

# NAS Enterprise Architecture



## Infrastructure Roadmaps v19.0

**BASELINE**

February 2025



# Infrastructure Roadmap Overview

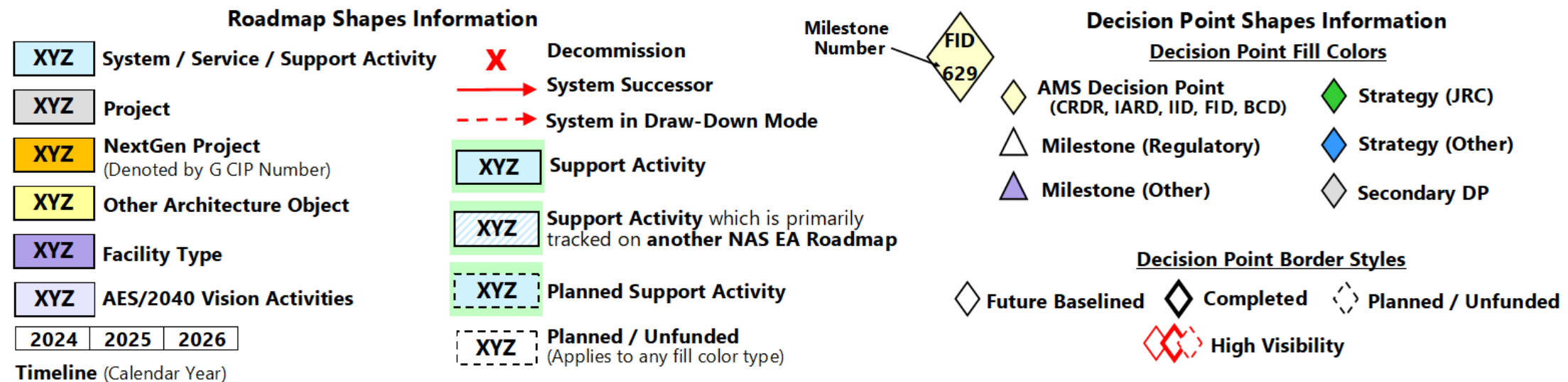
## What are the Infrastructure Roadmaps?

- The FAA Infrastructure Roadmaps show the progression of system deployments, investments, and key decision points for major NAS acquisitions. They depict the acquisition strategy to evolve the NAS from the As-Is to the To-Be environment.
- The Infrastructure Roadmaps show all Capital Investment Plan (CIP) investment projects and systems identified in the NSIP that will deliver the necessary functionality to enable OIs and BTIs.

## Guidelines for Understanding the Roadmaps

- The Infrastructure Roadmaps are organized by Domain (Automation, Communication, etc.) and depict projects, systems, services, decision points, and support activities.
- The timeline is in calendar years and shows a 17-year outlook.
- The roadmaps have swim lanes for Infrastructure (white), Support Activities (green), and Platform/Compute (purple).
- The DP diamonds represent the quarter in which a decision will occur.
- The Support Activity bars represent the dates that work is being performed on the activity.
- The Project bars represent the dates that CIP funding is allocated to a project.
- The System and Service bars represent the dates that a system or service is operational, with red lines indicating sustainment, drawdown, or convergence

