



Systems Engineering & LRASM

FOR 19TH ANNUAL NDIA SYSTEMS ENGINEERING CONFERENCE

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LRASM Deployment Office (LDO)

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LRASM Background



DARPA Demonstration

- 2008- Initiated, Acting on UONS
- 2010- Completed PDR
 - LRASM A: subsonic, low altitude
 - LRASM B: supersonic, high altitude
- 2011- "Down-selected" to LRASM A
 - LRASM A leveraged JASSM-ER heritage
- 2013- Successful Free-flight Demonstrations

Navy Program

- 2011 OASuW AoA
- 2014- USD(ATL) ADM
 - Initiated Program; "pre-MDAP"
 - Streamlined Governance
 - ASN(RDA) MDA
 - Navy PMA-201 as Program Mgr
 - LRASM Deployment Office
 - DARPA Director through Tech Mat
 - Navy Director to EOC
 - EOC
 - B-1 NLT end of FY18
 - F/A-18E/F end of FY19
- 2014- PDR
- 2015- 3rd Free-flight
- 2016- CDR

"Schedule is King" for LRASM



OASuW Acquisition Strategy

OASuW Incr 1

- Interim, gap-filling capability
- “Speed to the Fleet” critical
- Leverage DARPA LRASM Demo
- Air-launched only, limited launch platforms
- Ends with EOC

OASuW Incr 2

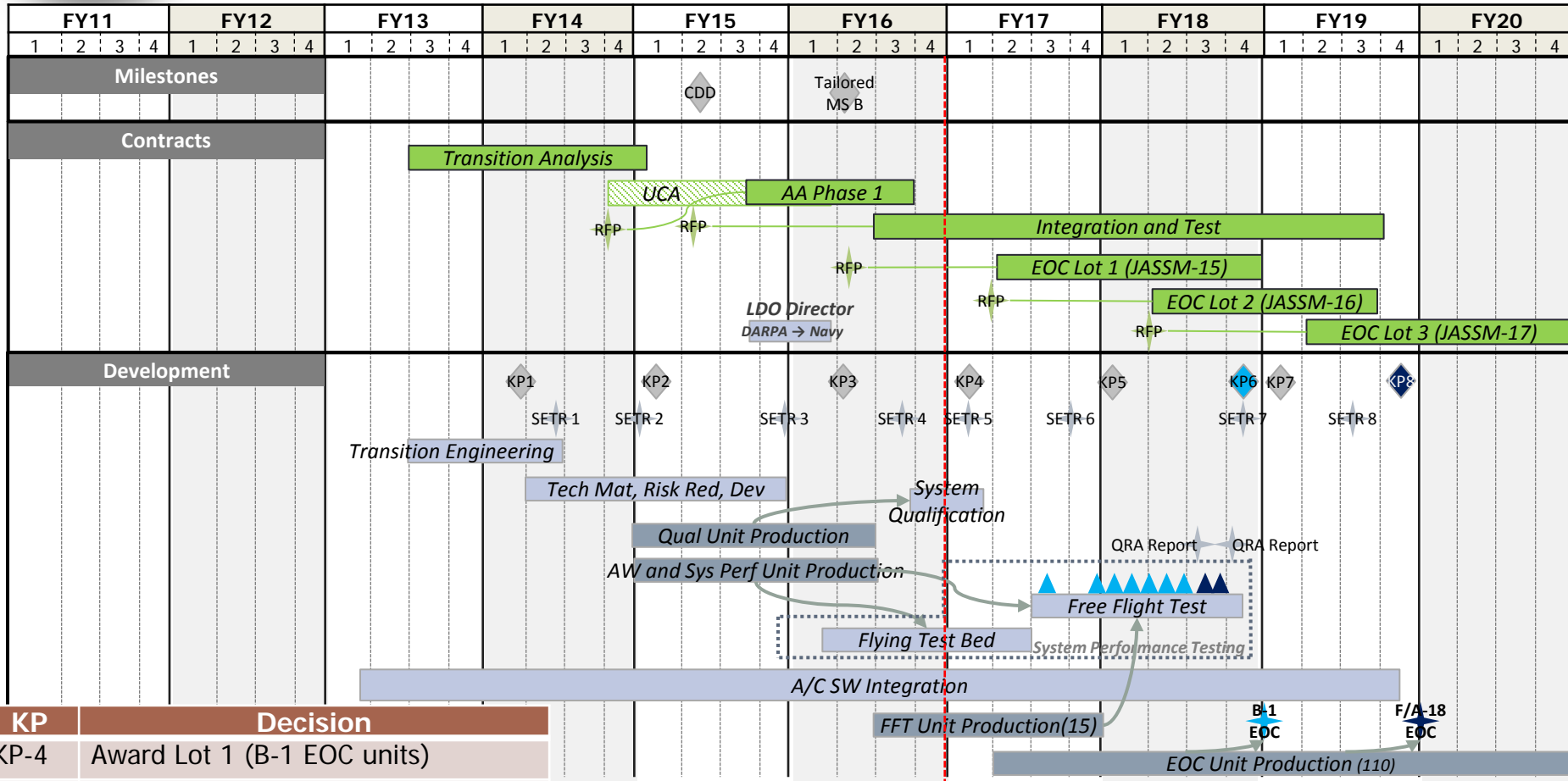
- Longer-term & broader OASuW requirement
- Broader solution set



