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SINERGISE

Integrating external registers within Farm Registry/ LPIS or how to improve administrative controls

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- Types of checks
- Examples
- How to establish controls
- Benefits
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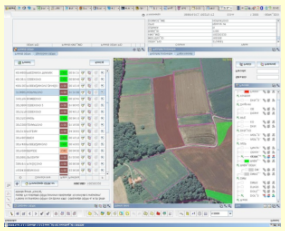
LPIS evolution within a country - start

- Set-up infrastructure
- Buy aerial photography
- Buy existing / develop new LPIS software
- Setup initial data
  - using last year's claims and possible the cadastre
- Educate users
- Go live






LPIS evolution – problems

- **First problems occur**
  - **Staff have problem using the software (is complex)**

  - **Staff have problem implementing the methodology (is complex; it is sometimes tough, farmers want to declare as much land as possible)**

LPIS evolution – problems

- **EU audit happens**
  - **their response: nice job, but you can do even better**

  - **How to do it better? Use all available administrative controls (in 100% cases!!!)**

LPIS evolution – LPIS Update

- In a few years, more data inconsistency issues:
  - the farmer does not even exist (typing error)
  - same farmer having more farm holdings or non-existing farmers within the LPIS
  - husband and wife having two separate farm-holdings
  - a farmer claims there is arable land although the foresters are cutting down the trees there
  - … many more

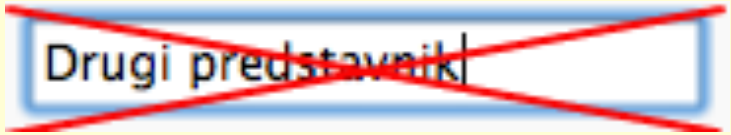
- The system is only using controls within the agriculture area and not using all other registers available in the country
- Let's go through some examples

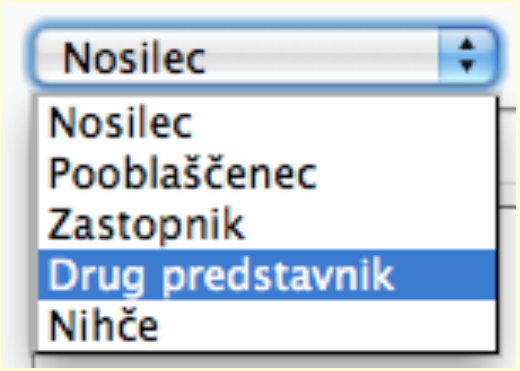
Types of checks

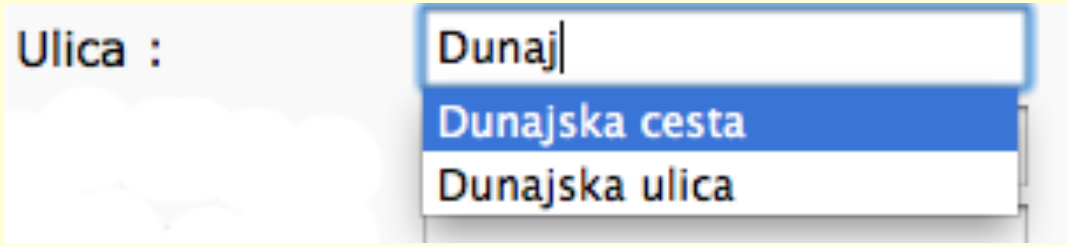
- Control while entering data
- Nightly data consistency checks
- External action triggered controls