## Infrastructure Roadmap Legend

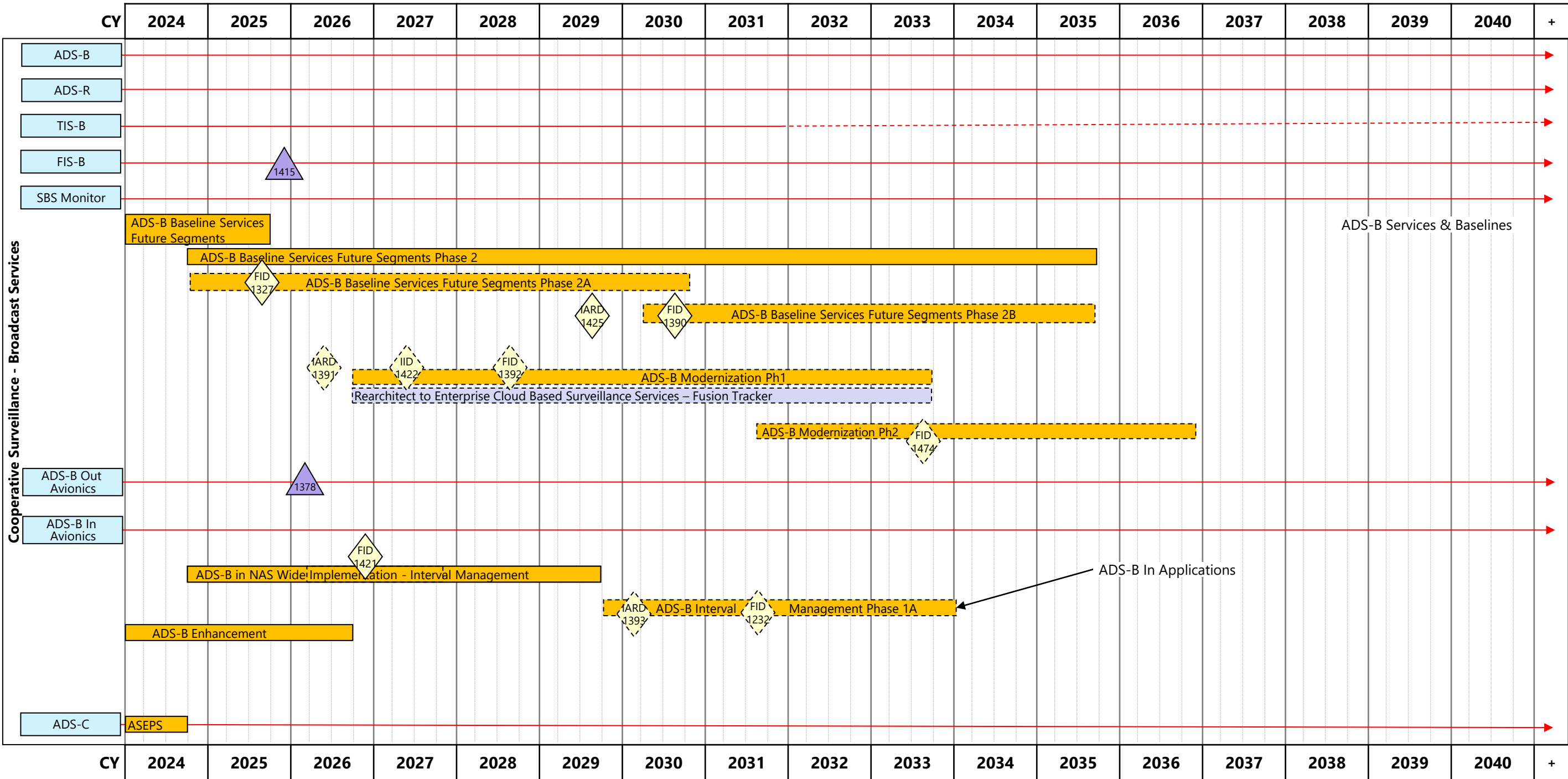


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# Surveillance

