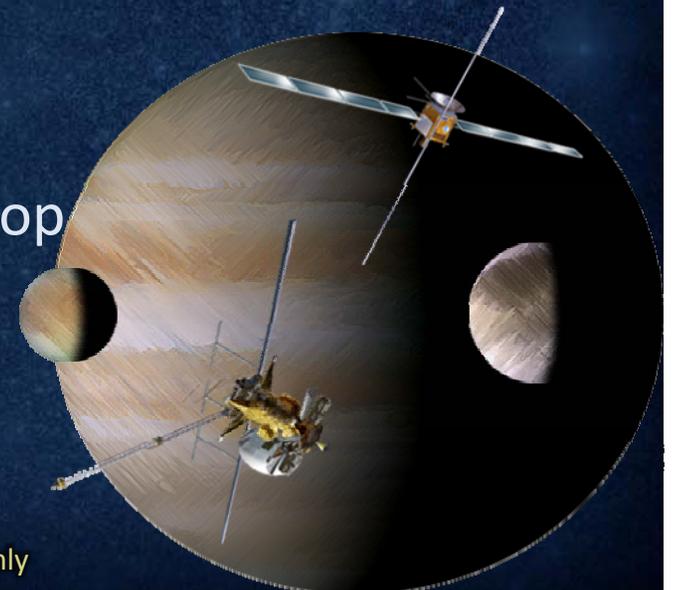




Step 2 Description

Curt Niebur
EJSM Program Scientist
NASA Headquarters

EJSM Instrument Workshop
July 27-29, 2010





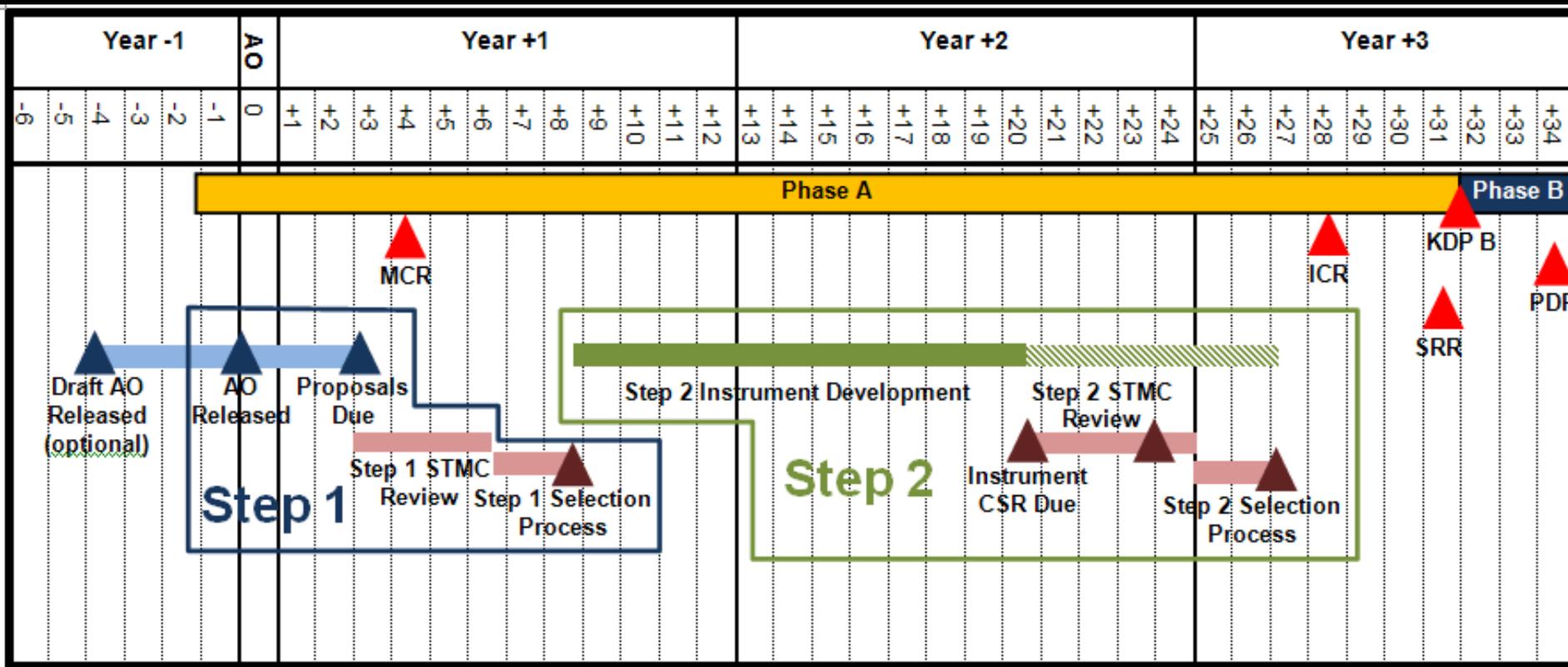
Overview of Step 2

- Goal of Step 2 is to produce a robust instrument concept that is suitable for the JEO mission and is ready to proceed to Phase B
- During Step 2 the selected instrument concept teams will revise their plans based on the review results and execute them
- Access to the technical expertise and testing opportunities of the Project Office will be critical to a successful Step 2 effort
 - The Project Office will designate Subject Matter Experts (SMEs) in specific areas who are behind the firewall to answer questions from the selected instrument teams on technical issues
- Instrument concept teams will also work with the broader EJSM Science Team independently selected by NASA to refine the science scope
- All teams will submit an instrument Concept Study Report (CSR) for independent review

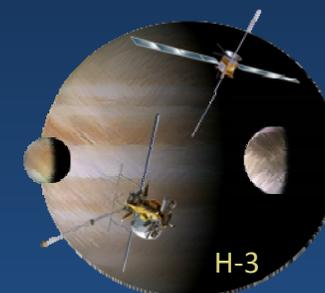




Step 2 Schedule



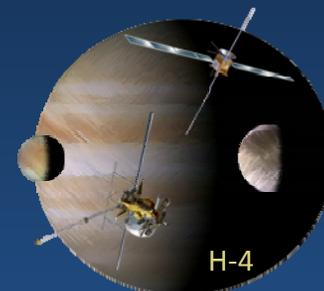
- All dates are notional and fixed relative to AO release date
- Release of draft AO is optional





Step 2: Kickoff and Execution

- Step 2 begins at kickoff meeting in early FY12
 - Final process, parameters, and schedule of Step 2 effort will be described
- Step 2 effort lasts approximately 1 year during which instrument concept teams execute their implementation plans
 - Teams have the option of posing technical questions to firewalled Project SMEs (e.g., radiation design, shielding, instrument accommodation) (*details in the **Project Interactions presentation***)
 - Teams have the option of using test facilities reserved by Project for parts and sensor testing (*details in the **Project Interactions presentation***)
 - Teams have the option of working with broader Science Team to integrate broader science investigations
- Instrument CSRs are due in early FY12





Step 2: CSR Evaluation and Selection

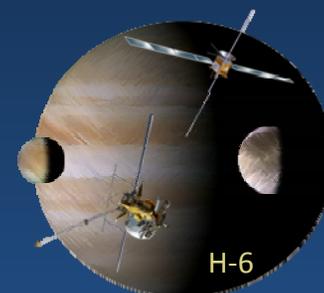
