

VERA

Verification of environmental technologies in **A**gricultural production

Why ?

What and how?

Goals?



Why VERA?

Background:

- need to fulfil the requirements of conventions / EU directives
- **Need for secure validation of environmental technologies**



1. Clear definition of product requirements
2. Harmonization of test procedures in Europe
3. Comparable test quality in Europe
4. Improvement of comparability of products
5. Homogeneous competitive market conditions
6. Establishment of a database for tested products

Environmental technologies in agriculture



Current VERA test protocols

Land applied manure



Manure storage



Slurry separation



Housing systems



Air cleaners



Biogas - Draft



Importance in Europe - BREFs

- ✓ IED/ IRPP BREF = European regulatory framework
- ✓ VERA = a type of confirmation for technology performance

In order to have a reliable monitoring, efficiency factors (EF) are recommended to be derived from measurements designed and performed according to a national or an international protocol (e.g. **VERA** protocol) and validated for an identical type of technique and similar climatic conditions.

- ✓ is mentioned as a reference:

27 hits in “final draft”

Source: Final draft, BREF, Aug 2015

4.18.5 Dust emissions

As for ammonia emissions, dust emissions can be measured or estimated by using emission factors. Measurements of dust emissions are also covered by the **VERA** protocol, and the operational procedure is very similar to the one use for ammonia emissions (see Section 4.18.2.2). The main differences are related to the measuring methods, which are summarised in Table 4.225.

What does VERA do?

- ✓ **Verification** = Confirmation that a test has been performed according to a **standard** (= VERA test protocol).

✓ Independent
✓ Transparent

NO certification

NO expert opinion

NO national approval!

- ✓ National requirements or general advices can **ONLY** be given as information or recommendation to the applicant.

VERification of Environmental Technologies for Agricultural production

Effective validation of environmental technologies

Mutual recognition by

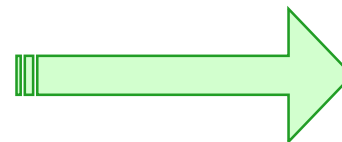
- ✓ common test protocols for verification with scientific experts
- ✓ International collaboration of authorities

Basic principle:

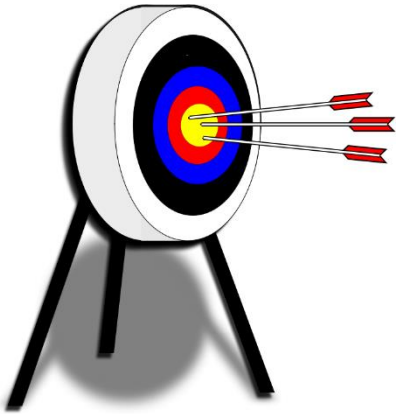
Credibility by

- ✓ High measurement quality
- ✓ Transparency

For: farmers manufacturers
authorities



VERA – Next targets



- Implementation of the new „General VERA Guidelines“
- **from now on open for new countries (BE, FR, AT, E, CH ...)**
- Revision/approval of the test protocols
- Workshops (odour, bioaerosols, air cleaning)
- Confidence-building measures → ring test

In discussion:

- Harmonised fees?
- Transition into EU-ETV ?
- Test labs: ISO 17025 with “VERA scope”

Interested in being a partner?

1st meeting “answers & question for new countries”: **end of November 2017**



Take care of fresh air!

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Some more slides...



ETV - Development

Start USA

Start EU

VERA 

Start VERA



- Energy
- Water treatment
- Waste



From AdvanceETV → ISO 14034:2016

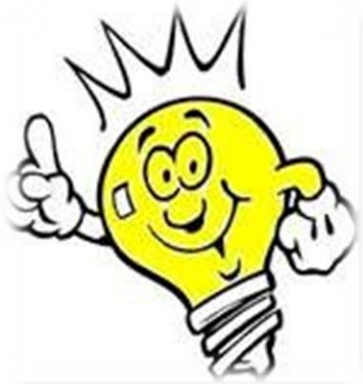
Certification vs. Verification

	Certification	Verification
Requirement Audit of a procedure	✓ Yes	✓ Yes
Evaluation - of a procedure	✓ Yes	✓ Yes
- of the results	✓ Yes	- NO
Target	Minimum requirements must be met: i.e. regulatory requirements, specific standards	Neutral confirmation of manufacturer data

