG meeting to present & review results
- Governance WG has agreed to KPI to measure success
- Prep for next trial
- Select week for Trial



GTAA

A-CDM @YYZ