

Service Road Map Legend

FY 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025+

ATC-Separation Assurance / Separation Management

TM-Synchronization / Trajectory Management

TM-Strategic Flow / Flow Contingency Management (Strategic Flow)

Airspace Management / Capacity Management (Airspace)

ATC-Advisory & Flight Planning, Emergency and Alerting, Infrastructure-Information Management / Flight and State Data Management

Key

•NAS EA Service / NIP Function

 •Near-Term Commitment

 •Mid Term Capability

 •Far Term Capability

 •JPDO is OPR

 •Delivery

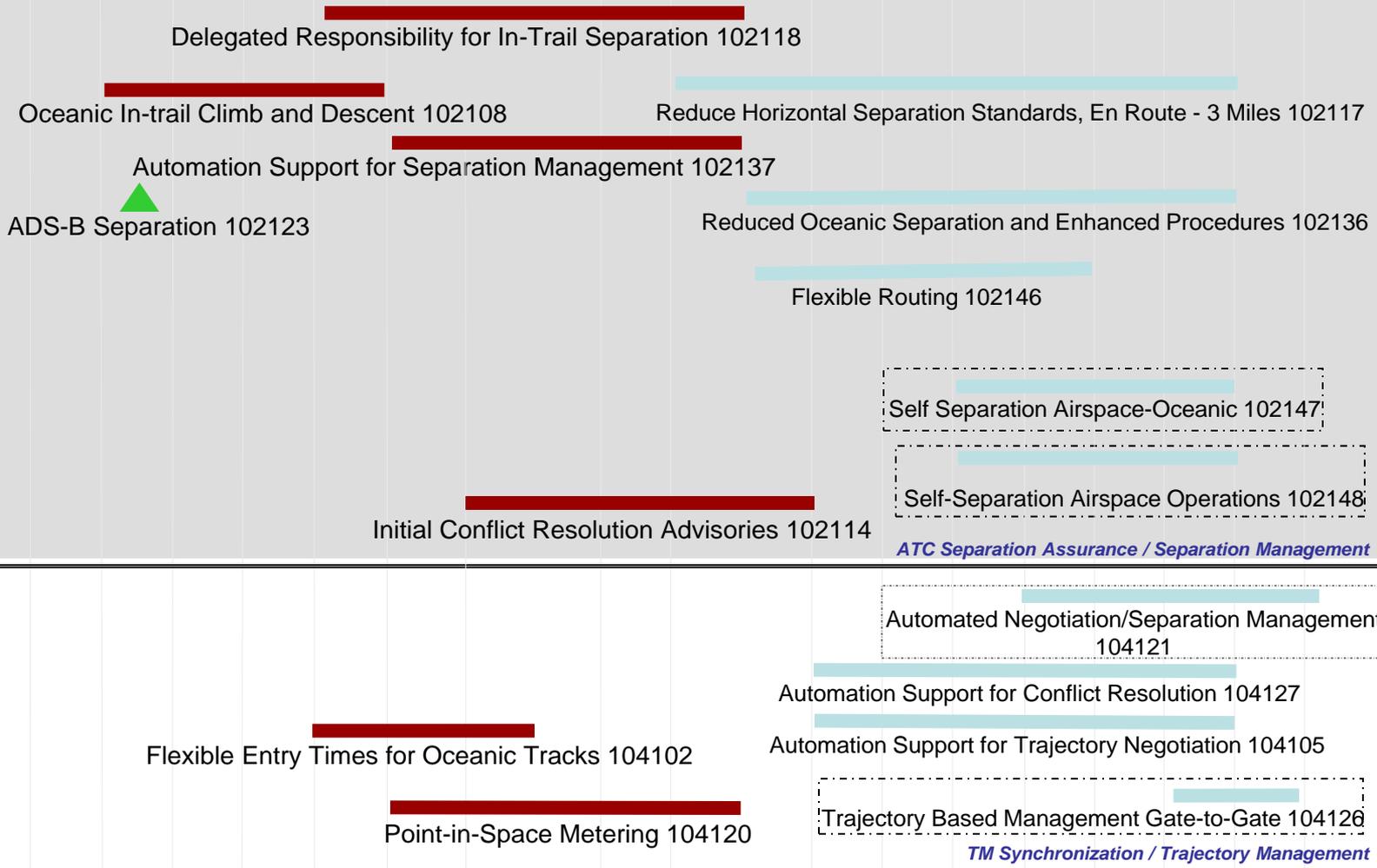
•(Initial Operating Capability targeted within the box)

