Space Inter-Agency Communications

This document provides information for the person responsible for Inter-agency liaison and communications.

Parties you may need to communicate with

The specific agencies and contacts who you need to work with depend on the nature of the incident (civil, scientific, military, or commercial). The following entities are typically involved in the U.S. context:

PARTIES
NASA (National Aeronautics and Space Administration)   Role: Oversees civil space activities, including satellite operations and orbital debris monitoring.   Key Office: The NASA Orbital Debris Program Office (at Johnson Space Center) and the Office of Safety and Mission Assurance would likely be notified for incidents involving debris or NASA assets.   Contact Point: For emergencies, NASA's Incident Response teams or the Mission Operations Directorate would coordinate internally.
U.S. Space Force (USSF) / U.S. Space Command (SPACECOM)   Role: Manages military space operations and space situational awareness (SSA), including tracking objects in orbit and assessing threats.   Key Office: The Space Operations Command (SpOC) or the Combined Space Operations Center (CSpOC) at Vandenberg Space Force Base would be central hubs.   Contact Point: The CSpOC maintains a 24/7 watch and would likely be the first military point of contact for an urgent incident.
Federal Aviation Administration (FAA)   Role: Regulates commercial space launches and reentries, so it would be involved if the incident involves a commercial operator.   Key Office: The Office of Commercial Space Transportation (AST).
National Oceanic and Atmospheric Administration (NOAA)   Role: Manages weather and environmental satellites; relevant if an incident affects these assets.   Key Office: The National Environmental Satellite, Data, and Information Service (NESDIS).
Department of Defense (DoD)   Role: Oversees broader defense implications of space incidents, especially those with national security impacts.   Key Office: The Office of the Secretary of Defense or the Under Secretary of Defense for Intelligence and Security might coordinate higher-level responses.
National Transportation Safety Board (NTSB)

Role: Investigates commercial space accidents (e.g., launch or reentry mishaps) if they meet certain criteria (e.g., loss of life or significant damage). Contact Point: The Office of Aviation Safety, with its commercial space investigation subpart.
Federal Communications Commission (FCC)
Role: Regulates satellite communications; involved if an incident disrupts licensed communication satellites.
International Partners
Inter-Agency Space Debris Coordination Committee (IADC): A forum including NASA, ESA (European Space Agency), Roscosmos, and others, which might be notified for debris-related incidents. United Nations Office for Outer Space Affairs (UNOOSA): Could be informed for incidents with international legal implications (e.g., under the Outer Space Treaty).
Commercial Operators
Companies like SpaceX, OneWeb, or Planet Labs might be directly involved or informed if their assets are affected, typically through their liaison with the FAA or FCC.

Defined Standards and Processes

While there's no single, universal "urgent space incident notification process" publicly detailed across all agencies, several frameworks and practices provide structure:

- **NASA Mishap Reporting and Investigation (NPR 8621.1)**
  - o NASA has a detailed process for reporting and investigating mishaps, including space incidents. For urgent events, immediate notification is required to the NASA Center Director and the Office of Safety and Mission Assurance. High-visibility incidents (e.g., those with public or media interest) trigger a standing Mishap Investigation Board.
- **U.S. Space Command's Space Situational Awareness (SSA) Sharing Program**
  - o SPACECOM tracks over 35,000 objects in orbit and shares data with civil, commercial, and international partners. In an urgent incident (e.g., a predicted collision), the CSpOC issues conjunction warnings and coordinates with affected parties. This isn't a public "standard" but an operational protocol.
- **Inter-Agency Space Debris Coordination Committee (IADC) Guidelines**
  - o The IADC's Space Debris Mitigation Guidelines (2007, revised) provide voluntary recommendations for managing debris risks, including post-incident analysis. While not a notification process, it encourages member agencies (e.g., NASA, ESA) to coordinate responses.
- **National Space Policy (U.S.)**
  - o The 2020 Space Policy Directive emphasizes inter-agency coordination for space traffic management and incident response, tasking the DoD, NASA, and the Department of Commerce (which oversees NOAA) with collaborative roles. Specific contacts aren't listed, but the policy implies a chain of command through agency heads.

International Frameworks

The Convention on International Liability for Damage Caused by Space Objects (1972) requires states to notify others of incidents causing damage, typically via diplomatic channels or UNOOSA.
The Convention on Early Notification of a Nuclear Accident (IAEA-managed) applies if a space incident involves nuclear-powered satellites, with a defined process via the IAEA's Incident and Emergency Centre.

Commercial Space Incident Response

The NTSB's Subpart F (proposed 2021) outlines investigation procedures for commercial space mishaps, requiring immediate notification to the NTSB if a launch/reentry incident meets thresholds (e.g., loss of life). Operators must report to the FAA, which may escalate to other agencies.

General Process Overview

Detection: An incident (e.g., collision, debris generation) is detected by SSA networks (e.g., USSF's Space Surveillance Network or ESA's systems).
Initial Notification: The detecting entity (e.g., CSpOC, NASA) alerts relevant agencies based on the asset involved (military, civil, commercial). This is often immediate for high-risk events.
Assessment: Agencies evaluate the incident's scope (e.g., debris spread, national security implications) and notify additional stakeholders (e.g., DoD, FCC, international partners).
Coordination: A lead agency (e.g., NASA for civil, USSF for military) coordinates response, potentially activating investigation boards or mitigation plans.
Public Disclosure: Agencies like NASA or the NTSB may issue statements, balancing transparency with security concerns.

Challenges and Gaps

- No Unified List: Contact lists exist within agencies (e.g., NASA's emergency points, CSpOC's watch desk), but they're not centralized or public due to security and operational needs.
- Varied Standards: Civil, military, and commercial sectors follow distinct protocols, with overlap but no single standard.
- International Coordination: Processes like IADC or UNOOSA are slower and less defined for urgent scenarios.