



Climate & Environment



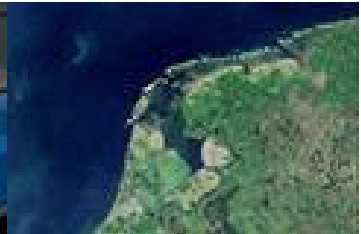
Land



Spatial Planning



Transport



Satellite Images & Tools



Security



Energy



Infrastructure



Maritime & Water

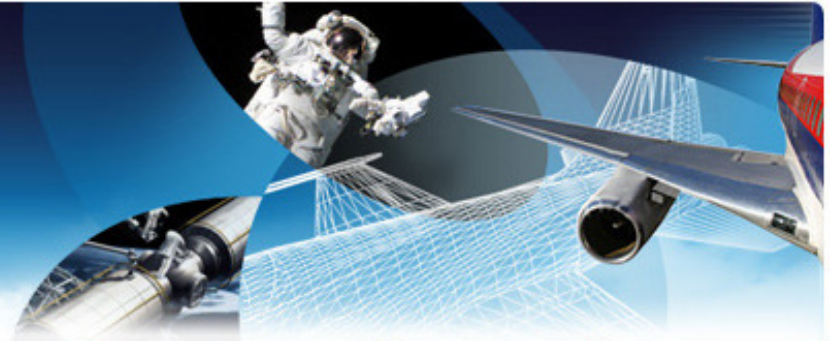


Consumers

Bringing Space down to Earth

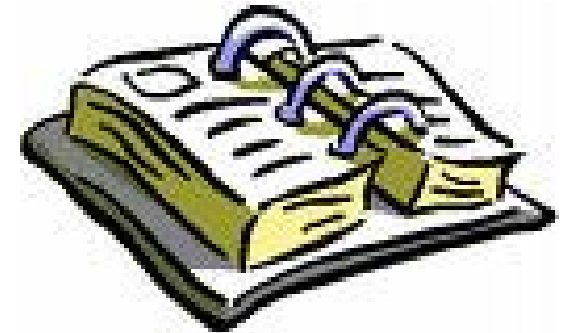
Stimulating Operational Use of Satellites in the Netherlands

ESAWAT workshop, May 20 2009, Rotterdam



Content

- ▶ Dutch policy drivers
- ▶ Mandate within NIVR (NSO)
- ▶ Mission, vision, objectives, activities
- ▶ Use of space data:
single measurement, multiple use





Dutch policy drivers relevant for operational use

- ▶ ESA/EC Space Policy (a.o. GMES, Galileo, GEO)
- ▶ Relevance to international policies
- ▶ Relevance to national policies, a.o. KRW
- ▶ Sustainable use of natural resources
- ▶ Innovation
- ▶ International cooperation
- ▶ High Tech Employment (and growth) within NL

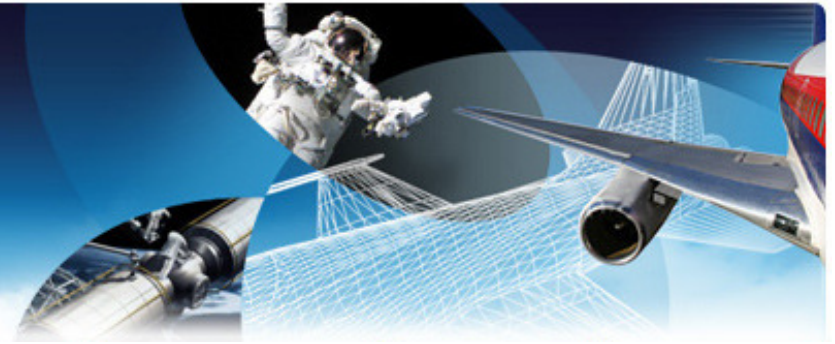




Mandate within NIVR (NSO)

- ▶ Special focus on stimulating “operational use of satellite data and services”
- ▶ Dedicated program ‘*Operationeel Gebruik (OG)*’
 - Development of strategy (2008-2009)
 - Development & execution of Innovation Programme (2009-2010 and onwards)
 - Need inventories & business case definition





Mission 'OG program'

- ▶ NIVR promotes and stimulates the societal and economical use of satellites and makes this visible





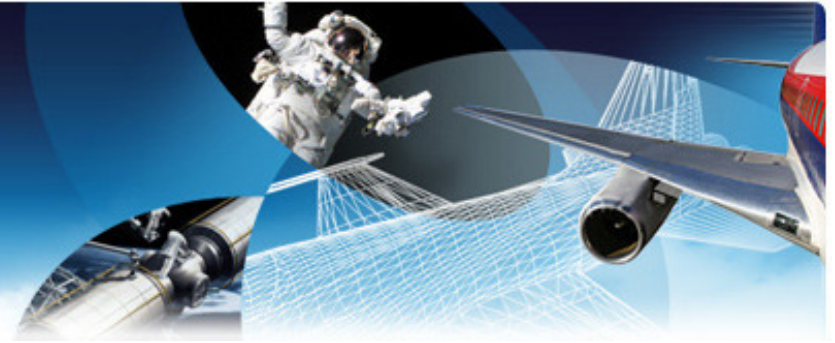
Vision 'OG program'

- ▶ Operational use of satellites contributes to a better quality of life
- ▶ The use of satellites is an international growth market and is of economical and societal relevance for the Netherlands
- ▶ Identification and development of market demand is essential for service development and sustainable operations



Activities 'OG program'

