



CII Hosted Payload Opportunity Database

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WORKING GROUP MEETING FEEDBACK



Overview



- Goal: Better understand HPO Market
 - Distribution of HPO orbits
 - Launch tempo
 - Industry players
- Answers questions for customers:
 - Prospective Instrument Developers: what are likely orbits available for science?
 - ESD Flight Programs: given a selected instrument, who might be available to host?
- Acknowledged Limitations
 - Public information horizon surrounding commercial GEO HPO's only about 3 years
 - Not all HPO's publicized
- Content Policy
 - Primary data only
 - No NASA analysis, assessment or forecasts
 - Users should independently validate data



Sources



- Public Information
 - Industry / Government Press Releases
 - Trade Press Articles
 - CEOS Database
- Proprietary Information
 - RFI Responses
 - Independent Communication with Industry
 - Sanitized from Public Database Views



Information Presented



Mission Name	Launch Date
Launch Vehicle	Launch Site
Orbit Type	Orbit Height of Apogee/Perigee
Orbit Inclination	Orbit Longitude
Primary Owner/Customer/Agency	Secondary Owner/Customer/Agency
Operator	Operator POC
Spacecraft Bus	Spacecraft POC
Mission URL	Remarks
Information Source	Date Record Last Updated



Downloadable PDF File



Common Instrument Interface Hosted Payload Opportunity Database

1/3/2012

Page 1 of 29

Suitability as Hosted Payload Opportunity: Plausible

Launch Vehicle Source: Domestic or TBD

ISS Resource

Launch Date	Mission Name	Primary Owner / Operator	LX	S/C	Orbital Altitude (km)	Inc. (Deg)	Geo. Long. (Deg)	Remarks
2013	Orbital CRS-3	NASA / Orbital	Antares	Cygnus	350	51.7		Plausible as hosted payload opportunity. Attached to Cygnus Service Module on one of two external surfaces. Option to become Free Flyer—up to 1 year duration, including ISS resupply, once CRS mission complete—contingent on agreement with Orbital Sciences Corporation via ISS Commercial Cargo Office (ISC-ON, 381-244-7626). Any hardware that utilizes ISS launch vehicles or the ISS vehicle itself is considered to be an ISS Resource, regardless of whether the payload is deployed prior to ISS rendezvous, and must comply with all applicable requirements levied by the ISS Program Office. Contact ISS Payload Office (ISC-OI) for transportation to become ISS Payload.
2013	Orbital CRS-4	NASA / Orbital	Antares	Cygnus	350	51.7		Plausible as hosted payload opportunity. Attached to Cygnus Service Module on one of two external surfaces. Option to become Free Flyer—up to 1 year duration, including ISS resupply, once CRS mission complete—contingent on agreement with Orbital Sciences Corporation via ISS Commercial Cargo Office (ISC-ON, 381-244-7626). Any hardware that utilizes ISS launch vehicles or the ISS vehicle itself is considered to be an ISS Resource, regardless of whether the payload is deployed prior to ISS rendezvous, and must comply with all applicable requirements levied by the ISS Program Office. Contact ISS Payload Office (ISC-OI) for transportation to become ISS Payload.

Assumptions and Caveats

Data derived from open source information found on public Internet to provide high-level overview of Earth-orbiting satellite market. Data are neither validated with primary source nor guaranteed. Missions may transition from Implausible or Unknown Suitability to Plausible following further research. Information on ISS manifest provided for convenience only. For questions associated with ISS Payloads or payloads flying on ISS resources, please contact the Manager of the ISS Technology Demonstration Office, Dr. George C. Nelson (ISC-OE111), 381-244-8514.

LEGEND

Orbit Domains: ISS (International Space Station), LEO (Low Earth Orbit), GEO (Geostationary Earth Orbit), MEO (Medium Earth Orbit), HEO (Highly Elliptical Orbit), SSO (Sun Synchronous Orbit)
Hosted Payload: a payload manifested on a free flying spacecraft but ISS Payload: a payload designed to interface/attach directly to ISS.

- 8 ½" x 14" layout document showing most relevant fields; display of all available fields constrained by size
- No sorting or filtering capability. Limited search using text string matching
- JAN 2012 edition hosted in EVI-1 Program Library on SOMA website



