

Analytical Tool Development and Analysis Update



Federal Aviation
Administration

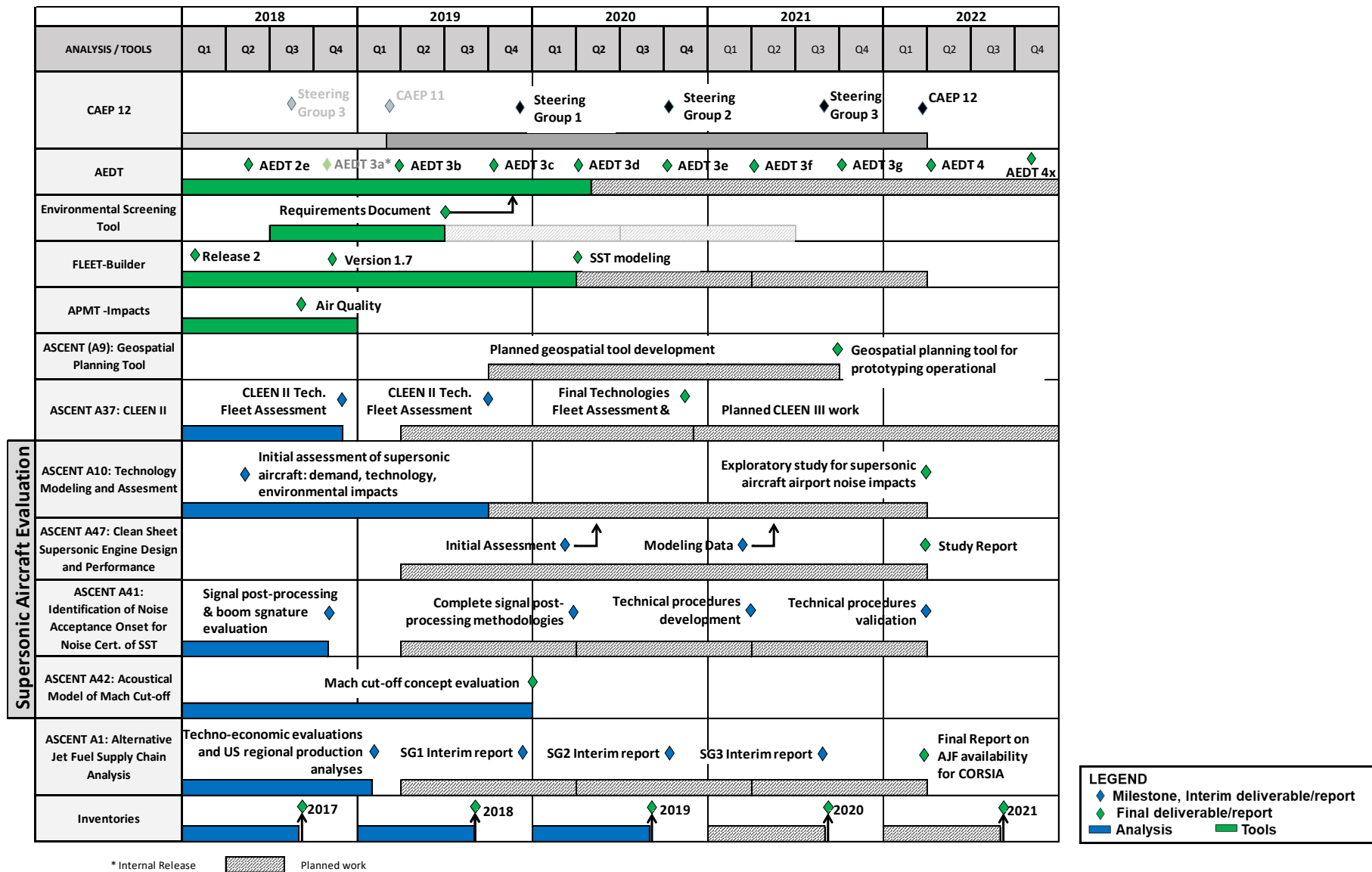
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By: Fabio Grandi
Office of Environment and Energy
Federal Aviation Administration

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Tools and Analysis Roadmap



Screening Tools Update: Noise Screening Methodology Organizational Success Increase (OSI)

“Develop a noise screening methodology document that will be used to develop updated noise screening capabilities for FAA

Due September 30, 2019”

- **Methodologies must support FAA’s current regulatory framework**
 - Average Annual Day DNL 65dBA as the definition of significant noise
 - 1.5dB increase within DNL 65dBA as the definition of a significant noise impact under NEPA
- **Disclosure of reportable impacts must be fully supported**
 - 3dB increases between DNL 60dB and 65dB and 5dB increases between DNL 45dB and 60dB
 - Disclosure of reportable impacts will remain as directed under Order 1050.1
- **To the extent possible, methodologies must allow for flexibility to adapt to any future policy requirements**



Screening Tools Update: Roadmap

- AEE has provided clarification on guidance for proper use of noise screening tools: **June 2018**
- AEE is conducting research to review and define conservative noise screening methodologies **Through September 2019**
- AEE convening OSI workgroup to collect input on proposed Noise Screening Methodology updates: **Through September 2019**
- AJV and AEE are collaborating on improvements to flight track data management and applicable TARGETS features: **Ongoing**
- Replace all currently approved noise screening tools with a single integrated methodology and tool: **Planned by October 2021**

Goals for the new noise screening tool are to:

- Use updated agency wide noise screening methodologies
- Integrate more closely with AEDT
- Leverage pre-validated consistent, conservative and credible techniques to complete noise screening analysis in near real-time
- Simplify the workload and user input requirements



System Level Inventory Modeling Update

- We have been working with AJV-114 and MITRE to develop an integrated and automated approach to developing AEDT-ready data from NAS raw sources
- The capability will satisfy two requirements
 - Generate the data used to perform the yearly inventory analyses that satisfy the Agency's reporting requirements
 - Provide high quality and consistent baseline data to be used in NEPA analyses
- Current work plan consists of 4 development phases aimed to:
 1. Generating AEDT ready 4D trajectories (x, y, z plus time)
 2. Using the trajectories to generate noise modeling tracks and utilization data
 3. Augmenting the trajectory data with detailed fleet information
 4. Integrating the processes into a single system ready for Technology Transfer to FAA
- ***Phase 1 has been completed and the CY2018 system level inventory currently under way is based on these new trajectory data***



Questions?

