



The route towards an internationally accepted ETV Procedure

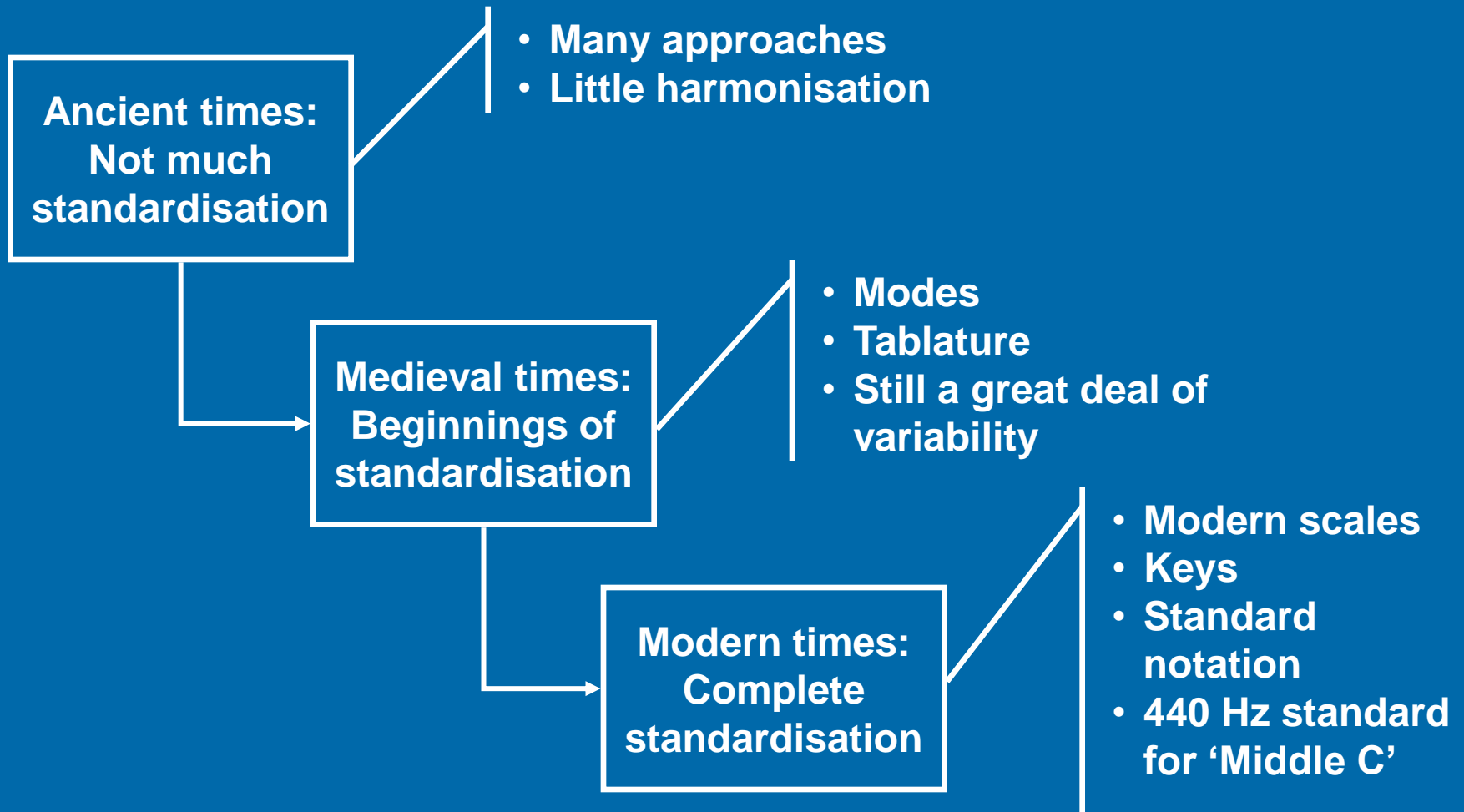
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(England and Wales)

European and international perspectives on
Environmental Technology Verification (ETV)
24 – 26 May 2011, Conference and Workshop, Brussels

Outline

- ➔ Harmonisation and standards
- ➔ Common goals and needs of ETV programmes
- ➔ The path to harmonisation and mutual recognition
- ➔ AdvanceETV and Work Package (WP) 4
- ➔ WP4 and the International Working Group (IWG)
- ➔ The International Working Group (IWG) Strategy for Quality Assurance of ETV
- ➔ The development of the *ETV Framework and Policy* and the *ETV Procedure*
- ➔ Continued alignment with AdvanceETV
- ➔ What happens next