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Initiate Trajectory-Based Operations (1 of 2)

FY 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025+



ATC Separation Assurance / Separation Management

TM Synchronization / Trajectory Management

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Initiate Trajectory-Based Operations (2 of 2)

FY 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025+

TM Strategic Flow / Flow Contingency Management (Strategic Flow)

Flexible Airspace Management 108206

Increase Capacity and Efficiency Using RNAV and RNP 108209

Flow Corridors – Level 1 Static 108105

Flow Corridors – Level 2 Dynamic 108106

Dynamic Airspace Performance Designation 108213

Airspace Management / Capacity Management (Airspace)

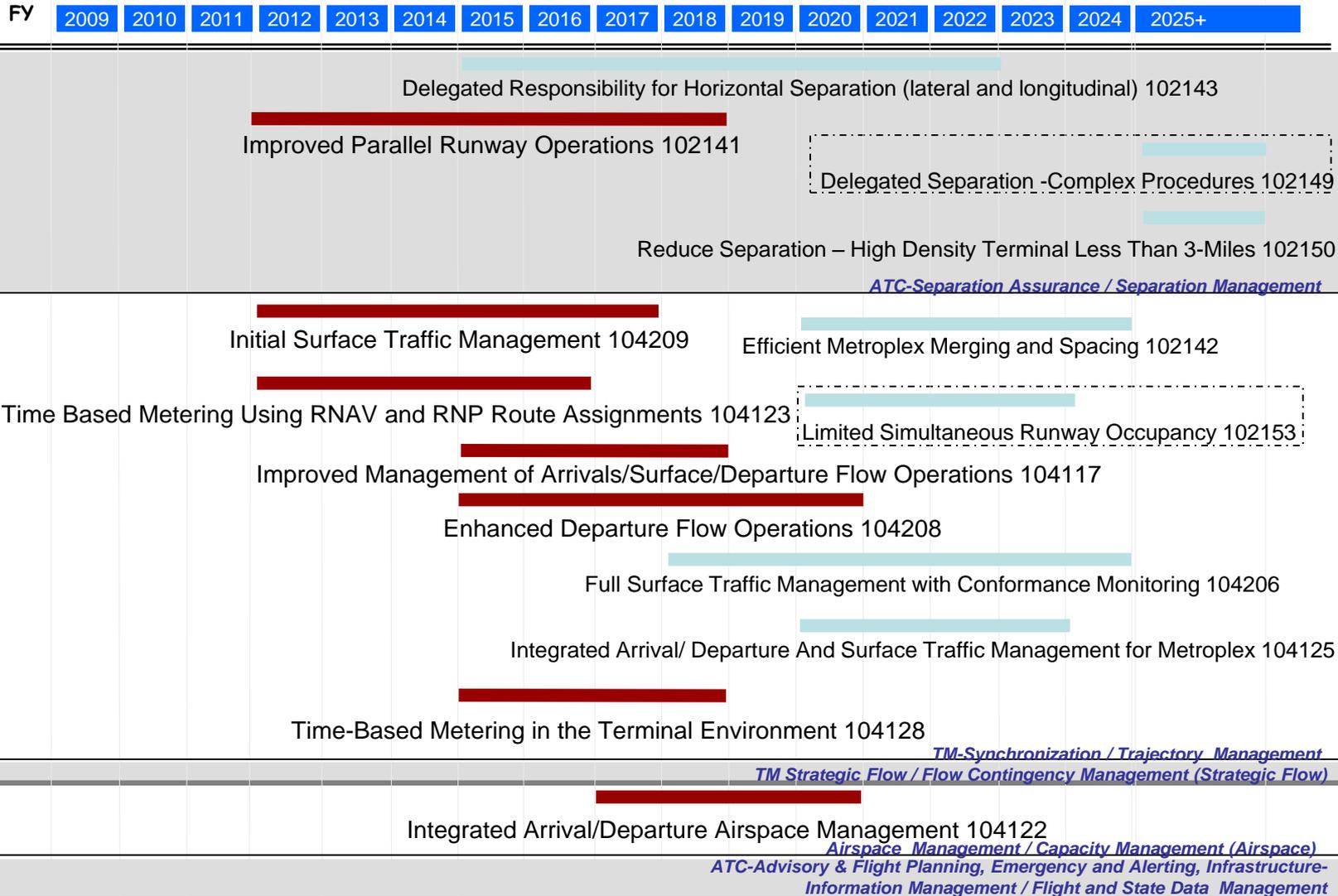
Provide Interactive Flight Planning from Anywhere 101103