- Similar to Step 1, evaluation of the CSRs will consist of
 - Science panel to evaluate the scientific merits of the proposal
 - TMC panels to evaluate the technical, management, and cost portions of the CSRs
 - At the request of the HQ Program Scientist, the Project Office will provide an integrated payload accommodation assessment to understand how selected combinations of instruments may impact the mission design and/or project resources
 - This assessment will be done independently of the TMC evaluation; it will be used as an additional selection factor
- Based on review of CSRs, TMC panel will provide questions to instrument concept teams which are answered at face to face CSR Reviews between TMC panel and instrument concept teams
- Further details in the *Evaluation Process presentation*
- Once the CSR evaluation is complete the standard selection process will be used and teams notified and debriefed





Step 2: Team Activities during Evaluation

- NASA recognizes the value of keeping teams intact during the Step 2 evaluation process and plans to maintain funding during this time
- CSR Reviews between instrument concept teams and TMC are expected ~3 months after CSR submission to address submitted TMC questions
 - Instrument concept teams will be funded during this period to prepare for the CSR Review
- Selection is expected ~3 months after CSR Reviews start
 - Instrument concept teams will be funded during this period to continue preparations for KDP B
 - Project office will provide SOW and list of deliverables





Step 2 Expectations

- Goal of Step 2 is to produce a robust instrument concept that is suitable for the JEO mission and is ready to proceed to Phase B
 - “Suitable” means the instrument can accomplish its science in the mission environment and can be integrated into the spacecraft
 - “Ready” means that you have ~6 months after final selection to prepare for a successful KDP B
 - Among other things, this requires a realistic cost estimate, a plan to reach needed TRL, etc. as defined in CSR guidelines

