



# **LPIS structure and procedures in the Netherlands**

**Sofia, Bulgaria,  
September 17th-18th**



## Agenda

- Characteristics of NL LPIS reference layer
- Some statistics
- Data layers/attributes in LPIS
- Complementary data in NL LPIS
- Cross checks
- Quality of NL LPIS
- Questions?



## Characteristics of NL LPIS reference layer

As for the determination and implementation of the LPIS (according to Council Regulation 3508/1992 and art. 20 of 1782/2003) NL has chosen for the physical block as the reference unit

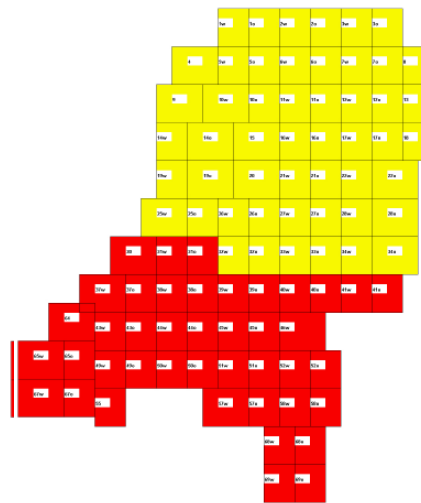
### Why physical block?

1. most in line with the actual situation in the field and with practice of land use
2. nation-wide and updated Topography file (called: **Top10**) was already available from the Land Registration and Mapping Agency of the Netherlands's Cadastre



3. NL Topography file is now officially a Basic Register, which implies:
  - government institutions are legally bound to use available data and to report inaccuracies or anomalies
  - assures a high level of quality and efficiency
  - update and maintenance is carried out by the Cadastre
- **Some features of Top10:**
  - coverage: whole NL territory, including non-agricultural
  - SOURCES: current digital aerial photographs , field reconnaissance's carried out by 40 topographers and existing data files

- currency:
  - until 2008 update cycle was 4 years (25% each year)
  - since 2008 update cycle is 2 years (50% each year)



Figuur 2.1: De blokken van de 2-jarige herzieningscyclus (Noord en Zuid Nederland).

- within 5 years update process is to be continuous
- scale: 1 : 10.000



## **Some statistics of NL LPIS**

- 790.000 Agricultural Parcels (AP) actually in use
- by around 79.000 applicants
- 500.000 Reference Parcels (RP)
- on 1 reference parcel lies (on average) 1,56 agricultural parcels
- 77% of the reference parcels consists of 1 agricultural parcel



## Data layers/attributes in LPIS

- For the use as a reference layer in the NL LPIS an abstract is made from the Top10, containing only the physical blocks which are classified as 'agricultural blocks' or nature reserve areas
  - the selection is based on Land Use Codes recorded in Top10 to classify these agricultural blocks and nature reserve areas
    - e.g. meadow, arable land, pasture, orchard, tree nursery, heath, mixed forest
  - boundaries are 'hard boundaries' like roads, waterways, forest, buildings, hedge-banks, surfaced lanes
  - boundaries between arable land and pasture ('soft boundaries') within 1 topographical block are removed



- Determination of the eligible area in NL LPIS reference layer
  - landscape features which are depicted as plane objects have their own code in Top10. Consequently, these objects do not become part of the reference parcel layer
    - E.g. marsh and reed, pool/ponds, hedge-banks, bush, waterways
  - landscape features which are depicted as line objects, are considered essential parts of the 'good agricultural practices', in line with Commission Regulation 796/2004 art. 30(2)
    - *certain features, in particular hedges, walls and ditches, which are traditionally part of good cropping and utilisation practices may be considered part of the fully utilized area on the condition that it does not exceed 2 meters*





- Attributes in LPIS:
  - location: unique identification with X/Y coordinates
  - area
  - land Use Code
  - year of actualisation
  - geometry