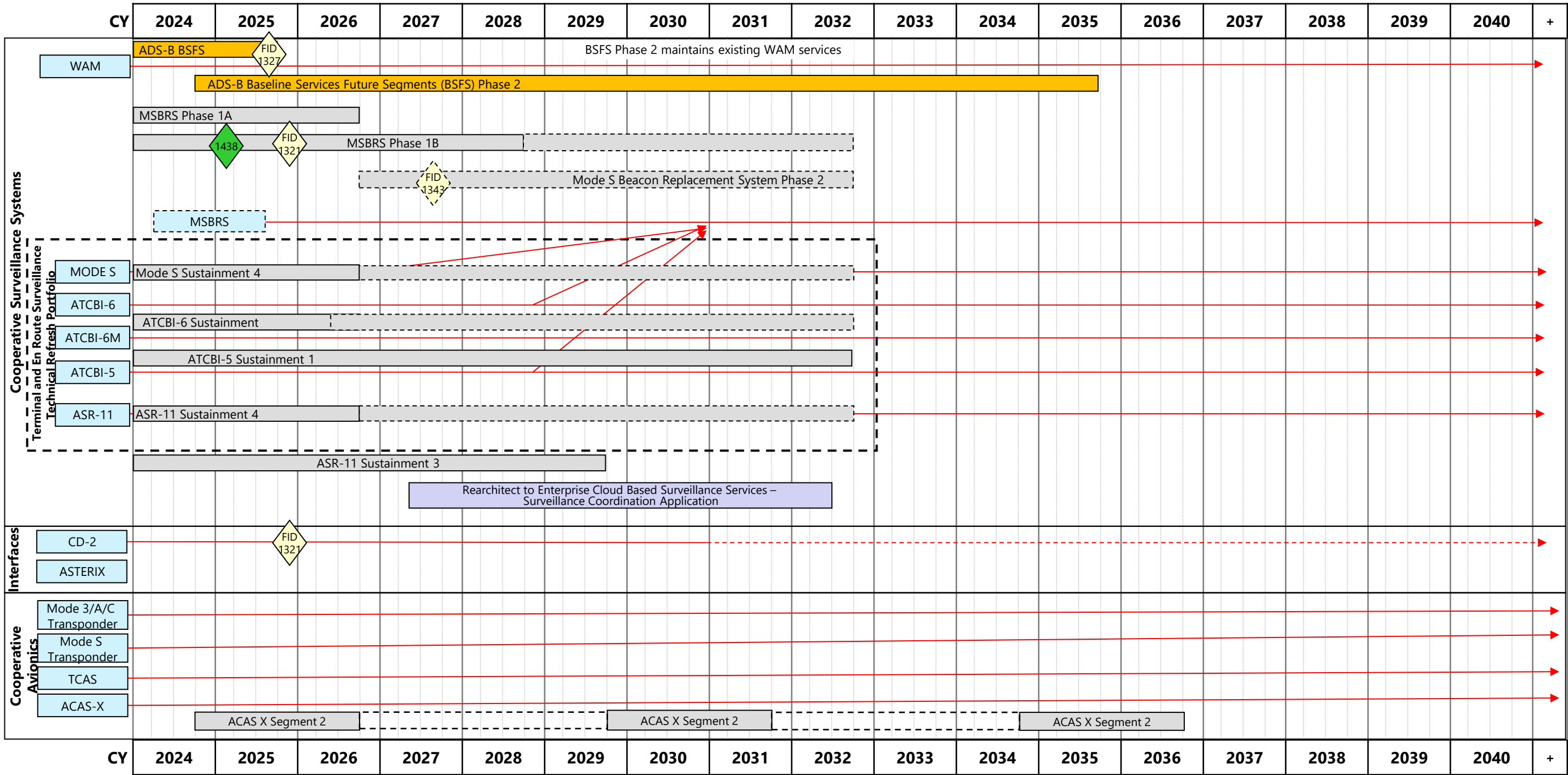
The Surveillance roadmap depicts the sustainment of legacy surveillance systems and the evolution towards the NextGen environment.

