

## All Active Assumptions Report

Generated 18-Feb-2013 at 14:05

Identifier: A&P-01

Description: Airspace Modernization Assumptions

- a) Flexibility into any of the agency's facility plans
- b) Future Airspace & NASA research funding is sufficient and provides favorable benefits
- c) System Dependencies
  - 1) ADS-B
  - 2) ERAM
  - 3) TFMS WP2
  - 4) DataComm

Primary Roadmap: Airspace and Procedures

Related Decision(s): [218] Concept and Requirements Definition Readiness (CRDR) Decision for DataComm Segment 3 and the migration to L-band

Update Date: 01-Feb-2013 by Cindy Magee

ID / Revision: 48 / 3

Identifier: A&P-02

Description: Integrated Arrival/Departure Airspace (Big Airspace) Assumptions

- a) Key Integrated Arrival/Departure Airspace enablers:
  - 1. Extension of 3 Mile Separation & Terminal Procedures
  - 2. Integrated arrival/departure airspace configurations
  - 3. Flexible sector & bi-directional routes published
  - 4. 5 mile lateral spacing for Required Navigation Performance (RNP) enables 5 mile lateral route spacing
  - 5. New voice system (NAS Voice System), leased circuits, and Air-Ground communications channels to handle transition
  - 6. Cost benefits are based on creating X Integrated Arrival/Departure (Big Airspace) facilities, covering X major metropolitan areas
- b) Cost analysis based on general assumptions about the concept, not on any detailed requirements or technical solutions
- c) Benefits analysis based on extrapolating results from FT simulations to other sites given traffic forecasts and historical weather patterns
- d) Sites identified where large TRACON facilities exist could accommodate additional BA operational positions with refurbishment. New buildings would be needed where no large TRACON exists.

Primary Roadmap: Airspace and Procedures

Related Decision(s): [267] Decision to proceed with High Altitude Trajectory Based Airspace Concept Phase 1

Update Date: 01-Feb-2013 by Abdul Khandker

ID / Revision: 49 / 5

---

Identifier: AC-01

Description: The roadmap identifies four phases  
a) Conops development and R&D in required areas  
b) Standards development  
c) AVS Approval  
d) ATC Procedure development

Deployment: After the standards process is complete, and manufacturers have developed, integrated, fully tested and made new avionics available, aircraft, engines and fuels available, an additional 7 to 10 years is needed to achieve wide scale equipage of a new capability

Different aircraft are expected to equip with different equipment. This roadmap does not currently distinguish between aircraft types.

Primary Roadmap: Aircraft

Related Decision(s): None

Update Date: 01-Feb-2013 by Abdul Khandker

ID / Revision: 1 / 5

---

Identifier: AC-02

Description: The aircraft roadmap includes environment research areas and assumptions and linkage to Non-NAS EA.

Primary Roadmap: Aircraft

Related Decision(s): None

Update Date: 01-Feb-2013 by Cindy Magee

ID / Revision: 2 / 3

---

Identifier: AC-03

Description: Any aircraft to include any UAS that participates in the NAS must operate in a way that is transparent to the ANSP and ATSP.

Primary Roadmap: Aircraft

Related Decision(s): None

Update Date: 01-Feb-2013 by Andrew Martin

ID / Revision: 3 / 5

---

Identifier: AG-01

Description: Harmonization of Air/Ground System functions not complete:  
Any operations or improvement that is dependant on ACAS (TCAS), Airborne Automation (upgraded and standardized FMS), ADS-B In, and IP Addressing are far-term implementations.

Primary Roadmap: Air / Ground

Related Decision(s): None

Update Date: 01-Feb-2013 by Cynthia Farfan

ID / Revision: 5 / 3

---

Identifier: AG-02

Description: Synchronization of airborne and ground capabilities and infrastructure remains open  
(a) A minimum of 7 to 10 years is needed to achieve fleet-wide aircraft equipage from the time an equipment standard is acknowledged  
(b) A minimum of 3 to 4 years is needed to achieve pair-wise aircraft equipage from the time an equipment standard is acknowledged

Primary Roadmap: Air / Ground

Related Decision(s): [194] Incorporate results into future Requirement for NextGen Technology and Human/Automation intensive operations

Update Date: 01-Feb-2013 by Cynthia Farfan

ID / Revision: 6 / 3

---

Identifier: AG-03

Description: Air-Ground standards will evolve from a technology-based to an integrated performance-based approach.

Primary Roadmap: Air / Ground

Related Decision(s): [192] Incorporate expected changes to TCAS, Conflict Probe, and Conflict Management into coordinated Air-Ground Safety Network  
[194] Incorporate results into future Requirement for NextGen Technology and Human/Automation intensive operations

Update Date: 01-Feb-2013 by Don Embt

ID / Revision: 7 / 2

---

Identifier: AG-04

Description: Federated Air and Ground Safety tools are overlapping temporally leading to a need to develop an integrated safety net strategy  
a) TCAS, ADS-B Conflict Management Conflict Probe, Conflict Alert, and TSAFE to support separation management and collision avoidance of other aircraft.  
b) TAWS, EGPWS and MSAW to support separation management and collision avoidance of objects and obstacles.

Primary Roadmap: Air / Ground

Related Decision(s): [194] Incorporate results into future Requirement for NextGen Technology and Human/Automation intensive operations

Update Date: 01-Feb-2013 by Cynthia Farfan

ID / Revision: 8 / 3

---

Identifier: AG-06

Description: NAS weather systems are not depicted on the A/G Roadmap. (See Weather Roadmap).

Primary Roadmap: Air / Ground

Related Decision(s): [192] Incorporate expected changes to TCAS, Conflict Probe, and Conflict Management into coordinated Air-Ground Safety Network  
[194] Incorporate results into future Requirement for NextGen Technology and Human/Automation intensive operations

Update Date: 01-Feb-2013 by Don Embt

ID / Revision: 78 / 2

---

Identifier: AG-07

Description: The A-G Roadmap facilitates the interoperability among roadmaps and does not include stand alone systems, but may identify integrated concepts/strategies not yet under consideration by individual programs.

Primary Roadmap: Air / Ground

Related Decision(s): [194] Incorporate results into future Requirement for NextGen Technology and Human/Automation intensive operations

Update Date: 01-Feb-2013 by Cynthia Farfan

ID / Revision: 79 / 3

---

Identifier: AG-09

Description: SWIM Air Capabilities:  
1) Airborne SWIM supports advisory communications through NNEW and commercial communication services (e.g. Iridium, InmarsatSBB, AirCell, XM Aviator).  
2) No mandatory equipment envisioned for airborne SWIM capability.

Primary Roadmap: Air / Ground

Related Decision(s): None

Update Date: 01-Feb-2013 by Abdul Khandker

ID / Revision: 81 / 3

---

Identifier: AG-10

Description: A-G tasks are aligned and compliment NASEA DP's and Air-Ground Evolution Environment. NASEA DP's should address A-G Challenge to support NextGen success.

