

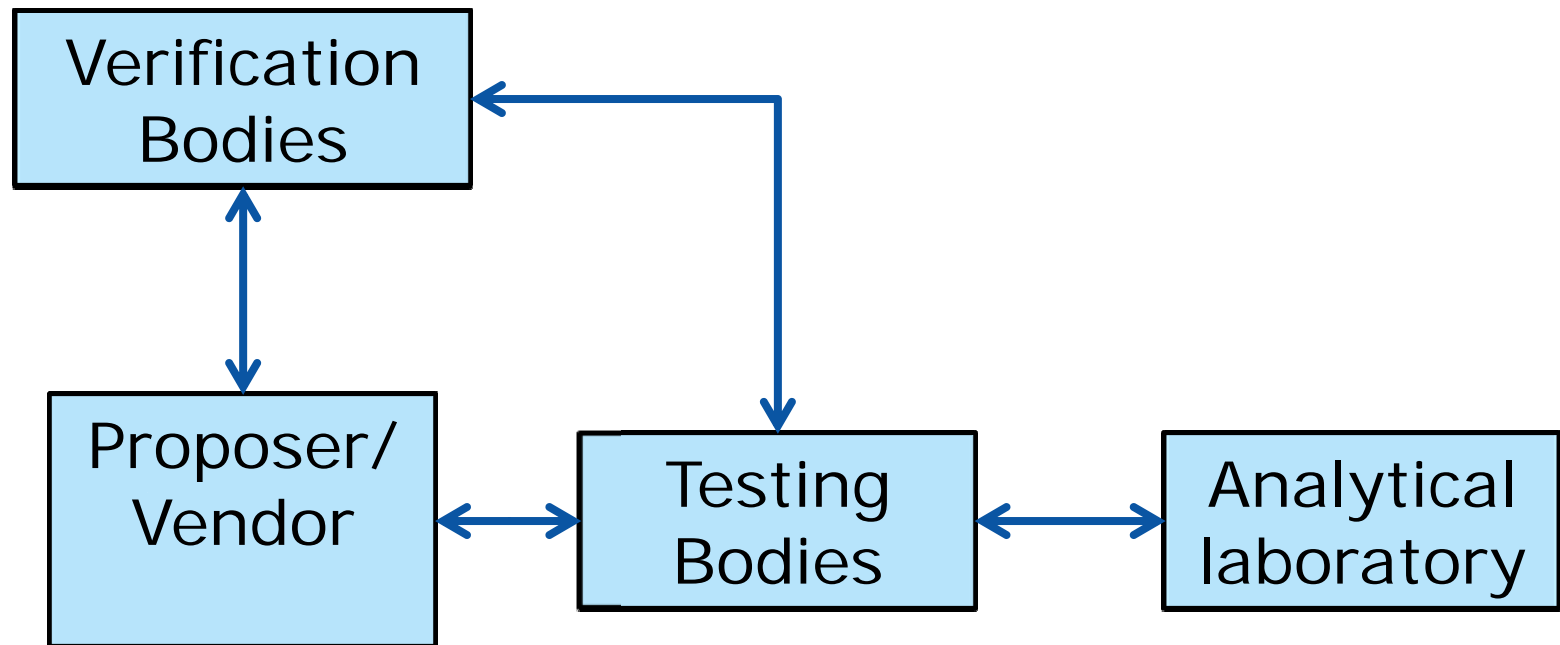
The European General Verification Protocol – how does the verification procedure work?