ATC-Advisory & Flight Planning, Emergency and Alerting, Infrastructure-Information Management / Flight and State Data Management

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Increase Arrivals/Departures at High Density Airports



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Increase Flexibility in the Terminal Environment (1 of 2)

FY 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025+

Wake Turbulence Mitigation for Departures (WTMD): Wind-Based Wake Procedures 102140

Single Runway Departure Wake Mitigation 102151

Dynamic, Pairwise Wake Turbulence Separation 102152

Ground Based Augmentation System (GBAS) Precision Approaches 107107

Provide Surface Situation to Pilots, Service Providers and Vehicle Operators for Near-Zero-Visibility Surface Operations 102409

Expanded Radar-Like Services to Secondary Airports 102138

Wake Turbulence Mitigation for Arrivals: CSPRs 102144

Wake Re-Categorization 102154

Single Runway Arrival Wake Mitigation 102145

ATC-Separation Assurance / Separation Management

Use Optimized Profile Descent 104124

Low Visibility Surface Operations 107202

Low Visibility/Ceiling Approach Operations 107117

Low Visibility/Ceiling Landing Operations 107118

Low Visibility/Ceiling Takeoff Operations 107115

Low Visibility/Ceiling Departure Operations 107116

Expanded Low Visibility Operations using Lower RVR Minima 107119

TM-Synchronization / Trajectory Management

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Increase Flexibility in the Terminal Environment (2 of 2)

FY

2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025+

TM-Strategic Flow / Flow Contingency Management (Strategic Flow

Airspace Management / Capacity Management (Airspace)



ATC-Advisory & Flight Planning, Emergency and Alerting, Infrastructure-Information Management / Flight and State Data Management

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Improve Collaborative ATM

FY 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025+

ATC-Separation Assurance / Separation Management

TM-Synchronization / Trajectory Management

Continuous Flight Day Evaluation 105302

Traffic Management Initiatives with Flight Specific Trajectories 105208

Full Collaborative Decision Making 105207

TM-Strategic Flow / Flow Contingency Management (Strategic Flow)

Improved Management of Special Activity Airspace 108212

Airspace Management / Capacity Management (Airspace)

Provide Full Flight Plan Constraint Evaluation with Feedback 101102

On-Demand NAS Information 103305

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Reduce Weather Impact

FY



ATC Separation Assurance / Separation Management

Initial Integration of Weather Information into NAS Automation and Decision Making 103119

TM Synchronization / Trajectory Management

Full Improved Weather Information and Dissemination 103121

TM Strategic Flow / Flow Contingency Management (Strategic Flow)

Airspace Management / Capacity Management (Airspace)

Initial Improved Weather Information from Non-Ground Based Sensors 103116

Deploy FIS-B Nationally 103104

Full Improved Weather Sensor Network 103122

Full Integration of Weather Information into NAS Automation and Decision Making 103123

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Increase Safety, Security, and Environmental Performance (1 of 3)

FY 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025+

ATC-Separation Assurance / Separation Management

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TM-Strategic Flow / Flow Contingency Management (Strategic Flow)

Airspace Management / Capacity Management (Airspace)

