

# Remedial Action Plan: The Swedish experience



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## Outline

- Background
- LPIS QA 2018
- Analyze
- Propose actions
- Create Remedial Action Plan
- Communicate result
- Support and resources



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## Swedish LPIS

- 1.2 million reference parcels (RP)
- 3.2 million ha



One ordinary RP



Some more rare ones

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## LPIS update – background

### Swedish lesson:

- Until 2007 LPIS only updated after farmers request or after control
- No systematic approach for LPIS update
- Audit 2007: "...too low quality in your LPIS"
- Complete LPIS refresh 2008–2010. Cost 25 million euro
- Penalty ~100 million euro for weaknesses found in audit
- New organisation for LPIS update



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## LPIS update

- Around 400 000 reference parcels checked CAPI new orthophotos every year
- 11% is changed
- 1-2% for field check



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## LPIS QA

- Sweden has never passed QE2a.
- Our result have improved over the years.
- Previous Remedial Action plans have given result



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## LPIS QA 2018

Result for 2018 – All QE except one is conforming  
 QE2a non conforming  
 107 non conforming, acceptance number 76



We need to make a Remedial action plan

Step 1

Analyze why QE2a is non conforming

Step 2

Create a plan with remedial actions



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## Analysis

QE4 gives us 3 reasons:

**Updates** – Changes of the underlying land were not applied

**Errors** – Previous assessment incorrect

**Design issues** – In Sweden we use this reason where we consider the parcels to be correct (i.e. where the method produces false non-conformances)



Cause:	updates	upgrades	omissions	errors	design issues
Score 2018: n <sub>nc</sub>	31	0	1	55	27
Conformance 2018	<i>conforming</i>	<i>conforming</i>	<i>conforming</i>	<i>conforming</i>	<i>conforming</i>
Score 2017: n <sub>nc</sub>	27	2	0	56	27



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## Analysis of Updates

What types of Updates?

- Changes in how the farmer use the land
- New buildings, roads



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## Analysis of Errors

What is the cause of errors?

- Temporary or permanent change?
- What is eligible?
- Operators experience



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## Analysis of Design issues

One reason for what we consider to be false non conformities is the fact that many boundaries in nature are unclear and without exact position

Our instructions LPIS update → Only edit an existing border if certain that the new boundary is more correct than the existing one.


This method differs from the LPIS QA where the operator does not take into account existing boundaries.



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## Example design issue

Orthophoto  
2014


 Reference  
Parcel



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## Example design issue

Orthophoto  
2017


 Reference  
Parcel



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## Example design issue

Satellite image  
LPIS QA 2018

 Reference  
Parcel



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## Example design issue

Satellite image  
LPIS QA 2018



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## Example design issue

Satellite image  
LPIS QA 2018

 LPIS QA  
2018





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## Example design issue

Satellite image  
LPIS QA 2018

-  Reference Parcel
-  LPIS QA 2018



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## Remedial actions

Input from  
LPIS QA

Input from  
OTSC

Input from  
LPIS Update process  
Quality assessed 6000 RP 2018



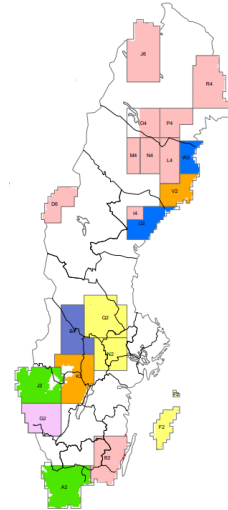
Action plan to improve quality

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## Remedial actions – Updates

Action: Systematic update, no further actions

- Approximately one third of the LPIS checked each year
- Based on orthophotos from the National Land Survey
- We consider non-conforming RP with this cause not a true problem as they, with correct processing, will be taken care of within the normal LPIS update process.



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## Remedial actions – Errors

Actions

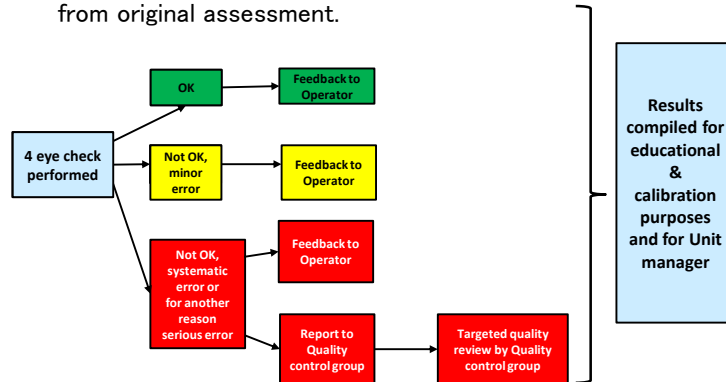
- All operators must undergo training once a year
- New operators must pass an editing test before permission is given to edit RP.
- Change instructions to fix systematic errors found in LPIS QA or LPIS update process
- Calibration exercises to make assessments as person independent as possible

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## Remedial actions – Errors

### Actions – new 2019

- Weekly 4-eye check, Total 12000 RP 2019. Within 1 week from original assessment.



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## Remedial actions – Errors

### Actions – new 2019

- Operator with field experience in area with new orthophotos help select RP for CAPI calibration exercises. Sweden is very different from south to north so it's important too share field experiences from different parts of the country.



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## Remedial actions – Design issues

### Actions

- Review routines for when a RP should be changed and evaluate if they can be improved



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## Communicate result

LPIS QA result and Remedial Action Plan  
is presented for head of department

Head of department signs  
Remedial action Plan

Remedial Action Plan is sent  
to Commission



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## Support and resources

- Budget for 2018: 3 million euro
- Staff – 40 persons
  - 1,5 Managers
  - 1 Quality coordinator
  - 2 Production coordinators
  - Quality control group – 5 persons
  - 32 Operators
- Goals for production and quality
- Same operators do both CAPI and field visits
- Process with detailed instructions for the operators



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## Thank you!



[andreas.egback@jordbruksverket.se](mailto:andreas.egback@jordbruksverket.se)



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