



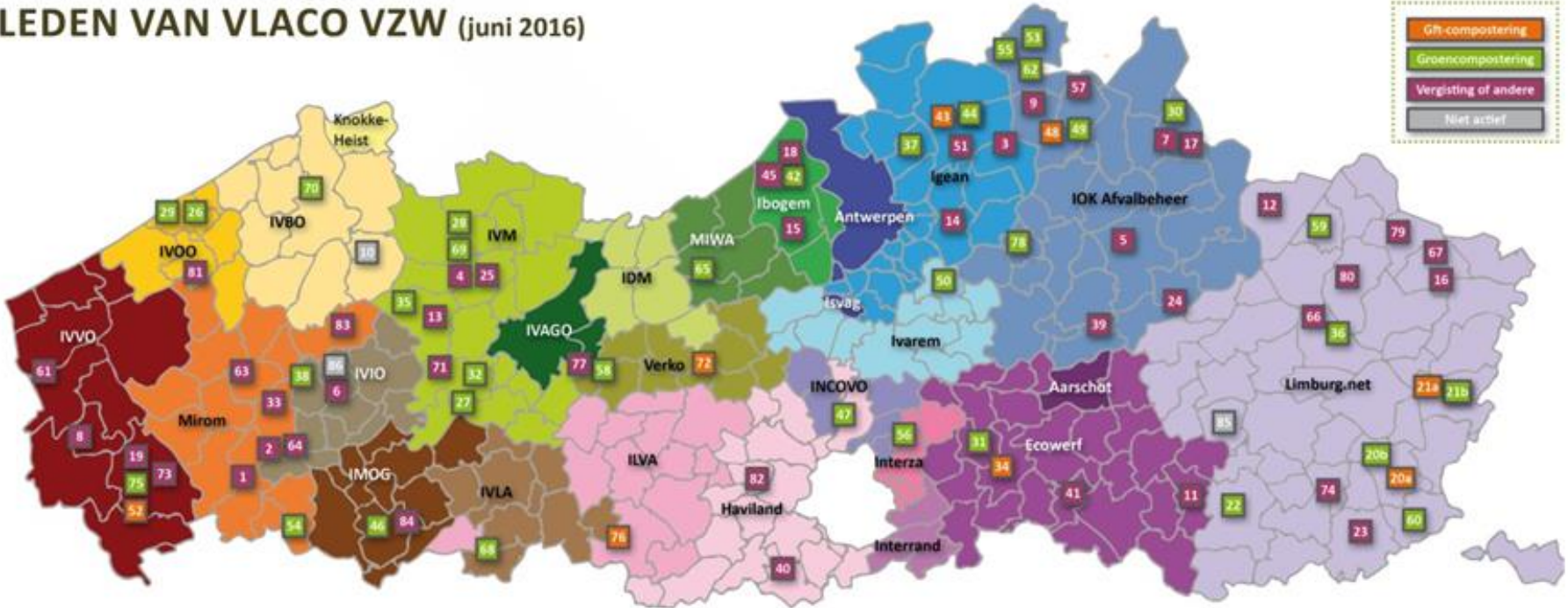
**Conformity assessment procedures for waste
derived organic materials under the new EU
Fertilising Products Regulation**

Wim Vanden Auweele (Vlaco, ECN)

Presented at ECN/GME Policy Workshop at Growing Media 2021

Flanders - Bio-waste Management

LEDEN VAN VLACO VZW (juni 2016)



VLACO is the Flemish membership organisation that supports and implements bio-waste policies in the region. It promotes both home and centralised composting, as well as anaerobic digestion.



National Rules vs. EU FPR

- **Vlaco** is recognized as **independent Certification Body in Flanders**
- Quality Assurance is **mandatory** with certification required on level of production and final product (audit, sampling and analysis, assessment, certification)
- **Quality certificate:** the end product (compost / digestate) complies and is no longer considered as waste (End-of-Waste status)
- General Regulation of the Certification: Flemish Sustainable materials and Waste Authority (OVAM) is scheme-holder

- **EU FPR:** CE mark is **voluntary**, not mandatory
- How easily can the requirements for FPR be reached ?



