

# Air Traffic Management Demonstration II (ATD-2)

## Phase I Go Live Discussion

NEXTGEN

September 13, 2017





- Update on STBO/TBFM Interface electronic negotiation
- Summary of alternatives for go live
- Discussion and finalizing plan for go live



- Review
    - Enables IDAC-style scheduling with STBO Client acting as an IDST
    - Requires communication between NASA and FAA networks via NAS Enterprise Security Gateway (NESG) using a new TBFM NASA Proxy
    - Currently conducting on-site testing at WJHTC
  - Summary
    - Network interface between NASA and FAA networks is ambitious and has proven more time consuming to validate than anticipated
    - Delays associated with TBFM NASA Proxy configuration have consumed margin in TBFM test schedule
    - **TBFM PO new test schedule states STBO/TBFM Interface will be cleared for use in CLT on October 25, 2017**
- Impact of STBO/TBFM Interface not available at “go live”
    - Will impact IDAC style scheduling for ZDC electronic scheduling
    - ZDC APREQ scheduling will be similar to ZTL APREQ scheduling
    - SWIM times on STBO will continue to be available

## 1) Big bang

- On or before Sat Sept 30<sup>th</sup>, begin daily use of all ATD-2 system features, including; all data exchange and integration features, available APREQ features and surface metering bank 2.

## 2) Experimentally rigorous micro-phases

- On or before Sat Sep 30th, begin the first micro-phase within Phase 1 evaluation, allowing progressive operational input on ATD-2 features while incrementally building up IADS capability and capturing evaluation and benefits data

## 3) Agile micro-phases

- A series of micro-phases that bring in capabilities and features for use operationally in a phased manner with a more flexible (e.g. expedited) timetable and based upon local feedback/readiness input on a week-by-week basis.

## 1) Big bang

- On or before Sat Sept 30<sup>th</sup>, begin daily use of all ATD-2 system features, including; all data exchange and integration features, available APREQ features and surface metering bank 2.

## 2) Experimentally rigorous micro-phases

- On or before Sat Sep 30th, begin the first micro-phase within Phase 1 evaluation, allowing progressive operational input on ATD-2 features while incrementally building up IADS capability and capturing evaluation and benefits data

## 3) Agile micro-phases

- A series of micro-phases that bring in capabilities and features for use operationally in a phased manner with a more flexible (e.g. expedited) timetable and based upon local feedback/readiness input on a week-by-week basis.

## Micro-phase I: Data Exchange & Integration

- When: Sep 29, 2017 (Go Live)
- Description: The focus of this micro-phase is on use of the ATD-2 system for all DE&I features as part of daily operations for ATC. Starts with the second bank of the day.

### ATC



- Implement runway utilization strategies, departure fix closures, runway closures, and TMs using STBO as part of daily operations
- SWIM APREQ times and EDCT times will be available in STBO
- STBO tools and DASH used to understand demand capacity imbalances

### Ramp



- During bank two all ramp controllers and the ramp manager will begin using RTC
- Inputs made by ATC regarding runway utilization strategies, departure fix closures, runway closures, and TMs will be seen on RTC
- Pushback advisories will be available for APREQ EDCT times
- Ability to request runways for OpNec

### Flight Deck



- During bank two the flight deck will receive runway assignments and changes to dep fixes
- Push back advisories based on call for release times may be given

## Micro-phase II: IDAC style APREQ negotiation with ZDC & Expanded DE&I

- When: Oct 26, 2017
- Description: The focus of this micro-phase is on use of the ATD-2 system for IDAC style electronic negotiation with ZDC and expanded DE&I beyond bank two

### ATC



- All micro-phase I capabilities, plus
- IDAC style electronic negotiation with ZDC for APREQ times
  - Use of red/green bar spacing to determine available slots
  - Electronic requesting of a slot

### Ramp



- All micro-phase I capabilities, plus
- During additional banks, all ramp controllers and the ramp manager will continue using RTC
  - The manner in which DE&I is expanded will be a ramp based decision but should be coordinated with ATC

### Flight Deck



- All micro-phase I capabilities, plus
- During additional banks, the flight deck will receive runway assignments and changes to dep fixes
- Push back advisories based on call for release times may be given

## Micro-phase III: Surface Metering

- When: Nov 29, 2017 (TBD)
- Description: The focus of this micro-phase is on use of the ATD-2 system for all DE&I features during daily operations and utilization of surface metering during bank two

### ATC



- All micro-phase II capabilities, plus
- Procedures and coordination required for surface metering
- Use of the DASH to determine when to implement surface metering

### Ramp



- All micro-phase II capabilities, plus
- Daily operational use of RTC
- Use of the DASH to determine when to implement surface metering
- During surface metering pushback advisories will be available and utilized