- ▶ Demonstrate utilization of satellite data for companies and governmental bodies
- ▶ Stimulate interaction between market and downstream (value adder, knowledge) organizations
- ▶ Business case initiation & development support
- ▶ Identification and resolution of bottle necks



Instruments (outreach)

- ▶ SpacePlaza.nl: web portal for liaison between public, market, government and service suppliers and knowledge institutes
- ▶ NIVR Link: match making sessions bringing together potential customers, service suppliers and research organizations



Instruments (service development support)

- ▶ Innovation Programme for new service development (on behalf of Min. of Economic Affairs), 2010 onwards?
- ▶ Execution/coordination of (feasibility) studies (for other ministries) → leading to new business cases
- ▶ Liaison towards ESA and EU programs
- ▶ Liaison towards non-space development funds



NIVR view on Water Management in NL

- ▶ Many stakeholders
- ▶ Overlapping and specific needs
- ▶ Several EO based services developed, demonstrated and operational (on project basis)
- ▶ National Instrumentation for Hydrology (NHI)
- ▶ No operational use of EO on national level yet



Space down to Earth?

- ▶ Where and how could NL EO value added services contribute to Dutch water resource management (and other) needs?



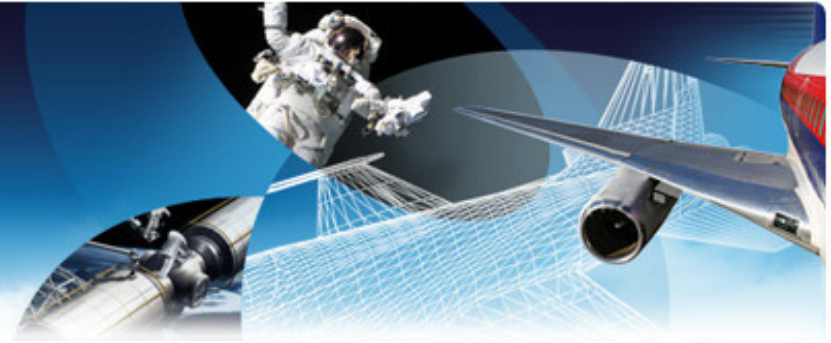
NL Stakeholders

- ▶ MinVenW: water supply (for people, industry, transport)
- ▶ MinLNV: drought (nature, agriculture), salination
- ▶ MinEZ: energy & economy
- ▶ Provinces: drought (nature, agriculture), salination
- ▶ Water Boards: water resource management
- ▶ End users (many)



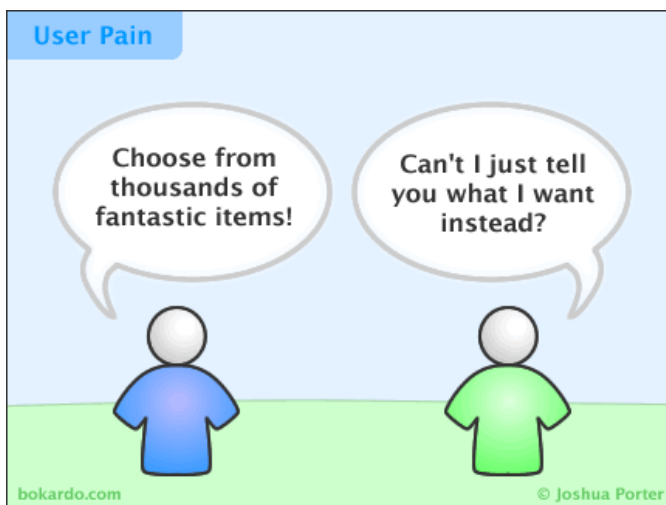
User needs

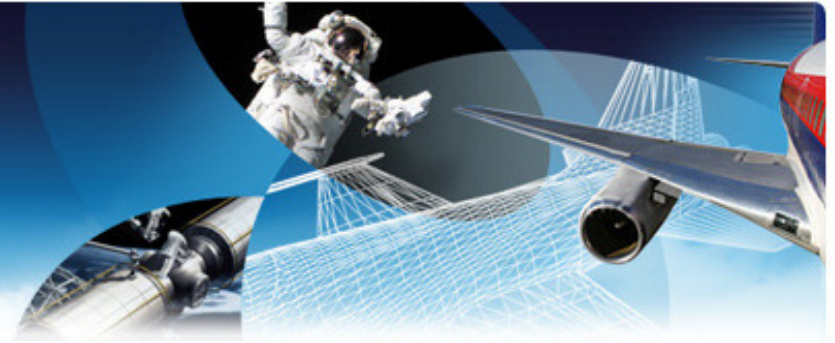
- ▶ Various, depending on specific demands
 - Functionality (from water management, nature conservation specific needs)
 - Scale: from local level (parcel) to continental (large river bassins)
 - Time (from several times per day, to several times per month....)



Invitation

- ▶ To participate in a work group to investigate the potential role of EO based services in future NL water management and nature conservation





Topics to be discussed

- ▶ Which monitoring information is relevant for many stakeholders?
- ▶ Where can EO contribute to improve current monitoring systems & models?
- ▶ How can cooperation on the user side result in more efficient use of existing infrastructure (satellites, services): single measurement, multiple use? E.g. Water management & nature conservation.



Opportunities?

- ▶ Regeling Innovatieprogramma Kaderrichtlijn Water (KRW) – SenterNovem
 - *De tweede tender (2009) is bestemd voor samenwerkingsverbanden tussen regionale overheden (waterschappen, gemeenten en provincies), onderzoeksinstellingen en bedrijven.*
- ▶ FP7 Space Call-2 (GMES downstream services)
- ▶ Coming soon....