Control while entering data

- **Primary**
  - **Use "select value" instead of "free text"**

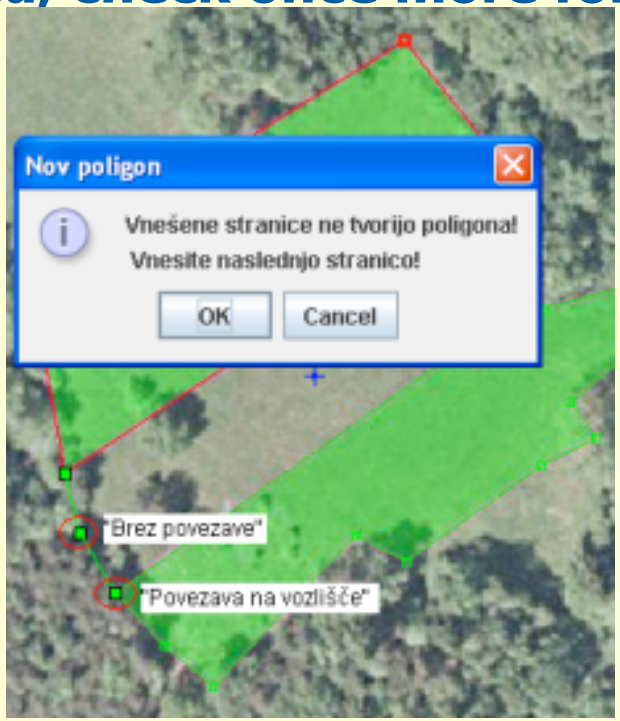






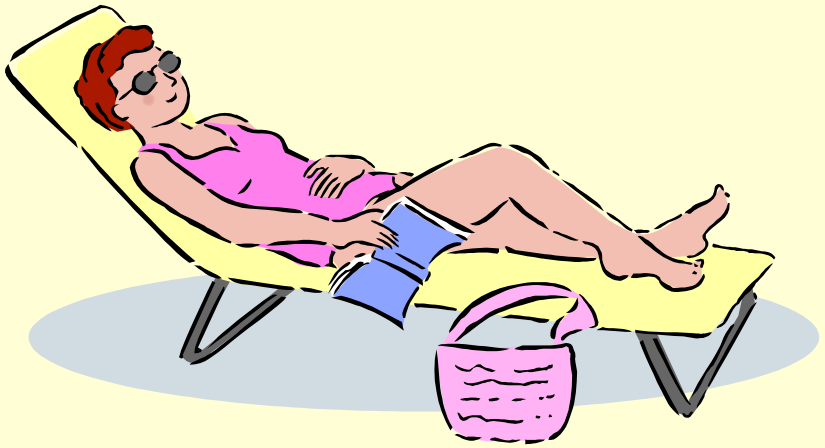
Control while entering data

- **Secondary**
  - **Once the form is filled, check for data consistency and reject improper values**
  - **Once the whole process is finished, check once more for consistency of data against all records in the database**



Control while entering data

- **Benefits**
  - **Less work for end-user**
  - **More structured data**
  - **Erroneous data do not even come to the database**



Example – Central population register

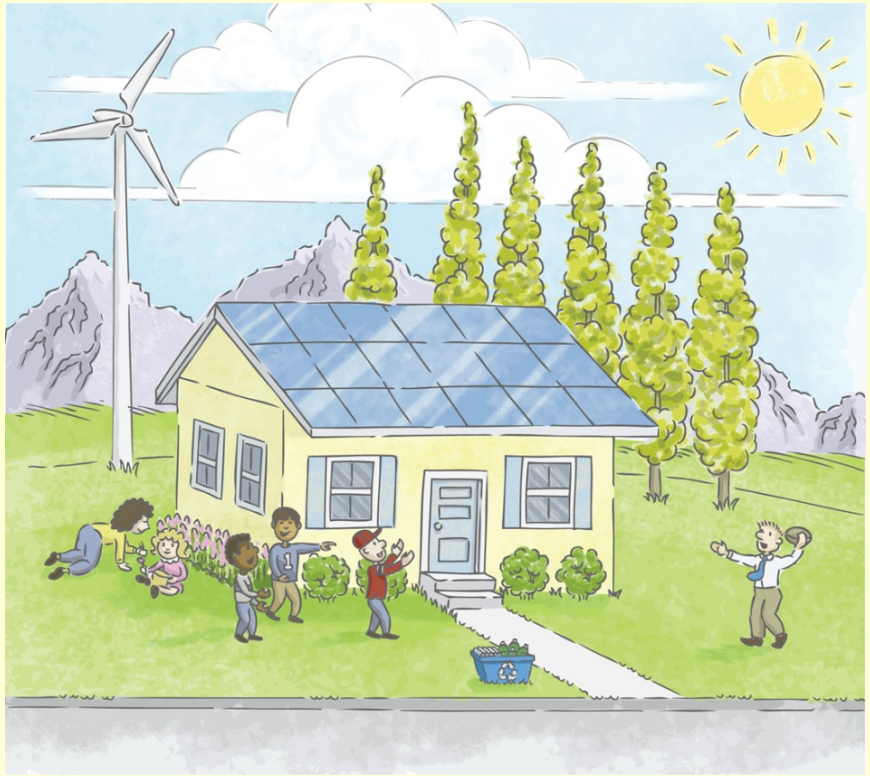
- **Available checks and benefits**
  - the person is a "real one"
    - he/she does exists
  - the person is unique
  - no need to fill person's data
    - query them in the register
  - the person's data are maintained by some other institution, which has better sources
- **Potential problems**
  - Use of personal data
    - LPIS has the access to only those people who are farmers and they give right to use these data