LRASM as “Gap-Filler” for OASuW Requirement



OASuW Increment 1 / LRASM Schedule



KP	Decision
KP-4	Award Lot 1 (B-1 EOC units)
KP-5	Award Lot 2 (F/A-18 EOC units)
KP-6	EOC Recommendation for USAF
KP-7	Approval to award Lot 3
KP-8	EOC Recommendation for USN



Lessons Learned

- Critical Thinking
- Active Risk Management
- Transparency & Over-Communication
- Tailor "Up"
- Senior Leadership Involvement Key

- Not Everything can be "Important"
- "Shoot the Flare" Early

Biggest LRASM Lessons Learned Apply to EVERY Program



Successes & Challenges

Successes

- Leveraging Existing Technology
- Maintaining Accelerated Schedule
- Active Risk & Schedule Management
- Defining Model 4
- Teaming with Industry
 - Truly Integrated Team
 - Process Tailoring
 - Risk Sharing

Challenges

- Defining Model 4
- Budget
 - Available Funding
 - Funding Profile Changes
- Team Stability





Streamlined SE Process

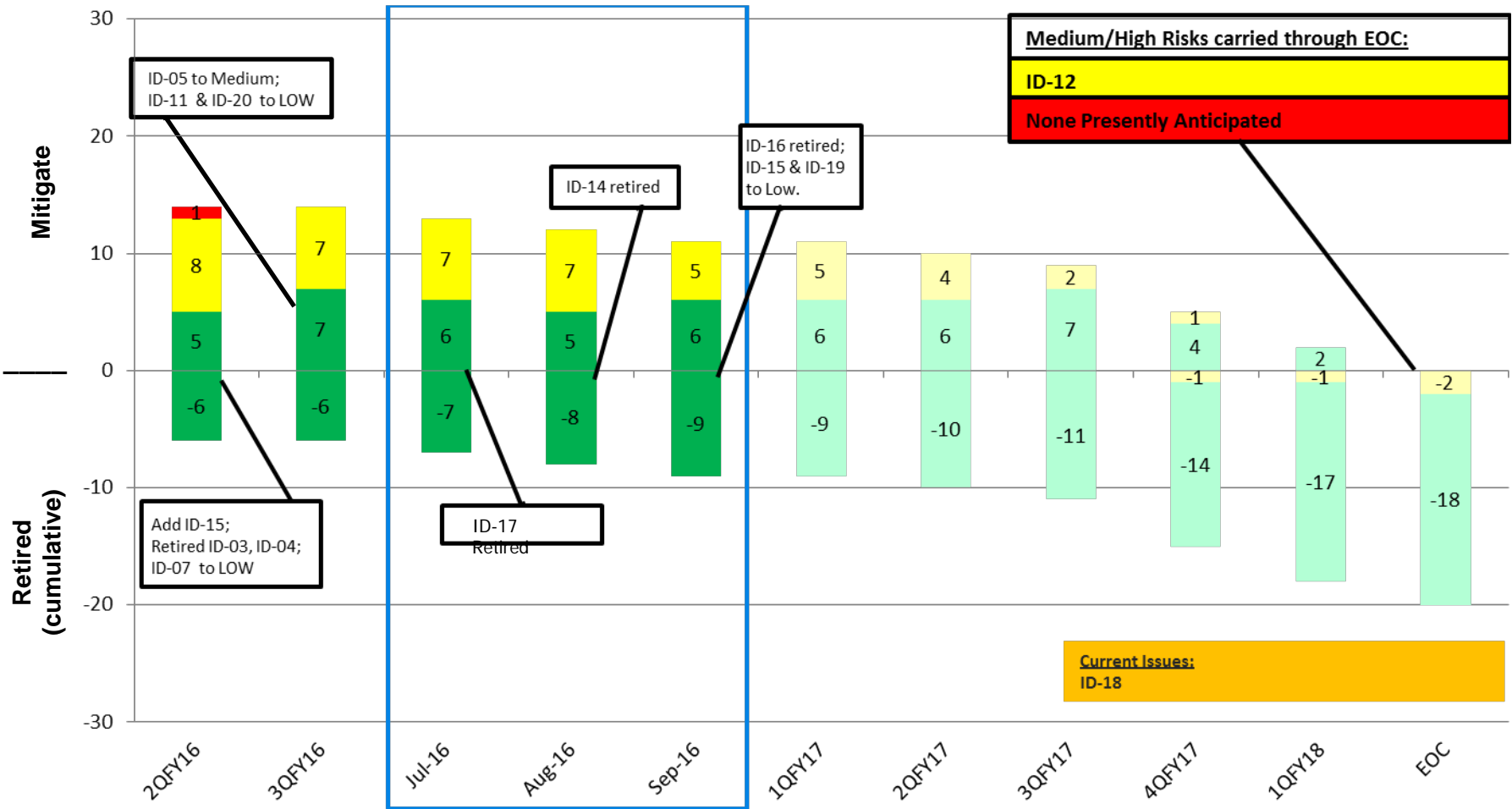
Tailored SETR process

- Managed major SETR events as maturity assessments
- Limited Technical Review Board (8 constant members)
- Technical Warrant Holders (TWH) were not invited to SETR events, they were expected to already be briefed and have buy in
- Minor SETR events were held in between major events so the data transfer was more continual