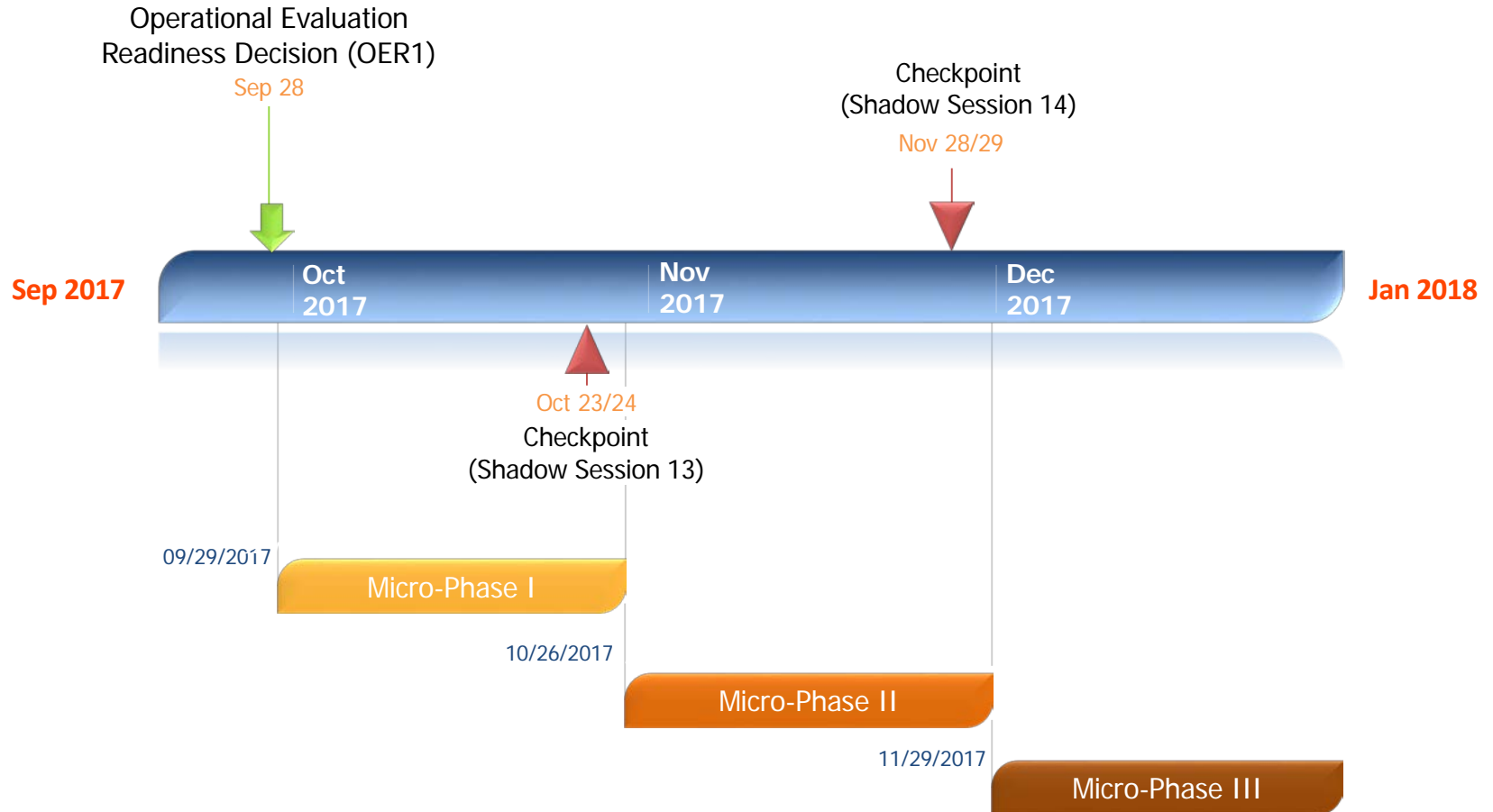
### Flight Deck



- All micro-phase II capabilities, plus
- During bank two the flight deck will receive push back times for surface metering



# Proposed Phase I Micro-Phase Timeline





- Feedback on feasibility and level of comfort of users given training will now be held the week of September 25<sup>th</sup>
- Thoughts on the draft timetable?
  - Does a go live date of September 29<sup>th</sup> seem achievable?
- Process to transition between phases?
  - Debriefs and checkpoints



The Operational Evaluation Readiness (OER1) decision event is planned for September 28<sup>th</sup>

- This is a decision that is quality driven based on input from our field demo partners
- The meeting will allow us to discuss
  - Recent user interface refinements that were implemented based on feedback gathered during the OSE1 period
  - Data quality and robustness
  - Data feed monitoring
  - Data sharing
  - Software updates for bug fixes as well as new feature releases
- Gain field demo partner concurrence to proceed with go live on September 29<sup>th</sup>
- Initial discussions of Phase II planning and development