DATA COMM INTEGRATED SERVICES

DCIS Program Update
ASRI AFC
October 2015

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DCIS Overview

Harris led Data Comm Integrated Services (DCIS) Team partners with the FAA to deliver:

- Data Comm Network Services
  - Air-Ground Network using Rockwell Collins (ARINC) & SITA
  - Service Delivery & System Monitoring
- Data Comm Integration & Test
  - Supports I&T activities at WJTHC and field sites
- Avionics Equipage Incentives
- Operations Support
  - Metrics Collection
  - Aircraft Operator Outreach
  - Operational Problem Reporting
- Engineering Services
  - CPDLC DCL Trials Support
  - Avionics Interoperability Engineering
  - En Route Engineering Support

DCNS Update

- Service establishment progressing well with Rockwell Collins-ARINC & SITA

- Supported FAA Integration & Test Activities in Atlantic City, NJ

- Delivered Service to 3 FAA key sites in 2015
  - KSLC
  - KIAH
  - KHOU

- Surveyed all 56 DCL Airports
  - Validated coverage at airports to ensure service performance
  - Updating sites where required to provide adequate performance

Program Summary

- **Completed key site IOCs for Tower Services at Salt Lake City (SLC), Houston Intercontinental (IAH), and Houston Hobby (HOU)**
  - Working to In-Service Decision (ISD) challenge date of December 2015

- **Preparing for Tower Service Implementation waterfall in 2016**
  - Coordinating with field personnel to meet accelerated dates from industry and NextGen
  - Coordinating with industry to support test and turn-up

- **Proceeding with En Route Service development and planning for Advanced Services**
  - Industry buy-in on deployment strategy
  - Buy-in and agreement from NATCA/controllers
  - Preparing for Full En Route Services FID in Q4 CY2015

S1P1 Tower Service
Acquisition Program Baseline (APB) Milestones

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Milestone	Date
✓ **ERAM Preliminary Design Review (PDR)**	**September 2011**
✓ **ERAM Critical Design Review (CDR)**	**March 2012**
✓ **FID: Final Investment Decision for ERAM & TDLS**	**May 2012**
✓ **DCIS Contract Award***	**July 2012**
✓ **TDLS Preliminary Design Review (PDR)****	**December 2012**
✓ **TDLS Critical Design Review (CDR)*****	**August 2013**
✓ **ERAM Initial Test Release (ITR) ******	**June 2014**
✓ **Operational Test (OT&E)*******	**November 2015**
✓ **First-Site Initial Operational Capability (IOC)‡**	**March 2016**
In-Service Decision (ISD)	**December 2016**
Operational Readiness Decisions (ORD)	**April 2017**
Last-Site IOC	**May 2019**

Key: | **Complete** | **On Track** | **May Be Missed** | **Missed**

*The DCIS contract was awarded in September 2012. The award delay does not impact any of the program milestone dates

** TDLS PDR completed in October 2012

*** TDLS CDR completed in July 2013

**** ERAM ITR completed in April 2014

***** OT&E completed in March 2015

‡ First site IOC at Salt Lake City completed in August 2015

Key Sites

Site Name	Site ID	ARTCC ID	IOC
Boise (Non-DCL)	BOI	ZLC	Q2 2015
KS 1: Salt Lake City	SLC	ZLC	Q3 2015
KS 2: Houston Intcl	IAH	ZHU	Q3 2015
KS 3: Houston Hobby	HOU	ZHU	Q3 2015

Group A

Site Name	Site ID	ARTCC ID	IOC
New Orleans	MSY	ZHU	Q1 2016
Austin	AUS	ZHU	Q1 2016
San Antonio	SAT	ZHU	Q1 2016
Los Angeles	LAX	ZLA	Q1 2016
Las Vegas	LAS	ZLA	Q1 2016
San Diego	SAN	ZLA	Q2 2016
John Wayne	SNA	ZLA	Q2 2016
Bob Hope	BUR	ZLA	Q2 2016
Ontario	ONT	ZLA	Q2 2016
San Francisco	SFO	ZOA	Q2 2016
Oakland	OAK	ZOA	Q2 2016
San Jose	SJC	ZOA	Q3 2016
Sacramento	SMF	ZOA	Q3 2016
Reno (Non-DCL)	RNO	ZOA	Q3 2016
Phoenix	PHX	ZAB	Q3 2016
Albuquerque	ABQ	ZAB	Q3 2016
El Paso (Non-DCL)	ELP	ZAB	Q3 2016
Seattle	SEA	ZSE	Q3 2016
Portland	PDX	ZSE	Q3 2016
Dallas Love	DAL	ZFW	Q4 2016
Dallas FTW	DFW	ZFW	Q4 2016
Will Rogers (Non-DCL)	OKC	ZFW	Q4 2016
Honolulu (Non-DCL)	HNL		Q4 2016
Anchorage (Non-DCL)	ANC		Q4 2016

