

# Workflow to update LPIS - The reference maintenance request system in North Rhine-Westphalia (NRW)

LPIS-Workshop Sofia

General  
**Agriculture**  
Environment  
Forestry  
Geology  
Land Register  
Land Use

## A spatial overview of Germany



General  
**Agriculture**  
Environment  
Forestry  
Geology  
Land Register  
Land Use

## The agricultural administration of NRW

- ③ North Rhine-Westphalia consists of 16 districts with associated agricultural offices
- ③ channelled by one head office with its proper paying agency
- ③ updating of LPIS in NRW is a principal task of the regional offices: administrated, supported and controlled by the head office



General  
**Agriculture**  
Environment  
Forestry  
Geology  
Land Register  
Land Use

## Statistic of the reference system



- ③ over 1.5 million hectares of agricultural area
- ③ over 50,000 farmers
- ③ the physical block system covers agricultural land classified in arable land, permanent crop, and permanent pasture
- ③ included in the LPIS-system are landscape elements for CC-topics
- ③ currently 409,000 physical blocks and over 82,000 landscape elements

General  
**Agriculture**  
Environment  
Forestry  
Geology  
Land Register  
Land Use

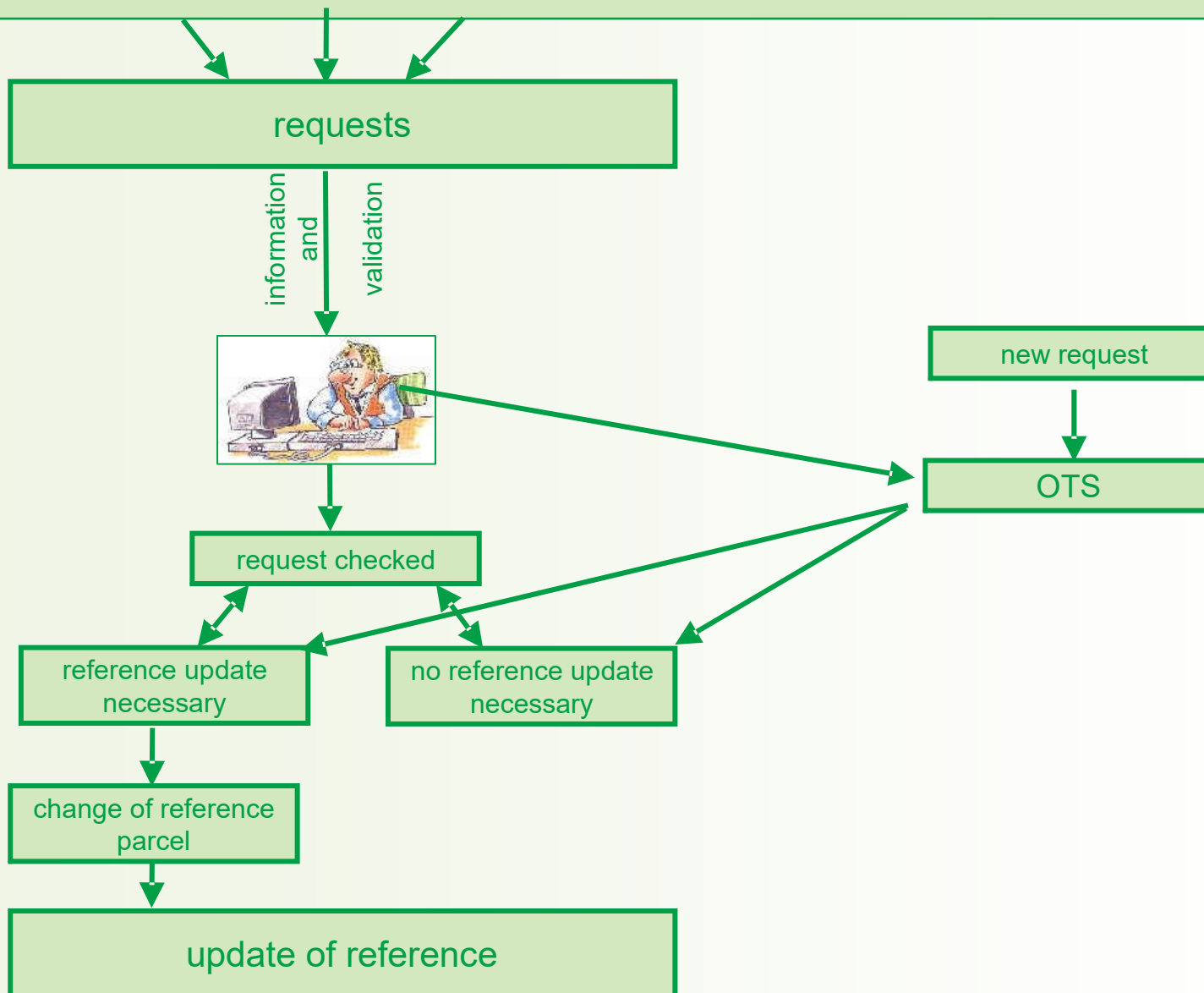
## The update of the reference system poses a challenge and an opportunity for NRW

- ③ to bring together all requests for changes of physical blocks or landscape elements
  - ③ to maintain all requests
  - ③ to process the requests
- ➡ to create the new updated reference layer

