

# Structure of General Verification Protocol



- Part A: Introduction and description of the system
- Part B: Verification Procedure
- Part C: Quality Management
- Part D: Supporting documents





#### **Verification Bodies**

#### Nomination

Verification Bodies will be **accredited** by National Accreditation Bodies (for certain technology areas), with that considered nominated.

#### Roles and Responsibilities

- Verification Bodies are responsible for managing the EU ETV pilot programme for certain groups of technologies. This includes e.g.:
  - · Implementation of the GVP
  - Assess and approve test methods and test data
  - Participation in the Technical Working Groups relevant for their technology area
  - · Receipt and processing of Proposals for verification in their technology area,
  - Technical advice to proposers, e.g. definition of performance claim
  - Ensure compliance with quality management requirements for test bodies

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# **Verification bodies**

- Qualification, e.g.
  - Be accredited to comply with the requirements of ISO 17020. (inspection body) GVP - part of the documentation describing the functions of the Verification Body
  - independent, e.g. not engaged in any activity that may conflict with their independence of judgment or integrity in relation to verification activities for which they are selected
  - Be capable of carrying out all the tasks assigned to it, itself or on its behalf
  - Have Quality Management and Quality Assurance to ensure that verification activities are implemented as in Part C of the GVP
  - · Have qualified personnel according to GVP
  - Professional secrecy with regard to all information obtained
  - etc.



# **Proposer/Vendor**



#### Roles and Responsibilities

- The Proposer is supporting the technology verification, in particular through:
  - · applying for verification
  - contracting with a Verification Body
  - · liaising on plans and reports
  - making technology available
- The Proposer is responsible for:
  - · reviewing plans and reports
  - providing timely access to technology, accessories, user manuals and training for the Verification Body
  - contracting and paying test bodies and for the services provided by Analytical Laboratories (in case of in-house testing);
  - · comply with the rules for using the verification statement
- The Proposer may perform the necessary tests in-house.

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### **Test Bodies**

- Qualification
  - Test Bodies shall fulfill the relevant requirements of the General Protocol of the EU ETV pilot programme as set out in Part C "Quality management of Test bodies"
  - Staff of test body not the same and not dependent on staff for evaluation
- Nomination
  - Test Bodies are designated by the Proposer to perform these tests, in consultation with the Verification Body. The Proposer is responsible for contracting with Test Bodies and for payment of the services provided by Test Bodies.





#### **Test Bodies**

#### Roles and Responsibilities

- Drafting the testing plans,
- Performing the tests, ensuring the level of quality required by the Verification Body;
- Ensuring quality of analysis used in the test and, when applicable, the compliance of analytical laboratories with the requirements of this GVP
- Drafting the report on the tests performed, for transmission to the Proposer and to the Verification Body.
- In case <u>a proposer performs the necessary tests in-house</u>, a test body might
  - draft the testing plans
  - review the testing plans elaborated by the proposer

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# **Analytical laboratories**

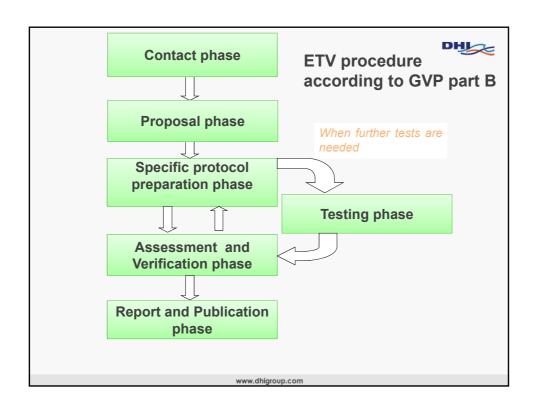


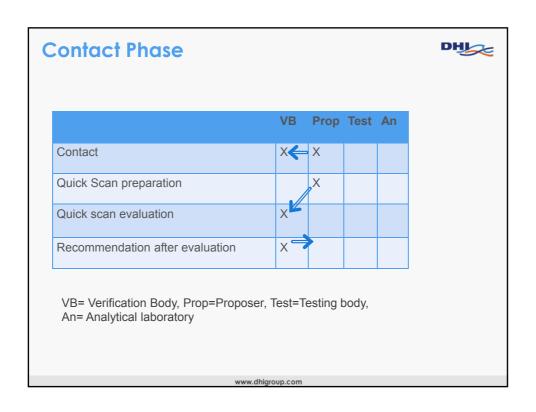
Staff not the same as those responsible for evaluation in test body and not dependent on these

#### Roles and Responsibilities

- planning analysis and selecting analytical methods in accordance with the requirements of the test body;
- performing the analysis, ensuring the level of analytical quality required by ISO 17025;
- reporting the analytical data to the test body in agreed format and with methods applied and obtained analytical uncertainty stated.