Primary Roadmap: Air / Ground

Related Decision(s): None

Update Date: 01-Feb-2013 by Cindy Magee

ID / Revision: 97 / 1

---

---

Identifier: AG-12

Description: An operations-based approach is applied to provide consistent context across the domains.

Primary Roadmap: Air / Ground

Related Decision(s): None

Update Date: 01-Feb-2013 by Cynthia Farfan

ID / Revision: 117 / 1

---

---

Identifier: AG-13

Description: NAS Voice switching systems are not depicted on the A-G Roadmap (CCS, ICSS, GSA 400/466, RDVS, STVS, ETVS, IVSR, VSCS/VTABS, and NVS).

Primary Roadmap: Air / Ground

Related Decision(s): None

Update Date: 01-Feb-2013 by Cynthia Farfan

ID / Revision: 118 / 1

---

---

Identifier: APT-01

Description: This roadmap will focus on airport airside and landside activities (not including inside the airport terminal), and arrival/departure operations out to about 5 miles.

Primary Roadmap: Airport

Related Decision(s): None

Update Date: 01-Feb-2013 by Cynthia Farfan

ID / Revision: 99 / 2

---

Identifier: APT-02

Description: Airports are covered in general; specific airports are not described.

Primary Roadmap: Airport

Related Decision(s): None

Update Date: 01-Feb-2013 by Cindy Magee

ID / Revision: 100 / 1

---

Identifier: APT-03

Description: Initial work covers large/medium hub airports.

Primary Roadmap: Airport

Related Decision(s): None

Update Date: 01-Feb-2013 by Cynthia Farfan

ID / Revision: 101 / 2

---

Identifier: APT-04

Description: Key decisions are pulled from other roadmaps.

Primary Roadmap: Airport

Related Decision(s): None

Update Date: 01-Feb-2013 by Cindy Magee

ID / Revision: 102 / 1

---

Identifier: APT-05

Description: This is an initial roadmap that connects FAA infrastructure elements to airport airside infrastructure elements, and provides a basis for future tracking of the boundary and boundary issues.

Primary Roadmap: Airport

Related Decision(s): None

Update Date: 01-Feb-2013 by Cindy Magee

ID / Revision: 103 / 1

---

Identifier: AUTO-01

Description: Net-centric Enterprise Services will replace designated existing point to point interfaces with a system based on a Service Oriented Architecture providing enhanced data exchange, enhanced flexibility, and enhanced security for FAA Operations Personnel, and airspace users within a common information environment to support NextGen Operational Improvements.

Primary Roadmap: Automation

Related Decision(s): [46] Final Investment Decision (FID) for Terminal Flight Data Manager (TFDM) Core  
[115] Initial Investment Decision (IID) for Terminal Flight Data Manager Core  
[121] Final Investment Decision (FID) for AIM Segment 2  
[387] Investment Analysis Readiness Decision (IARD) for Offshore Automation Systems Consolidation  
[388] Initial Investment Decision (IID) for Offshore Automation Systems Consolidation  
[389] Final Investment Decision (FID) for Offshore Automation Systems Consolidation  
[695] Initial Investment Decision (IID) for AMMS Work Package 1 and Work Package 2  
[696] Final Investment Decision (FID) for AMMS Work Package 1 and Work Package 2

Update Date: 01-Feb-2013 by Don Embt

ID / Revision: 9 / 3

---

Identifier: AUTO-02

Description: ADS-B is a necessary infrastructure element to support Trajectory Based Operations, Flexible Terminal, and High Density Terminal solution sets.

Primary Roadmap: Automation

Related Decision(s): [46] Final Investment Decision (FID) for Terminal Flight Data Manager (TFDM) Core  
[115] Initial Investment Decision (IID) for Terminal Flight Data Manager Core  
[198] Final Investment Decision (FID) for TFDM Future  
[208] Final Investment Decision (FID) for Future Flight Services Program (FFSP)  
[368] Initial Investment Decision (IID) for Future Flight Services Program (FFSP)  
[387] Investment Analysis Readiness Decision (IARD) for Offshore Automation Systems Consolidation  
[388] Initial Investment Decision (IID) for Offshore Automation Systems Consolidation  
[389] Final Investment Decision (FID) for Offshore Automation Systems Consolidation

Update Date: 01-Feb-2013 by Don Embt

ID / Revision: 11 / 3

---

Identifier: AUTO-03

Description: Data Communication is a necessary infrastructure element to support Trajectory Based Operations, Flexible Terminal, and High Density Terminal solution sets.

Primary Roadmap: Automation

Related Decision(s): [46] Final Investment Decision (FID) for Terminal Flight Data Manager (TFDM) Core  
[115] Initial Investment Decision (IID) for Terminal Flight Data Manager Core  
[122] Final Investment Decision (FID) for AIM Segment 3  
[198] Final Investment Decision (FID) for TFDM Future

Update Date: 01-Feb-2013 by Don Embt

ID / Revision: 12 / 3

---

Identifier: AUTO-06

Description: Operational Service Units will be responsible for JRC Final Investment Decisions.

Primary Roadmap: Automation

Related Decision(s): [46] Final Investment Decision (FID) for Terminal Flight Data Manager (TFDM) Core  
[57] Final Investment Decision (FID) for TBFM Work Package 3  
[121] Final Investment Decision (FID) for AIM Segment 2  
[122] Final Investment Decision (FID) for AIM Segment 3  
[198] Final Investment Decision (FID) for TFDM Future  
[208] Final Investment Decision (FID) for Future Flight Services Program (FFSP)  
[346] Final Investment Decision (FID) for CATMT Work Package 4  
[389] Final Investment Decision (FID) for Offshore Automation Systems Consolidation  
[696] Final Investment Decision (FID) for AMMS Work Package 1 and Work Package 2

Update Date: 01-Feb-2013 by Andrew Martin

ID / Revision: 82 / 4

---

Identifier: AUTO-07

Description: Policy and standards decisions prescribing the use of hand-held devices for data messaging by General Aviation pilots and aircraft are established.

Primary Roadmap: Automation

Related Decision(s): None

Update Date: 01-Feb-2013 by Don Embt

ID / Revision: 83 / 3

---

Identifier: AUTO-08

Description: Consistent security management across Data Communication, Automation and SWIM support the evolution.

Primary Roadmap: Automation

Related Decision(s): [46] Final Investment Decision (FID) for Terminal Flight Data Manager (TFDM) Core  
[115] Initial Investment Decision (IID) for Terminal Flight Data Manager Core  
[121] Final Investment Decision (FID) for AIM Segment 2  
[198] Final Investment Decision (FID) for TFDM Future  
[208] Final Investment Decision (FID) for Future Flight Services Program (FFSP)  
[368] Initial Investment Decision (IID) for Future Flight Services Program (FFSP)  
[387] Investment Analysis Readiness Decision (IARD) for Offshore Automation Systems Consolidation  
[388] Initial Investment Decision (IID) for Offshore Automation Systems Consolidation  
[389] Final Investment Decision (FID) for Offshore Automation Systems Consolidation  
[695] Initial Investment Decision (IID) for AMMS Work Package 1 and Work Package 2  
[696] Final Investment Decision (FID) for AMMS Work Package 1 and Work Package 2

Update Date: 01-Feb-2013 by Don Embt

ID / Revision: 84 / 3

---

Identifier: AUTO-09

Description: Human-system integration will be conducted during analysis, design, development, and testing of Automation programs.