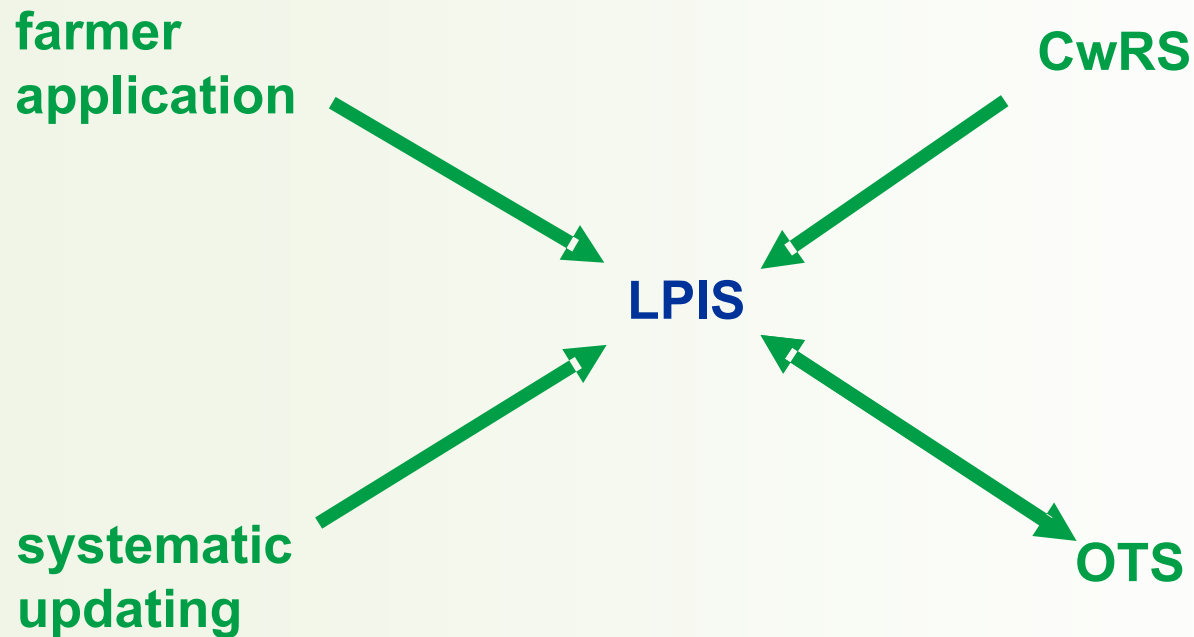
**The task is performed by a common workflow which is implemented in the LPIS-software**

General  
**Agriculture**  
Environment  
Forestry  
Geology  
Land Register  
Land Use

## workflow diagram of LPIS-update



## Maintenance requests to update the LPIS are mainly triggered by



General  
**Agriculture**  
Environment  
Forestry  
Geology  
Land Register  
Land Use



All requests, independent of their source are displayed as advice points in the system

farmer  
application

The screenshot shows the LaFIS-LFK software interface. On the left, a map displays various land parcels with green and orange outlines. A green arrow points from the text 'farmer application' to a specific point on the map. On the right, a window titled 'Hinweispunkteigenschaften' (Advice Point Properties) is open, displaying the following information:

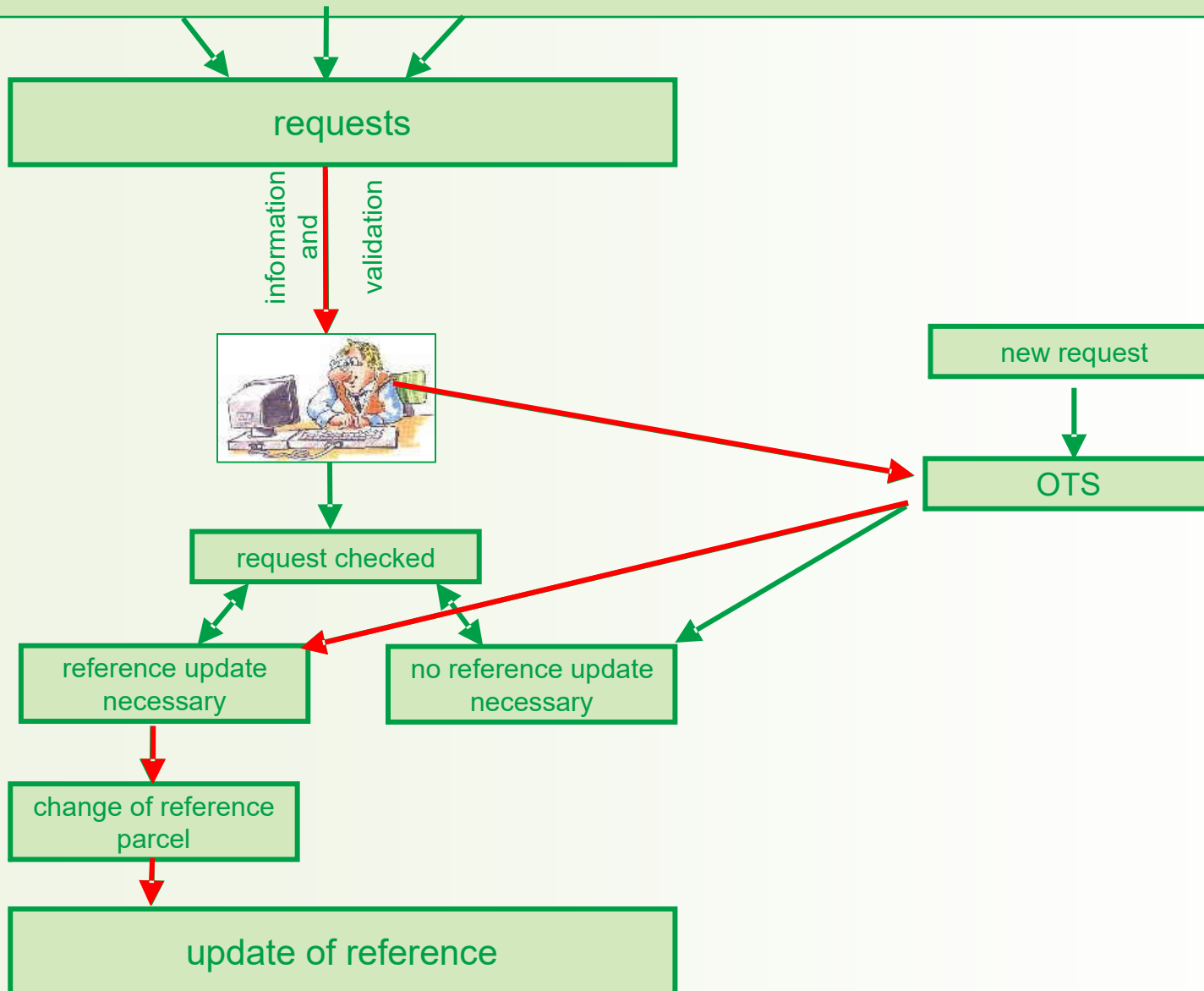
- ID: 248
- ELAN-ID: 2
- Herkunft: Elan
- Bemerkung zum Hinweispunkt: **Feldblockgrenze nach unten zeichnen**
- Datum des Hinweissetzens: 15.07.2008
- Laufende Nummer Feldblock: 24
- Zugeordneter FLIK/FLEK: DENWLI0542112282
- Adressnummer: 020044602 - 0815-020044602 Max
- Hinweistyp: Feldblock oder LE zu groß
- Bemerkung:
- Prüfstatus:
  - ☒ kein Eintrag
  - ☐ geprüft, Referenzänderung
  - ☐ geprüft, keine Referenzänderung
  - ☐ VDK notwendig
- Prüfname:
- Prüfdatum: --
- TPD-Kennzeichen: kein Eintrag
- TPD-Name:
- TPD-Datum: --
- TPD-Bemerkung:
- BEST-Status: Keine Eingabe
- BEST-Name:
- BEST-Datum: --