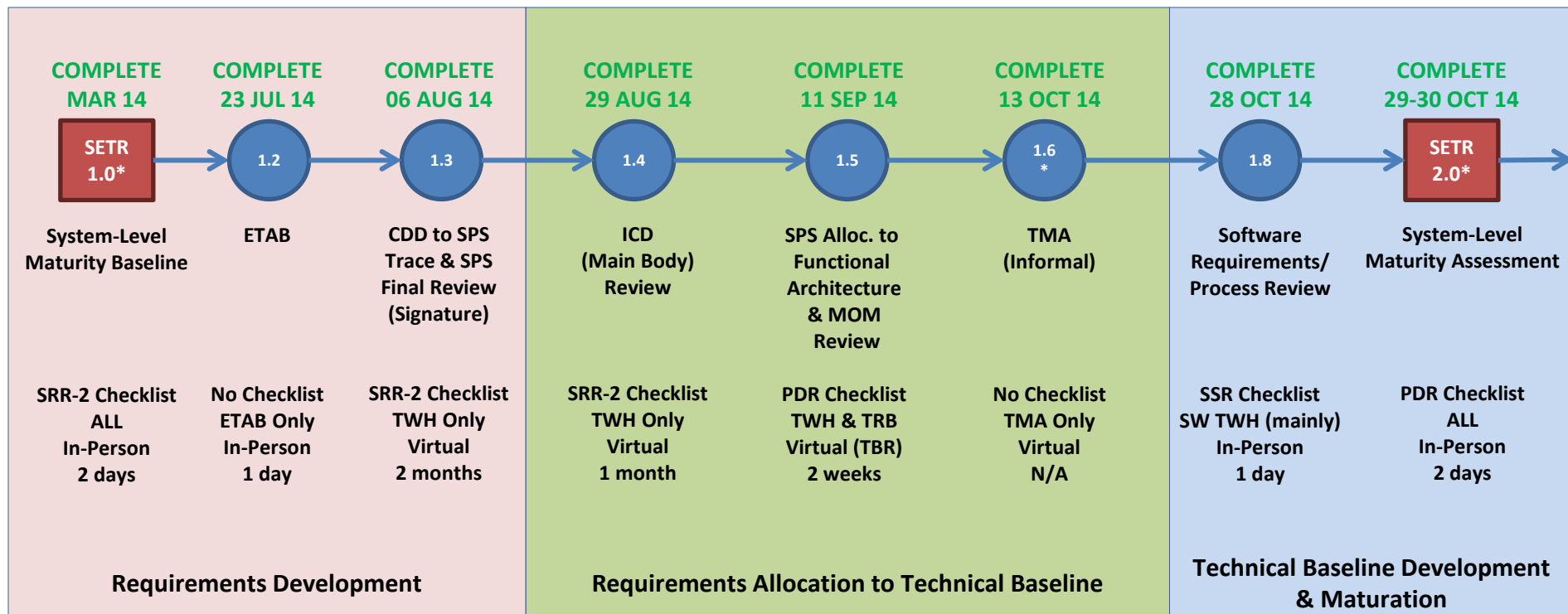
Other processes

- Worked System Safety Risk Assessments very early
- Completely integrated Gov/Cont IMS
