



# 19<sup>th</sup> Annual **MARS** Conference

*"CAP 2014+: let's make it  
administrable and controllable"*

## **LPIS QA audits the preparation**

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# LPIS QA Audit

## Purpose

- to investigate LPIS QA performance
- to validate LPIS QA results

→ This presentation deals with the **preparation** of such audits

# LPIS QA performance

Depends on correct:

- **scoping** (what to inspect)
- application of the inspection **methodology** (how to observe and measure)
- **processing** of the inspection observations (how to aggregate and analyse)

# Scoping

Verification of:

- the population of parcels (compared with previous years)
- the discarding of zones (based on image quality)
- the skipping of parcels (force majeure) , and
- the feasibility for measurement (local conditions)

2-4 require photointerpretation experience

All occurrences are checked.

# Inspection completeness

Verification of:

- identification and counting of critical defects,
- attribution of cause of non-conformity
- inspection measurements
- reported Field Observations

Critical defects will all be verified

# Dataset processing

- Population completeness
  - number uploaded parcels, total
  - number of uploaded parcels with reference area = 0
  - RPid duplicates
  - changes of the RPid's from year to year
- Spatial context
  - location and overlapping of the dataset with orthoimagery
  - correctness of the metadata
  - correctness of the file format

These are processed by semi-automatic routines (2014 during upload)

# Reference image preparation

- Orthoimagery
  - correctly picked satellite sensors
  - format correctness
  - overlapping with the selected ETS zones
  - aerial imagery
  - reasons for discarding of the orthoimagery
  - correctness of reporting in orthoimageryset.xml

# Parcel verification

- Skipped parcels,
  - visual check of skipping reasons
- Inspected parcels
  - visual check of reasons for failing feasibility
  - check of critical defects
- Measured parcels
  - correctness of delineation performed and area measured
  - correctness of assigning of the right eligibility class
  - correctness of assigning of the critical defects
  - correctness of assigning of the nonconformity causes
  - relevance of Field Observations for complex land covers

Convenience/purposive/sequential sampling for measured parcels  
Manual checks, prepared by automatic routines



# ETS results

The previous preparation allows to obtain a fair insight in the LPIS QA implementation, in preparation of an audit mission.

→ This is an internal inspection

Serious doubts can trigger a “verification of declared quality levels” to allow formal rejection of the ETS scores.

→ This is an external inspection

# Conclusions

- A LPIS QA audit is well prepared prior to the mission. It allows to identify topics that might bias the LPIS QA results.
  - unrepresentative scope
  - selective inspection
  - unreliable measurements
  - mitigated processing
- The subsequent mission “fills the gaps” in that understanding and collects additional evidence.
- As this is an internal inspection, correct ETS implementation should not cause any concern.

# Thank you!