Primary Roadmap: Automation

Related Decision(s): [46] Final Investment Decision (FID) for Terminal Flight Data Manager (TFDM) Core  
[57] Final Investment Decision (FID) for TBFM Work Package 3  
[115] Initial Investment Decision (IID) for Terminal Flight Data Manager Core  
[121] Final Investment Decision (FID) for AIM Segment 2  
[122] Final Investment Decision (FID) for AIM Segment 3  
[198] Final Investment Decision (FID) for TFDM Future  
[208] Final Investment Decision (FID) for Future Flight Services Program (FFSP)  
[346] Final Investment Decision (FID) for CATMT Work Package 4  
[355] Investment Analysis Readiness Decision (IARD) for CATMT Work Package 4  
[356] Initial Investment Decision (IID) for CATMT Work Package 4  
[357] Investment Analysis Readiness Decision (IARD) for TBFM Work Package 3  
[368] Initial Investment Decision (IID) for Future Flight Services Program (FFSP)  
[387] Investment Analysis Readiness Decision (IARD) for Offshore Automation Systems Consolidation  
[388] Initial Investment Decision (IID) for Offshore Automation Systems Consolidation  
[389] Final Investment Decision (FID) for Offshore Automation Systems Consolidation  
[695] Initial Investment Decision (IID) for AMMS Work Package 1 and Work Package 2  
[696] Final Investment Decision (FID) for AMMS Work Package 1 and Work Package 2  
[697] Investment Analysis Readiness Decision (IARD) for RMLS Technology Refresh

Update Date: 01-Feb-2013 by Don Embt

ID / Revision: 88 / 4

---

Identifier: AUTO-10

Description: Safety analysis and considerations will be included in all applicable phases of Automation analysis, design, development, and testing and platforms will provide data as required for safety monitoring and analysis.

Primary Roadmap: Automation

Related Decision(s): [46] Final Investment Decision (FID) for Terminal Flight Data Manager (TFDM) Core  
[57] Final Investment Decision (FID) for TBFM Work Package 3  
[115] Initial Investment Decision (IID) for Terminal Flight Data Manager Core  
[121] Final Investment Decision (FID) for AIM Segment 2  
[122] Final Investment Decision (FID) for AIM Segment 3  
[198] Final Investment Decision (FID) for TFDM Future  
[208] Final Investment Decision (FID) for Future Flight Services Program (FFSP)  
[346] Final Investment Decision (FID) for CATMT Work Package 4  
[355] Investment Analysis Readiness Decision (IARD) for CATMT Work Package 4  
[356] Initial Investment Decision (IID) for CATMT Work Package 4  
[357] Investment Analysis Readiness Decision (IARD) for TBFM Work Package 3  
[368] Initial Investment Decision (IID) for Future Flight Services Program (FFSP)  
[387] Investment Analysis Readiness Decision (IARD) for Offshore Automation Systems Consolidation  
[388] Initial Investment Decision (IID) for Offshore Automation Systems Consolidation  
[389] Final Investment Decision (FID) for Offshore Automation Systems Consolidation  
[695] Initial Investment Decision (IID) for AMMS Work Package 1 and Work Package 2  
[696] Final Investment Decision (FID) for AMMS Work Package 1 and Work Package 2  
[697] Investment Analysis Readiness Decision (IARD) for RMLS Technology Refresh

Update Date: 01-Feb-2013 by Don Embt

ID / Revision: 89 / 3

---

Identifier: AUTO-11

Description: Automation platform designs will support environmental and energy saving initiatives.

Primary Roadmap: Automation

Related Decision(s): [46] Final Investment Decision (FID) for Terminal Flight Data Manager (TFDM) Core  
[57] Final Investment Decision (FID) for TBFM Work Package 3  
[115] Initial Investment Decision (IID) for Terminal Flight Data Manager Core  
[121] Final Investment Decision (FID) for AIM Segment 2  
[122] Final Investment Decision (FID) for AIM Segment 3  
[198] Final Investment Decision (FID) for TFDM Future  
[208] Final Investment Decision (FID) for Future Flight Services Program (FFSP)  
[346] Final Investment Decision (FID) for CATMT Work Package 4  
[355] Investment Analysis Readiness Decision (IARD) for CATMT Work Package 4  
[356] Initial Investment Decision (IID) for CATMT Work Package 4  
[357] Investment Analysis Readiness Decision (IARD) for TBFM Work Package 3  
[368] Initial Investment Decision (IID) for Future Flight Services Program (FFSP)  
[387] Investment Analysis Readiness Decision (IARD) for Offshore Automation Systems Consolidation  
[388] Initial Investment Decision (IID) for Offshore Automation Systems Consolidation  
[389] Final Investment Decision (FID) for Offshore Automation Systems Consolidation  
[695] Initial Investment Decision (IID) for AMMS Work Package 1 and Work Package 2  
[696] Final Investment Decision (FID) for AMMS Work Package 1 and Work Package 2  
[697] Investment Analysis Readiness Decision (IARD) for RMLS Technology Refresh

Update Date: 01-Feb-2013 by Don Embt

ID / Revision: 90 / 3

---

Identifier: COMM-01

Description: NAS must transition from dedicated "nailed up" sector-based and independent facility operations to networked area based operations

Primary Roadmap: Communications

Related Decision(s): None

Update Date: 01-Feb-2013 by Don Embt

ID / Revision: 24 / 2

---

Identifier: COMM-02

Description: FTI becomes primary Voice/Data transport system

Primary Roadmap: Communications

Related Decision(s): [74] Final Investment Decision (FID) for FTI 2

Update Date: 01-Feb-2013 by Abdul Khandker

ID / Revision: 25 / 3

---

Identifier: COMM-03

Description: The NAS Voice System (NVS) is required to meet the following FAA business objectives: Consolidation/collocation; Business Continuity Plan; Load Balancing/Load Sharing; 4D Trajectory concepts

Primary Roadmap: Communications

Related Decision(s): [710] Final Investment Decision (FID) for NVS Segment 2

Update Date: 01-Feb-2013 by Abdul Khandker

ID / Revision: 26 / 5

---

Identifier: COMM-04

Description: All flight safety critical A/G communications are over VHF based systems. Advisory communications (e.g. Weather, NAS Status, NOTAMS) may be supported by commercial communications services through "airborne access to SWIM" services.

Primary Roadmap: Communications

Related Decision(s): None

Update Date: 01-Feb-2013 by Cynthia Farfan

ID / Revision: 27 / 3

---

---

Identifier: COMM-05

Description: Infrastructure evolution is driven by:  
(a) Transition strategies start in higher altitude airspaces migrating toward lower altitudes  
(b) Implementation starts in large facilities migrating to small facilities  
(c) Expectation for reduction in number of facilities-(staffed and unstaffed)  
(d) Infrastructure and people "dedicated to specific airspace" changing to "quickly and easily adapted to airspace as needed"  
(e) Expectation for very low growth in number of operational sectors ("airspace growth") through the mid term, limiting demand on dedicated resources

Primary Roadmap: Communications

Related Decision(s): None

Update Date: 01-Feb-2013 by Don Embt

ID / Revision: 28 / 2

---

Identifier: COMM-07

Description: There will be a JRC decision in 2013 Q4 (DP 214) to decommission LDRCL.