Example – Street addresses

- LPIS has by design exact location
- What about farm buildings (holdings)?
  - These are useful for some other cases
    - how to find/contact a farmer
    - disease outbreak analytics (stables, etc.)
- Again, no need to type exact address, select from a list of values
- Check that there are not two people from the same family claiming two fictiously different farm holdings
  - To be entitled for some specific measures

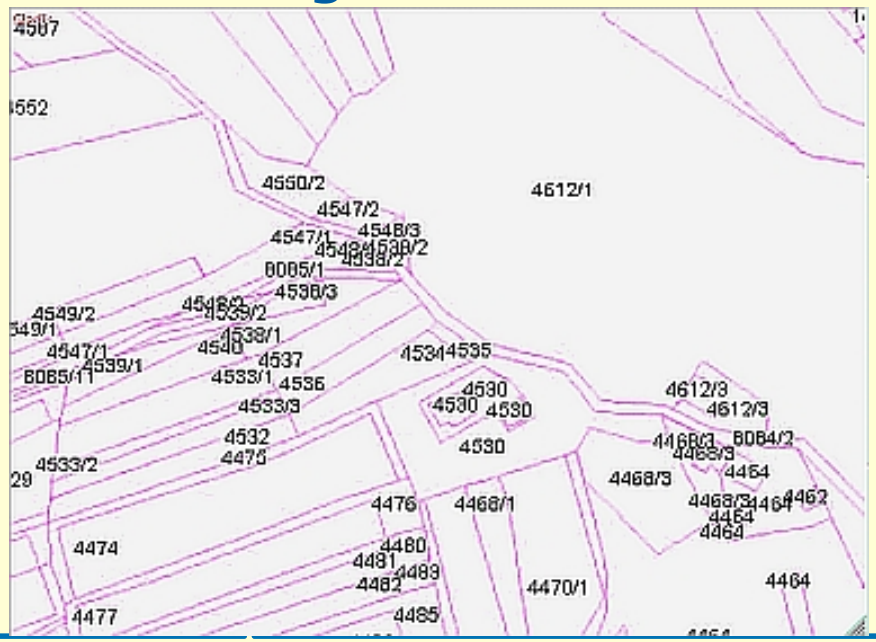
Example – Register of house holdings

- **Easier management of farm members**



Example – Land Cadastre

- Common practice to use it as initial layer
  - is it accurate enough?
  - in Slovenia we had to eliminate it from the LPIS completely
- Assistance to farmers
  - in the areas with no specific land features
  - can bring troubles as it can not be measured on the field



Nightly data consistency checks

- Include external registers' data in the database
  - including updates!
- Schedule your controls against these registers
- On inconsistency found, annotate the farm accordingly
  - Meeting with farmer is automatically scheduled as the farm holder has to be present during changes

Prikaz kontrol za KMG_MID 100180364

Iskalnik

	KMG_MID	Tip	Šifra	Tekst	Povezava
	100180364	INFO	KMG-90001	Kmetijsko gospodarstvo JE v območju z omejenimi dejavniki	>>
	100180364	INFO	TNS-40005	Nosilec je vpisan v RPGV z RPGV_ID 98299	>>
	100180364	WARN	KMG-00021	Domače ime kmetijskega gospodarstva ni določeno	>>
	100180364	WARN	KMG-00107	KMG nima določenega namestnika nosilca, obstajajo pa še drugi člani kmetije, starejši od 18 let	>>

