



Mars Exploration Program

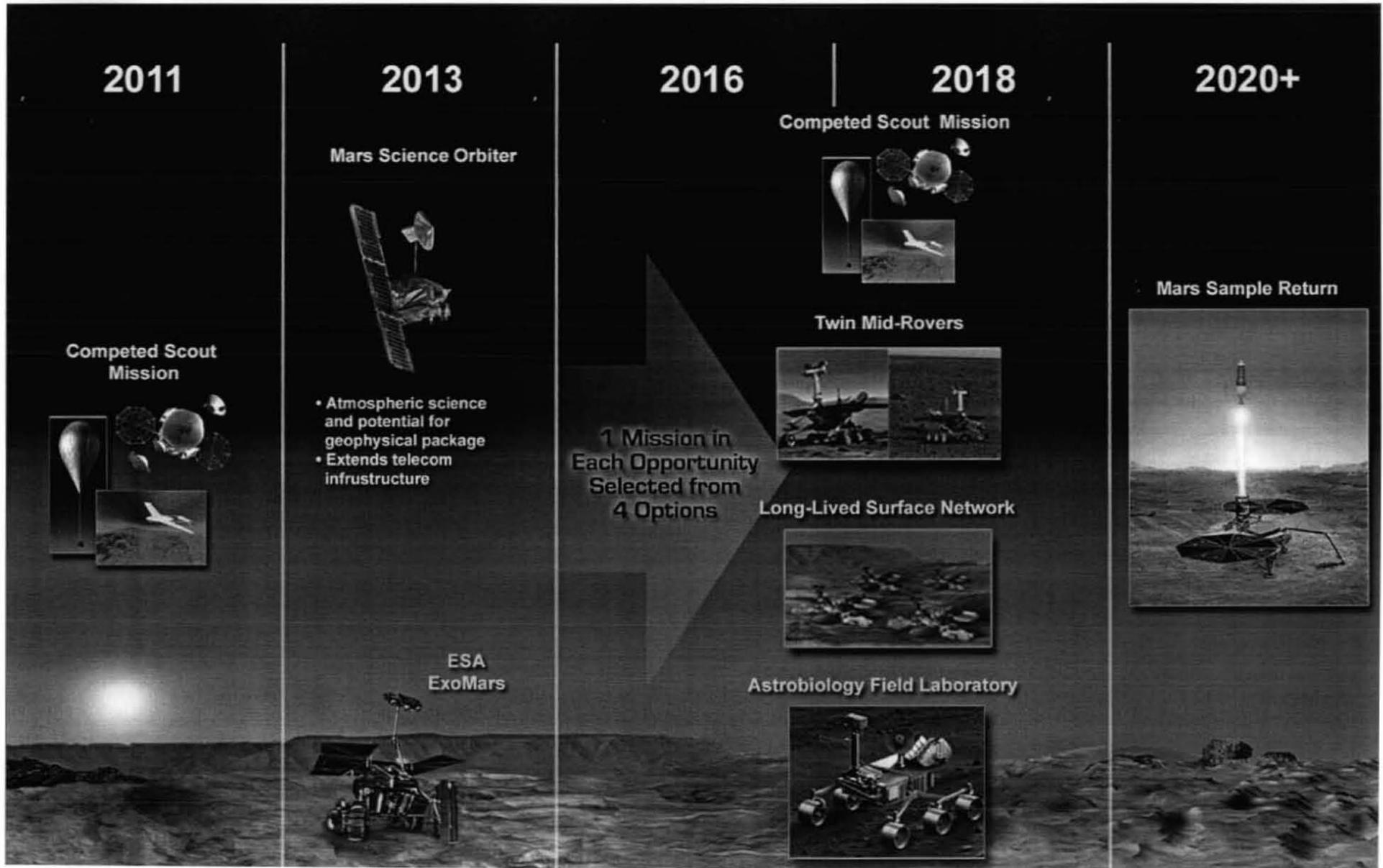
2007-08 Science Planning, with MEP Requests of MEPAG

