Program Status

- NASA-CNES SWOT meeting held last week, 16th September at NASA HQ

A successful meeting: a commitment on the workshare

1. Accept the proposed joint workshare/responsibilities scenario

2. Authorize the team to execute the proposed short term plan (joint activities)
Workshare Discussion Status

- NASA-CNES SWOT team in agreement on joint workshare/responsibilities
  - Propose following solution to the open workshare issues
    - CNES provides X band data downlink system ground element
    - CNES provides payload SSR
    - NASA provide X band downlink system space element
    - NASA provides KaRIn HVPS (part of HPA)
    - CSA provides KaRIn EIKs (part of HPA)*

* CNES and NASA accept this dependency

- Observatory AIT responsibility to be confirmed following additional study
- Additional workshare/responsibilities details per today’s Partnership Briefing

- CNES contribution 211M Euro/$269M (28% LCC, 3 yrs ops)
- NASA contribution ~535M Euro/$682M (72% LCC, 3 yrs ops)
Next Steps

• Joint mission development planning:
  • Schedule coordination
  • Synchronization of activities and milestones

• Joint mission design studies:
  • Level 2 and Level 3 requirements
  • Studies coordination/ interfaces, consolidated inputs for Phase A industrial contracts
  • Peer reviews

• Workshare
  • Complementary points
    • S/C AI&T option
    • Ground data processing activities

• Joint science studies:
  • AirSWOT preparation and implementation
  • Algorithms activities
  • Cal/ val preparation

• Preparation for MCR/KDP-A
• Development of NASA-CNES Implementing Arrangement extending joint activities beyond Phase A
• Securing CSA commitment to contribute ELKs and other items (Letter of Intent and Implementing Arrangement)
CNES has allocated an additional Phase A budget to cover activities from now to Mid 2012.

Phase A funding will be mainly devoted to the following activities:
- SWOT Satellite trades and design
- KaRIN RFU design and Ka band receivers for interferometric radar
- Data processing and simulation activities
- Airborne campaign support
- Science Team activities support

CNES Phase A activities need to be synchronized with adequate JPL support:
- Satellite activities (Spec., Interfaces, env. requirements)
- RFU requirements and interfaces
CNES Program Status

- **CNES response to partnership:** a substantial augmentation of the CNES budget contribution to SWOT mission 211 M€

- **2 sources of budget**
  - Investment Program: SWOT program submitted on August, 27th

- **The Investment Program drivers**
  - Innovative aspects
  - Economical aspects are relevant and important for the program
  - Flight in 2019 (LRD)
  - Constrained framework: respect the fixed budget
  - Regular reporting (each three month)
  - Result expected in November
  - Need to be on the same timeline with NASA and JPL
NASA Program Status

- Jointly CNES-NASA have immediate goals from this meeting:
  - Reach general agreement on near-term implementation priorities
  - Provide science guidance to the project, where needed, to make progress on “Next Steps” just described
  - Agree on the strategy and schedule for joint development/solicitation of a SWOT Science Definition Team (SDT)

- NASA SWOT FY11 Budget determined in late 2010 after Earth Science Division review of Decadal Survey Mission progress reports

- Prepare for a Mission Concept Review and Key Decision Point A (Phase A Entry Point) in summer 2011.
Joint Science: Formulation

Develop a draft joint NASA/CNES solicitation with common objectives. Main components:

- Primary thematic science (Oceanography and Hydrology)
- Secondary thematic science (Coasts, Cryosphere, etc)
- Risk reduction/simulation (Airborne program)
- Algorithms and Models (supporting SWOT products and services)

Complete community guidance using “Vision, Goals, and implementation for the Future of SWOT” (Draft document edited by Doug Alsdorf, draft version 26th August)*

*To be discussed during the SWG, 23rd and 24th September in Paris
Joint Science: Near Term Actions

Develop a timetable for joint SDT solicitation and selection

Formulate plans for joint science data processing
  – Linked to the SDT implementation plan
  – Several R&D actions are ongoing

Support development of NASA / CNES AirSWOT
  (Airborne technology and field campaigns)
QUESTIONS???
Next Steps

• **Joint mission development planning:**
  • Schedule coordination
  • Synchronization of activities and milestones

• **Joint mission design studies:**
  • Level 2 and Level 3 requirements
  • Studies coordination/ interfaces, consolidated inputs for Phase A industrial contracts
  • Peer reviews

• **Workshare**
  • Complementary points
    • S/C AI&T option
    • Ground data processing activities

• **Joint science studies:**
  • AirSWOT preparation and implementation
  • Algorithms activities
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• **Preparation for MCR/KDP-A**
• **Development of NASA-CNES Implementing Arrangement extending joint activities beyond Phase A**
• **Securing CSA commitment to contribute EIKs and other items (Letter of Intent and Implementing Arrangement)**