Nazaj | Naprej

LFA areas

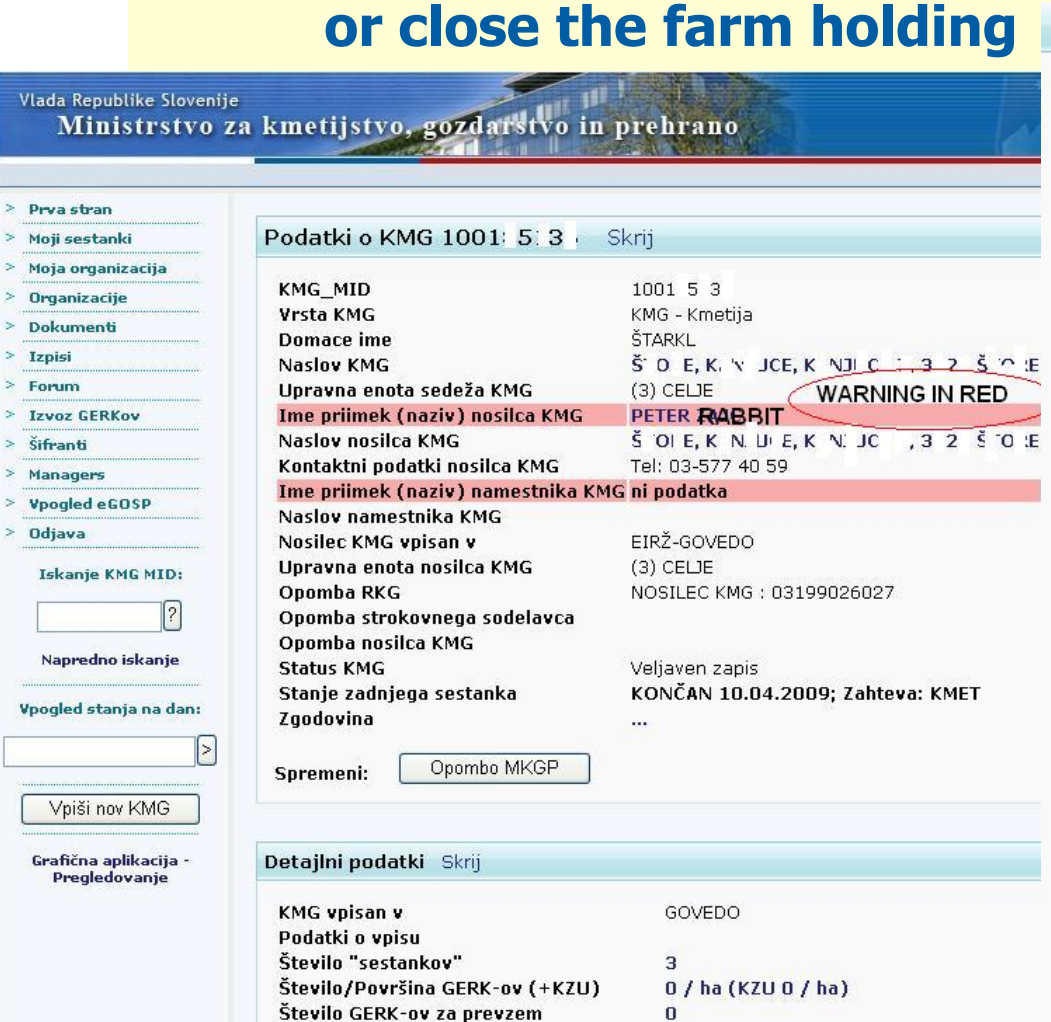
Wine register

Domestic name of the farm?

There is no substitute for the holder

Example - Central population register

- **Changes of the person's status**
  - **if a person dies, the system is notified and a meeting scheduled with members of the farm in order to enter a substitute person or close the farm holding**



Example – Land use

- First used for initial LPIS data setup
- Used as a "control while entering data"
  - farmer cannot claim the land if it is overlaid with a land use polygon stating forest use, built-up area
  - assistance with on-the-spot controls
- Regular check
  - The land use is changing continuously so LPIS have to be updated