Musical notation - harmonisation



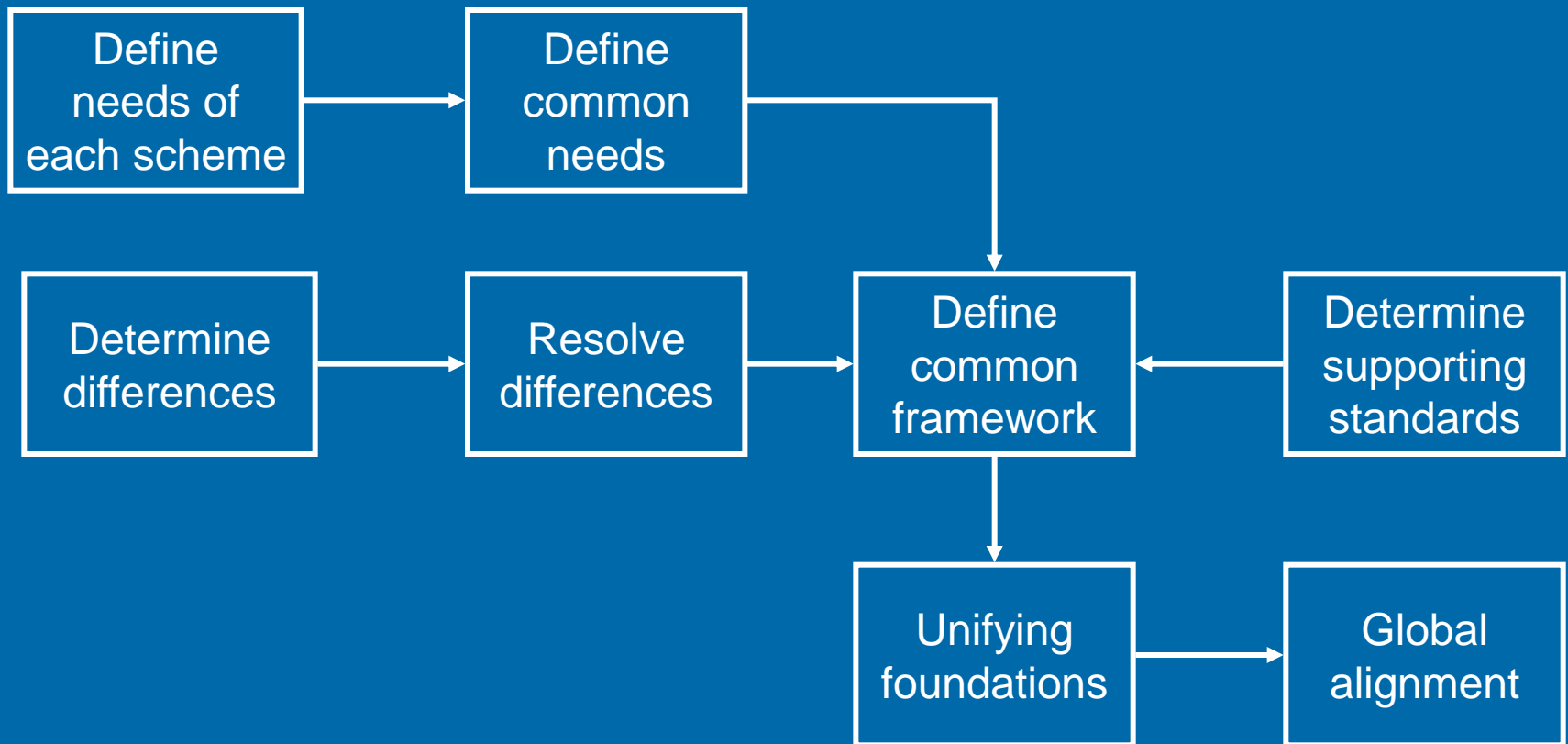
Lots of ETV schemes



Common goals of all ETV systems

- ➔ Provide reliable data and information on the performance of environmental technologies
- ➔ Accelerate the development and use of environmental technologies
- ➔ Find solutions to common environmental challenges