Group B

Site Name	Site ID	ARTC C ID	IOC
Louisville	SDF	ZID	Q1 2016
Indianapolis	IND	ZID	Q1 2016
Cincinnati (Non-DCL)	CVG	ZID	Q1 2016
Columbus (Non-DCL)	CMH	ZID	Q1 2016
Memphis	MEM	ZME	Q2 2016
Nashville	BNA	ZME	Q2 2016
Adams Field (Non-DCL)	LIT	ZME	Q2 2016
Denver	DEN	ZDV	Q2 2016
Atlanta	ATL	ZTL	Q2 2016
Charlotte	CLT	ZTL	Q2 2016
Piedmont (Non-DCL)	GSO	ZTL	Q2 2016
Jacksonville	JAX	ZJX	Q2 2016
Orlando	MCO	ZJX	Q3 2016
Miami	MIA	ZMA	Q3 2016
Ft Lauderdale	FLL	ZMA	Q3 2016
Tampa	TPA	ZMA	Q3 2016
Palm Beach	PBI	ZMA	Q3 2016
San Juan (Non-DCL)	SJU	ZMA	Q3 2016
St Louis	STL	ZKC	Q4 2016
Kansas City	MCI	ZKC	Q4 2016
Tulsa (Non-DCL)	TUL	ZKC	Q4 2016
Minn-St Paul	MSP	ZMP	Q4 2016
Eppley Field (Non-DCL)	OMA	ZMP	Q4 2016

Group C

Site Name	Site ID	ARTC C ID	IOC
Newark	EWR	ZNY	Q1 2016
J F Kennedy	JFK	ZNY	Q1 2016
La Guardia	LGA	ZNY	Q1 2016
Teterboro	TEB	ZNY	Q1 2016
Westchester	HPN	ZNY	Q2 2016
Philadelphia	PHL	ZNY	Q2 2016
Boston	BOS	ZBW	Q2 2016
Providence	PVD	ZBW	Q2 2016
Bradley	BDL	ZBW	Q2 2016
Albany (Non-DCL)	ALB	ZBW	Q2 2016
Detroit	DTW	ZOB	Q3 2016
Cleveland	CLE	ZOB	Q3 2016
Pittsburgh	PIT	ZOB	Q3 2016
Buffalo (Non-DCL)	BUF	ZOB	Q3 2016
Balt/Wash	BWI	ZDC	Q3 2016
Dulles	IAD	ZDC	Q3 2016
Reagan	DCA	ZDC	Q3 2016
Raleigh/Durham	RDU	ZDC	Q4 2016
Andrews (Non-DCL)	ADW	ZDC	Q4 2016
Chicago Midway	MDW	ZAU	Q4 2016
Chicago O'Hare	ORD	ZAU	Q4 2016
Milwaukee (Non-DCL)	MKE	ZAU	Q4 2016

TDLS Sites Color Key

CPDLC DCL Site	
Enhanced PDC Only Site	
Site Operational	

- Waterfall reflects **challenge** schedule dates (calendar year)
  - Baseline schedule Tower deployment dates are 2016-2019

S1P2 En Route Initial Service Acquisition Program Baseline (APB) Milestones

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Milestone	Date
✓ ERAM Data Comm Contract Definitization	March 2015
Contractor Detailed Design Complete	December 2016
Order DCNS Network Service Volume for Keysite	December 2017
Development Test and Evaluation Complete	June 2018
First-Site Initial Operational Capability (IOC)	July 2019
In-Service Decision (ISD)	March 2020
Last-Site IOC	February 2021

Key: Complete | On Track | May Be Missed | Missed

DCL Trials Update

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- **Tower Controller Pilot Data Link Communications (CPDLC) Departure Clearance (DCL) trials at Memphis and Newark using Data Comm Trials Automation Platform (DTAP)**

- **Validates requirements and operational training / procedures**

- **Aligns stakeholders in support of program**
  – Industry involvement through Data Comm Implementation Team (DCIT)

- **Two trials sites running since 2013**

  - KMEM & KEWR

- **Plan to decommission DCL Trials sites in January 2016**

  - Preparing for permanent DCL system installation in 2016

En Route CPDLC Update

- Working with FAA to solidify the En Route Data Comm service definition
  - Developing Operational Scenario Documentation based on FAA & user feedback (from DCIT)
- En Route Operational Demonstrations on-going
  - Next phase starts middle of September 2015 in Kansas City En Route Airspace

CPDLC DCL Preparations

FAA Authorization

- Aviation Authority Approval for CPDLC Operations
- Equipped aircraft: FANS 1/A over VHF (POA/AOA)
- Flight Crew Bulletins and Training
- Add CPDLC DCL into FAA OpSpec (A003 & A056)

Flight Planning

- Flight Plan Filing
  - Field 10a (J3/J4)
  - Field 18 DAT/
- FAA Subscriber Database (generally coordinated with ARINC and SITA)
- Dispatch System Preparations (Dispatch Copies)

Start CPDLC DCL

Email Chris Collings (chris.collings@harris.com) for more information.