Example – Land use

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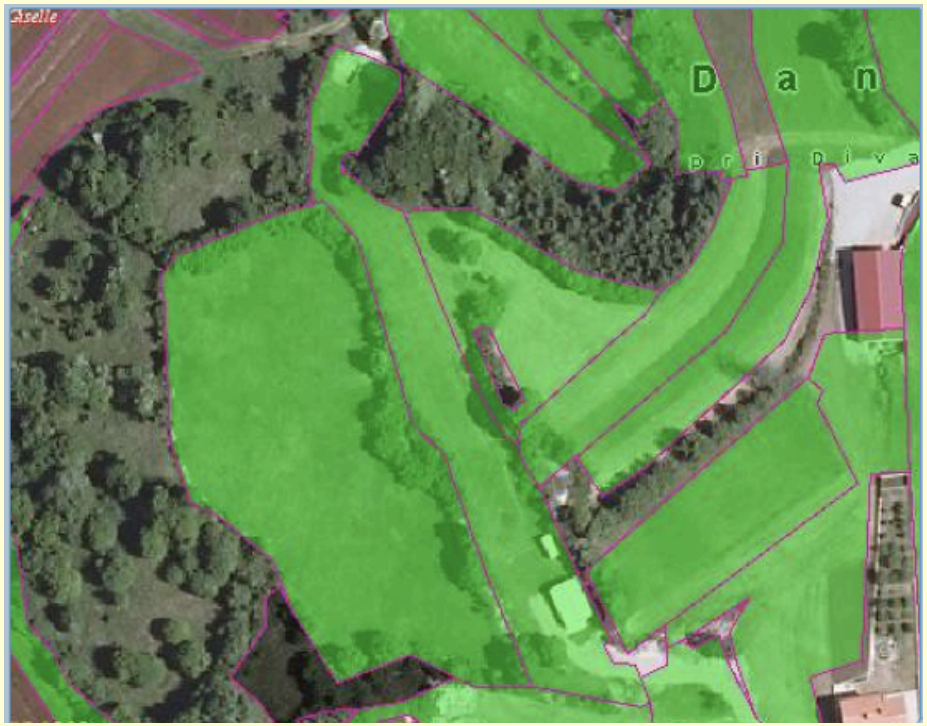

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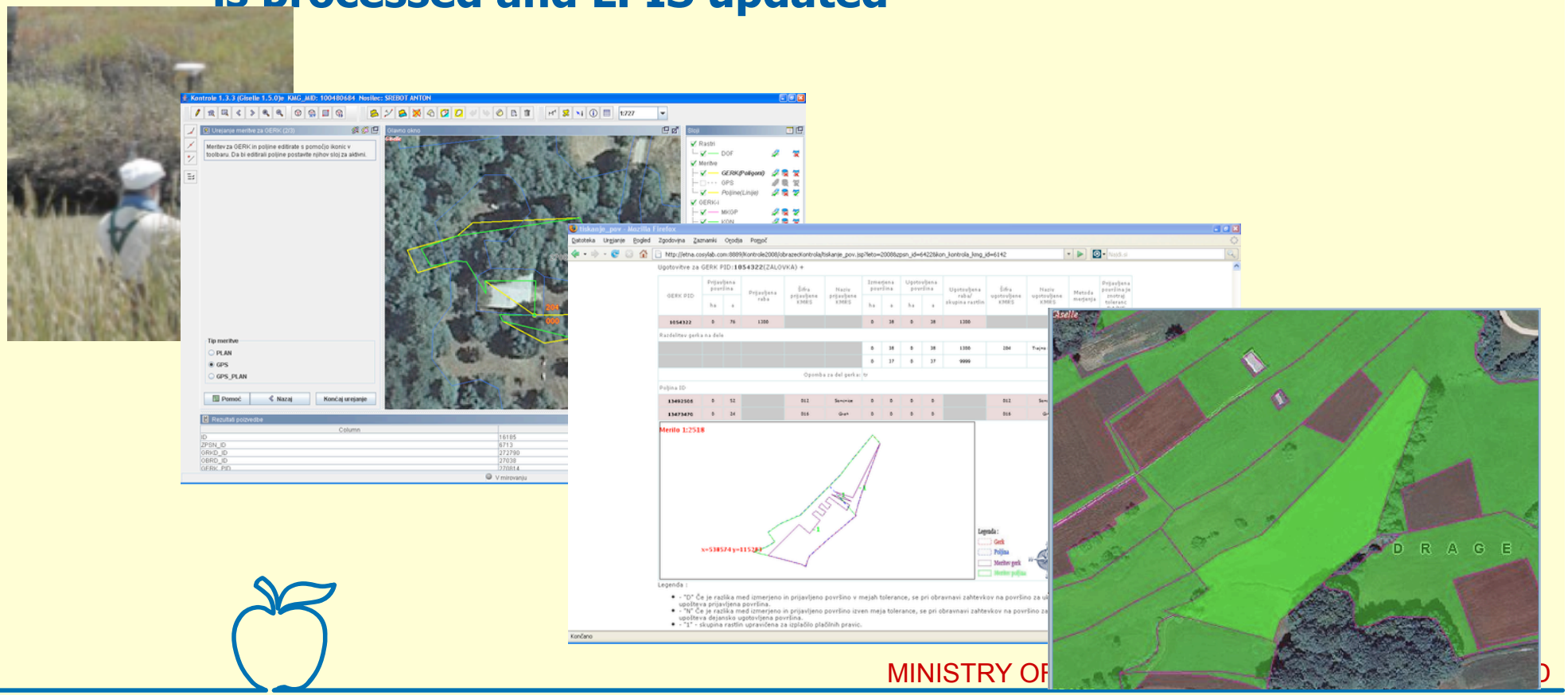
External action triggered controls