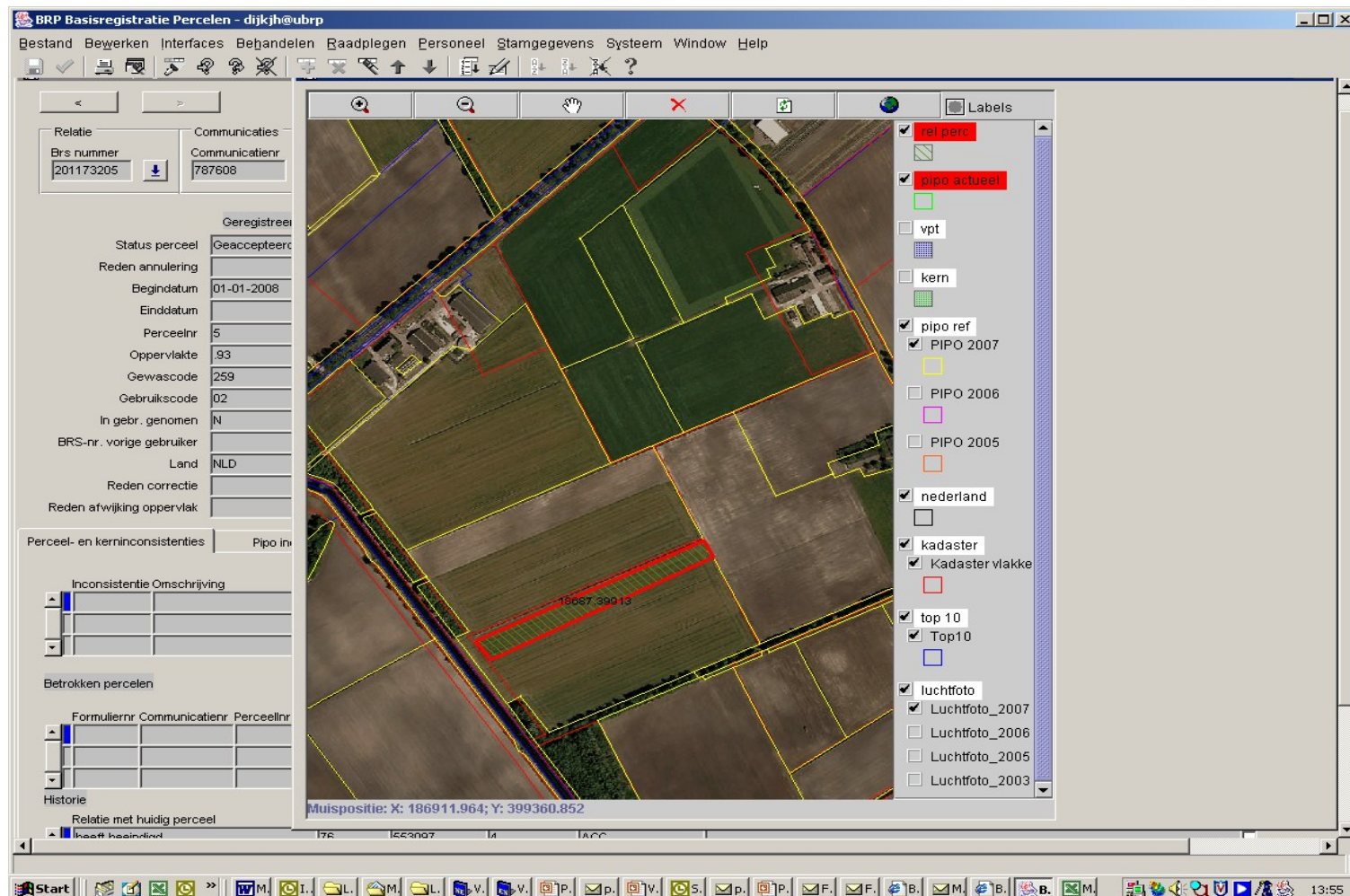
## Complementary data in NL LPIS

- Besides this reference layer NL LPIS also consists of:
  - aerial photographs:
    - nation-wide
    - history (2000, 2003, 2005, 2006, 2007)
    - current (2008)
    - 2008 aerial photo: 25 cm resolution, infra red included, fly height: 3653 m
  - agricultural parcels layer:

all agricultural parcels declared for aid support starting from 2001. Every newly declared agricultural parcel is following the previous declared parcel
  - detection of OTSC and Remote Sensing (since 2005)

area and crop
  - Top10 and Cadaastre layer

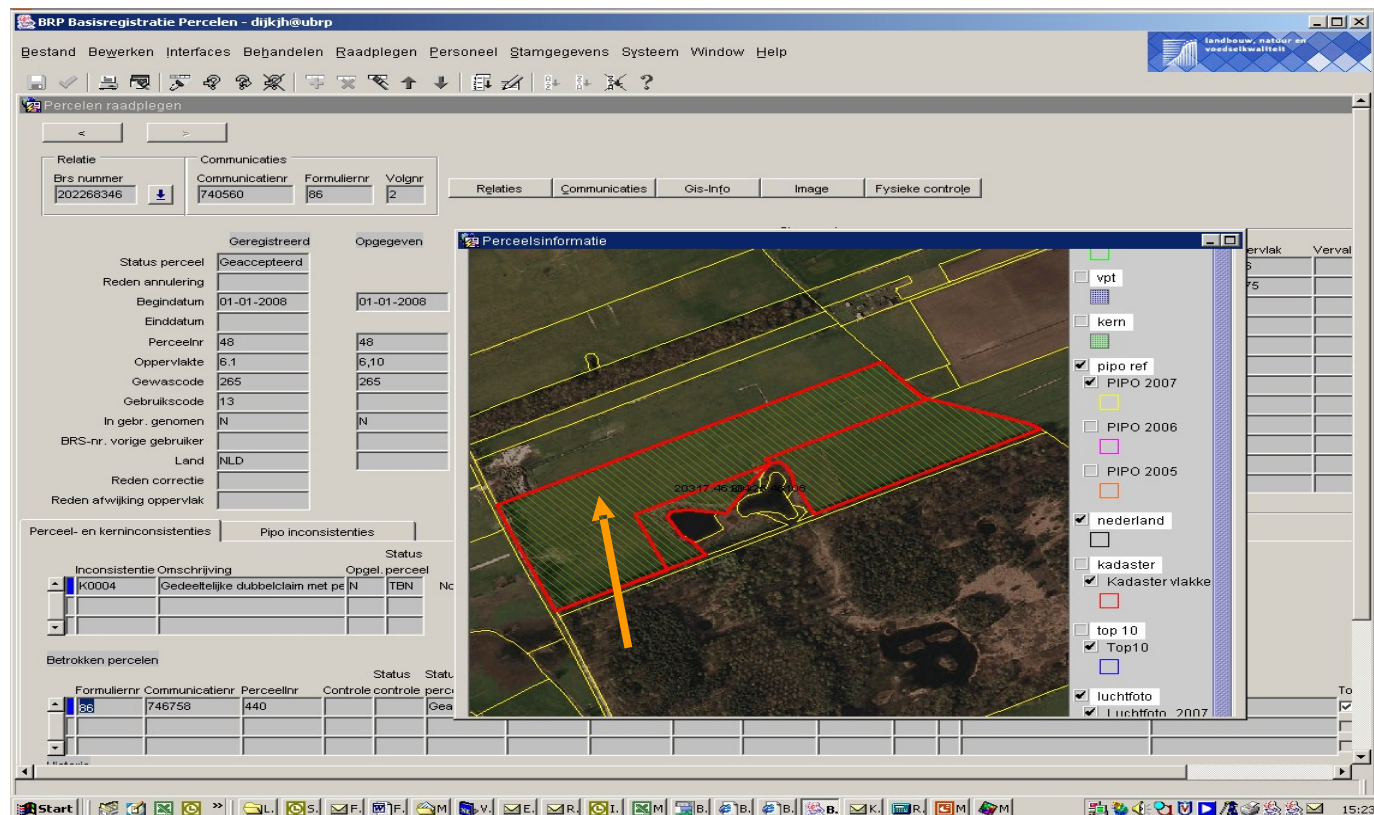
Example:



## Cross check (art. 24 796/2004):

- Among AP's declared

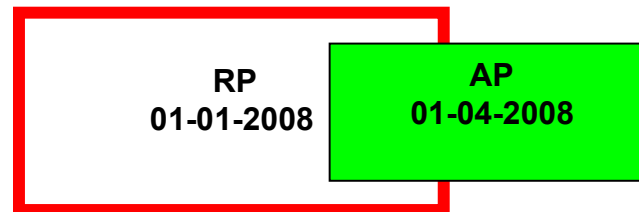
Screen dump: 2 AP's which have a geometrical overlap with each other (marked by arrow)





- **between AP's and RP (geometrical check)**

1. determination of overlap of AP with RP



an RP which has changed physical boundaries in the ongoing campaign (according to applicant, or OTSC) is marked with an expiry date

check: all AP's lying on a RP with an expiry date. By use of calculated area and aerial photograph: see following example





## Screen dump of AP overlapping 3 RP's with expiry date

BRP Basisregistratie Percelen - dijkjh@ubrp

Bestand Bewerken Interfaces Behandelen Raadplegen Personeel Stamgegevens Systeem Window Help

Perceelsinformatie

Relatie  
Brs nummer 110312516  
Communicaties  
Communicatienr 761977  
Formulier 86

Geregistreerd  
Status perceel Geaccepteerd  
Reden annulering  
Begindatum 01-01-2008  
Einddatum  
Perceelnr 21  
Oppervlakte 6  
Gewascode 266  
Gebruikscodes 01  
In gebr. genomen N  
BRS-nr. vorige gebruiker  
Land NLD  
Reden correctie  
Reden afwijking oppervlak

Perceel- en kerninconsistenties  
Pipo inconsistent

Inconsistentie Omschrijving  
K0010 Perceel niet op PIPO en ingevuld N

etrokken percelen

Formuliernr Communicatienr Perceelnr Contr

Labels

- ☒ rel perc
- ☒ pipo actueel
- ☐ vpt
- ☐ kern
- ☒ pipo ref
- ☒ PIPO 2007
- ☐ PIPO 2006
- ☐ PIPO 2005
- ☒ nederland
- ☐ kadaster
- ☒ Kadaster vlakke
- ☐ top 10
- ☒ Top10
- ☒ luchtfoto
- ☒ Luchtfoto\_2007
- ☐ Luchtfoto\_2006
- ☐ Luchtfoto\_2005
- ☐ Luchtfoto\_2003

datum	Oppervlak	Vervaldatum
	11.82	01-01-2006
	5.14	22-09-2005
	1.15	22-09-2005

Titel Toon

13:56



3. check on over declaration of AP's with 1 RP: totally declared area is not to exceed RP area

- **Other checks:**

between AP's declared under the Single Payment Scheme (1<sup>st</sup> Pillar) and AP's declared under the Rural Development Policy (2<sup>nd</sup> Pillar)

So far these checks are carried out in the alphanumerical part of LPIS, but recently a pilot was done with the use of LPIS GIS for cross checks between 1<sup>st</sup> and 2<sup>nd</sup> Pillar



## Quality of NL LPIS

- efficiently reflects land use and declaration because it fully complies with 75%/90% rule under Art 6 of Reg. 796/04
  - **2006** : 84,89% (national level)
  - **2007** : 87,86% (national level)
- high level of currency with respect to 2-years update cycle and precise update procedures (field reconnaissance's)
- the complementary use of current aerial photos makes the LPIS system reliable
- checks eligibility of parcels by the codes (pasture, forest, nature reserve area) in Top10





**Questions?**