Primary Roadmap: Communications

Related Decision(s): [214] Strategy Decision to determine to sustain or decommission LDRCL

Update Date: 01-Feb-2013 by Cynthia Farfan

ID / Revision: 30 / 4

---

Identifier: COMM-08

Description: There will be a JRC decision in 2013 Q4 (DP 215) to decommission RCL. Schedule will be determined based on the SIM program milestones. BWM will remain and transition to the replacement RCL service.

Primary Roadmap: Communications

Related Decision(s): [215] Strategy Decision to determine to sustain or decommission RCL

Update Date: 01-Feb-2013 by Abdul Khandker

ID / Revision: 31 / 4

---

Identifier: COMM-09

Description: There is an approved transition plan for migrating real-time surveillance data directly onto FTI services in order to allow DMN decommissioning. Plan on hold awaiting SIM decision.

Primary Roadmap: Communications

Related Decision(s): [102] Final Investment Decision (FID) to implement SIM in terminal and en route legacy radar systems

Update Date: 01-Feb-2013 by Abdul Khandker

ID / Revision: 32 / 4

---

Identifier: COMM-10

Description: There will be a decision (DP 218) whether to implement ATC data communications capabilities using yet to be defined broad-band communications links in addition to VDL-2.

Primary Roadmap: Communications

Related Decision(s): [218] Concept and Requirements Definition Readiness (CRDR) Decision for DataComm Segment 3 and the migration to L-band

Update Date: 01-Feb-2013 by James Grant

ID / Revision: 33 / 6

---

Identifier: COMM-11

Description: Relationship between SWIM and Communications: SWIM Dataflows all leverage NAS OPS IP service and initial SWIM Segment 2 infrastructure is being implemented with FTI.

Primary Roadmap: Communications

Related Decision(s): [74] Final Investment Decision (FID) for FTI 2  
[208] Final Investment Decision (FID) for Future Flight Services Program (FFSP)

Update Date: 01-Feb-2013 by Abdul Khandker

ID / Revision: 34 / 4

---

Identifier: COMM-12

Description: Three ICSS switches in Alaska AFSSs are to be replaced by NVS switches.

Primary Roadmap: Communications

Related Decision(s): [710] Final Investment Decision (FID) for NVS Segment 2

Update Date: 01-Feb-2013 by Abdul Khandker

ID / Revision: 35 / 5

---

Identifier: COMM-13

Description: ASTI (ANICS) will not be integrated into FAA Telecommunications Infrastructure contract .

Primary Roadmap: Communications

Related Decision(s): None

Update Date: 01-Feb-2013 by Cynthia Farfan

ID / Revision: 119 / 1

---

Identifier: ES-01

Description: FAA Net Centric Programs will exchange information based on Service Oriented Architecture principles, comply with SWIM policies and standards and use SWIM core infrastructure to the extent practicable

Primary Roadmap: Enterprise Services

Related Decision(s): None

Update Date: 01-Feb-2013 by James Grant

ID / Revision: 50 / 3

---

Identifier: ES-02

Description: SWIM will provide policies, standards, and core infrastructure to support data management, based on existing systems and networks to the extent practicable, and using proven technologies to reduce cost and risk

Primary Roadmap: Enterprise Services

Related Decision(s): [704] Concept and Requirements Definition Readiness (CRDR) for the Enterprise Level Time and Frequency Solution  
[705] Investment Analysis Readiness Decision (IARD) for the Enterprise Level Time and Frequency Solution  
[706] Initial Investment Decision (IID) for the Enterprise Level Time and Frequency Solution  
[707] Final Investment Decision (FID) for the Enterprise Level Time and Frequency Solution

Update Date: 01-Feb-2013 by Don Embt

ID / Revision: 51 / 2

---

Identifier: FAC-01

Description: Business Continuity will be integrated into the design of the Future Facilities

Primary Roadmap: Facilities

Related Decision(s): None

Update Date: 01-Feb-2013 by Andrew Martin

ID / Revision: 52 / 3

---

Identifier: FAC-02

Description: Facilities will be built to mandated security and safety guidelines

Primary Roadmap: Facilities

Related Decision(s): None

Update Date: 01-Feb-2013 by Don Embt

ID / Revision: 53 / 2

---

Identifier: FAC-03

Description: The airspace will be restructured to accommodate transitional and NextGen airspace concepts (e.g. Big Airspace, flexible airspace, classic en route airspace, mixed equipage airspace, special use airspace, super-density flexible airspace, etc.)

Primary Roadmap: Facilities

Related Decision(s): None

Update Date: 01-Feb-2013 by Don Embt

ID / Revision: 54 / 2

---

Identifier: FAC-04

Description: Future Facilities will use a new geo-independent model, where service delivery is best aligned to manage costs and increase efficiencies

Primary Roadmap: Facilities

Related Decision(s): None

Update Date: 01-Feb-2013 by Andrew Martin

ID / Revision: 55 / 3

---

Identifier: FAC-05

Description: Airspace planning projects and Future Facilities projects should be inter-dependently scheduled in accordance with national priorities

Primary Roadmap: Facilities

Related Decision(s): None

Update Date: 01-Feb-2013 by Andrew Martin

ID / Revision: 56 / 5

---

---

Identifier: FAC-06

Description: ATC tasks will evolve consistent with changes in the management of airspace

Primary Roadmap: Facilities

Related Decision(s): None

Update Date: 01-Feb-2013 by Don Embt

ID / Revision: 57 / 2

---

---

Identifier: FAC-07

Description: Future Facilities will accommodate NextGen automation and enterprise services enhancements

Primary Roadmap: Facilities

Related Decision(s): None

Update Date: 01-Feb-2013 by Andrew Martin

ID / Revision: 58 / 4

---

---

Identifier: FAC-08

Description: Site locations will be determined according to a number of factors that consider safety, security, and human resources

Primary Roadmap: Facilities

Related Decision(s): None

Update Date: 01-Feb-2013 by Don Embt

ID / Revision: 59 / 2

---

---

Identifier: HSI-01

Description: The definition and descriptions of NAS Actors will continue to mature. (AJP-1)

Primary Roadmap: Human Systems Integration

Related Decision(s): None

Update Date: 01-Feb-2013 by Cynthia Farfan

ID / Revision: 61 / 4

---

---

Identifier: HSI-02

Description: The HSI Roadmap relates to the NextGen job changes (e.g., roles and responsibilities) and work environment changes, and therefore includes procedures and training, safety (human reliability), human-system performance and productivity, information and display requirements, personnel selection, and staffing impacts. (AJP-61)