- Risk management process integrated into IMS

Risk Burn Down Progress Utilizing Arbitrary Risks



SETR Event Details



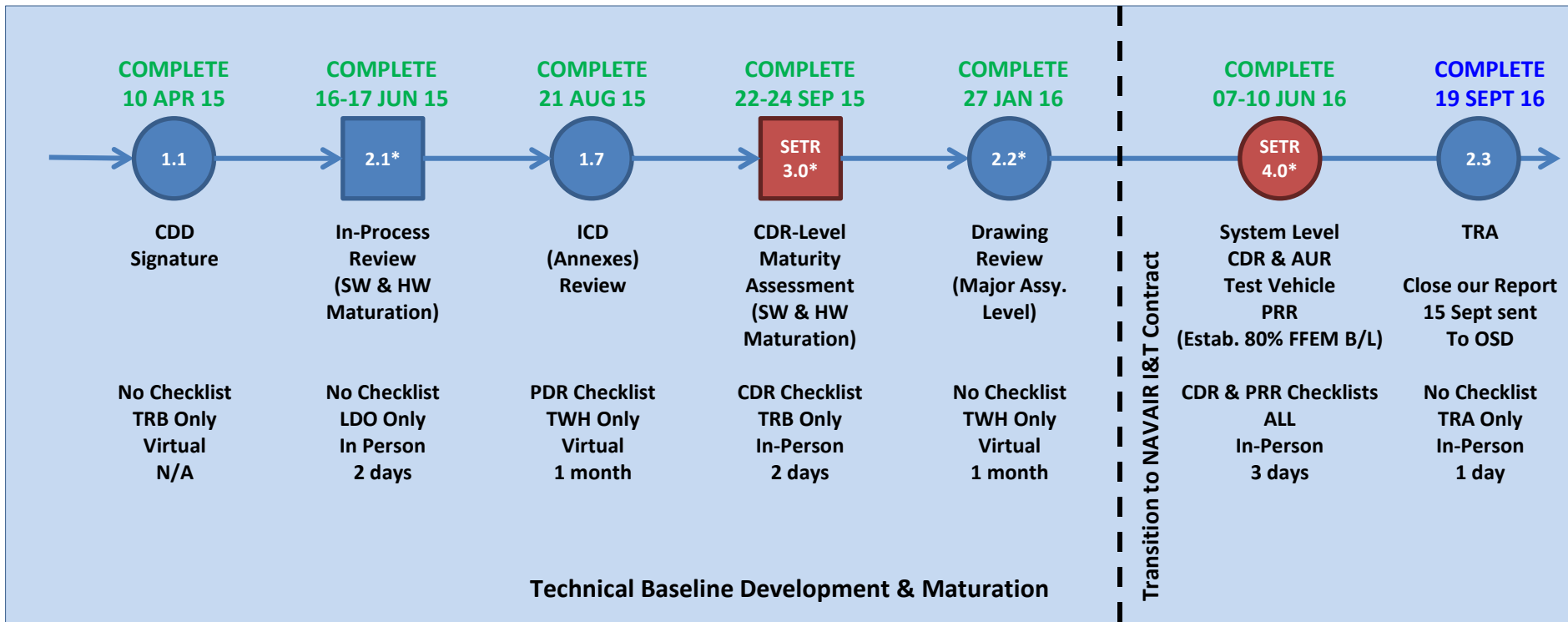
NOTES:

Square denotes schedule-driven, circle denotes event-driven

* Denotes Separate Program-Level Review to be conducted in addition

As of 6 SEP 2016

SETR Event Details



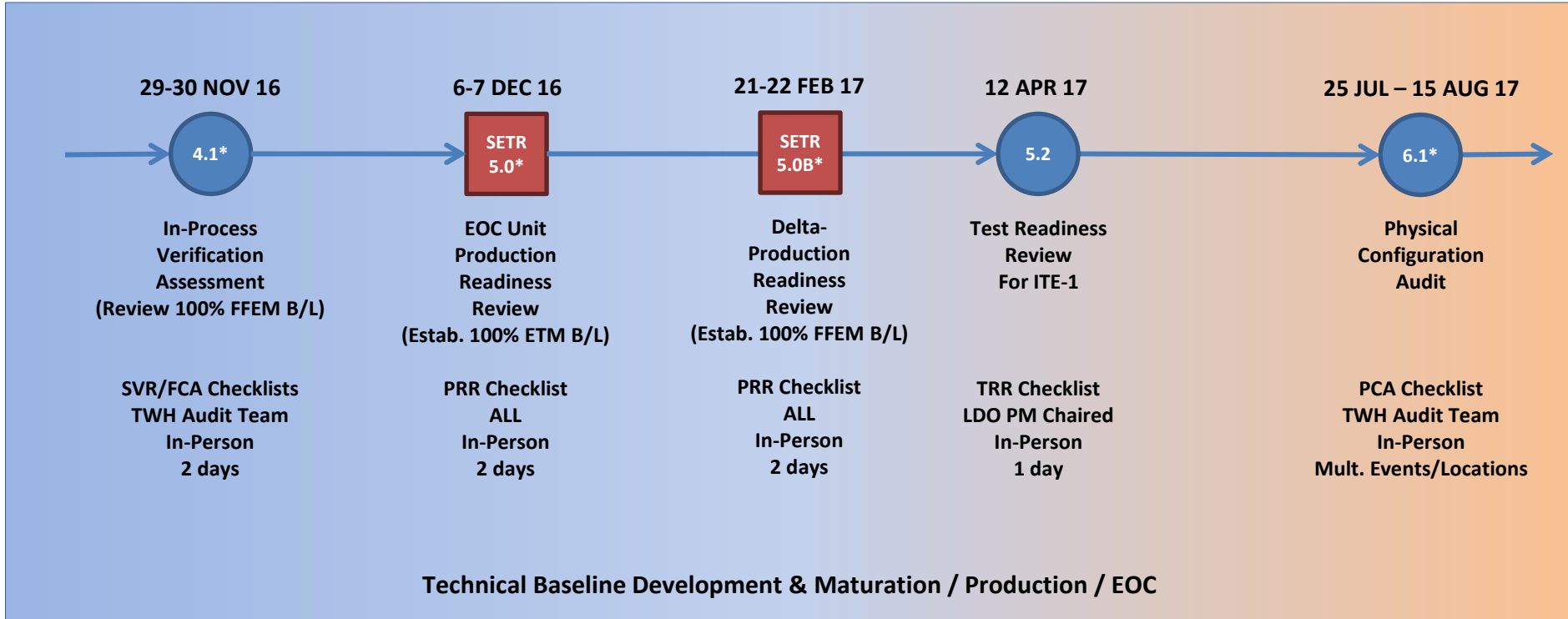
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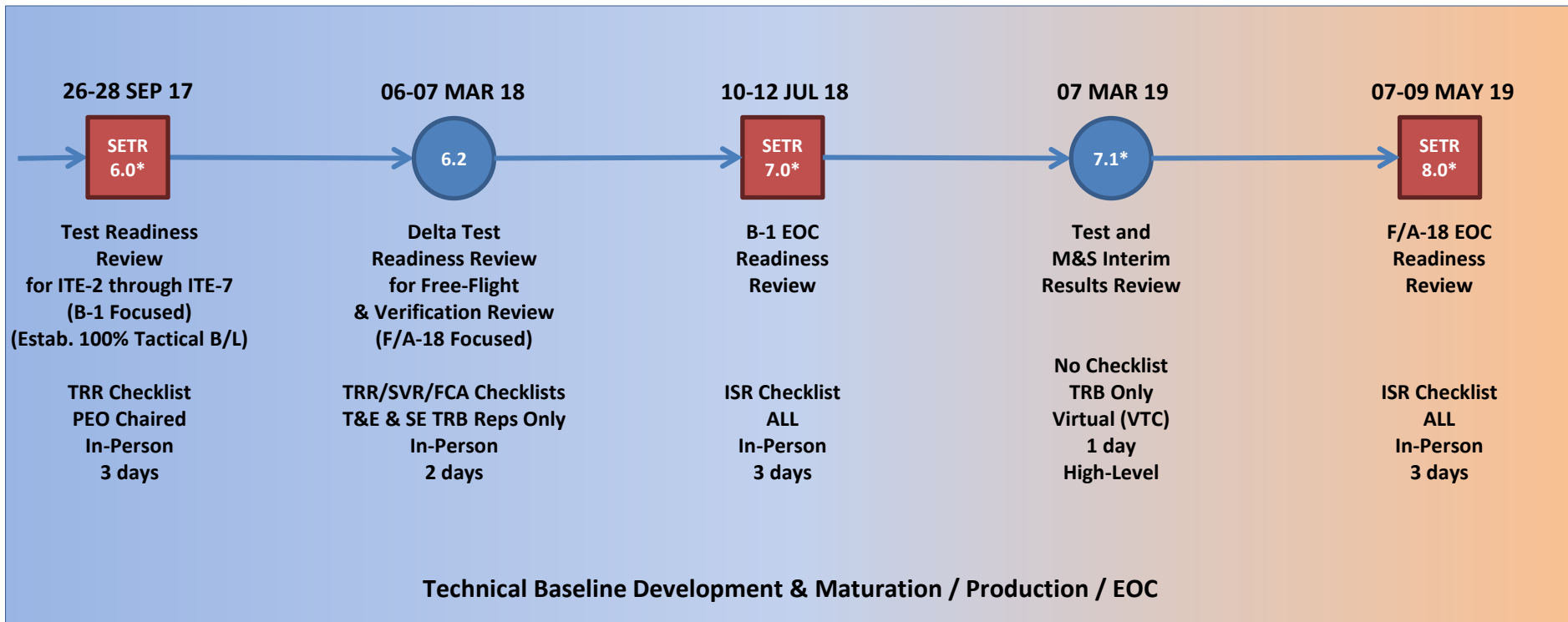


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