# Surveillance Roadmap (1 of 4)



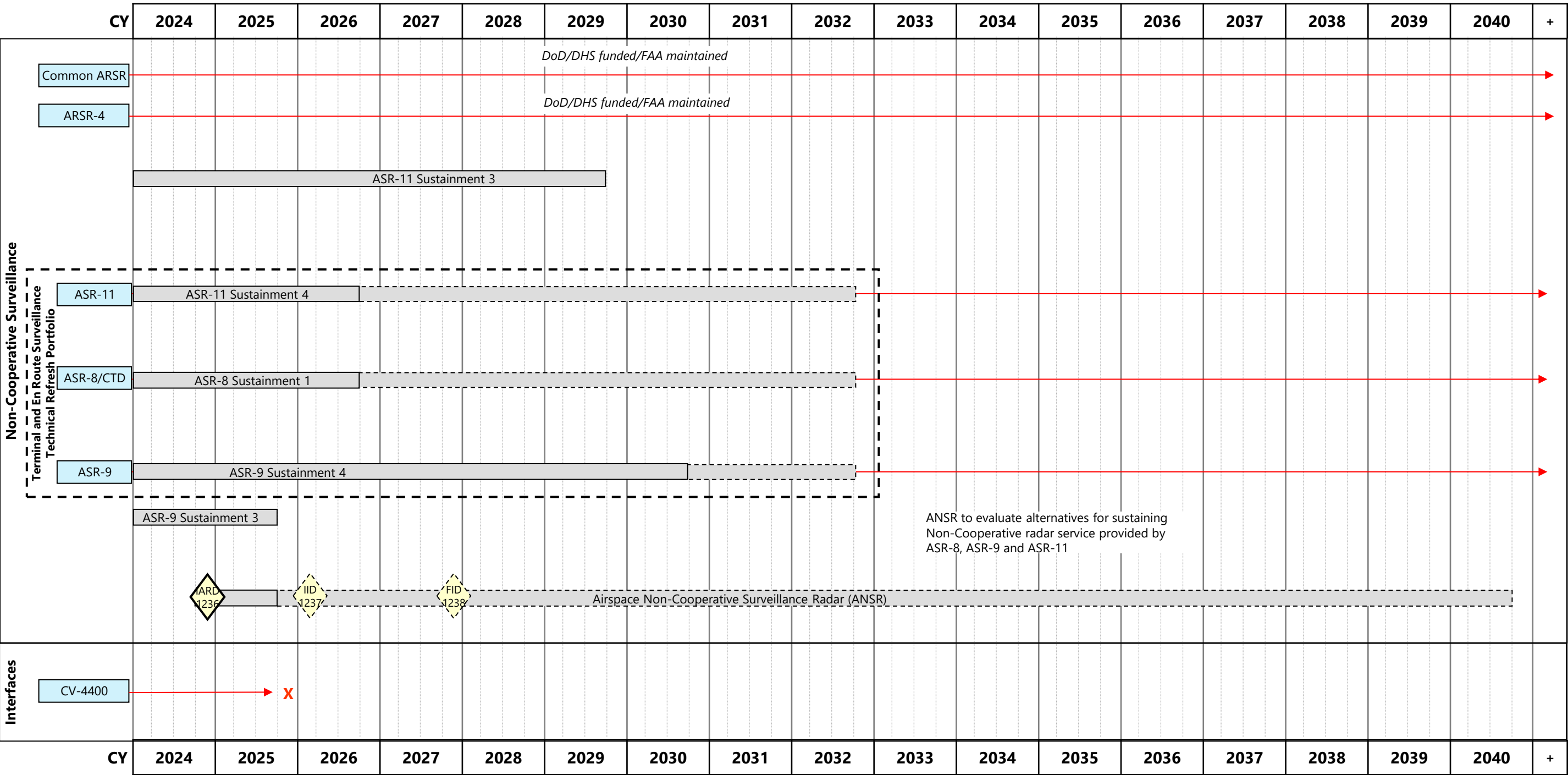
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# Surveillance Roadmap (2 of 4)