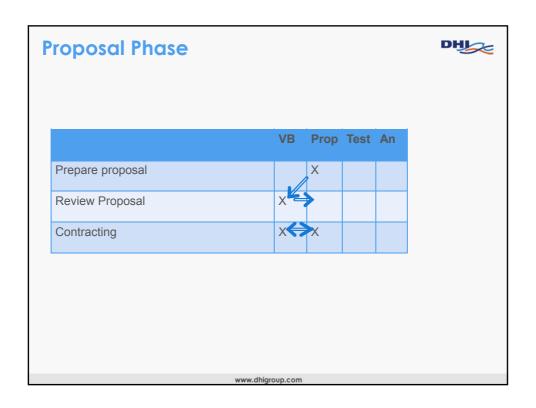






# Aim of the Quick Scan

- Assess the suitability of the technology for verification, e.g.
  - does it fall within the scope of the EU ETV pilot programme, as provided in Appendix 2 list of technology areas?,
  - is it ready for the market?,
  - does it show potential to meet user needs and to perform in line with legal requirements?,
- does it show a sufficient level of technological innovation?
- Identify the relevant technology group
- Give a first indication about the complexity and range of costs for a full verification







# Specific Protocol Phase and assessment of available data

	VB	Prop	Test	An
Technology definition and its impact	(X) <b>&lt;</b>	Х		
Performance parameter definition	X (lead)	Х	(x)	(x)
Requirements on test design and data quality	X (lead)	X	(x)	(x)
Requirements on test, measurement and evaluation methods	X (lead)	X	(x)	(x)
Provide existing data		Χ		
Assessment of available data	Х			

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# Parameters to consider

- Operational and benefit
- Resources
- Consumables
- Use of hazardous substances
- Waste generated
- Emissions (air, water)
- Man-power needed
- Space needed
- Longevity

- Legal standard and/or BAT values
- Robustness/vulnerability to changing conditions of use or maintenance
- Resource use during production of equipment
- Reusability, recyclability (fully or in part)
- End of life decommissioning



# Requirements on test design



- Overall test design
- Scale (pilot and/or field)
- Performance parameters to be measured
- Methods of reference analysis if relevant, including sampling, measurement and calculation methods
- Data management
- Quality assurance
- Test report contents

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# **Testing**

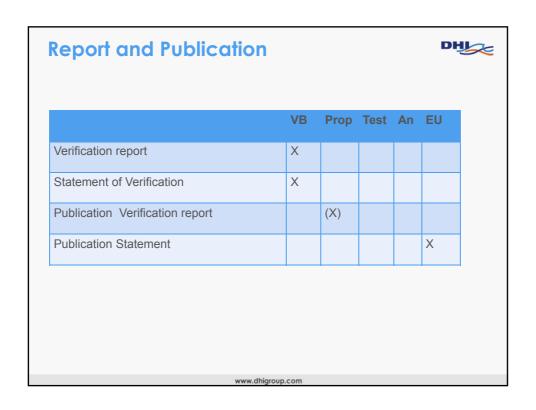


	VB	Prop	Test	An
Test body selection		X		
Test site selection*	X	X	Х	
Test plan*	X	X	X	
Testing*	Х	Х	Х	
Test report*	Х	X	х	

\*= different options possible, e.g. in-house test by proposer, proposer involved in preparation of test plan and test report



# Assessment Phase VB Prop Test An Assessment of all data (data quality, completeness, procedures...) Verification (all documents evaluated, final assessment of data) www.dhigroup.com





>∈TV	Statement of Verification Title page/page 1				
EU Environmental Technology Verification (ETV) pilot programmo	e	Verification Body logo			
Technology:	The new supe	er technology for zer	o emission from		
Verification Body		Proposer			
Name:	XX	Name:	YY		
Contact:	X1	Contact:	Y1		
Address:	XXXX	Address:	YYYY		
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