

11. Integrated Master Schedule

11.1 Introduction and Ground Rules

The Exploration Systems Architecture Study (ESAS) Integrated Master Schedule (IMS) is an integrated, logically connected set of activities and milestones. There are 22 separate individual schedule networks that make up the IMS. The major individual logic schedule networks are:

- ESAS Systems Engineering and Integration (SE&I),
- Crew Exploration Vehicle (CEV),
- Crew Launch Vehicle (CLV),
- Cargo Launch Vehicle (CaLV),
- In-Space Transportation Systems (includes the Earth Departure Stage (EDS) and Lunar Surface Access Module (LSAM)),
- In-Space Support Systems (includes communication and navigation activities),
- Launch Operations and Ground Support Systems, and
- Mission Operations.

Key Ground Rules and Assumptions (GR&As) are listed below:

- The ESAS IMS reflects the recommended launch scenario for the ISS and lunar missions/flights.
- The ESAS IMS includes all activities from the test and evaluation plan outlined in **Section 10, Test and Evaluation**.
- The ESAS IMS includes activities associated with all CEV Block options.
- The CEV Crew Module (CM) is reusable.
- The Automated Rendezvous and Docking (AR&D) module is reusable.
- The CEV Service Module (SM) is expendable.
- The CEV Launch Escape System (LES) is expendable.
- Design, manufacturing, assembly, and test for CEV will continue until the first crewed CEV mission to the International Space Station (ISS) (ISS-1).

11.2 Summary IMS

The schedule shown in **Figure 11-1** summarizes the activities/milestones associated with the ISS flights/missions and the initial lunar landing flights/missions in 2018. The more detailed ESAS IMS is provided in **Appendix 11A, Detailed Integrated Master Schedule**.

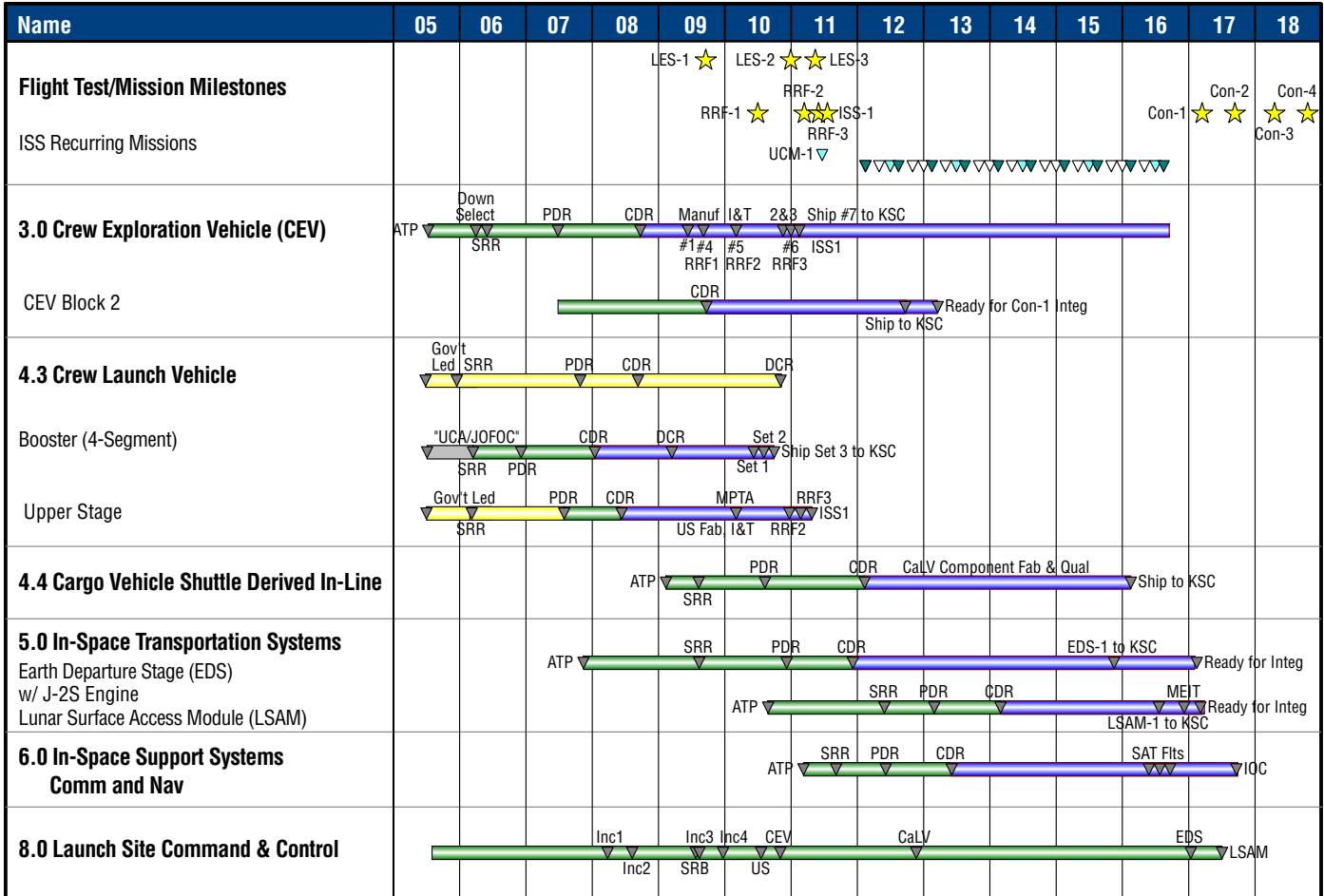


Figure 11-1. Summary IMS