Uwe Fortkamp, 24 May 2011

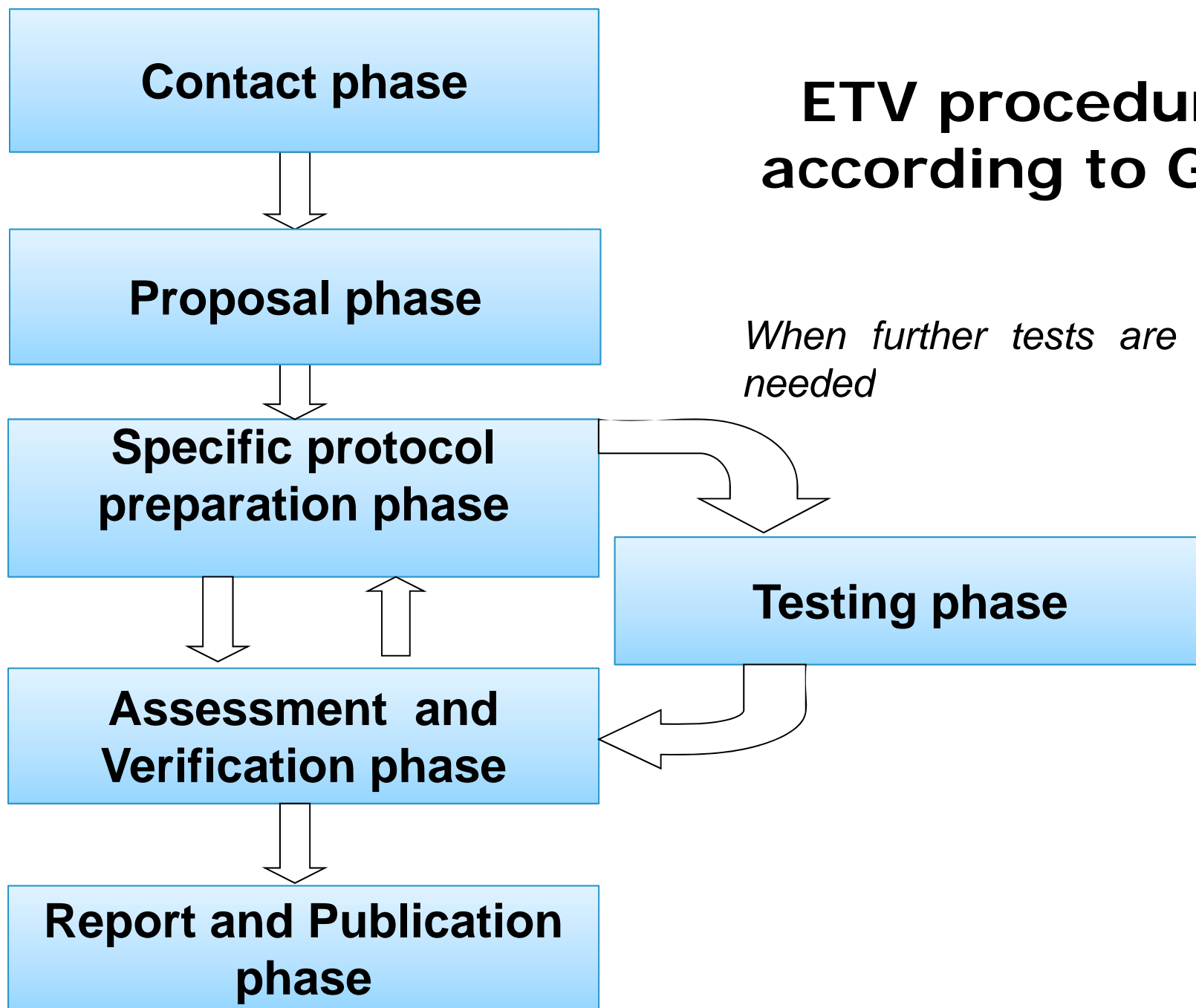
General Verification protocol

- Part B describes verification procedure
- Part D provides templates and flowsheets

Organisations in verification procedure



ETV procedure according to GVP



Contact Phase

	VB	Prop	Test	An
Contact	X ←	X		
Quick Scan preparation		X		
Quick scan evaluation	X ↙			
Recommendation after evaluation	X →			

VB= Verification Body, Prop=Proposer, Test=Testing body,
An= Analytical laboratory

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 pre-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

Proposal Phase

	VB	Prop	Test	An
Prepare proposal		X		
Review Proposal	X			
Contracting	X	X		

Specific Protocol Phase and assessment of available data

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

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 and disposal

Parameter	Value	Legal requirements	Test measurement method(s)	or	Test /available data)
Operational and benefit e.g. temperature	max 80° C	e.g. Required in France, legal reference	e.g. ISO....		av. data + sample (lab) e.g. Verified (2 months) (subcontractor)

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

Testing

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

* = different options possible, eg. in-house test by proposer
 Test site not under influence of proposer

Assessment Phase

	VB	Prop	Test	An
Assessment of all data (data quality, completeness, procedures...)	X			
Verification (all documents evaluated, final assessment of data)	X			

Report and Publication

	VB	Prop	Test	An	EU
Verification report	X				
Statement of Verification	X				
Publication Verification report*		(X)			
Publication Statement					X

* Verification report proprietary of proposer ,Access verification report on request, e.g. to Verification bodies

- Post verification not handled in GVP

Statement of Verification

Title page/page 1



EU Environmental Technology
Verification (ETV) pre-programme

Verification Body logo

Technology: The new super technology for zero emission from...

ETV Registration Number: 007

Date of issuance: Yesterday

Verification Body

Name: XX
Contact: X1
Address: XXXX

Proposer

Name: YY
Contact: Y1
Address: YYYY