Path to mutual recognition – EU and IWG



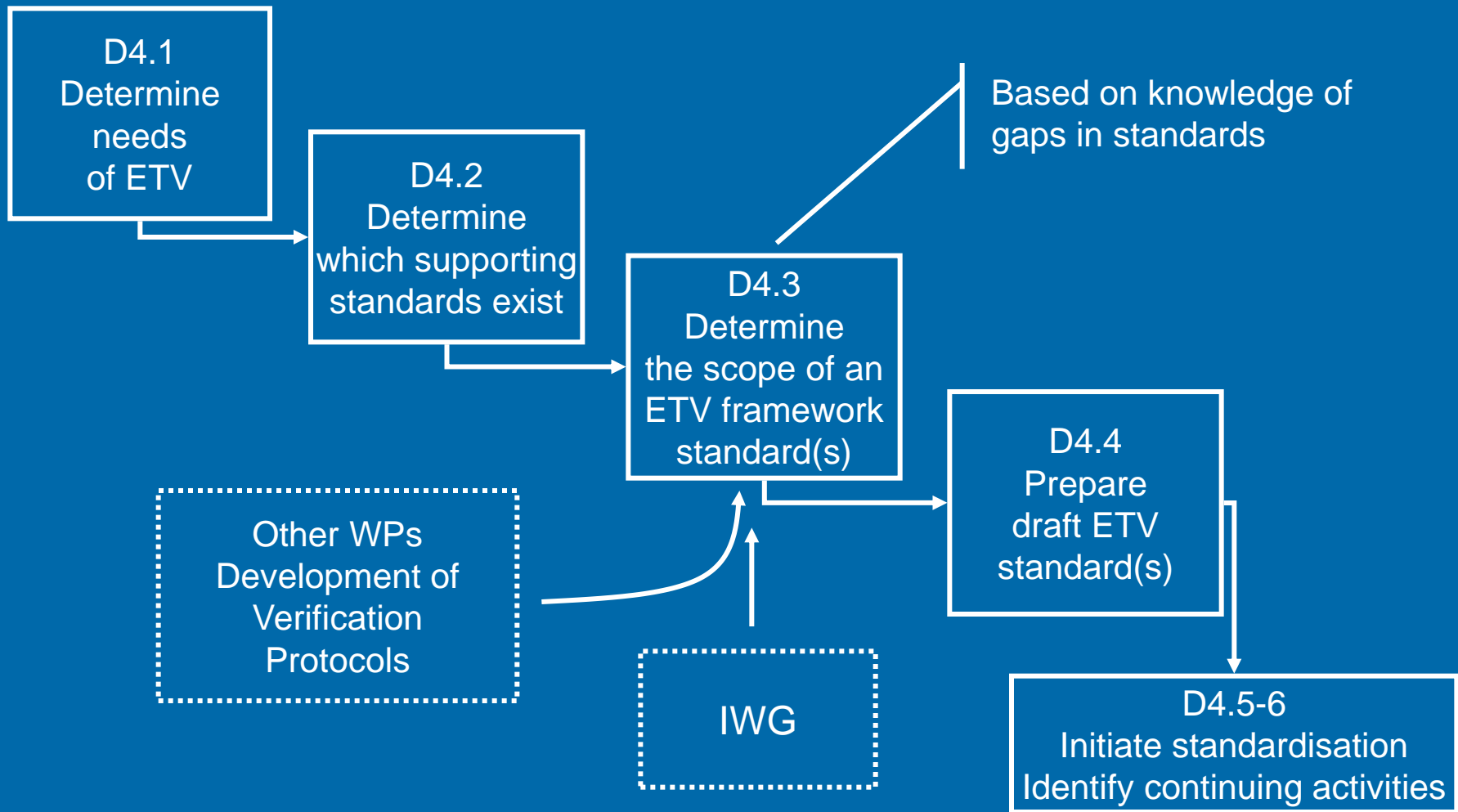
Examples of differences - Globally

- ➔ Specify management systems?
- ➔ Accreditation, certification or nothing?
- ➔ Which stakeholders govern?
- ➔ Verification and test-bodies
 - ➔ Combined or distinct organisations?
- ➔ Provisions for co-verification and joint-verification
 - ➔ Resolved through AdvanceETV project
- ➔ The Obligatory Pointless Argument
 - ➔ 'Contractual Document' or 'Documented Contract'?
- ➔ How much do we publish?

The foundations for harmonisation

- ➔ Unifying policies
- ➔ A common framework
- ➔ A procedure for the process of ETV
 - ➔ EU – General Verification Protocol
 - ➔ Globally – ETV Procedure
- ➔ Development – two parallel projects
 - ➔ AdvanceETV (Europe)
 - ➔ International Working Group (World)

AdvanceETV, WP4 – activities



WP4 – The needs of a unifying scheme

- ➔ Provide a harmonised, international framework
- ➔ Uniform foundation, national flexibility
- ➔ Not be another product-certification scheme
- ➔ Allow for legislation
- ➔ Provide for joint and co-verification (WP3)
- ➔ Focus on innovative technologies
- ➔ Use existing standards and conformity-assessment mechanisms
- ➔ Use the system of standards development to produce any standards where there are gaps

WP4 - How standards can support ETV

- ➔ Examined types of standards available
- ➔ Examined how standards are already supporting ETV
- ➔ Examined the needs of ETV schemes
- ➔ (Considered the work of the IWG in parallel)
- ➔ Types of standard
 - ➔ Management systems/ QA-QC, testing, analysis
 - ➔ Existing ETV protocols and method statements

Global developments

- ➔ Quality Assurance Group (QAG) set up within the IWG
 - ➔ AdvanceETV represented
 - ➔ Mette Tjener Andersson, Christian Grøn, Rick Gould
 - ➔ International ETV Strategy
- ➔ Review - ETV programs and conformity assessment
 - ➔ AdvanceETV WP4
 - ➔ Report by Canadian Standards
 - ➔ Report by NOWATECH
- ➔ EU roadmap for ETV pre-programme