Primary Roadmap: Human Systems Integration

Related Decision(s): None

Update Date: 01-Feb-2013 by Cynthia Farfan

ID / Revision: 62 / 4

---

---

Identifier: HSI-03

Description: Human Factors analysis, design, development, and testing are to be accomplished within program/project detailed system engineering activities and not necessarily represented in the HSI Roadmap. (AJN, AJA)

Primary Roadmap: Human Systems Integration

Related Decision(s): None

Update Date: 01-Feb-2013 by Cynthia Farfan

ID / Revision: 63 / 5

---

---

Identifier: HSI-04

Description: Additional HSI impacts and dependencies are to be fully analyzed as needed in terms of:  
a) Convergent or divergent roles (e.g., new actors, obsolete roles)  
b) Implied role changes not apparent in the OI description  
c) More comprehensive assessment of Far-Term OI impacts on the workforce and work environments (AJP-61)

Primary Roadmap: Human Systems Integration

Related Decision(s): None

Update Date: 01-Feb-2013 by Cynthia Farfan

ID / Revision: 64 / 5

---

---

Identifier: HSI-05

Description: "Gaps" in concept of ops/concept of use (such as off-nominal scenarios) will be filled to identify and resolve other changes in roles and responsibilities.

Primary Roadmap: Human Systems Integration

Related Decision(s): None

Update Date: 01-Feb-2013 by Cindy Magee

ID / Revision: 65 / 4

---

---

Identifier: HSI-06

Description: NextGen HSI Roadmap products represent information systems, information requirements, guidelines, standards, design requirements, specifications, methods, and tools for incorporating human factors in the NextGen NAS Enterprise Architecture. (Core human factors program requirements may not be fully represented.) (AJP-61)

Primary Roadmap: Human Systems Integration

Related Decision(s): None

Update Date: 01-Feb-2013 by Abdul Khandker

ID / Revision: 66 / 5

---

Identifier: HSI-07

Description: Notional "Operational Improvements" devised for the purposes of constructing the Tech Ops HSI Roadmap will be validated as future Tech Ops concepts of operations develop. (AJW)

Primary Roadmap: Human Systems Integration

Related Decision(s): None

Update Date: 01-Feb-2013 by Cynthia Farfan

ID / Revision: 87 / 4

---

Identifier: HSI-08

Description: NAS infrastructure and capabilities are not constrained by limitations in personnel staffing, selection, and training unless otherwise identified. (AHR)

Primary Roadmap: Human Systems Integration

Related Decision(s): None

Update Date: 01-Feb-2013 by Cynthia Farfan

ID / Revision: 120 / 1

---

Identifier: ISS-01

Description: The identification, development and introduction of NAS ISS controls, policies and procedures associated with the NAS EA ISS Roadmap will in no way impinge upon the successful completion of the FAA's Operational Mission needs and functions.

Primary Roadmap: Information System Security

Related Decision(s): None

Update Date: 01-Feb-2013 by Andrew Martin

ID / Revision: 67 / 5

---

Identifier: ISS-02

Description: The NAS EA ISS Roadmap is predicated upon the identification, formulation, initiation and monitoring of Information System Security policies to maintain a secure posture for the enterprise level, consistent with "Information Systems Security Authorization Handbook and Templates".

Primary Roadmap: Information System Security

Related Decision(s): None

Update Date: 01-Feb-2013 by Andrew Martin

ID / Revision: 68 / 6

---

Identifier: ISS-03

Description: The NAS ISS Roadmap is specific to the NAS environment and consistent with FAA Order 1370.82, "Information Systems Security Program", and per OMB Circular A-130, Appendix III, Management of Federal Information Resources, all NAS ISS policies, standards, requirements, and procedures will be developed and implemented in a manner consistent with standards and guidance issued by National Institute of Science and Technology (NIST).

Primary Roadmap: Information System Security

Related Decision(s): None

Update Date: 01-Feb-2013 by Andrew Martin

ID / Revision: 69 / 6

---

Identifier: ISS-04

Description: The ISS Roadmap will identify, plan and coordinate the implementation of the enterprise-level ISS capabilities within the framework of the system's lifecycle.

Primary Roadmap: Information System Security

Related Decision(s): None

Update Date: 01-Feb-2013 by Andrew Martin

ID / Revision: 70 / 5

---

Identifier: ISS-05

Description: The NAS ISS Roadmap will concentrate on identifying, developing and updating, as appropriate, NAS level ISS Policies, including but not limited to the following areas:  
\*FAA AMS/ISS Policy & Requirement Integration  
\*NAS External Management Policies  
\*NAS Remote Access Management Policies  
\*NAS A/V & Patch Management Policy & Practices  
\*NAS Continuous Monitoring Policies & Practices

Primary Roadmap: Information System Security

Related Decision(s): None

Update Date: 01-Feb-2013 by Andrew Martin

ID / Revision: 71 / 5

---

Identifier: ISS-06

Description: ISS policies will be reviewed and updated annually, or as required.

Primary Roadmap: Information System Security

Related Decision(s): None

Update Date: 01-Feb-2013 by Andrew Martin

ID / Revision: 72 / 5

---

Identifier: ISS-07

Description: The NAS Cyber Operations (NCO) is responsible for facilitating centralized, real-time incident management coordination for NAS Cyber Events through monitoring, detection, analysis, intelligence fusion, trend analysis, response, and policy enforcement.

Primary Roadmap: Information System Security

Related Decision(s): None

Update Date: 01-Feb-2013 by Andrew Martin

ID / Revision: 105 / 3

---

Identifier: ISS-08

Description: NCO synthesizes and distributes cyber event information internally via established NAS Cyber Incident Response Team (NCIRT) procedures.

Primary Roadmap: Information System Security

Related Decision(s): None

Update Date: 01-Feb-2013 by Andrew Martin

ID / Revision: 106 / 4

---

Identifier: ISS-09

Description: NAS systems connected to NAS Operations IP (OPIP) networking infrastructure will integrate the generation of system security audit records with the NCO enterprise cyber event monitoring, detection, analysis, and response capability.

Primary Roadmap: Information System Security

Related Decision(s): None

Update Date: 01-Feb-2013 by Andrew Martin

ID / Revision: 107 / 4

---

Identifier: ISS-10

Description: NCO will implement required infrastructure at the WJHTC, FAA Command Center, and FTI SOCC to collect and monitor NAS system security audit records and respond to detected security events.

Primary Roadmap: Information System Security

Related Decision(s): None

Update Date: 01-Feb-2013 by Andrew Martin

ID / Revision: 109 / 3

---

Identifier: ISS-11

Description: NCO will perform 24x7 monitoring of NAS system security audit records to detect anomalous behavior that is indicative of a cyber security event and perform applicable response actions.

Primary Roadmap: Information System Security

Related Decision(s): None

Update Date: 01-Feb-2013 by Andrew Martin

ID / Revision: 110 / 4

---

Identifier: ISS-12

Description: NCO will provide the storage capabilities for NAS system generated security audit records for on-line review and for 3-year archive and will provide geographically segregated backup storage that is at least 50 miles from the primary storage site.