Safety

Enhance Emergency Alerting 106202

Safety Information Sharing and Emergent Trend Detection 109303

Enhanced Safety Information Analysis and Sharing 109304

Improved Safety for NextGen Evolution 109305

Increased International Cooperation for Aviation Safety 109306

Improved Safety Across Air Transportation System Boundaries 109307

Automated Safety Information Sharing and Analysis Scope and Effectiveness 109308

ATC-Advisory & Flight Planning, Emergency and Alerting, Infrastructure-Information Management / Flight and State Data Management

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Increase Safety, Security, and Environmental Performance (2 of 3)

FY 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025+

ATC-Separation Assurance / Separation Management

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Airspace Management / Capacity Management (Airspace)

Operational Security Capability for Threat Detection and Tracking, NAS Impact Analysis and Risk-Based Assessment 109302

Operational Security Capability with Dynamic Flight Risk Assessment for Improved Security Airspace Planning and Management 109317

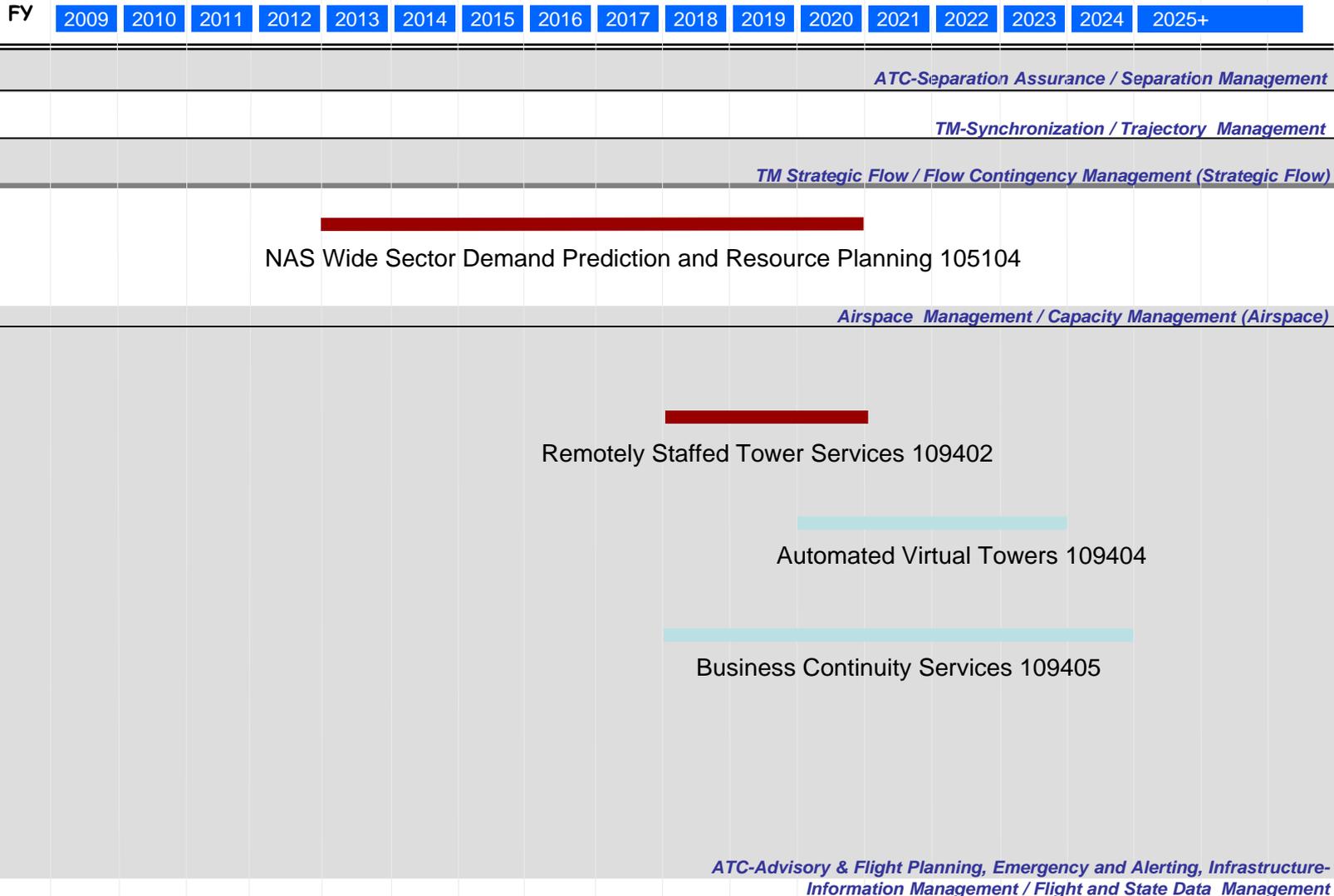
ATC-Advisory & Flight Planning, Emergency and Alerting, Infrastructure-Information Management / Flight and State Data Management