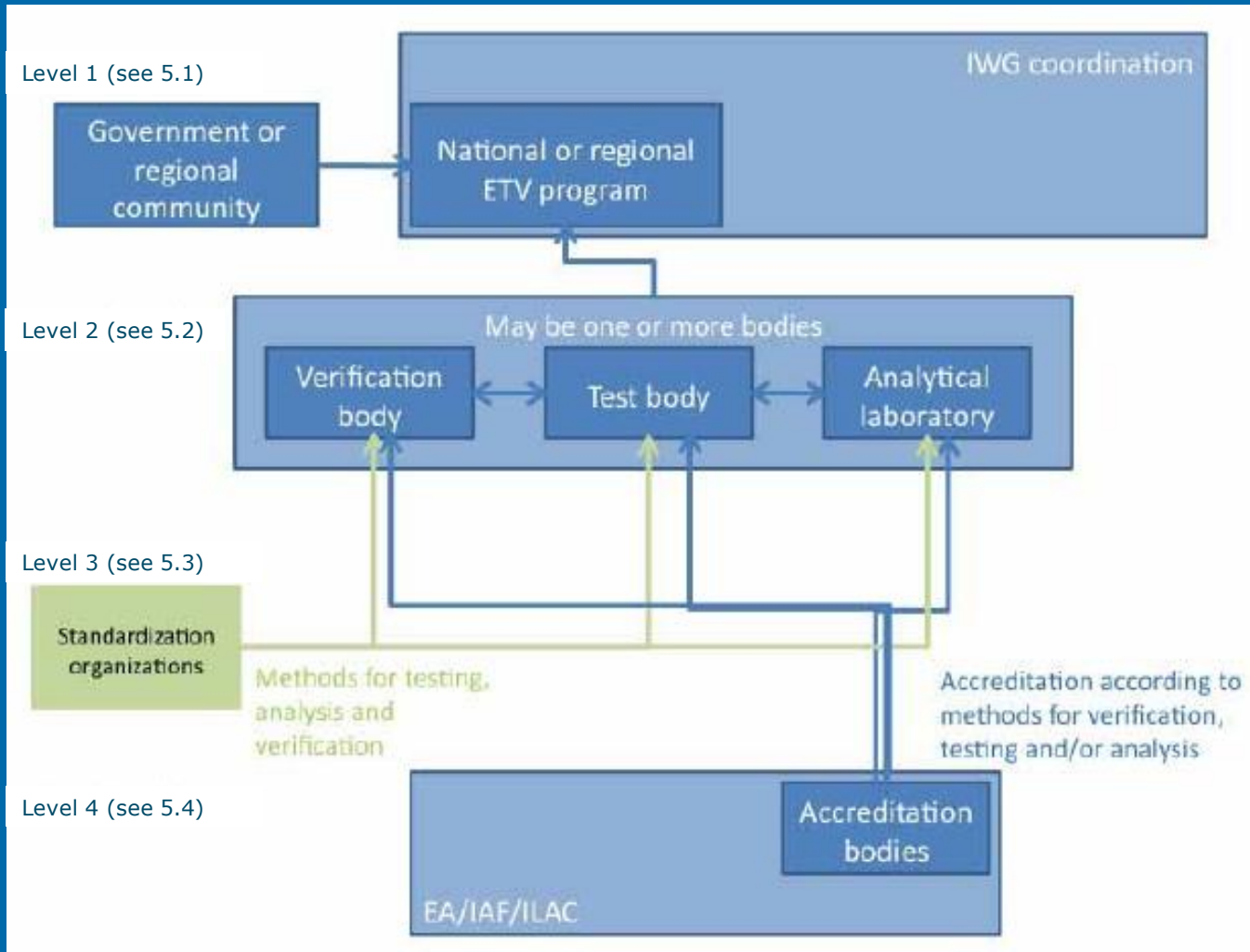
QAG - Strategy - Objectives

- ➔ Identify the necessary functions of an international ETV framework with mutual recognition
- ➔ Identify the elements of a framework
 - ➔ Organisational structures
 - ➔ Supporting standards
 - ➔ Procedures
- ➔ Suggest a framework for consideration by the IWG

IWG QA Strategy - Timeline

- ➔ Work began October 2009
- ➔ *Strategic Options for Quality Management and Mutual Recognition of ETV*
 - ➔ published end of January 2010
- ➔ Suggested a framework for ETV QA
- ➔ Recommended adoption by IWG
- ➔ Application
 - ➔ Organisational structures
 - ➔ Application of standards
 - ➔ Use of accreditation
- ➔ Strong links to the work of WP4 in AdvanceETV

IWG QA Strategy – Proposed Framework



IWG QA Strategy – Levels of standards

	Verification	Test	Analysis	Accreditation
General quality management	ISO 9001 or equivalent			
ETV operation and quality management/assurance	ETV procedure		ISO 17025 or equivalent	ISO 17011 or equivalent
Verification and test	Protocols prepared according to the ETV procedure	Test plans prepared according to the ETV procedure	ISO analytical standard methods or equivalent	None relevant

IWG QA Strategy – Use of standards

➔ ISO 17025

- ➔ Quality Assurance for analyses

➔ ISO 9001

- ➔ Generic specification for Quality Management Systems

➔ (ISO 17020)