Certification vs. Verification

Advantages of the verification:

- ✓ Use for each country possible
- ✓ Everything will be published → also negative examples!
- ✓ Transparent data
- ✓ Benchmark better possible



ETV global

Start USA

Start EU

VERA 

Start VERA



- Energy
- Water treatment
- waste



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Basis for a VERA verification

Test Protocol for Livestock Housing and Management Systems



Version 2 / 2011-29-08 Copyright VERA Secretariat

VERA

General VERA Guidelines (GVG)

Version 1.1 – February 2017

For more information:
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Version 1.1 – July 7th, 2014 and Version 1.2 / July 27th, 2016
Luxembourg, Office for Official Publications of the European Communities, 2014
For more information: <http://iet.jrc.ec.europa.eu/etv/> or ENV-ETV@ec.europa.eu

VERA

VERIFICATION OF ENVIRONMENTAL TECHNOLOGIES
FOR AGRICULTURAL PRODUCTION

Application for VERA Verification Statement

Application date: _____

1. Applicant	
Company	
Contact person	
Address	
ZIP Code	
City	
Phone	
E-mail	
Website	
Manufacturer (if other)	
2. Test	
Applied test protocol	
<input type="checkbox"/> The test is pre-approved by <input type="checkbox"/> The technology was applied for	
Date: _____	
Existing test data available	
Date of completed test	
Test institute(s)	
Contact person	
Test institute accredited?	
3. Technology	
Product name	
Basic principle	

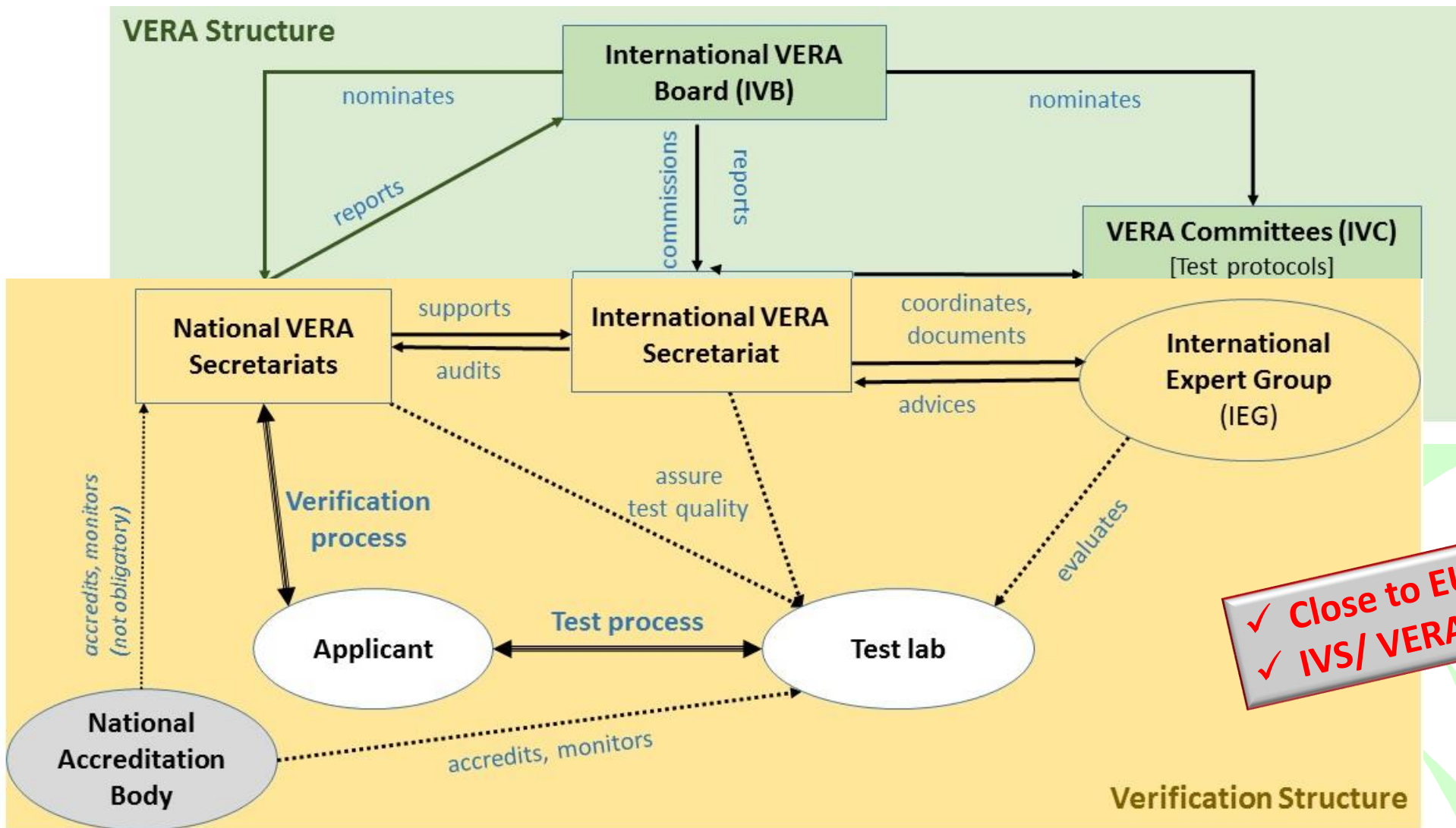
International VERA Secretariat
Phone +49 69 24788-639 Email