Buttons at the bottom of the window include 'Übernehmen', 'OK', and 'Abbrechen'.

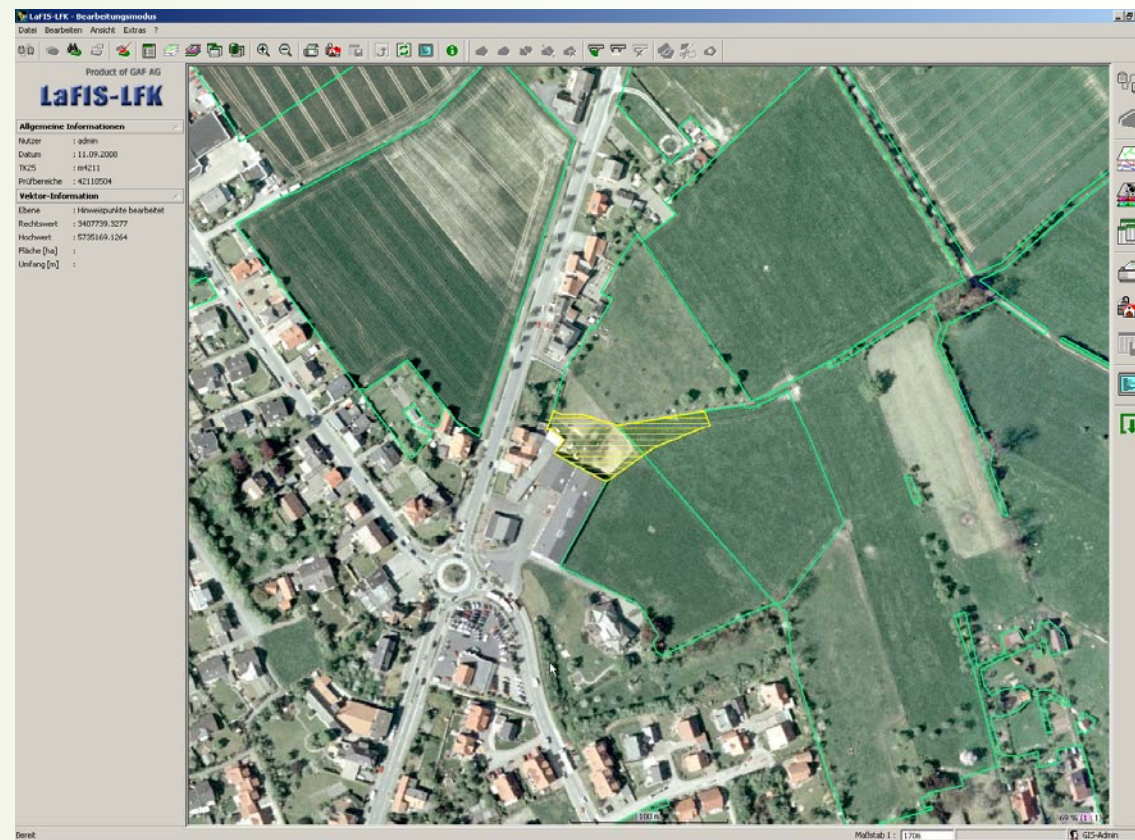
General  
 Agriculture  
 Environment  
 Forestry  
 Geology  
 Land Register  
 Land Use