Primary Roadmap: Information System Security

Related Decision(s): None

Update Date: 01-Feb-2013 by Andrew Martin

ID / Revision: 111 / 4

---

Identifier: ISS-13

Description: NAS functionality will be implemented at all Air Route Traffic Control Centers (ARTCC) and Network Enterprise Management Centers (NEMC) to capture full data packets for:  
\*All Intra-facility IP data flows between NAS systems  
\*All NAS OPIP data flows, and  
\*All NAS to Authorized Gateway (e.g. NAS Enterprise Security Gateway (NESG)) data flows  
Summary information for these data flows will be periodically sent to a centralized enterprise system for NCO data flow monitoring and anomalous behavior detection.

Primary Roadmap: Information System Security

Related Decision(s): None

Update Date: 01-Feb-2013 by Andrew Martin

ID / Revision: 112 / 4

---

Identifier: NAV-01

Description: NextGen implementation requires an aggressive transition to services that support performance-based navigation. This requires:  
a) Close collaboration with the aviation community  
b) A clear definition of the standard services that will be provided by FAA  
c) Other services supported by non-Federal entities

Primary Roadmap: Navigation

Related Decision(s): [94] Policy decision on complete Instrument Landing System (ILS) CAT I drawdown  
[220] Decision to cut over to Dual Frequency Operations based on completion of Dual Frequency (GPS L1 and L5) development & testing.  
[228] Decision to proceed with WAAS dual frequency avionics activities to validate standards and lower risk for avionics development.  
[235] Strategy Decision on active drawdown of CAT I ILSs operating in the NAS  
[237] Strategy Decision on replacement CAT II/III ILSs operating in the NAS  
[239] Strategy Decision to proceed with ALS (I) Production LED Lamps for MALSR systems based on results of Benefit Cost Analysis  
[324] Decision to proceed with ALS (I) LED lamps, based on Operational Capability Demonstration with Enhanced Flight Vision System (EFVS) aircraft  
[507] Final Investment Decision (FID) to move WAAS from Phase III to Phase IV  
[511] Alternate Position, Navigation, and Timing (APNT) solution determined

Update Date: 01-Feb-2013 by Abdul Khandker

ID / Revision: 36 / 3

---

Identifier: NAV-02

Description: FAA is migrating to NAS-wide performance-based navigation-RNAV/RNP/LPV using GNSS and DME/DME for en route, terminal, and approach & landing domains. This will include:  
a) Transition from VORs to GNSS RNAV and APNT for en route and terminal  
b) Transition from ILS to GNSS (SBAS/GBAS)\* for approach and landing  
c) Provision for CAT I or equivalent approach & landing service by SBAS at airports meeting minimum criteria  
d) Extent of CAT II and CAT III service by GBAS is TBD  
\* SBAS is WAAS; GBAS is LAAS

Primary Roadmap: Navigation

Related Decision(s): [94] Policy decision on complete Instrument Landing System (ILS) CAT I drawdown  
[220] Decision to cut over to Dual Frequency Operations based on completion of Dual Frequency (GPS L1 and L5) development & testing.  
[228] Decision to proceed with WAAS dual frequency avionics activities to validate standards and lower risk for avionics development.  
[235] Strategy Decision on active drawdown of CAT I ILSs operating in the NAS  
[237] Strategy Decision on replacement CAT II/III ILSs operating in the NAS  
[239] Strategy Decision to proceed with ALS (I) Production LED Lamps for MALSR systems based on results of Benefit Cost Analysis  
[324] Decision to proceed with ALS (I) LED lamps, based on Operational Capability Demonstration with Enhanced Flight Vision System (EFVS) aircraft  
[507] Final Investment Decision (FID) to move WAAS from Phase III to Phase IV  
[511] Alternate Position, Navigation, and Timing (APNT) solution determined

Update Date: 01-Feb-2013 by Abdul Khandker

ID / Revision: 37 / 4

---

Identifier: NAV-03

Description: Need to continue working closely with users and the avionics industry on equipage issues  
a) Current equipage is insufficient to support transition from ground-based infrastructure to performance-based navigation  
b) In future, equipage will be in place to support transition to performance-based navigation  
c) Implementation dates allow sufficient lead time to accommodate time-lines

Primary Roadmap: Navigation

Related Decision(s): [94] Policy decision on complete Instrument Landing System (ILS) CAT I drawdown  
[220] Decision to cut over to Dual Frequency Operations based on completion of Dual Frequency (GPS L1 and L5) development & testing.  
[228] Decision to proceed with WAAS dual frequency avionics activities to validate standards and lower risk for avionics development.  
[235] Strategy Decision on active drawdown of CAT I ILSs operating in the NAS  
[237] Strategy Decision on replacement CAT II/III ILSs operating in the NAS  
[239] Strategy Decision to proceed with ALS (I) Production LED Lamps for MALSR systems based on results of Benefit Cost Analysis  
[324] Decision to proceed with ALS (I) LED lamps, based on Operational Capability Demonstration with Enhanced Flight Vision System (EFVS) aircraft  
[507] Final Investment Decision (FID) to move WAAS from Phase III to Phase IV  
[511] Alternate Position, Navigation, and Timing (APNT) solution determined

Update Date: 01-Feb-2013 by Cindy Magee

ID / Revision: 38 / 3

---

Identifier: NAV-04

Description: Policy will be in place to maintain safety, security, and capacity and preclude significant economic impact during GNSS outages

Primary Roadmap: Navigation

Related Decision(s): [94] Policy decision on complete Instrument Landing System (ILS) CAT I drawdown  
[220] Decision to cut over to Dual Frequency Operations based on completion of Dual Frequency (GPS L1 and L5) development & testing.  
[228] Decision to proceed with WAAS dual frequency avionics activities to validate standards and lower risk for avionics development.  
[235] Strategy Decision on active drawdown of CAT I ILSs operating in the NAS  
[237] Strategy Decision on replacement CAT II/III ILSs operating in the NAS  
[239] Strategy Decision to proceed with ALS (I) Production LED Lamps for MALSR systems based on results of Benefit Cost Analysis  
[324] Decision to proceed with ALS (I) LED lamps, based on Operational Capability Demonstration with Enhanced Flight Vision System (EFVS) aircraft  
[507] Final Investment Decision (FID) to move WAAS from Phase III to Phase IV  
[511] Alternate Position, Navigation, and Timing (APNT) solution determined

Update Date: 01-Feb-2013 by Cindy Magee

ID / Revision: 39 / 3

---

Identifier: NAV-05

Description: Assume the Department of Defense will maintain a GPS constellation consistent with the Standard Positioning Service.

Primary Roadmap: Navigation

Related Decision(s): [345] Strategy Decision for the implementation of a GPS timing backup

Update Date: 01-Feb-2013 by James Grant

ID / Revision: 40 / 4

---

Identifier: SAFE-01

Description: ASIAs is part of the non-NAS EA. It is depicted on the Safety Infrastructure Roadmap for coordination purposes since:  
a) It will require NAS data.  
b) It will provide safety data and tools for the NAS

Primary Roadmap: Safety

Related Decision(s): None

Update Date: 01-Feb-2013 by Cynthia Farfan

ID / Revision: 73 / 5

---

Identifier: SAFE-02

Description: SMS Implementations for other LOBs are part of the Non-NAS EAs. These activities are depicted on the Safety Infrastructure Roadmap for coordination purposes.