Facts and Figures from Flanders

Some figures: 112 audits, 245 certificates, 594 samples annually

	Plants	Audits	Input (bio-waste) [tonnes]
Green waste composting	42	39	645.000
Vfg composting	9	9	345.000
Anaerobic digestion	39	37	1,45 million



Quality Assurance of compost and digestate in a European perspective

- European Compost Network
- A little bit of history:
 - 20 years ago: first discussions on harmonising the quality requirements
 - ECN Technical Working Group on Quality Assurance
 - ECN Quality Assurance Scheme: Quality Manual: first draft in 2006
 - 3rd version: <https://www.compostnetwork.info/ecn-qas/>
 - Guidance for JRC study on end-of-waste criteria for compost and digestate
 - Guidance for the safety and quality requirements for EU Fertilising Products Regulation
- Harmonisation between QA-systems
- Assistance to build up national schemes
- Assurance and monitoring for high quality compost and digestate products in Europe



Biological treatment of biowaste: important issues

- waste materials: diverse, possible risks associated
- biological treatment offers:
 - hygienisation
 - stabilisation
 - homogenisation
- How to turn into material which is:
 - “product”-like
 - Safe in terms of chemical, physical, (micro-)biological issues
- 4 main cornerstones
 - Quality of **input** material
 - Management of the biological **process**
 - **Quality** of the end **product**
 - Reasoned use of the product: **info**
- Quality Assurance of production process and final product



Biological treatment of biowaste: quality assurance and certification

- input materials: waste
 - definite list => EWC codes
 - risk assessment of input material
 - acceptance protocol, technical properties
 - registration, traceability, documents
- process control: quality manual
 - operational procedures: batch treatment, registration
 - management of critical control points
 - hygienisation: time/temperature (knowledge and experience)
 - post-treatment
- end products
 - independent sampling and analysis
 - limit values, quality targets, declaration
 - output registration, complaints management



**THE ANSWER:
CERTIFICATION**



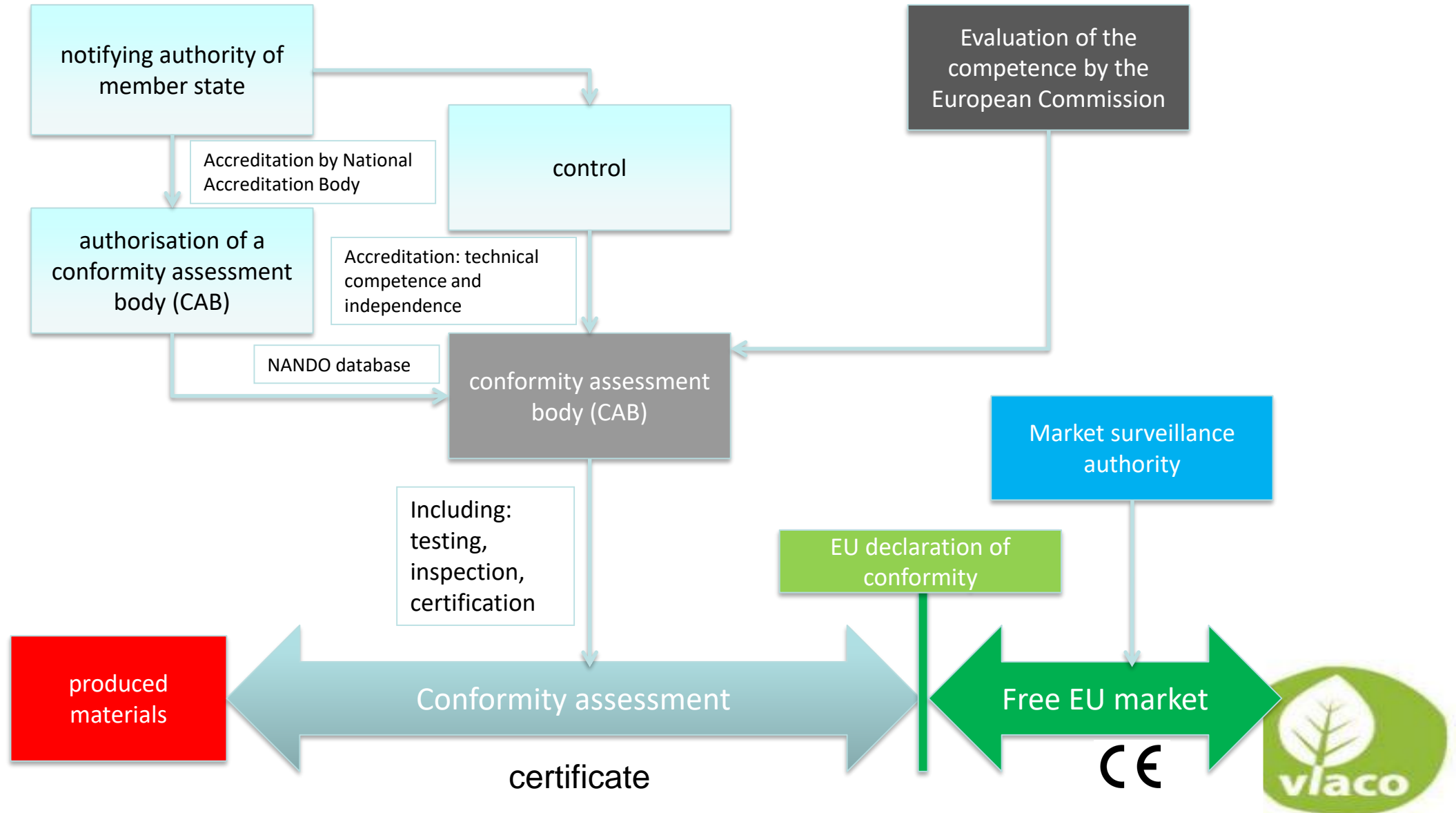
EU FERTILISING PRODUCTS REGULATION (EU) 2019/1009