- **On the spot checks**
  - **if non-eligible area is found during on the spot control, it is processed and LPIS updated**



Other possible controls

- **Orthophoto**
  - most commonly the orthophoto is used only as a visual control
  - could we include semi-automatic control?
    - image processing + statistics + user's comment
  - some image processing in order to check user's input on-the-fly?

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- **Any ideas?**

Improving external registers

- None of the registers is perfect
- All have to be maintained
- One can use LPIS process to improve these registers
  - i.e. if the on-the-spot control discovers discrepancy between land use layer and state on the field, the land use layer is automatically updated

How to establish controls

- design a system integrated to as many registers as possible (for input use; users should select values; no free text if possible)
- do not limit too many user's actions at the beginning
  - they are already confused with the complexity
  - observe types of mistakes users are doing and add controls one by one
- integrate new registers to improve quality and consistency
  - each time a new register is added, one should update the data entered before that moment
    - as later, more inconsistency which have to be resolved manually

Establishment – technical part

- Replicate data from external registers to the central database (on- line, daily or weekly,…)
- Add additional checks to the application
  - Application logic or Database level
  - Decide about allowed/forbidden discrepancy between the register and the user's input
    - if it is allowed, user should always write an explanation (force them)

Benefits

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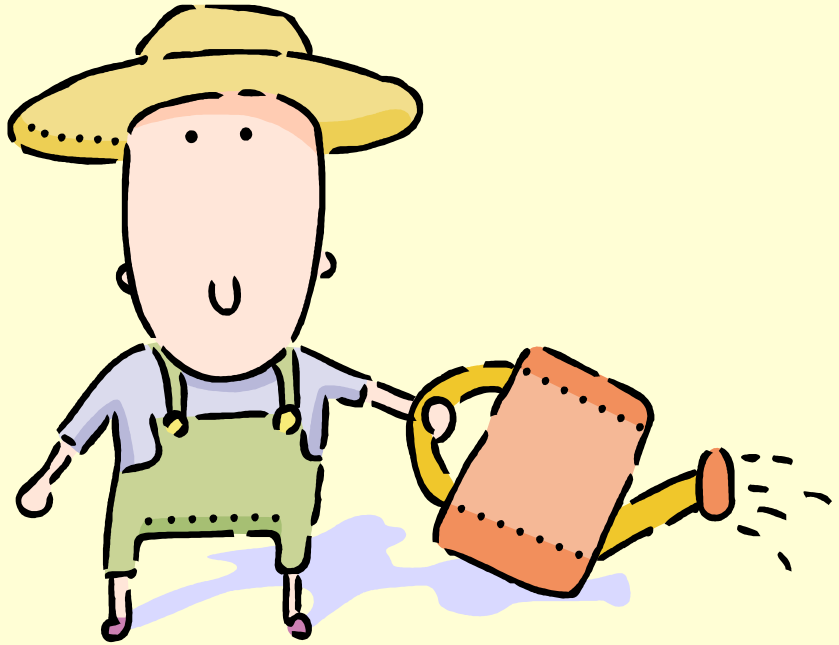
- Better quality of the data
- Better concistency of the data
- Less effort needed for maintenance of the data
- Less frustration to the farmers

- Lesser penalty ☺



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Lessons learned

- **Integrate as soon as possible**
  - **to avoid data inconsistency**
  - **to avoid EC penalty**
- **Included registers should be of proper quality**
- **It requires some effort but it is worth it**