Overview
Netherlands
Space activities
2016
National framework

• Netherlands Space Office (‘NSO’)
  o Advises on and implements national space policy;
  o Represents the Netherlands in ESA and towards Space Agencies;
  o Manages national programs.

• Netherlands Radiocommunications Agency
  o Regulates NL space activities (Dutch Space Act);
  o Role as Notifying administration (ITU-RR);
  o Sole responsibility for Dutch radio frequency spectrum.
Netherlands Space Office (NSO)

• Developed the NL Space Vision: a change in focus;
• Space technology and satellite data are key to global solutions, scientific breakthroughs and new markets;
• Societal needs and market opportunities are drivers for space technology and applications development;
• Space technology no longer unique in complexity.

• This vision requires:
  o Demand driven developments;
  o More synergy space and non-space;
  o More and broader international cooperation.

• European policy milestones drive NL space policy:
  o ESA & EU Space Council, May 2016;
Main NL capabilities in Science, Technology & Applications are:

- **Science:**
  Astrophysics (IR, Submm), planetary research & Atmosphere (UV, IR);

- **Hardware:**
  Instruments, Solar arrays, Structures, Sensors, Electronics;

- **Applications:**
  Agriculture, Water, Land use, Logistics.
Spending figures 2016

- **Total Government space spending 2016:** M€ 145
  - ESA: M€ 109
  - National: M€ 36
  (Excl. EUMETSAT, EU contr.)

- **Netherlands priorities in ESA:**
  - Science, Launchers, Earth Observation and technology development for ESA and the commercial market.

- **National projects:**
  - Tropomi (atmosphere instrument for Copernicus/Sentinel-5P)
  - G4AW (Applications for Agriculture & Water)
  - National Satellite Portal.
Netherlands Radiocommunications Agency (1)

- ‘Notifying Administration’ for 7 operators:
  - 3 GSO and 4 NGSO satellite operators.
  - 2 new satellite operators in the Netherlands in 2016:
    - Magnitude Space BV planning 24 small LEO satellites;
    - Viasat Netherlands BV planning 3 satellites at GEO;
  - 14 satellites operating under Netherlands jurisdiction.
- Renewed Policy for foreign satellite operators.
**Netherlands Radiocommunications Agency (2)**

**Dutch Space activities Act and Registry for space objects**

- In force per 1 January 2008;
- Launch, flight operation & guidance;
- Generic license, no fee, decision within 6 months;
- A license is granted for the duration of the space activity;
- Mandatory 3rd party liability insurance for all types of satellites;
- NL fully adheres to the relevant Space Debris Mitigation Guidelines;
- Small Satellites in a low orbit have to comply with de-orbiting < 25 years after launch.
Netherlands Space highlights 2016 (1)

• Integration of the Tropomi instrument (launch mid-2017);
• G4AW: extension of program, 3rd call;
• Further Extension of the Satellite Data Portal (free data of the Netherlands for EO applications), transition to user funding;
• Instrument Cluster;
• Cooperation Chang’e4 with China initiated;
• Development of commercial instruments (e.g. for agriculture applications);
Netherlands Space highlights 2016 (2)

• NL EC chairmanship (Q1):
  o Informal ESA-EU Space Council;
  o European Space Solutions conference (May 2016).
• Space Policy ‘17-’19;
• Satellite coordination meeting with the People’s Republic of China (May 2016);
• Satellite coordination meeting with the Russian Federation (June 2016);
Netherlands Space highlights 2016 (3)

- Election of Mrs Lilian Jeanty as the chairperson of the ITU Radio Regulations Board;
- 3 licenses granted in Q1 under the Dutch Space Act:
  - Innovative Solutions In Space BV;
  - Foundation AMSAT-NL;
  - Delft University of Technology.
- Supervision for licensee SES/New Skies Satellites BV;
- The Hague Space Resources Working Group.
Thank you for your attention!