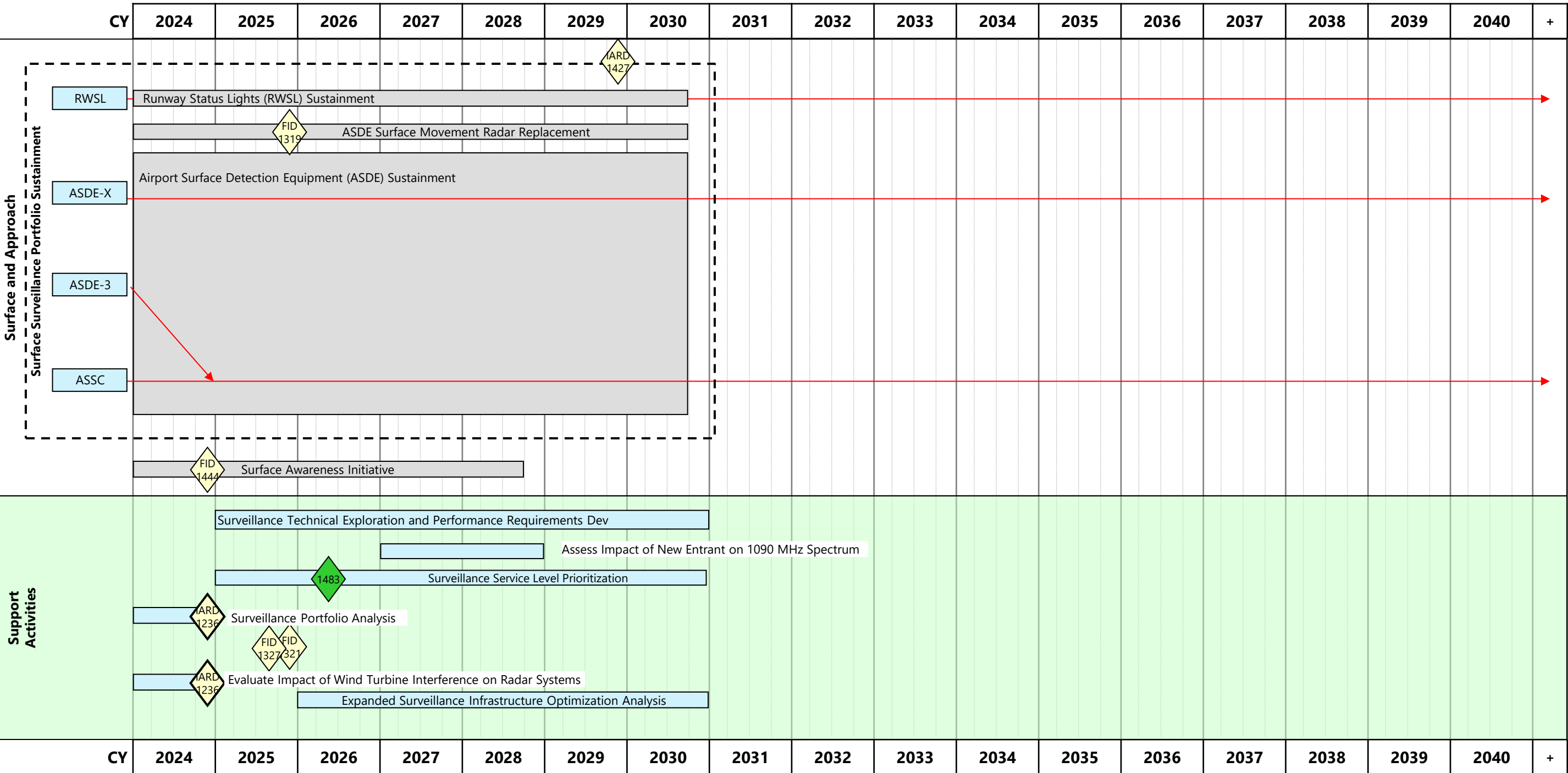
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# Surveillance Roadmap (3 of 4)



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# Surveillance Roadmap (4 of 4)



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# Surveillance Roadmap: Assumptions

