

# Government and Industry:

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public and private partners in  
developing the market for applications  
of satellite data.

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Public Private Partnership Summit,  
Hyderabad, 01-25-17

Dr. Ger Nieuwpoort

# About NSO

- Space agency of the Netherlands government (established 2009)
- Reporting to:
  - Ministry of Economic Affairs
  - Ministry of Infrastructure and Environment
  - Ministry of Education, Culture and Science
  - Ministry of Foreign Affairs
  - Netherlands Organisation for Scientific Research (NWO)
- Task: to develop and implement Netherlands Space programme
- Outcome: space applications for science, economy and society

Netherlands  
**Space**  
Office 

# Bridging the gap between EO and user

- Who is user?
  - How to connect to the user?
  - Understand their needs
  - Verify usability service and build trust
- What business model(s)?
  - “New” product in an new market is (too) risky
  - Partnerships & cooperation
  - Integration of EO in an (existing) information service



# Policy instruments used in The Netherlands

## ▶ Roadmap process

- Information needs: process demand & supply (use cases)

## ▶ Data

- Satellite data portal
- Copernicus, Sentinels, Landsat, etc.

## ▶ Financial

- SBIR (small business innovation research)
- ESA IAP (integrated applications)
- G4AW (geo-information for agriculture&water)



# SBIR Instrument



NVWA (surveillance & enforcement agricultural)



Fire Department (Vegetation)



Water board (dike monitoring)



## Small Business Innovation Research

# Wildfire Control

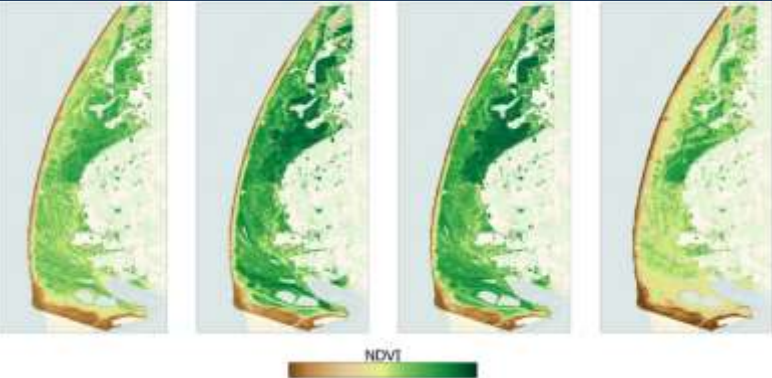
- Type vegetation
- Moisture Content
- Biomass
- Terrain characteristics

Spring

Summer

Fall

Winter



standard  
vegetation map



Satellite image



new improved  
vegetation map



# SBIR Instrument in 2017



**RWS (Water quality)**



**SBB (nature “mapping”)**



**Water Boards (evaporation)**



**Police (soil criminality)**



**ProRail (rail monitoring  
movement)**



**RVO & CBS  
(Nature & Agriculture)**

# G4AW: space for food security

- User demand (farmers, pastoralists) is leading
  - Cooperation with NGO's and extension services
- Cooperation along information chain
  - From satellite to bottom-of-pyramid
- Business model
  - Affordability for user
  - Financially sustainable service provision (after project)
- 17 projects in 10 countries



# Conclusions

- Government organisations in The Netherlands are more and more interested in using satellite data as source of geo-information
- The value adding industry in The Netherlands is growing and changing from project to service oriented.
- For governments stimulating the use of satellite data, a user driven approach is vital
- This can only be done in a partnership between government and industry
- The Dutch satellite data portal, SBIR, ESA-IAP and G4AW were important instruments to stimulate this partnership.



# Netherlands Space Office

*Thank you  
for your attention*

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*Gateway to the  
Netherlands space sector:*

**[www.spaceoffice.nl/spacedirectory](http://www.spaceoffice.nl/spacedirectory)**