SUMMARY OF THE END OF LIFE WORKSHOP 28th of January 2014 CNES Headquarters

F.Alby



END OF LIFE WORKSHOP

5th workshop held on January 28, 2014 at CNES's Headquarters in Paris

More 80 participants:

- ◆Administrations: Ministry of Defence
- ◆Space Agencies: UKSA, CNES, DLR and ESA
- ◆ Satellites operators: Eumetsat, Eutelsat, SES-Astra, Hispasat
- → Launch operator: Arianespace
- ◆Industry: Thales Alenia Space, Airbus Defence and Space, Satel Conseil, Euroconsult, CS, OHB, Dassault Aviation
- ◆Insurance companies: Marsh, HISCOX, La Réunion Spatiale
- ◆Universities, research: ISTI/CNR



OBJECTIVES OF THE WORKSHOP

- ■Objective 1: To inform operators and industry about on-going regulatory activities:
 - to convince,
 - to support, encourage their implementation
 - to be prepared to future evolution
- ■Objective 2: to get feed-back from operators having performed end of life operations
 - to highlight implementation difficulties
 - to identify update needs



CONTENT

Objective 1: To inform operators and industry about on-going regulatory activities:

- ◆UK Space Agency regulatory activities and lessons learned regarding EOL disposal
- ◆Lessons learned from the application of the French Space Act
- ◆Disposal orbits for space objects in LEO, GEO and GTO: the good practices and the STELA tool
- ◆End-of-life practices in GEO and LEO protected regions evaluation of recent adherence from catalogue data
- →Statistics on LEO end of life practices
- ◆The Cleanspace technology roadmaps for debris mitigation



CONTENT

Objective 2: feed-back from operators having performed end of life operations

- ◆Consideration of collision risk on end of life orbits when selecting disposal strategy
- ◆Collision risk management during satellites end of life operations
- →GEO and LEO end of life: 30 years of improvements Flight dynamics aspects
- ◆In orbit CNES LEO satellites adaptations for end of life operations
- → EUTELSAT 4B/HB5 End of Life operations
- ◆Re-orbiting Strategy for the Satellites of the MSG Series
- → Metop "Vanilla" End of Life Operations
- →Telecom2 disposal operations lessons learnt



Next workshop scheduled in January 2016

