

# Quality management of OTSC methods '2015'

MARS (Monitoring Agricultural Resources) Unit  
DG Joint Research Centre



Evidence-based scientific and technical support  
Cooperation with policy Directorates-General  
Sharing its know-how with the Member States



**Quality Assurance** is process oriented and focuses on **defect prevention**, while **quality control** is product oriented and focuses on **defect identification**.

Both aspects of quality management.

# Outline

Motivations

General principles of QC

For the OTSC...

- Verification intra-method
- Verification inter-methods
- Verification selection methods

Propositions of procedure

Conclusion

## Yet another extra work ?

With all the existing audits...

With all the data preparations...

With all these changes within the CAP...

With all the checks to perform ...

On top of all that, why should we have another “audit” to face ?



# Motivations



It is not a tool for:

- Loosing your time
- Gather materials for your next audit

But it is a tool for spotting and understanding

“What possibly went wrong in your OTSC method(s)”

Rise awareness of possible weaknesses

Possibly implement remedial actions ...

Not waiting for identification by audits

Better overview of real case and practical issues

Also important for JRC (adapt technical guidance, better image use ...)



# General principles

What ? : “Quality control (QC) is a procedure or set of procedures intended to ensure that a product meets a defined set of quality .”

How ? : Check the set of quality on ( **a sample of** ) the product

When ? : After the production, before to issue the product

Be self-assured that the final product is accurate and of the requested quality



# For the OTSC



Assess the overall quality of the OTSC results (and thus method):

- No inconsistency in the data
- Rules correctly applied
- Appropriate methods

Emphasize on CwRS

(cost/time effective + less invasive for the farmers)



but for MSs, also important have a look at field controls

How can we increase effectiveness ?

- Reduce cost: if too strong in rejecting

Reduce risk for the fund by more Rapid Field Visits (costly)

- Reduce financial risk: if too loose in accepting

Less dossier follow up but risk for the fund





## Check different levels within OTSC process

Effect of data/data preparation ? (e.g. quality of control tools (GNSS, Imagery ...))

Effect of controller ? (e.g. consistency of control instructions)

Effect of control method ? (e.g. CwRS vs. field)

Effect of sample selection ? (e.g. risk vs. random, control zones vs. full random)



# Verification intra-method

“The dossier is re-controlled using the exact same conditions and tools”  
Typically, the dossier is passed to another controller and the check is re-performed not knowing the first diagnostic

## Observables:

- Are they consistent...
  - at parcel level ?
  - at dossier level ?
- If not, look for the reason:
  - Rules/guidelines not clear enough...
  - Controller not following rules





## Verification inter-method

“The control tools are assumed to be equivalent”

= “The conclusions should be the same regardless of the control tool”

Is it a correct assumption ?

How to assess it ?

Typically, the same parcels/dossiers should be checked using both methods (even if already accepted using CwRS).

E.g., a dossier selected at random for field inspection that is in a CwRS zone can be checked twice.

### Observables:

- Are they consistent...
  - at parcel level ?
  - at dossier level ?
- If not, again, it could be the rules/guidelines or the control tools are not equivalent in such conditions ???

# Verification selection methods

All the following choices are likely to affect your OTSC results:

- Random vs. Risk ?
  - for Control Zones
  - for dossier
- Field vs. CwRS ?
- Homogeneous Control Zones ?
- Random selection with random key or every  $x^{\text{th}}$  dossier ?



## Observables:

- Comparison of error rates: "Random < Risk", "Field = CwRS", "CwRS  $Z_1$  = CwRS  $Z_2$ ", "Temporal trend of rejections/errors found"...

...

# What can I learn ?

If nothing was found => Good for you ! Hopefully next time too...



If something was found => The most important part of the work starts ...

- Why this issue ?
- How did it happen ?
- Is it unfortunate or systematic ?
- How can I remediate ?
- Do other MSs have experience on that ?
- For how long has it been there ?
- ...

# Proposed procedure

Very light

Keep go with your own process

collection of minimum set of data by JRC

Light ( Similar to previous QC before 2009)

Limited to 1 CwRS zone/MS

limited sample size/QC

'Real' ( Similar to LPIS QA)

Sample statistically representative



# Conclusion



The main objective is to help you !  
NOT to create another audit level !

- Not mandatory...
- Practical details still to be agreed

## Expected impacts

- Detect issues upstream (before audit )
- Increase awareness, mastering and effectiveness of control methods
- Take remedial action
- It is an investment !  
“Allocating some time to double-check could save money on long term!”

## Who volunteers?