Primary Roadmap: Safety

Related Decision(s): None

Update Date: 01-Feb-2013 by Don Embt

ID / Revision: 74 / 3

---

Identifier: SAFE-03

Description: Safety Modeling Advisory Committee (SMAC). SSMT (ASIAS, SSA, SRM & SMS) representatives of FAA LOBs and other integrated system safety assessment stakeholders will meet annually (at least) to coordinate requirements and resources where appropriate. SMAC business requirements and process will be dependent and potentially represented in the NAS EA

Primary Roadmap: Safety

Related Decision(s): None

Update Date: 01-Feb-2013 by Cynthia Farfan

ID / Revision: 121 / 1

---

Identifier: SURV-01

Description: Migration to Automatic Dependent Surveillance-Broadcast (ADS-B) as primary means of surveillance  
a) Airspace rule to be in effect and backup to be in place by 2020 (compliance date)

Primary Roadmap: Surveillance

Related Decision(s): [76] Final Investment Decision (FID) for ASDE-3 Service Sustainment  
[105] Final Investment Decision (FID) for NextGen Backup Surveillance Capability

Update Date: 01-Feb-2013 by Cynthia Farfan

ID / Revision: 42 / 5

---

Identifier: SURV-02

Description: Backup to mitigate loss of on-board GPS positioning source required  
a) Backup strategy was identified in January 2007  
1) Retain all en route beacons (~ 150 monopulse systems with selective interrogation)  
2) Retain limited set of terminal beacons at Operational Evolution Partnership (OEP)/High Density Terminals (~ 43 locations)  
b) All terminal primary radars are retained  
1) Used as safety (ATC) backup  
2) May also be retained for aviation security and/or weather requirements

Primary Roadmap: Surveillance

Related Decision(s): [105] Final Investment Decision (FID) for NextGen Backup Surveillance Capability  
[345] Strategy Decision for the implementation of a GPS timing backup

Update Date: 01-Feb-2013 by Abdul Khandker

ID / Revision: 43 / 6

---

Identifier: SURV-03

Description: Surface primary radar surveillance will not be required at selected ASDE sites  
a) Requires mandated equipage of all surface vehicles  
b) Surface surveillance to be supported by multilateration and ADS-B at these sites

Primary Roadmap: Surveillance

Related Decision(s): [76] Final Investment Decision (FID) for ASDE-3 Service Sustainment  
[260] Decision on ADS-B Rule Compliance

Update Date: 01-Feb-2013 by Abdul Khandker

ID / Revision: 44 / 5

---

Identifier: SURV-04  
Description: PRM-A, with multilateration technology, will replace PRM E-Scan  
Primary Roadmap: Surveillance  
Related Decision(s): [36] Final Investment Decision (FID) for migration of PRM to PRM-R  
Update Date: 01-Feb-2013 by Cindy Magee  
ID / Revision: 45 / 3

---

---

Identifier: SURV-06  
Description: Department of Defense/Department of Homeland Security continues to fund LRR systems through 2025  
Primary Roadmap: Surveillance  
Related Decision(s): None  
Update Date: 01-Feb-2013 by Abdul Khandker  
ID / Revision: 47 / 3

---

---

Identifier: SURV-07  
Description: Digital automation system inputs are assumed for implementation of SIM  
Primary Roadmap: Surveillance  
Related Decision(s): [102] Final Investment Decision (FID) to implement SIM in terminal and en route legacy radar systems  
Update Date: 01-Feb-2013 by James Grant  
ID / Revision: 104 / 2

---

---

Identifier: WX-01

Description: Ongoing NextGen (NG) Weather functional & performance requirements validation for Midterm may result in new/emerging requirements that create perturbations in NextGen Weather Architecture

Primary Roadmap: Weather

Related Decision(s): [86] Initial Investment Decision (IID) for NWP WP1  
[89] Final Investment Decision (FID) for NWP WP1

Update Date: 01-Feb-2013 by Andrew Martin

ID / Revision: 15 / 4

---

Identifier: WX-02

Description: Weather Sensor Sustainment Issues:  
1)Terminal Portfolio approach  
Wind Shear systems (LLWAS, WSP & LIDAR) consolidated into Wind Shear Detection Services (WSDS) to sustain capabilities with DP's for IARD, IID, FID & ISD; WSDS to split into 2 Work Packages-Sustain & NextGen Instantiation (Sensor Expansion, LIDAR, New Requirements) - TDWR SLEP 2 is pulled out of Portfolio Implement ANG-C6 'Right Sizing' study results in NextGen Surface Observing Capability  
a)Incorporate 'Right Sizing' study results (FTSN) into ASWON TR as appropriate  
b)Consolidate Automated Surface Observing systems (ASOS/SAWS, AWOS, AWSS) plus F-420, DAS1, WME & CHI into a single capability  
c)NextGen Surveillance/Weather Radar Capability continues to support Terminal & En route Weather requirements  
2)Continue obtaining Surface Observations from non-Fed AWOS systems  
3)Both NextGen Radar & Surface Observing capabilities will consider multi-agency requirements. Anticipate both of these capabilities will be implemented as multi-agency systems [Note combined WX-10 with this one.]

Primary Roadmap: Weather

Related Decision(s): [85] Investment Analysis Readiness Decision (IARD) for NSOC  
[445] Initial Investment Decision (IID) for NSOC  
[446] Final Investment Decision (FID) for NSOC

Update Date: 01-Feb-2013 by Andrew Martin

ID / Revision: 16 / 8

---

Identifier: WX-03

Description: 1)ADAS-Rehost serves as a consolidating access point for Weather observations for CSS-Wx.  
2)Evaluate WMSCR communications to determine if movement of functionality to CSS-Wx should occur in WP1 or WP2. ALDARS functionality (in ADAS) to be subsumed by CSS-Wx WP 2 (information extraction functionality of CSS-Wx WP1 enables publishing of lightning reports to NextGen Surface Observing Capability)

Primary Roadmap: Weather

Related Decision(s): [448] Investment Analysis Readiness Decision (IARD) for CSS-Wx WP2 and transition of ADAS communications (and WMSCR Comms if not completed in CSS-Wx WP1) to CSS-Wx WP2  
[449] Initial Investment Decision (IID) for CSS-Wx and transition of ADAS communications (and WMSCR Comms if not completed in CSS-Wx WP1) to CSS-Wx WP2

Update Date: 01-Feb-2013 by Andrew Martin

ID / Revision: 17 / 5

---

Identifier: WX-04

Description: Migrate Weather information distribution to envisioned enterprise Network Enabled Operations (NEO)  
1) Provide FAA Requirements for 4-D Weather Data Cube & 4-D Weather SAS information  
NOTE: 1) NWS modeling capability is not part of the 4-D Wx SAS but is required to create data  
2) IAW ICAO ConOps for ATM, ATM includes Service Providers & Users, e.g., pilots & dispatchers

