CII Origin and Charter

Origin
• NASA’s Earth Science Division (ESD) has/will be developing secondary payload Earth Science instruments that will need to be paired with a future mission or Hosted Payload Opportunity (HPO).
• Instrument and HPO development will initially be independent.
• How can we help instrument developers propose smarter concepts?
• How can we influence an increased probability of matching instruments and HPOs?

Charter
• Characterize the commercial spacecraft industry accommodations.
• To develop a set of common instrument interface guidelines for secondary Earth Science instruments that will improve the matching with hosted payload opportunities.
• Identify potential hosted payload opportunities that the secondary Earth Science instruments could be matched with.
Approach

- Since 2010, CII has been working with industry, academia, other government agencies, and international partners to develop instrument interface guidelines and to identify potential hosted payload opportunities to help the matching of instruments with hosted payload opportunities.

- CII has held two previous workshops (April 2011, June 2011) to engage instrument developers and spacecraft bus owner/operators to solicit feedback and to develop the CII guidelines.

- Initial workshops focused on LEO HP interfaces and accommodations.

- Baseline version of CII HP Guidelines released in November 2011.

- GEO Hosted Payload Opportunities & Accommodations RFI released March 2012.
GEO HP Opportunities & Accommodations RFI

- Identify the GEO HPO’s for the period from 2013-2023
- Obtain a description of available HPO payload accommodations on future GEO HPO’s
- Obtain information on all of the steps required to fly the notional GEO Pathfinder Initiative
  - Provide timeline for contract start and instrument delivery based on launch date
  - Identify government-provided deliverables
  - Provide ROM price estimate (I&T, launch, ops, total)
  - FAR Part 12 T&C concerns
  - Concept of Ops including communications architecture
- S&MA
Properly-marked proprietary information has been and will be safeguarded.

CII intends to utilize the non-proprietary portions of Hosted Payload Opportunity information to update the publicly available HPO database.

CII intends to utilize the non-proprietary portions of the Payload Accommodations to bound/envelope the payload accommodation parameters that will inform the future GEO Guidelines document.

NASA may also use these non-proprietary portions to assess the suitability of hosted payload-to-spacecraft matches associated with future NASA Earth Science missions.

CII will use the requested information for the GEO pathfinder initiative to assess the feasibility of such an Initiative, to provide an overview of the hosted payload process in the Guideline document, and to inform future planning and activities.
Schedule

- May 2012: GEO Hosted Payload Opportunities and Accommodations RFI Responses Received
- May-Aug 2012: Review of responses, initial draft of LEO/GEO Hosted Payload Guidelines, and continued updates to HP database.
- Aug 2012: CII Quarterly Team Meeting (LaRC)
- Sept 2012: Face-to-Face meetings with RFI responders
- Nov. 26, 2012: Send out latest draft of Guidelines to industry.
- Dec 12-13, 2012: CII Working Group Meeting III (NASA HQ)
- Jan-Feb 2013: Guideline & Database Industry/Peer Review
- CY 2013: Expected Rev A Approval
Engagement

PI’s/Scientists
Academia

Commercial Industry

NASA

esa

HOSTED PAYLOAD ALLIANCE

AIR FORCE: SPAC & MISSILE SYSTEMS CENTER

COMMON INSTRUMENT INTERFACE (CII)

SMD ESP ESSP
In Summary: CII Tenets

- **Transparency**: CII is dedicated to engaging the commercial industry and government partners in an open dialogue.
- **Responsiveness**: We hear you!
- **Flexibility**: Our goal is to provide guidance to help make instrument teams smarter; not establish requirements for them.
- **Realism**: Instrument designs outside of CII’s technical guidance does not represent a cliff. Such instruments may very well be accommodated with additional resources that offset the impact to existing HPO designs.
QUESTIONS / DISCUSSION