## workflow diagram of LPIS-Update: example

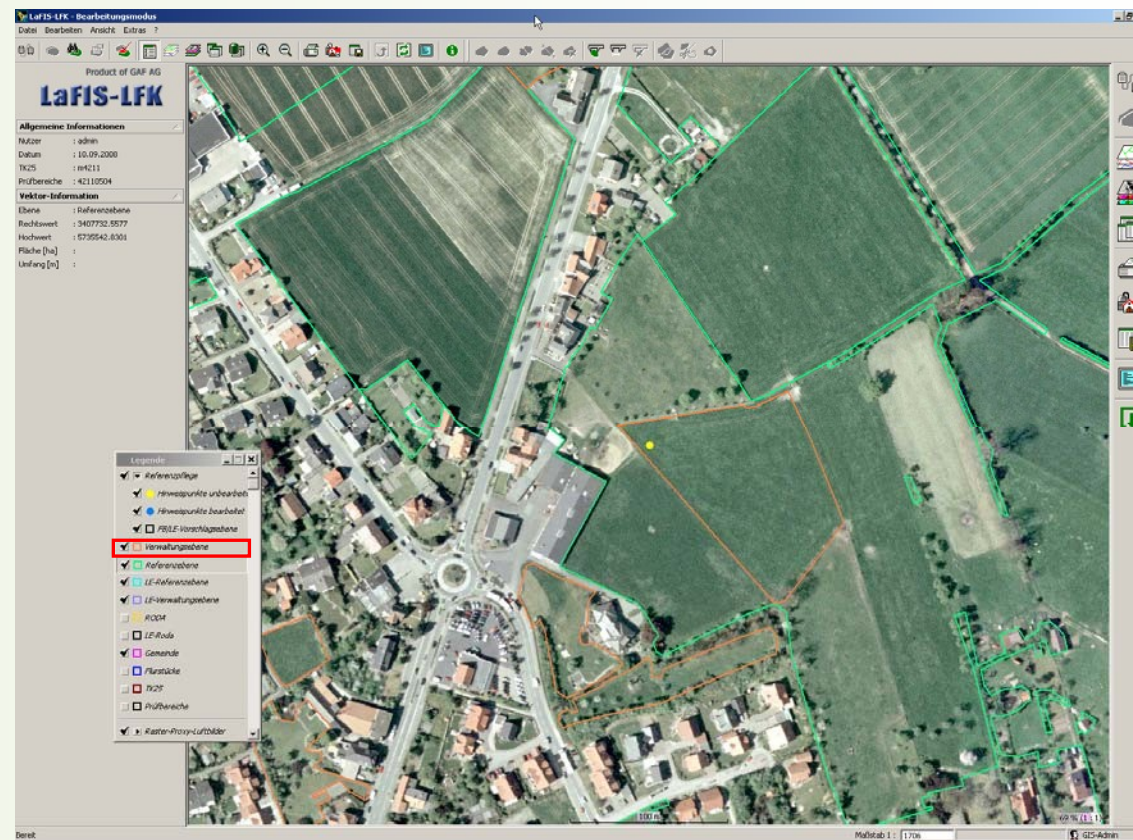


- ③ Farmer application requests to change the physical block due to the expansion of an industrial area



General  
**Agriculture**  
Environment  
Forestry  
Geology  
Land Register  
Land Use

- ③ start of physical block maintenance
- ③ physical block of reference copied to draft layer



General  
**Agriculture**  
 Environment  
 Forestry  
 Geology  
 Land Register  
 Land Use