- ➔ Accreditation standard to be applied in EU

➔ Technology Specific

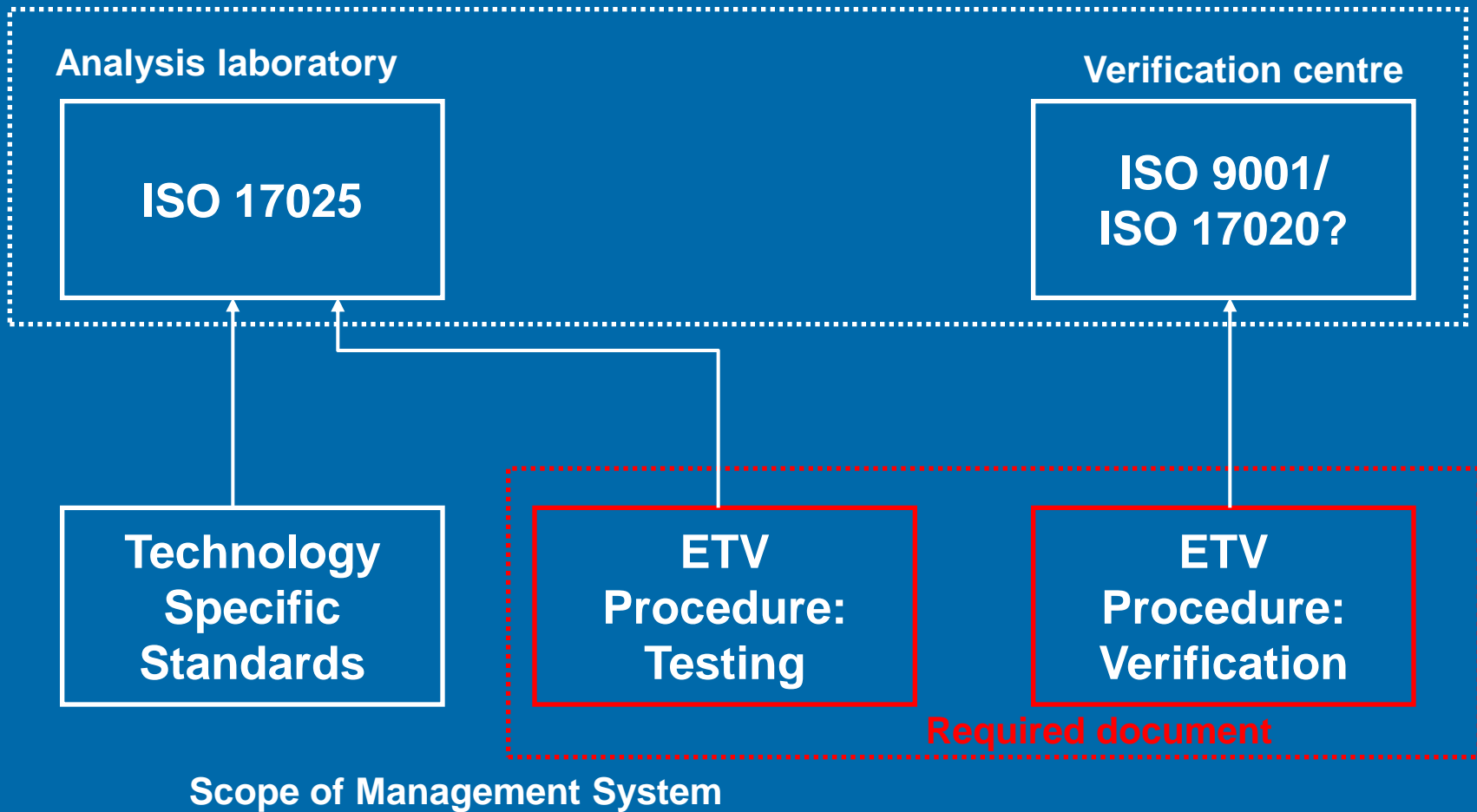
- ➔ Performance requirements

- ➔ Test requirements

➔ National ETV protocols

- ➔ Includes test programmes, verification and QA

Standards for organisational frameworks



IWG QAG Recommendation

Produce (a) document(s) which supports:

- ➡ International conformity assessment for ETV
- ➡ Mutual-recognition framework
- ➡ Based on existing national and international structures
- ➡ Applying the four-level structure in the Strategy Document

- ➡ (Very similar to the aims of AdvanceETV)

Eventual Work Programme – IWG-QAG

➔ Two documents:

