Introduction to Ground Data Service Support

First Contact Package
Contents of this Briefing

- Where does POIC fit in your picture?
- What is Ground Data Service Support?
- What is the Ground Support Requirements Team (GSRT) and does it support me?
- What is the HOSC Customer Service Team (CST) and how do they support me?
- What is the POIC Ground Operation Support Team and how does it support me?
- What is the GDS integration timeline?
- What is a CoFR Package?
- What is expected of me?
- POIC Contact Information
- Use POIC Website.
Where Does POIC Fit?

**Payload Developers and Principal Investigators**
- Defines standard ground support service needs as defined in SSP 50305 POIC Capabilities Document
- Defines ground system operating locations
- Defines unique ground support needs

**ISS Research Integration Office (OZ)**
- Development of the Payload Integration Agreement (PIA) Letter’s Ground Data Service Section
- Negotiates funding for non-standard unique ground support requirements

**Ground Support Requirements Team and POIC Customer Service Team**
- Coordinate PIA assessments
- Coordinate detailed support services via GDS Blankbook
- Integrates GDS requirements for implementation, test, and certification
- One stop POC for PD/PI for GDS requirements (all mission phases)

**POIC Ground Support Operations**
- Monitors and configures GDS in support of all customer provided service.
- Troubleshoots and restores service as required.
- Help Desk Support.
- POIC Service Training
Ground Data Service Support

Who is involved in the process?
- The HOSC Ground Data Services (GDS) Customer Service Team (CST)
- The Payload Integration Manager (PIM)
- The PD/PI

Documentation:
- Payload Integration Agreement (PIA) Letter Ground Data Services Section
- SSP 50305, POIC Capabilities Document

What is required:
- Identification of all operating locations
- Identification of all operating location points-of-contact
- Identification of general GDS needs
  - Telemetry/Command
  - Voice
  - Video
  - etc.
- Unique GDS requirements
Ground Support Requirements Team (GSRT)

- Who is involved in the process?
  - The Payload Integration Manager (PIM)
  - The PD/PI

- Documentation:
  - Payload Integration Agreement (PIA) Letter
  - Ground Data Services Section Letter

- What is required:
  - Identification of all operating locations
  - Identification of video, voice, telemetry, and command services
  - Identification of unique GDS needs

- Results:
  - Concurs with standard GDS requests in PIA Letter.
  - Provide cost and schedule impacts to OZ for reconciliation of unique requirements.
  - Documents support commitment in the ISS Program Requirements Document (PRD)
HOSC Customer Service Team (CST)

- The HOSC Customer Service Team is responsible for support the development of your ground data service (GDS) needs
  - Provides detailed explanation of the Payload Operations Integration Center’s (POIC) ground services.
    - Voice
    - Video
    - Command
    - Telemetry
    - Information Management Services (PIMS/OCRs).
    - Payload Planning services (User ISS resource requirements, Data flow plans, etc.)
  - Works with the customer to provide a “best fit” set of POIC ground support services that satisfy the customer’s ground operations concept.
  - Assist the customer with documenting their GDS needs in the appropriate Program Level and POIC requirement documents.
    - Payload Integration Agreement (PIA) Letter
    - Ground Data Service Blank Book
  - Provides cost impacts to optional services or other unique customer GDS needs.
  - Coordinates the creation and integration of all the customer GDS needs with customer’s host support facilities.
  - Ensures Payload Operations team training on POIC GDS.