David Beaty and Michael Meyer

January 9, 2007

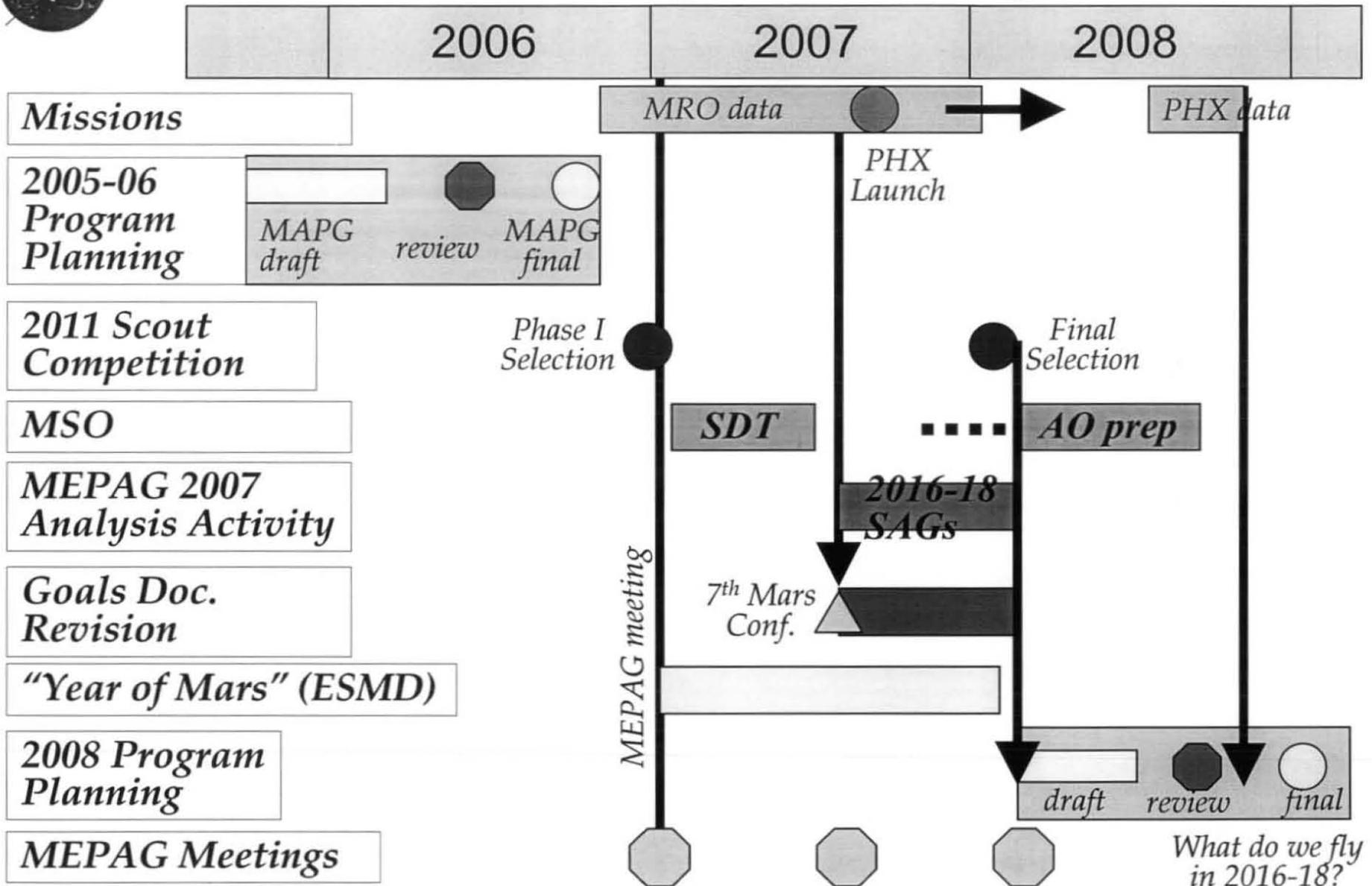


Mars Program Architecture: Next Decade





Mars Program Planning





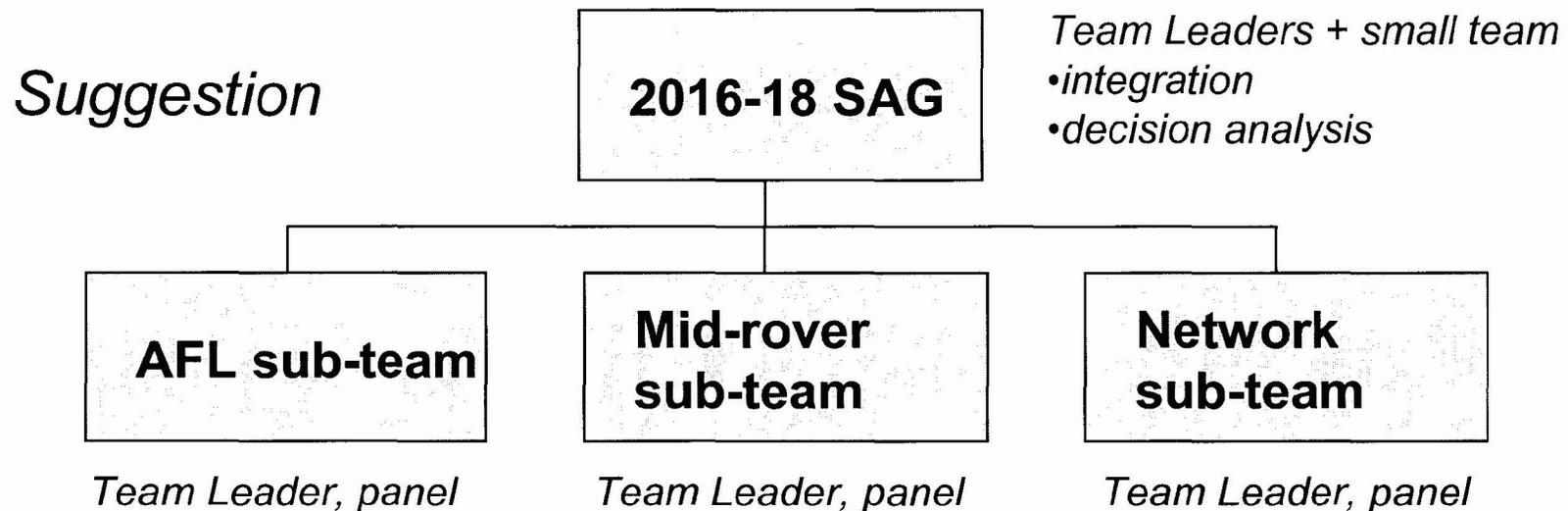
Mars Science Orbiter

- Jan. 2007 (if necessary): MEPAG SAG to generate analysis of the primary contingency options the payload of MSO
 - Orbital geophysics
 - Landed solid planet geophysics package
 - Orbital camera (to support future landing site studies)
 - “Safe on Mars” payload element (e.g. wind studies)
- Spring, 2007: MSO Science Definition Team convened by HQ
 - Receive above analyses from MEPAG
 - Prepare one or more options to accommodate various final Scout '11 selection possibilities
- early 2008: Decision on MSO configuration/scope, begin preparing MSO AO



2016-18 Planning Teams

- MEPAG SAG to generate analyses of the three primary options for 2016-2018 (as defined by MAPG, 2006)
 - Astrobiology Field Lab
 - Mid-Rovers
 - Network
 - In addition, analyze the decision process that will lead to the selection of what to fly in 2016.





Revision of the Goals Document

- MEPAG Goals Document is now in its fourth edition
 - 2001: original
 - 2004: major revision
 - 2005: minor maintenance
 - 2006: minor maintenance
- Since 2004, we have learned a great deal about Mars from MER, MEX, ODY, MGS, MRO, and the R&A programs.
- It is time to reconsider
 - The basic scientific strategies embodied in the Goals Document
 - The structure and priority of the scientific objectives and investigations
- A good trigger for this activity is the 7th International Conference on Mars.



Program Planning—next phase

- The next round of Mars Program Planning needs to incorporate
 - The decision on the Scout 2011 competition
 - The decision on the scientific objectives and scope for MSO (which will be the basis for its instrument competition)
 - MEPAG's detailed analysis of the primary options for 2016-2018, and an analysis of the decision logic
 - MEPAG's update of the scientific objectives and investigations, and their priority
- All of the above should be available by the end of 2007, and will constitute inputs to the next program planning iteration
- Program planning activity (2008) will be chartered by MEP, with regular iteration with MEPAG, PSS, and COMPLEX.



Summary of 2007 MEPAG requests

- MSO SAG to prepare inputs to SDT (if necessary).
- 2016-2018 SAG to analyze the planning options for 2016-2018 in detail.
- Update the MEPAG Goals Document
- Support the next round of program planning, as requested



Backup



MSO Anticipated Schedule