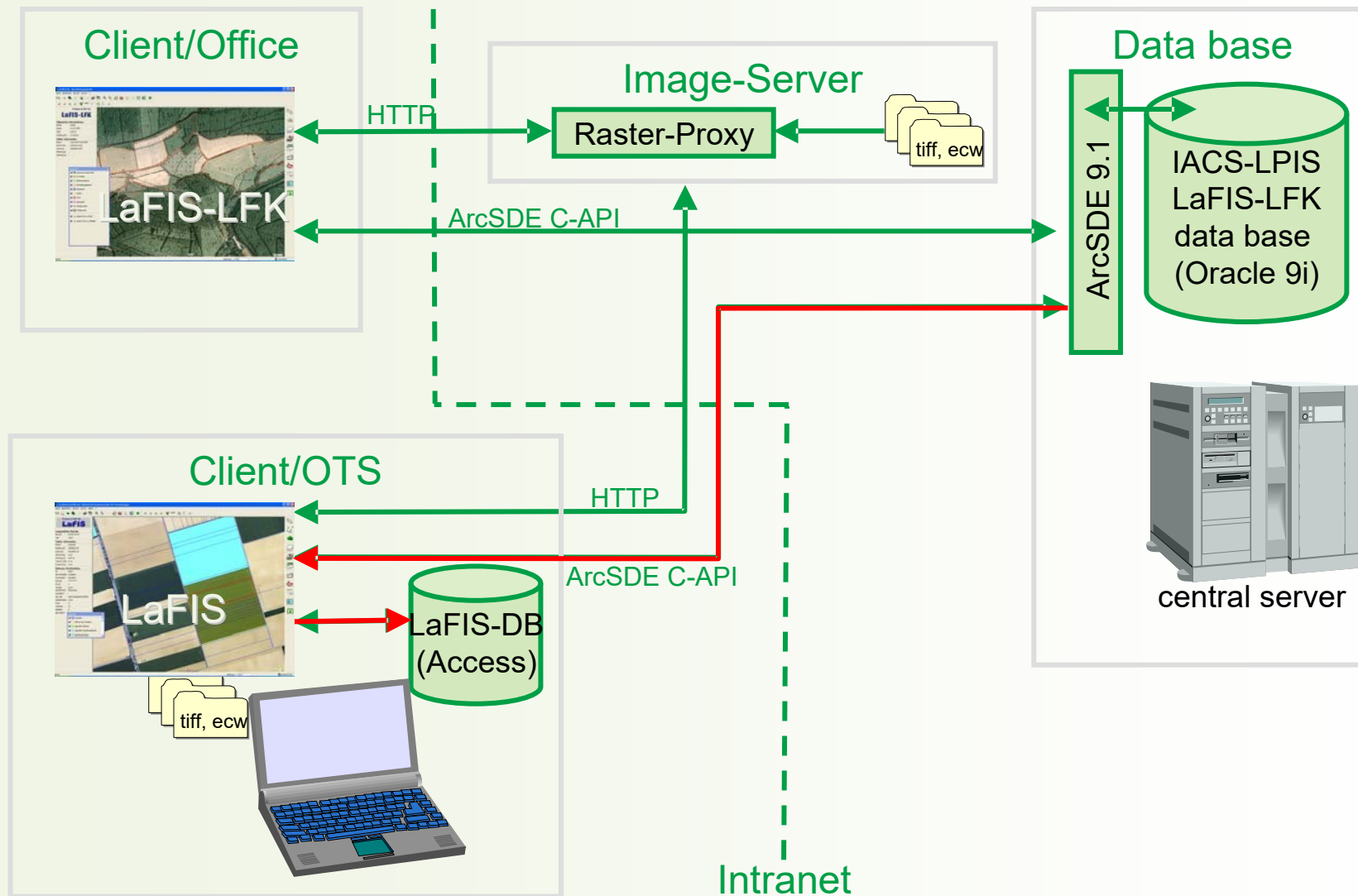
- ③ physical block has to be checked on the spot
- ③ LPIS-editor sets status “OTS necessary”

The screenshot shows the LaFIS-LFK software interface. On the left, there is a map of a rural area with a green boundary line. A legend window is open over the map, showing various layers like 'Referenzspalte', 'Hinweispunkte unbearbeitet', 'Hinweispunkte bearbeitet', 'VOLL-Vorschlagszone', 'Verwaltungszone', 'Referenzzone', 'LE-Referenzzone', 'LE-Verwaltungszone', 'RCD4', 'LE-Rode', 'Gemeinde', 'Flurstücke', 'TK25', 'Prüfbereiche', and 'Raster-Proxy-Luftbilder'. On the right, there is a 'Hinweispunkteigenschaften' (Hint Point Properties) form. The form contains the following fields and values:

- ID: 248
- ELAN-ID: 2
- Herkunft: Elan
- Bemerkung zum Hinweispunkt: Feldblockgrenze nach unten zeilen#
- Datum des Hinweisensetzens: 15.07.2008
- Laufende Nummer Feldblock: 24
- Zugeordneter FLIK/FLEK: DENWLI0542112282
- Adressnummer: 020044602 - 0815-020044602 Max
- Hinweistyp: Feldblock oder LE zu groß
- Bemerkung:
- Prüfstatus: ☐ kein Eintrag, ☐ geprüft, Referenzänderung, ☒ geprüft, keine Referenzänderung, ☒ VOK notwendig (circled in red)
- Prüfname:
- Prüfdatum:
- TPD-Kennzeichen: kein Eintrag
- TPD-Name:
- TPD-Datum:
- TPD-Bemerkung:
- BEST-Status: Keine Eingabe
- BEST-Name:
- BEST-Datum:

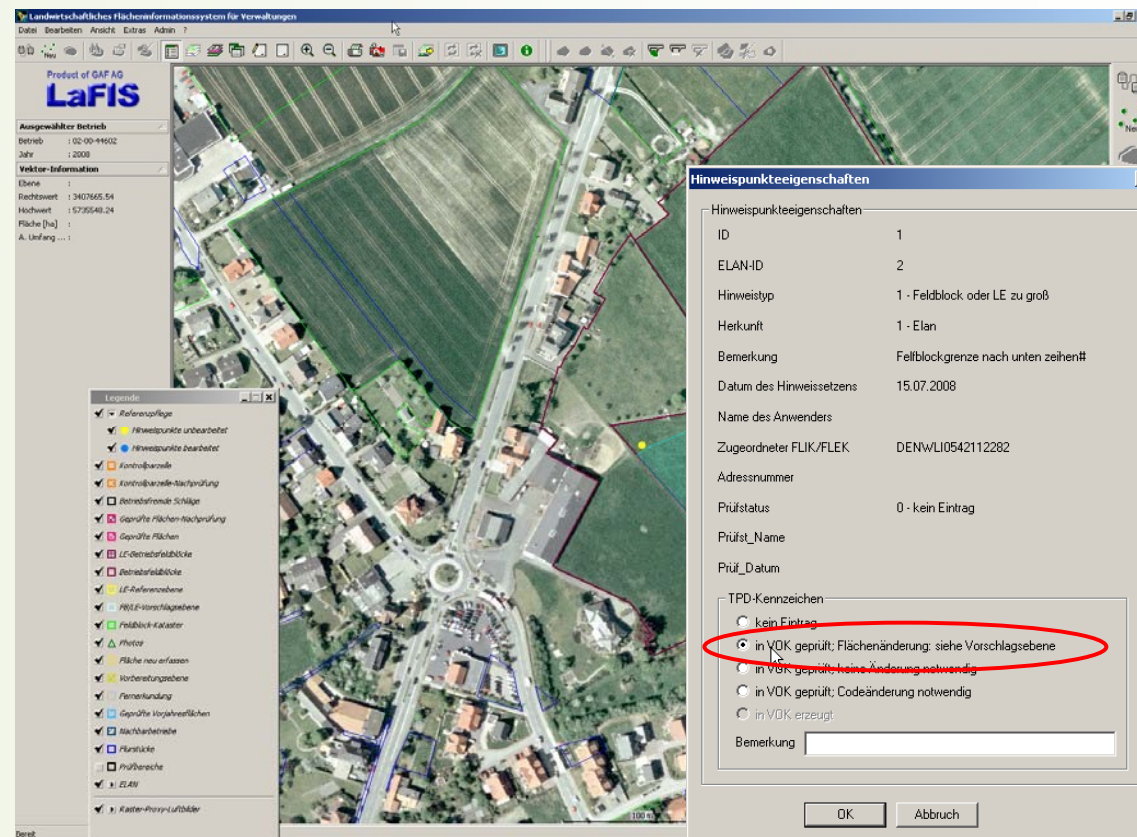
Buttons at the bottom include 'OK', 'Abbrechen', and 'Übernehmen'.

General  
 Agriculture  
 Environment  
 Forestry  
 Geology  
 Land Register  
 Land Use



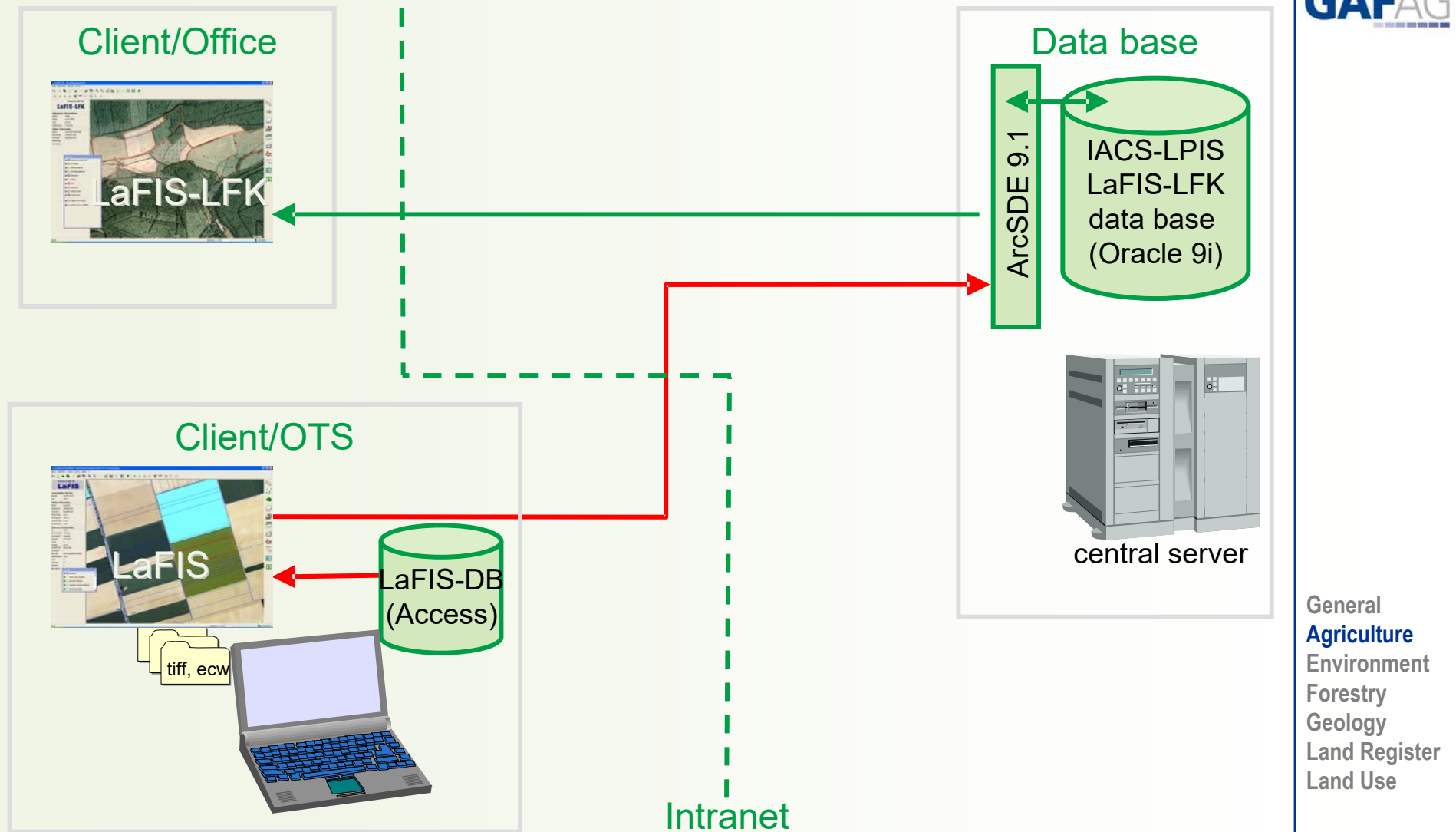
General  
**Agriculture**  
 Environment  
 Forestry  
 Geology  
 Land Register  
 Land Use