Work In Progress: Web-hosted Database



Common Instrument Interface Hosted Payload Opportunity Database

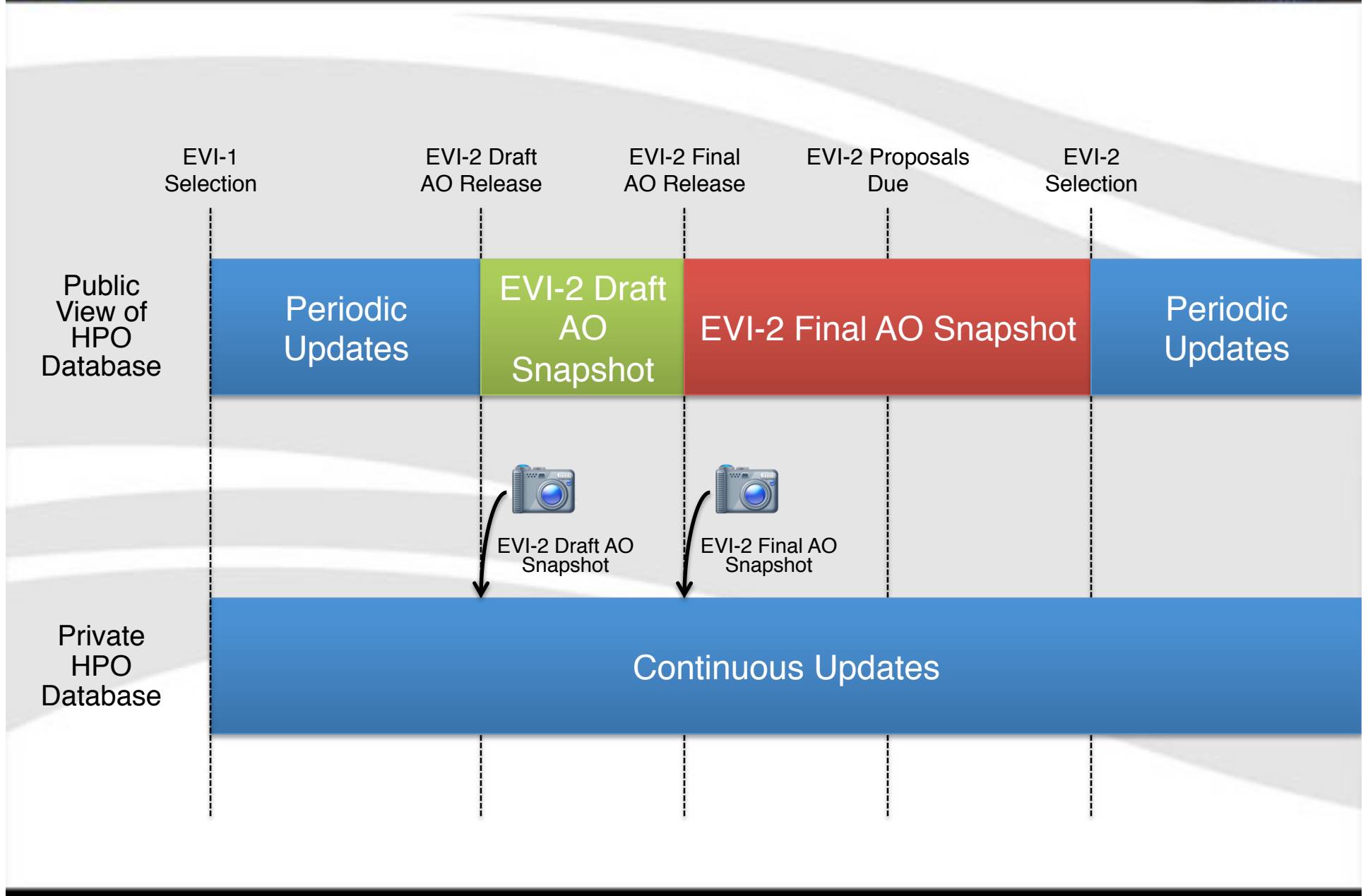
Launch Date	Mission Name Short	Full Mission Name	Orbit Type	Orbit HA	Orbit HP	Orbit Inclination	Orbit Longitude	Suitability	Primary Owner/Customer/Agency	Primary Owner/Customer/Agency Country	
2/8/1967	Diadème 1	Diadème 1	LEO	1350	569	39.98		Unknown	Centre National d'Études Spatiales	France	Ce d'É
2/15/1967	Diadème 2	Diadème 2	LEO	1881	591	39.45		Unknown	Centre National d'Études Spatiales	France	Ce d'É
2/6/1975	STARLETTE	STARLETTE	LEO	812	812	49.83		Unknown	Centre National d'Études Spatiales	France	Ce d'É
5/4/1976	LAGEOS-1	Laser Geodynamics Satellite - 1	MEO	5900	5900	11.0		Unknown	Italian Space Agency	Italy	Ital
3/1/1984	Landsat-5	Landsat-5	SSO	705	705	98.2		Unknown	United States Geological Survey	United States of America	Un Ce
9/26/1988	TDRS 3	Tracking and Data Relay Satellite System	CEO	35786	35786	11.53	65	Unknown	National Aeronautics and Space Administration	United States of America	Na an Ad
		Tracking and Data Relay							National Aeronautics and		Na

Showing 1 to 100 of 966 entries

Provides server-based sorting, filtering, and searching capabilities.



HPO Database Release Timeline





QUESTIONS / DISCUSSION