Security

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Transform Facilities



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Service Roadmap Changes

May and June 2011 Review

TBO

- OI#102123 – Added triangle in 2010
- OI#102114 - IOC date range changed from 2013-2017 to 2014-2019 per OI Review
- OI#102137 - IOC date range changed from 2014-2015 to 2014-2018 per OI Review
- OI#104102 - IOC date range changed from 2011-2013 to 2013-2015 per OI Review
- OI#104105 – IOC date range changed from 2018-2025 to 2020-2025 per OI Review
- OI#104120 - IOC date range changed from 2012-2016 to 2014-2018 per OI Review
- OI#104127 – IOC date range changed from 2018-2025 to 2020-2025 per OI Review
- OI#108206 - IOC date range changed from 2015-2018 to 2017-2020 per OI Review

HD

- OI#104122 - IOC date range changed from 2016-2019 to 2017-2020 per OI Review
- OI#104209 - IOC date range changed from 2010-2017 to 2012-2017 per OI Review

Flex

- OI #107119 – Added triangle in 2011
- OI# 102154 – Moved the OI to the Mid-Term and updated the IOC date range from 2014-2022 to 2014 to 2020 per OI Review
- OI#102144 - IOC date range changed from 2015-2018 to 2016-2019 per OI Review

CATM

- OI#105208 – IOC date range changed from 2014-2015 to 2014-2017 per OI Review
- OI#108212 - IOC date range changed from 2012-2014 to 2014-2017 per OI Review

RWI

- OI# 103121 – IOC date range changed from 2016-2023 to 2018 to 2023 per OI Review
- OI#103122 – IOC date range changed from 2016-2023 to 2018 to 2023 per OI Review
- OI#103123 - IOC date range changed from 2016-2023 to 2018 to 2023 per OI Review

SSE

- OI#109302 - IOC date range changed from 2015-2018 to 2017-2020 per OI Review
- OI#109303 – Removed ASIAs from title of the OI per OI Review
- OI#109304 – Removed Aviation from title of the OI per OI Review
- OI#109306 – Changed from Far-Term to Mid-Term per OI Review
- OI#109307 - Changed from Far-Term to Mid-Term per OI Review
- OI#109308 - Changed from Far-Term to Mid-Term per OI Review and removed Enhanced and took Automated out of () from the title of the OI per OI Review
- OI#109309 – IOC date range changed from 2011-2011 to 2010-2015 per OI Review
- OI#109310 – IOC date range changed from 2018-2018 to 2016-2018 per OI Review
- OI#109311 - Deleted and was replaced/combined with New OI per OI Review
- OI#109312 – Deleted and was replaced/combined with New OI per OI Review

- OI#109313 - Deleted and was replaced/combined with New OI per OI Review
- OI#109314 - Deleted and was replaced/combined with New OI per OI Review
- OI#109315 – IOC date range changed from 2015-2015 to 2011-2015
- OI#109316 – IOC date range changed from 2015-2015 to 2011-2015 and updated title per OI Review
- OI#109318 – Moved OI to the Mid-Term and updated the IOC date range changed from 2021 – 2021 to 2016 – 2018 and updated title per OI Review
- OI#109319 – Created new OI per OI Review
- OI#109320 - Created new OI per OI Review
- OI#109321 - Created new OI per OI Review
- OI#109322 - Created new OI per OI Review
- OI#109323 – Created new OI per OI Review
- OI#109324 - Created new OI per OI Review
- OI#109325 - Created new OI per OI Review