Identifier	Description
SURV-01	Backup to mitigate loss of on-board GPS positioning source for ADS-B is required: a) Retain all en route beacons (~150 monopulse systems) b) Retain limited set of terminal beacons (or WAM) based on need (Core 30 airports for resiliency, other airports based on economic analysis and ADS-B equipage rates) c) All terminal non-cooperative surveillance coverage areas are retained for safety purposes d) Selected terminal surveillance systems that will no longer be required will be divested starting in CY2020
SURV-02	The Mode-S Beacon Replacement System (MSBRS) will replace all remaining beacon systems that are not replaced by WAM
SURV-03	The ANSR program will determine the long-term upgrade strategy of the ASR-8, ASR-9, and ASR-11 (PSR portion) systems



# Surveillance Roadmap: Decision Points (1 of 1)

DP #	Target Date CY	Primary Domain	Type	Name
1224	2025 Q2	Facilities	FID	Final Investment Decision (FID) for Anchorage ATCT/TRACON Replacement
1232	2031 Q3	Surveillance	FID	Final Investment Decision (FID) for ADS-B In Applications: IM Phase 1A
1236	2024 Q4	Surveillance	IARD	Investment Analysis Readiness Decision (IARD) for Airspace Non-cooperative Surveillance Radar (ANSR)
1237	2026 Q1	Surveillance	IID	Investment Initial Decision (IID) for Airspace Non-cooperative Surveillance Radar (ANSR)
1238	2027 Q4	Surveillance	FID	Final Investment Decision (FID) for Airspace Non-cooperative Surveillance Radar (ANSR)
1269	2024 Q3	Automation	FID	Final Investment Decision (FID) for STARS Sustainment 4
1319	2025 Q4	Surveillance	FID	Final Investment Decision (FID) for ASDE-3 Surface Movement Radar (SMR) Replacement
1321	2025 Q4	Surveillance	FID	Final Investment Decision (FID) for MSBRS Phase 1B
1327	2025 Q3	Surveillance	FID	Final Investment Decision (FID) for ADS-B Baseline Services Future Segments Phase 2A
1343	2027 Q3	Surveillance	FID	Final Investment Decision (FID) for Mode S Beacon Replacement System Phase 2
1390	2030 Q3	Surveillance	FID	Final Investment Decision (FID) for Automatic Dependent Surveillance-Broadcast (ADS-B) Baseline Services Future Segments (BSFS) P2B
1391	2026 Q2	Surveillance	IARD	Investment Analysis Readiness Decision (IARD) for Automatic Dependent Surveillance-Broadcast (ADS-B) Modernization
1392	2028 Q3	Surveillance	FID	Final Investment Decision (FID) for Automatic Dependent Surveillance-Broadcast (ADS-B) Modernization
1393	2030 Q1	Surveillance	IARD	Investment Analysis Readiness Decision (IARD) for ADS-B In Applications: IM Phase 1A
1421	2026 Q4	Surveillance	FID	Final Investment Decision (FID) for ADS-B Interval Management
1422	2027 Q2	Surveillance	IID	Initial Investment Decision (IID) for ADS-B Modernization
1425	2029 Q3	Surveillance	IARD	Investment Analysis Readiness Decision (IARD) for ADS-B BSFS Phase 2B
1427	2029 Q4	Surveillance	IARD	Investment Analysis Readiness Decision (IARD) for Surface Portfolio Sustainment
1438	2025 Q1	Surveillance	Strategy	JRC Strategy Decision for Mode S Beacon Replacement System Phase 1B
1444	2024 Q4	Surveillance	FID	Final Investment Decision (FID) for Surface Awareness Initiative
1474	2033 Q3	Surveillance	FID	Final Investment Decision (FID) for ADS-B Modernization Phase 2
1483	2026 Q2	Surveillance	Strategy	JRC Strategy Decision for Surveillance Portfolio Analysis