Objectives

- **Boosting organic matter (biowaste) recycling** from biowaste
- **Integration of organic fertilising products** into the scope of the new Regulation
- Introducing **harmonised EU rules for products** diverting from organic waste materials
- Creating access to CE marking and **free trade for organic fertilising products across EU**
- **Optional Harmonisation**, free choice to opt for compliance with national rules for fertilising products restricted to national markets or CE marked fertilisers with unrestricted access to EU market



Organisation of the approach



Conformity Assessment Procedure

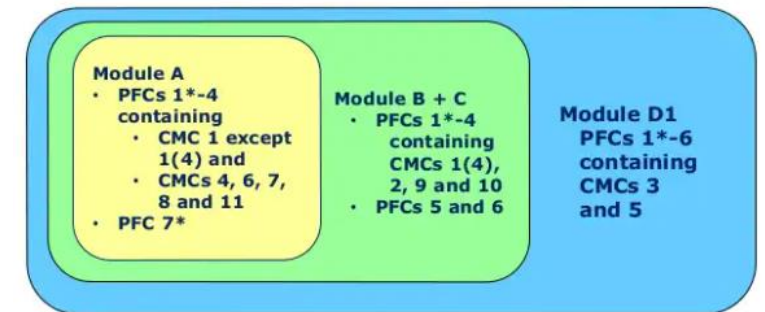
- Levels of conformity assessment
- Different modules for different PFC/CMC
- Compost (CMC3) and digestate (CMC5): Module D1 : Quality Assurance of the production process

- Conformity Assessment tasks by CAB:

- Periodic audits
- Sampling and analysis
- Unexpected visits
- Certification => authorization to use the CE mark + name of the CAB

- Harmonized standards are needed, for both sampling and analysis. There are no standards for audits.

Modules are defined in Annex IV depending on component material category (CMC) or product function category (PFC)



Conformity Assessment CMC3 and CMC5

- Annex IV – Module D1
- Quality System of compost and digestate producer (CMC level)
 - Technical documentation
 - Trained staff and responsables
 - Internal audit
 - Evaluation of internal quality system
 - Quality assessment of input materials (acceptance protocol)
 - Evaluation of quality and safety criteria (internal testing and analysis) of the process (hygienisation) and the output material (1 – 12 samples / year)
 - Complaints and non-conformities, corrective actions
- Audit by the **accredited** conformity assessment body
- **Knowledge** and **experience** of the process and products



Waste materials in EU FPR

- Article 19: End-of-Waste status

This Regulation lays down criteria in accordance with which material that constitutes waste, as defined in Directive 2008/ 98/EC, can cease to be waste, if it is contained in a compliant EU fertilising product. In such cases, the recovery operation under this Regulation shall be performed before the material ceases to be waste, and the material shall be considered to comply with the conditions laid down in Article 6 of that Directive and therefore to have ceased to be waste from the moment that the EU declaration of conformity was drawn up.

- End-of-waste status is confirmed with CE mark
- Only PFC's can obtain CE mark, thus end-of-waste status
- Compost and digestate as CMC: remains waste
- Setup of EU FPR: providing a high level of protection of public interests such as human, animal and plant health, safety and the environment.
- Recovery operation: hygienisation and biological breakdown (process parameters) are substantial
- Other CMC's than compost and digestate: no waste should be allowed
(CMC2: Plants, plant parts or plant extracts)



Organisation of Conformity Assessment

- Audit, sampling, conformity assessment: many safety and quality requirements are imposed at CMC-level (compost and digestate primary production)
- Other requirements are imposed at PFC-level (using CMC's to make CE marked fertilizing products)
- Conclusion: Module D1 conformity assessment activities will have to be carried out on different production levels / sites
- Compost for Growing Media: Conformity Assessment on composting plant + growing media production plant: split audit ? Different CAB ?
- Is a certificate for CMC requirements compliance a solution ?





**Thank you
for your attention**

Any questions?

wim.vanden.auweele@vlaco.be

+32 15 451 370

www.vlaco.be