➔ *ETV Framework and Policy*

➔ *ETV Procedure*

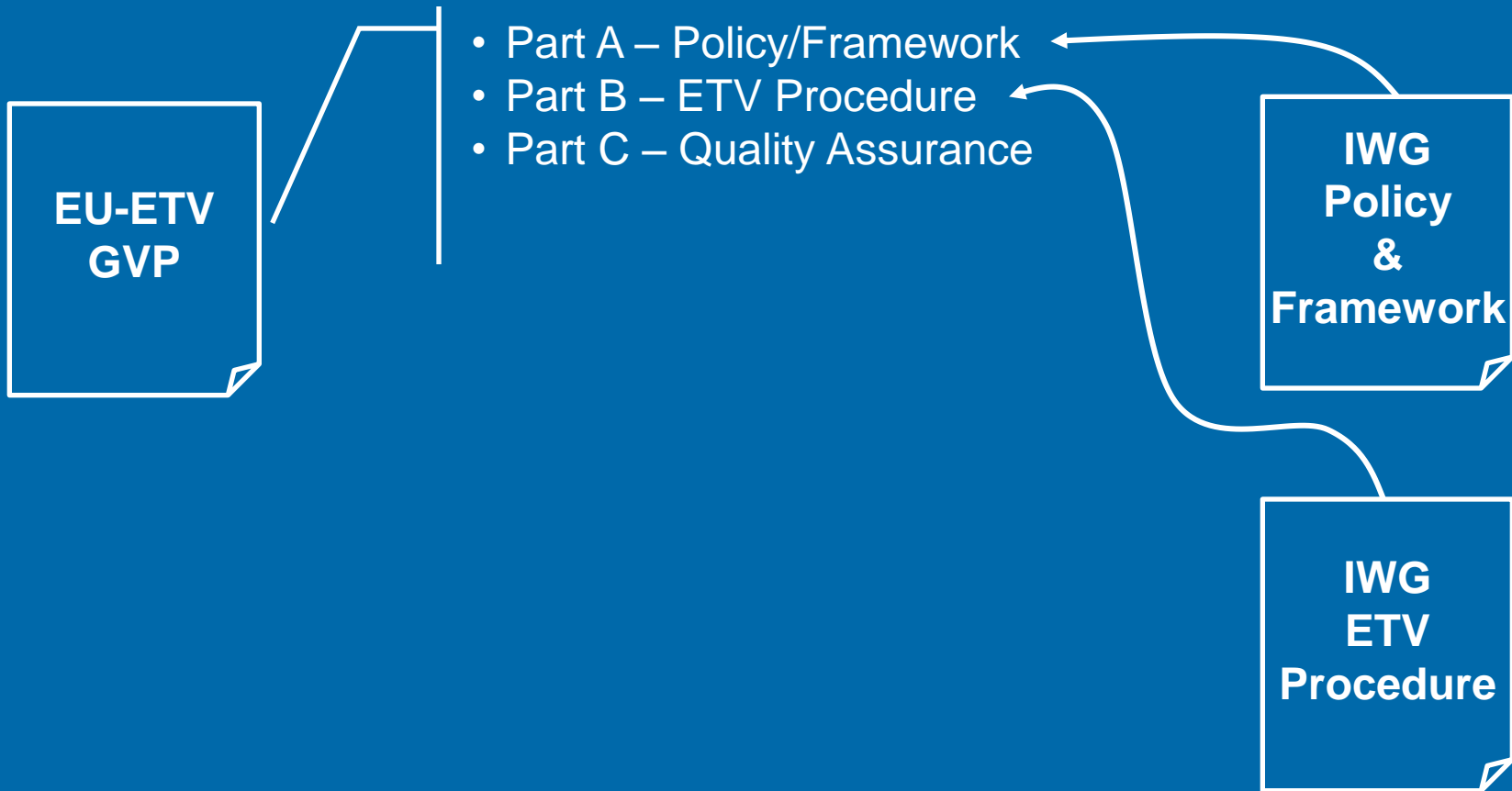
➔ Written in the format of international standards