- ③ import of GPS-measurements as reference proposal into the OTS-system
- ③ documentation with advice points

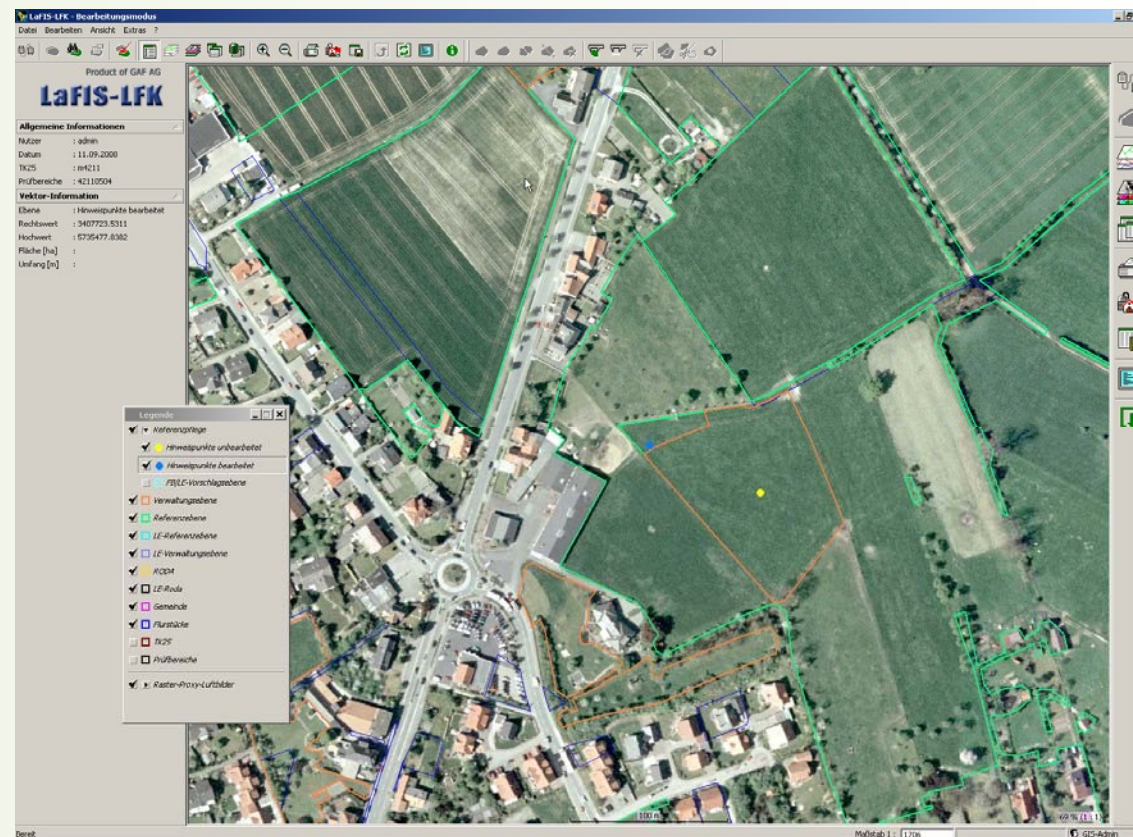


General  
Agriculture  
Environment  
Forestry  
Geology  
Land Register  
Land Use



