

National Aeronautics and
Space Administration



NASA Response Plan to NRC Report and Discussion

NAC Technology and Innovation
Committee Meeting

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March 6, 2012

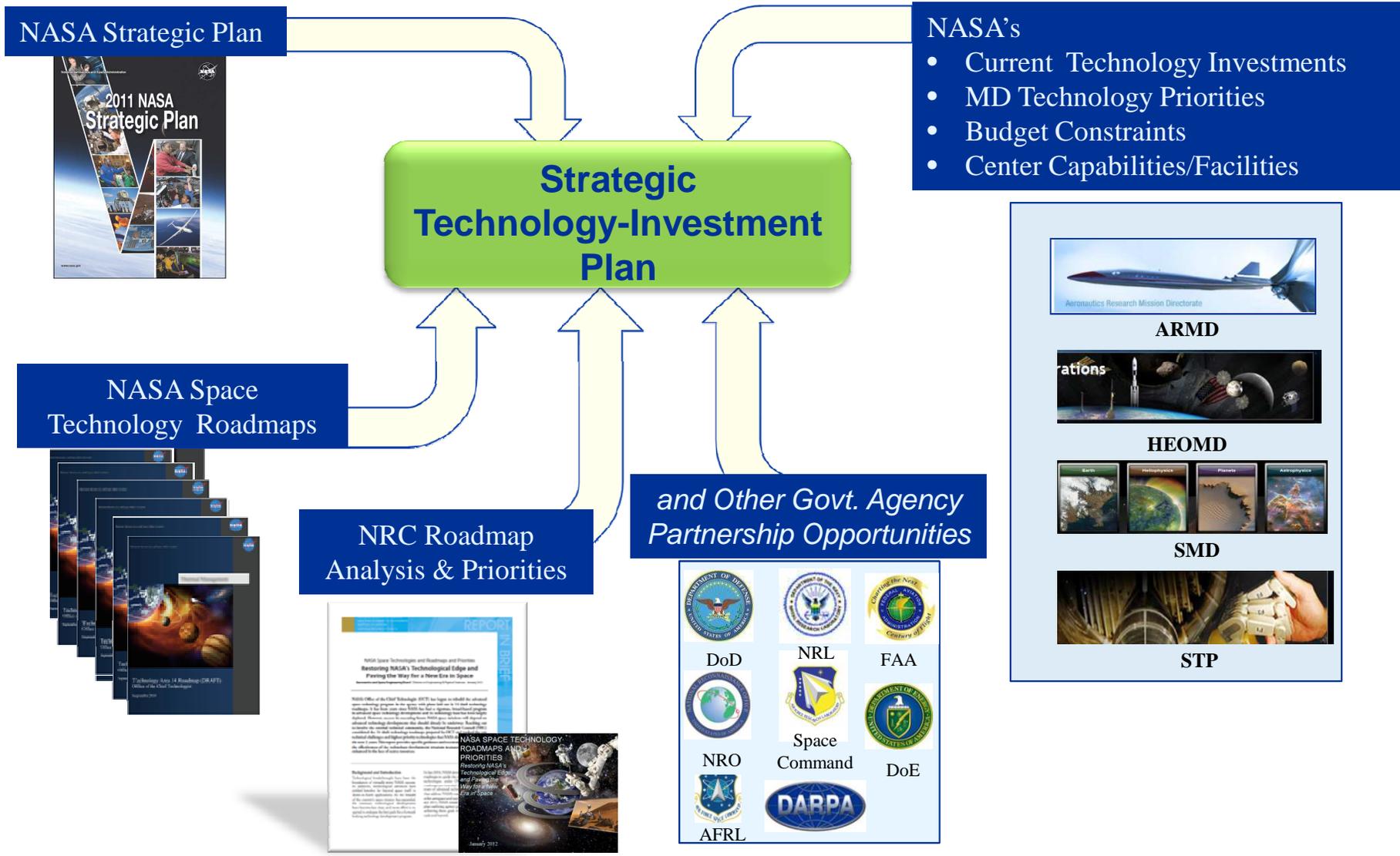


NASA Technology – A Path Forward

- **Success in executing future NASA space missions will depend on advanced technology developments.**
- **NASA technology development efforts must address the needs of NASA's missions, enabling human exploration, scientific discovery, as well as contribute to critical national and commercial needs in space technology.**
- **Technologies prioritized in the NASA Space Technology Roadmaps and the NRC study represents a foundation upon which NASA can build a 4-Year NASA Strategic Technology-Investment Plan.**
- **WHAT IS A NASA STRATEGIC TECHNOLOGY-INVESTMENT PLAN?**
 - **A set of strategically linked technology investments**
 - **Planned and managed collectively**
 - **To ensure high priority goals are achieved**
 - **To avoid unnecessary duplication**
 - **To optimize the overall return and infusion**
 - **While maintaining allowable risk, schedule and resource allotments.**



NASA Strategic Technology-Investment Plan





Creating the 4-Year NASA Strategic Technology-Investment Plan

Goal: 4-year Plan to guide Agency's Future Technology Investments.

- Guide Agency calls for technology proposals in FY 2013 to achieve priorities
- Guide Agency technology partnering activities
- Influence portions of the FY 2014 budget request that involve technology programs



Creating the 4-Year NASA Strategic Technology-Investment Plan

Development and Maintenance:

- Create 4-year plan (led by OCT with support from MD/Centers)
- Every year:
 - Provide cross-Agency guidance on aggregate technology-program content
- Every 2 years:
 - Update gap analysis and 4-year Strategic Technology-Investment Plan
 - NAC T&I provides independent sanity check of the plan
- Every 4-years:
 - Update 20 year Technology Roadmap – evaluate state of art (including any new technology breakthroughs), incorporate new Decadals, MD design reference missions, etc
 - NRC evaluation of 20 year Technology Roadmap





Creating the 4-Year NASA Strategic Technology-Investment Plan

OCT SI will coordinate development of NASA Strategic Technology- Investment Plan with support from MD and Center Chief Technologists

- **Finalize MD Technology priorities**
- **Generate list of current Agency technologies development activities/projects**
- **Identify budget constraints**
- **Identify Center technology capabilities/facilities**
- **Identify (OGA, commercial) partners with interest in gap areas**
- **Identifying gap areas**
- **Integrate roadmaps, NRC priorities and recommendations**
- **Prepare 4-year plan to fund technologies in gap areas**



Plan Forward

| Creating NASA Strategic Technology-Investment Plan | Due Date |
|--|----------------------------------|
| MD/Office Technology Priorities | April 30, 2012 |
| List of NASA Tech Development Projects/Activities | April 30, 2012 |
| List of MD/Office Cross Infusion Opportunities | April 30, 2012 |
| List of OGA Shared Needs and Partnership Opportunities | May 30, 2012 |
| Analysis – Agency Technology Investments vs. Gaps vs. NRC report | May 30, 2012 |
| Version #1 NASA 4-year Strategic Technology-Investment Plan for Agency Review | June 15, 2012 |
| Version #2 NASA 4-year Strategic Technology-Investment Plan | July 30, 2012 |
| Independent Assessment of NASA Strategic Technology-Investment Plan (NAC – T&I / Independent Deliberative Panel) | August 1, 2012 – August 15, 2012 |
| Final NASA 4-year Strategic Technology-Investment Plan | September 15, 2012 |

NTEC Discussion:

Redlines /Additions to Plan?

Concur on Plan?