- Provides a POIC single point-of-contact for GDS needs for the full life cycle of the experiment’s operations.
  - Pre-mission (flight readiness)
  - Mission (GDS need changes)
  - Post-mission (access to stored data service)
POIC Ground Operations Support Team

Marshall Ops (MOPS)

System Controller (SYSCON)
Marshall Data (MDATA)
Help Desk

Integrated Support Team (IST)

Network Management
Systems Management
Data Base Administration
Account Management
Consolidated Maintenance
HOSC Facility
IT Security
Workload Control
Scheduling
Ground Operations Support Team

- Marshall Ops (MOPS)
  - Management of ground operation support to ensure all service are operating per identified service agreements.
  - Manages the GDS Call for Flight Readiness (CoFR) activities.
- Systems Controller (SYSCON)
  - Real time configuration and control of POIC GDS computer services to include troubleshooting and restoration of services as required for all mission, simulation, and test activities.
- Marshall Data (MDATA)
  - Real time configuration and control of POIC data, voice, and video distribution services to include troubleshooting and restoration of services as required for all mission, simulation, and test activities.
- Help Desk
  - Provides customer support for customer POIC to user systems interface problems.
GDS Integration Timeline

Signed PIA Letter
Ground Data Services

**NOTE:**
PIA Identified Optional Services support template varies based on complexity of need.

GDS Blank Book (Each Operating Location)
- Detailed POIC Services request
  - Command
  - Telemetry
  - Information management
  - Voice
  - Video
  - etc.
- Operating Location Network Information
- Operation Personnel Identification (ID)
- Ground System Support Personnel ID
- POIC Account Needs per Person

GDS Services Integration
- POIC Network I/F’s established
- User Accounts established
- POIC Services training
- POIC Services tested
- POIC Account Needs per Person
- Host Facility IT Security Checklist
- Payload Test & Checkout Supt
  - PRCU (JSC, MSFC, GRC, KSC)
  - SDIL (JSC)
  - EPIC II (KSC)

Sim Support
- Sim Ready
- More Payload Test & C/O Supt.

GDS CoFR
- GDS CoFR Checklist

Mission Ready

INC Ops Start

Increment Minus Months
0 1 2 3 4 5 6 7 8 9 10 11 12 13
GDS CoFR Package

- GDS CoFR Checklist Package distributed to all payload operating locations by the POIC Increment Operations Lead.
  - Package identifies services requiring CoFR
  - Package identified CoFR testing certification methodology
- POIC provides access to services 24 x 7 to support CoFR activity.
- Each operating location certifies GDS services by signing CoFR checklist.
PD Team Responsibilities

- Support to GDS HOSC Customer Service Team Rep to identify ground support service needs and GDS Blank Book completion for each ground operations location.

- GDS Support from payload’s host operating location(s):
  - Network management
  - Systems management
  - Security
  - Ground services testing

- Support GDS CoFR activity from each supported operating locations.

- Notify POIC of any ground support or payload operations personnel changes
Contact Information

◆ Ground Systems Requirements Team (GSRT)
  ♦ Philip Cauthen  256-544-4204  philip.cauthen@nasa.gov

◆ POIC Customer Service Team
  ♦ Nick Bornas  256-544-5235  nick.bornas@nasa.gov
  ♦ Dennis Botts  256-544-9363  dennis.botts@nasa.gov
  ♦ Chris Reid  256-544-6880  christopher.g.reid@nasa.gov
  ♦ Karl Roth  256-544-3539  karl.roth@nasa.gov

◆ POIC Ground Operations Leads (Marshall Ops)
  ♦ Hal Greenlee  256.544.6140  hal.greenlee@nasa.gov
  ♦ Neal Mahone  256-544-2157  neal.mahone@nasa.gov
  ♦ Gary Dempsey  256.544.5113  gary.l.dempsey@nasa.gov

◆ POIC Help Desk:  256-544-5066
Useful Website

- HOSC Administrative Portal
  - [https://mgssp.hadm.msfc.nasa.gov](https://mgssp.hadm.msfc.nasa.gov)
    - Requires HOSC Account to access (standard service to all payload ops and support personnel as requested through the GDS Blank Book.
    - Access to POIC Services client applications
      - VPN
      - Remote IVoDS
      - EHS Web
      - TReK
      - EPC
    - Network Configuration requirements in support of POIC services
    - POIC service training materials
    - GDS Documentation
    - Integrated Schedules
    - HOSC Resource Schedules
    - HOSC Problem Reports.