Terms and Conditions for a VERA application

(Dated: 22.03.2017)

- General terms**
 - The VERA organization does not endorse, certify or approve technologies. VERA verifications are based on an evaluation of the technology performance under specific, predetermined criteria and the appropriate quality assurance procedures. VERA makes no expressed or implied warranties as to the performance of the technology and does not certify that a technology will always operate as verified.
 - The end user is solely responsible for complying with any and all applicable federal, state, and local requirements. Further the end user must be aware that the countries involved in VERA are having different legal requirements which will influence the status and use of this verification statement in each country.
- Validity**
 - A VERA Verification Statement is only valid for the specific verified product/technology and the tested animal category. There is no time limit for the validity of a VERA Verification Statement as long as the product / technology stays unmodified. The International VERA Secretariat can, however, at any time invalidate the VERA Verification Statement if it is found to be misused or if significant modifications have been made to the product / technology that are estimated to have a negative effect on the environmental efficiency or operational stability. In regard to the latter the International VERA Secretariat can require that a new VERA test should be performed.
 - A VERA Verification Statement provides access to the admission of the specific technology on the Danish Technology List of environmental efficient technologies for agricultural purpose administered by the Danish Environmental Protection Agency and to the Dutch Raw list administered by the Dutch Ministry of Infrastructure and Environment provided that the VERA test shows adequate operational stability and sufficient environmental efficiency. The final evaluation for admission on these lists is solely a decision made by the individual ministries in question.
- Processing an application**
 - When the Verification Body receives the application, the applicant will be notified if the application meets the formal requirements and if the required documents are included.
 - The application is evaluated by the Verification Body in collaboration with the International VERA Secretariat and a group of international experts. The involved parties are obliged to handle all information confidentially. Potential Intellectual Property Right issues have to be clarified together with the Verification Body when submitting the application.
 - The duration of the evaluation procedure depends on the quality of the application and the attached documentation. If additional information is needed, the processing period can be prolonged. The Verification Body aims to keep the applicant continuously informed about the status of the evaluation.
 - A VERA verification can be granted when it has been verified that a test has been carried out according to the demands in the applicable VERA test protocol. The VERA Verification Statement is ready for issuing after approval by the International VERA Expert Group, the International VERA Secretariat and the Verification Body handling the application. The applicant has five days to comment before the final VERA Verification Statement can be issued.
 - The VERA Verification Statement describes among other things which technology the statement is concerning, a description of the technology, the results from the test, focussing on the



✓ Close to EU-ETV
✓ IVS/ VERA: no legal entity