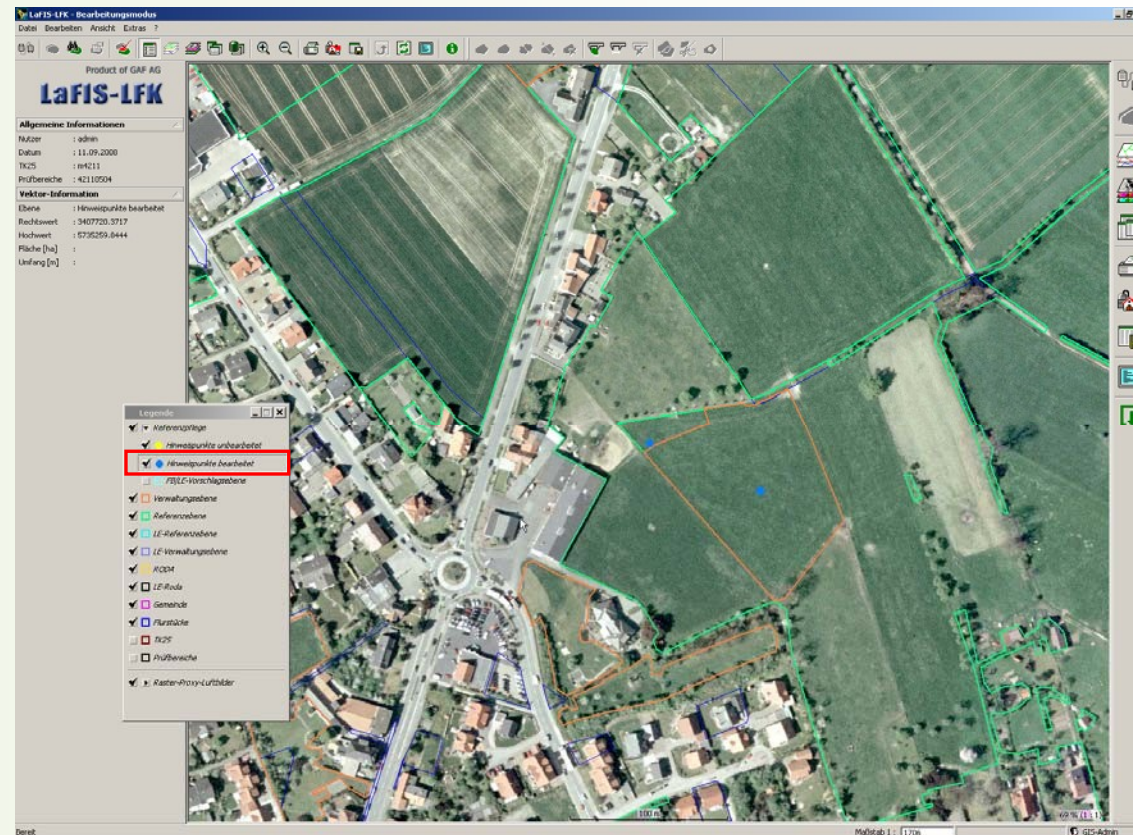


- ③ farmer advice point completed – new advice point of GPS-proposal
- ③ replacement of physical block from draft layer by GPS-proposal



General  
**Agriculture**  
 Environment  
 Forestry  
 Geology  
 Land Register  
 Land Use

- ③ documentation of physical block changes with advice point
- ③ completion of maintenance request



General  
**Agriculture**  
 Environment  
 Forestry  
 Geology  
 Land Register  
 Land Use

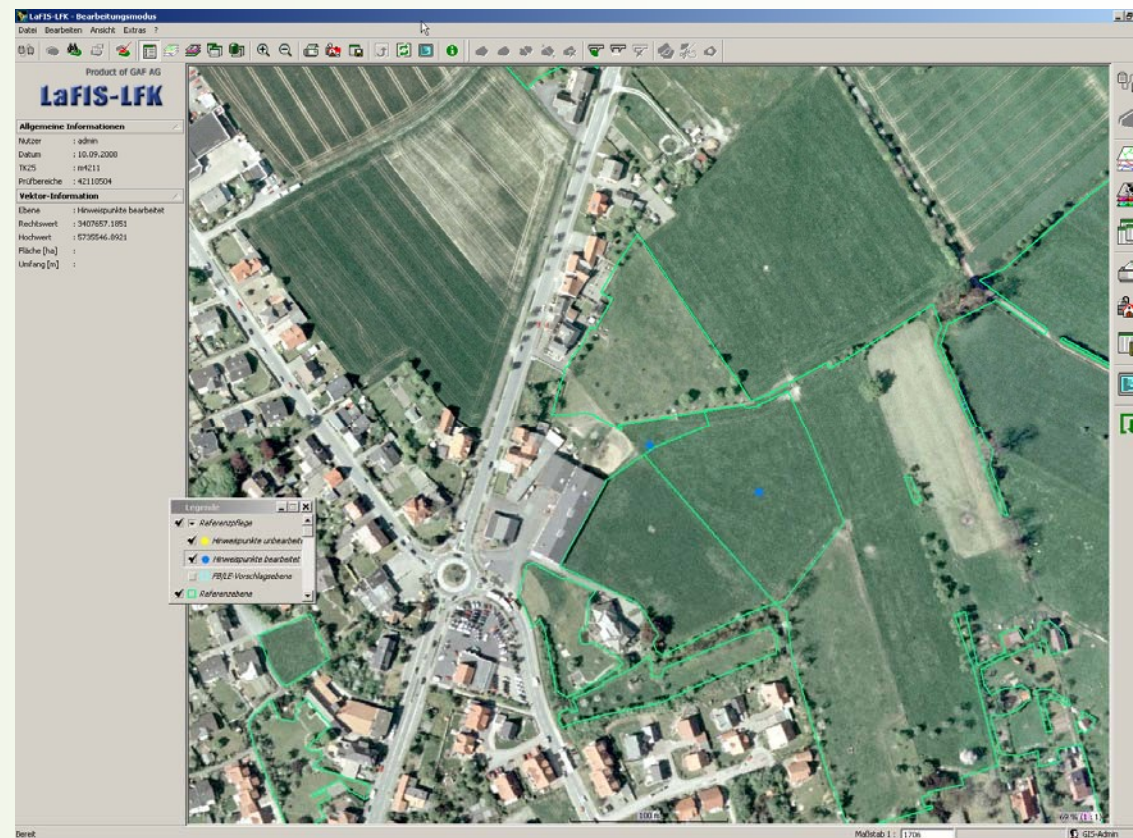
## The closing steps to obtain a new reference layer

- ③ the editing of the physical block from the draft layer has to be confirmed
- ③ checks are carried out by the head office to give information to the paying agency software
- ③ the head office starts the creation of the new reference:  
all completed and confirmed reference parcels (physical block) from the draft layer are inserted into the new reference layer and replace their predecessors

General  
**Agriculture**  
Environment  
Forestry  
Geology  
Land Register  
Land Use



### ③ Creation of the new reference layer



General  
**Agriculture**  
Environment  
Forestry  
Geology  
Land Register  
Land Use

**Thank you very much for your attention!**

General  
**Agriculture**  
Environment  
Forestry  
Geology  
Land Register  
Land Use