

GLOBAL SPACE TRAFFIC MANAGEMENT WORKSHOP



AUGUST 29, 30 & 31 2017

ROYAL OBSERVATORY, EDINBURGH

MAJOR TAKEAWAYS

1. Handoff from launch to orbit
 - Positive knowledge through transitions
2. Give and take with operators
 - We will give you something great
 - We need a little info to fill in holes
 - Move from broadcast to communication
3. Observation data vs. Information Knowledge
 - Observation should not be classified; derived products can be
 - Difficult to transition to civilian need for safety
 - Basic need for information should not impinge on proprietary
 - Hard line between civilian and military
4. We are not making paper
 - Most useful info
 - What is your pattern of life? This is key info
 - Minimum set of base set data
 - Find you
 - Recover you
 - Protect you going forward
5. Linking Range to STM system
 - Combo active/passive systems
 - Civil SBIRS?
6. Launch flight plan
 - Basic path
 - Pattern of life
 - Observables
7. Growth Path providing benefit to operator and establish buy-in
8. Minimum Requirement for Notification
 - When do I have to tell you I saw something “or when I do something”
 - Space NOTAMS
9. Classification “Typing” of objects
 - aid “object” management
10. Commercial Problem Solver, change detection and dynamic tasking
 - Event detection and characterisation
11. Definition of Catalogue
 - Database vs Catalogue vs Products
12. Blockchain/exchange/decentralised Network
 - Virtual observatory
 - Resiliency & cyber protection
13. We don't want to regulate, but some regulation is inevitable
 - Evolve
 - Regulation → policing

RESEARCH

Research Areas

- Positive ID – Require of operator option of PID
- How small can the “box” for operating in GEO become?
- What is the future role of STM? Safety of Flight or Policing + enforcing

- STM Roadmap

Nothing → awareness → cooperative → policing

- Basic Set of needed info for effective STM
 - Minimum burden

Summary Discussion

- Data you get vs data you want
- Why is “space” so proprietary
- Range – “r”
- “copyright” / data sharing
- Sensitivity analysis for trajectory models
- “due regard”
- Minimise level of compliance
- Responsibilities/phases
- Economics
- Database
- Authorities

FOLLOW-UP PROJECTS

1. Blockchain investigation
2. Roadmap creation
3. Develop Economics model
4. STM Technical demonstration
5. Develop Whitepaper from workshop
 6. Develop flight plan
7. Information sharing repository

NEXT YEARS EVENT

Venue: Edinburgh

Date: 28, 29, & 30 August

Additional attendees

- Satellite Operators
- Space Insurance
- Space Lawyers
- Data providers
- Cyber expertise

Potential topics

- Data Management
- Operator Constraints + Requirements
- Develop the Roadmap