➔ Drafts produced and revised following comments

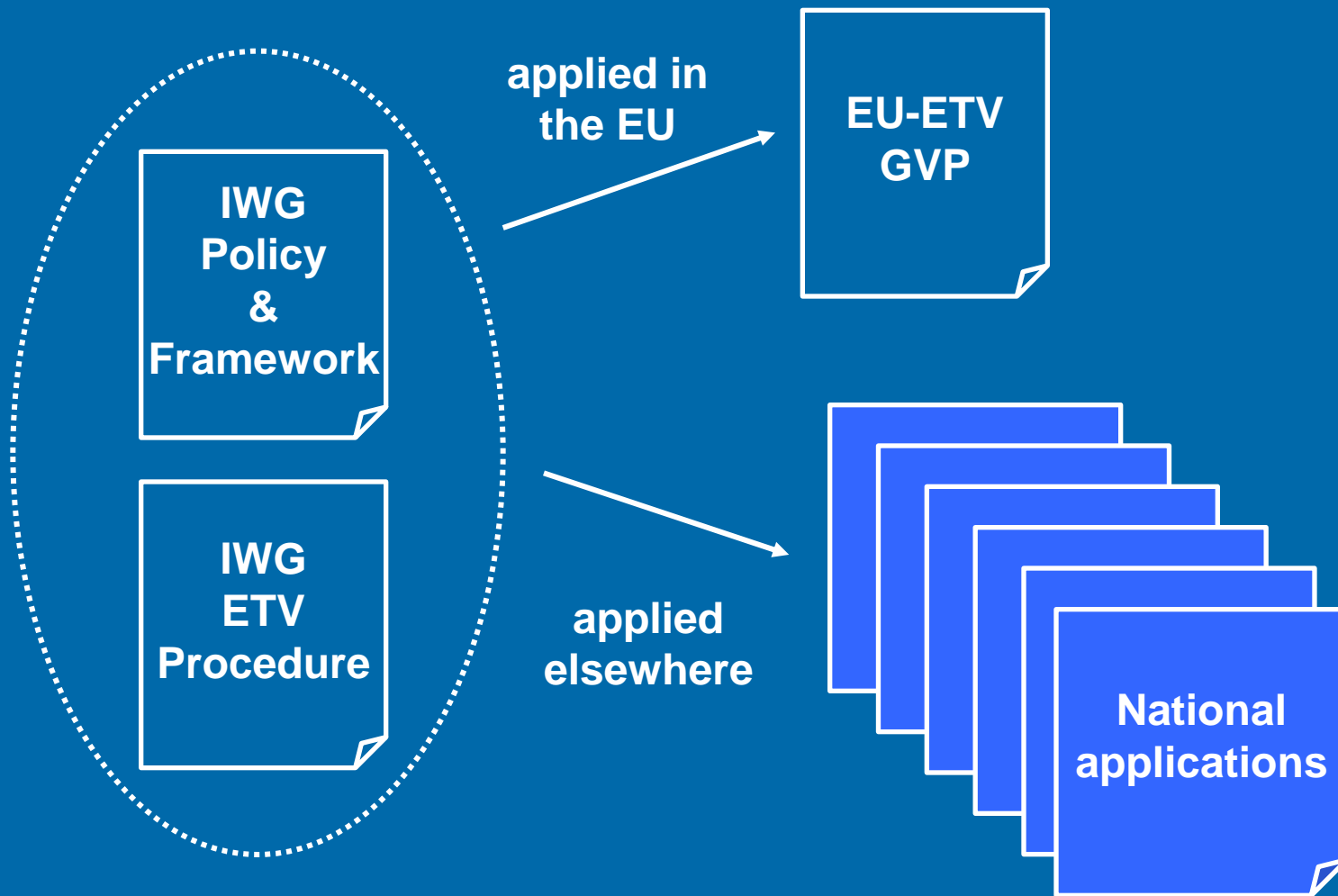
➔ Now on Draft 3

➔ Submitted as D4.4 of WP4

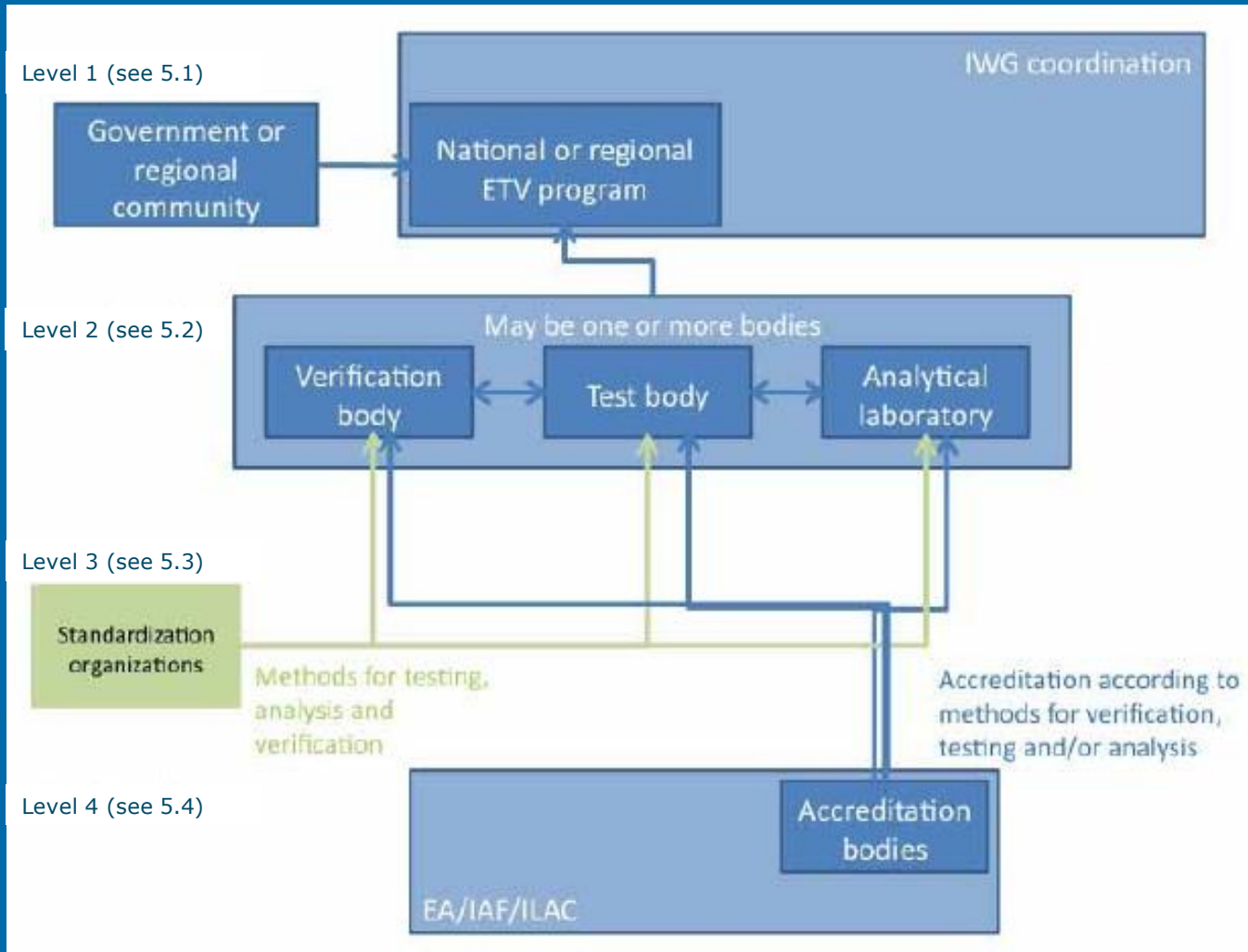
Alignment – critical activity



IWG ETV documents – minimum requirements



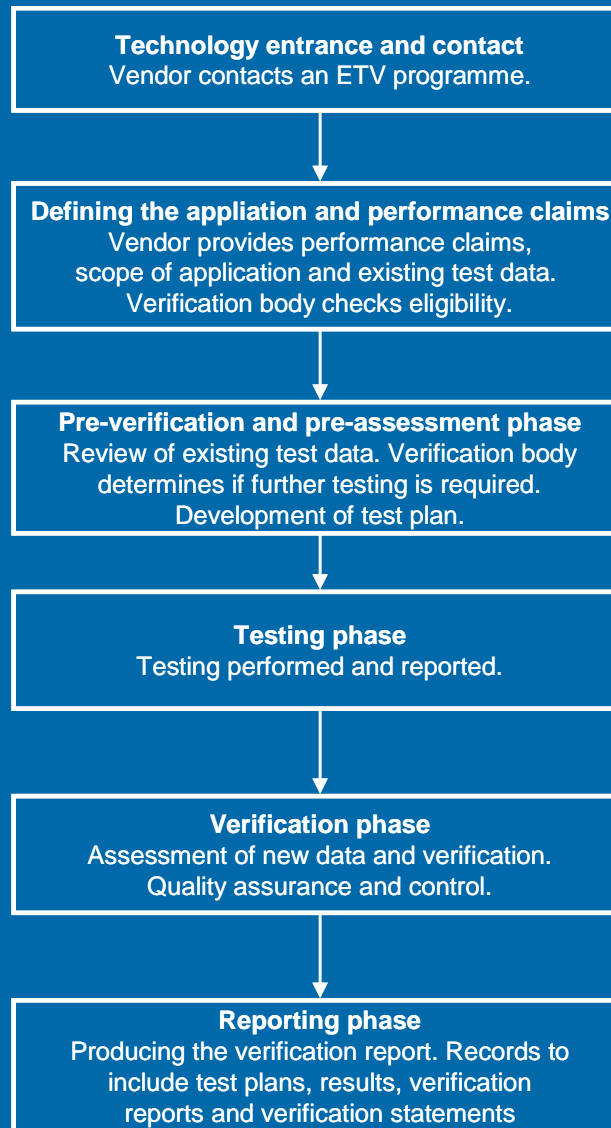
ETV Framework - Levels



ETV Framework and Policy

- ➔ General principles
- ➔ Level 1 – International Coordination
- ➔ Level 2 – Delivery of ETV
- ➔ Level 3 – Standards
- ➔ Level 4 – Accreditation
- ➔ Outline of quality assurance
- ➔ Outline of verification process
- ➔ Reporting

Process



ETV Procedure - contents

- ➔ Technology entry into the programme
- ➔ Contractual agreement
- ➔ Defining the application
- ➔ Defining the performance parameters
- ➔ Verification planning
- ➔ Existing data assessment
- ➔ Test planning, testing and analysis
- ➔ Reporting
- ➔ Post verification
- ➔ Detailed quality-assurance requirements

Future alignment

- ➔ We need to keep the EU GVP and IWG ETV Procedure aligned
- ➔ Euro GVP includes templates for the following:
 - ➔ Proposal
 - ➔ Test plan
 - ➔ Test report
 - ➔ Verification report
 - ➔ Verification statement
- ➔ Does the draft ETV procedure need to:
 - ➔ Copy the templates?
 - ➔ Include minimum requirements for the above?
 - ➔ Not specify anything?

Future development

- ➔ Progression towards international standards through ISO and CEN
- ➔ *ETV Framework and Policy*
 - ➔ Descriptive (Informative)
 - ➔ Development as an international standard – *Guidance*
- ➔ *ETV Procedure*
 - ➔ Requirements (Normative)
 - ➔ Development as an international standard – a *Standard*
- ➔ EU General Verification Protocol
 - ➔ An application of the ETV Procedure



Thanks for your attention