Primary Roadmap: Weather

Related Decision(s): None

Update Date: 01-Feb-2013 by Andrew Martin

ID / Revision: 18 / 5

---

Identifier: WX-05

Description: Improved observations & enhanced forecasts, require significant commitment to R&D and infrastructure changes must continue:  
1) R&D prioritized to meet NextGen Capabilities  
2) Ample funding for Wx R&D, with increased focus on translation, must be available to realized the NextGen goals  
3) Output of R&D-developed Algorithms will be available from the 4-D Wx SAS. All weather information available in 4-D Wx SAS by 2025.  
4) Sensor measurement, accuracy & frequency must be increased IAW mid-term & far-term Performance Requirements.  
5) Weather R&D must be coordinated and collaborative with NWS efforts  
6) Initiate work with ICAO to harmonize NextGen/SESAR weather requirements

Primary Roadmap: Weather

Related Decision(s): None

Update Date: 01-Feb-2013 by Andrew Martin

ID / Revision: 19 / 7

---

Identifier: WX-06

Description: Convergence of Wx Processing Capability into NextGen Wx Processor (NWP)  
1)NextGen Weather Processor Work Package 1 (NWP WP 1)  
a)CIWS continues as prototype until integrated into NWP WP1 as part of 0-8 hour convective forecast (CoSPA) capability; CIWS Communications functionality (CDDS) is subsumed into CSS-Wx WP1  
b)WARP RAMP (radar acquisition & mosaic processor) must be sustained until functionality transferred to NWP WP1.  
c)NAS IDS (or NIDS) incorporates WARP Remote BT functions, CIWS product display, ITWS display and CSS-Wx-provided data (Note: not a Wx display).  
d)Strategy Decision to either perform ITWS Tech Refresh (and incorporate into NWP WP2), or include ITWS into NWP WP1  
a)Pending 1) d) - ITWS TR may be required to continue functionality until NWP WP2 fielded  
2)NWP WP2:  
a)Selected Wx R&D algorithms matured since WP1 baseline frozen will be incorporated, e.g., 2-8 hour Winter Wx Forecast  
b)Implement improved Convective algorithms from Aviation Wx R&D  
c)Pending 1) d) - ITWS functionality transferred at this time except functions allocated to NextGen Far-Term Work Pkg to meet latency requirements of Wind shear/Microburst Detection & Prediction alerts  
d)Due to the delay in the implementation of NWP WP2 and FAA-NWS agreement to move forecasting functionality to NWS when NWS can meet all FAA requirements associated with forecasts, anticipate that FAA NWP WP2 will contain only the convective translation algorithms, any other maturing translations functionality and the ITWS functionality that overlays convective activity on the runway complex, while the CIWS/CoSPA and ITWS forecasting capability are implemented at NWS.  
3)FAA NWP Translation WP3 will implement selected weather translations that have matured out of R&D since the WP2 baseline was frozen. NWS will implement selected WX R&D algorithms that have matured since their NWP Weather WP2 baseline was frozen.

Primary Roadmap: Weather

Related Decision(s): [86] Initial Investment Decision (IID) for NWP WP1  
[89] Final Investment Decision (FID) for NWP WP1

Update Date: 01-Feb-2013 by Andrew Martin

ID / Revision: 20 / 5

---

Identifier: WX-07

Description: NextGen Weather information becomes available at user-specified resolution but weather impact is determined by user DST

Primary Roadmap: Weather

Related Decision(s): [86] Initial Investment Decision (IID) for NWP WP1  
[89] Final Investment Decision (FID) for NWP WP1

Update Date: 01-Feb-2013 by Andrew Martin

ID / Revision: 21 / 6

---

Identifier: WX-08

Description: Weather Communications functionality to be provided by CSS-Wx

Primary Roadmap: Weather

Related Decision(s): [86] Initial Investment Decision (IID) for NWP WP1  
[89] Final Investment Decision (FID) for NWP WP1

Update Date: 01-Feb-2013 by Andrew Martin

ID / Revision: 22 / 5

---

Identifier: WX-09

Description: Center Weather Service Unit support addressed as Strategy DP 658 to discontinue as advanced DSTs are fielded (~ 2020)

Primary Roadmap: Weather

Related Decision(s): None

Update Date: 01-Feb-2013 by Andrew Martin

ID / Revision: 23 / 8

---

Identifier: WX-10

Description: NWP WP1 implements a convective "translation" product that provides Weather Avoidance Fields (WAFS) to change state of the atmosphere information into weather-related constraints to NAS airspace, which will be delivered by CSS-Wx Segment 1

Primary Roadmap: Weather

Related Decision(s): [218] Concept and Requirements Definition Readiness (CRDR) Decision for DataComm Segment 3 and the migration to L-band

Update Date: 01-Feb-2013 by Andrew Martin

ID / Revision: 86 / 5

---

Identifier: WX-11

Description: Weather-related constraints on NAS Airspace will be translated into NAS operational Impacts by User DSTs

Primary Roadmap: Weather

Related Decision(s): [86] Initial Investment Decision (IID) for NWP WP1  
[89] Final Investment Decision (FID) for NWP WP1  
[341] Final Investment Decision (FID) for CSS-Wx WP2 and transition of ADAS communications (and WMSCR Comms if not completed in CSS-Wx WP1) to CSS-Wx WP2  
[449] Initial Investment Decision (IID) for CSS-Wx and transition of ADAS communications (and WMSCR Comms if not completed in CSS-Wx WP1) to CSS-Wx WP2

Update Date: 01-Feb-2013 by Andrew Martin

ID / Revision: 91 / 4

---

Identifier: WX-12

Description: Products developed from Req'm'ts allocated to NWS, will be accessible via CSS-Wx as they become operational

Primary Roadmap: Weather

Related Decision(s): [77] Initial Investment Decision (IID) to implement a NextGen Surveillance and Weather Radar Capability for ATC  
[85] Investment Analysis Readiness Decision (IARD) for NSOC  
[104] Final Investment Decision (FID) to implement a NextGen Surveillance and Weather Radar Capability for ATC  
[407] Investment Analysis Readiness Decision (IARD) for NextGen Surveillance and Weather Radar Capability  
[445] Initial Investment Decision (IID) for NSOC  
[446] Final Investment Decision (FID) for NSOC

Update Date: 01-Feb-2013 by Andrew Martin

ID / Revision: 92 / 4

---

Identifier: WX-13

Description: EPI sensor essential to mitigate ASOS shortfalls in Aircraft and Airport Ground Anti/De-icing operations will be deployed to support NextGen capacity/safety goals late in the mid-term

Primary Roadmap: Weather

Related Decision(s): None

Update Date: 01-Feb-2013 by Andrew Martin

ID / Revision: 93 / 3

---

Identifier: WX-14

Description: FTSN (Flexible Terminal Sensor Network) conducts a series of CMTD activities starting in CY mid-2013

Primary Roadmap: Weather

Related Decision(s): [86] Initial Investment Decision (IID) for NWP WP1

Update Date: 01-Feb-2013 by Andrew Martin

ID / Revision: 94 / 3

