The role of CWA's and standardisation

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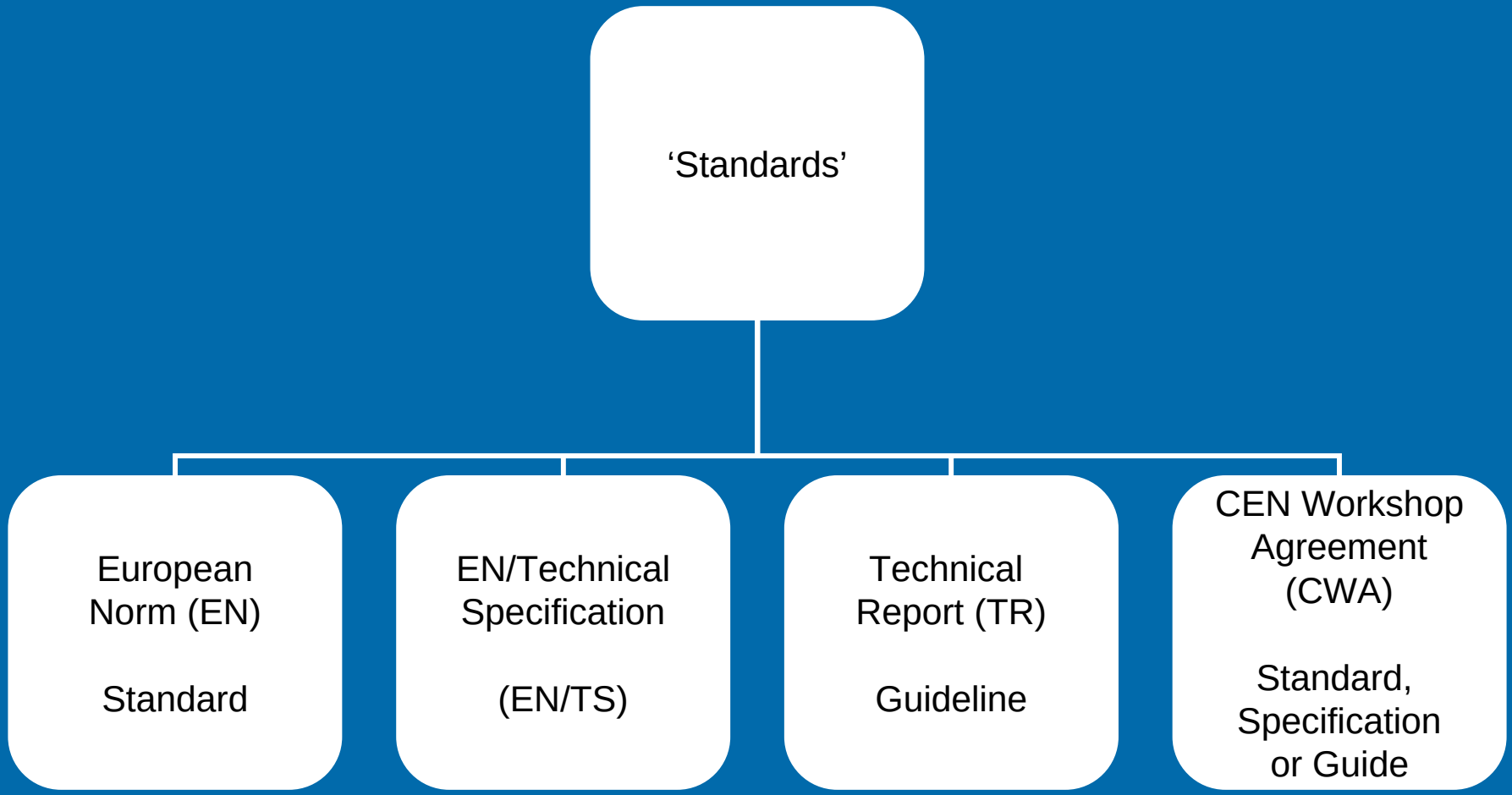
Outline

- Types of standards
- Time scales for development
- Advantages of standards
- An example of abatement and standards
- CEN Workshop Agreement 42
  - An answer to a problem

Types of standard



European Norms (EN)

- A technical publication used as a rule
  - Normative and prescriptive
- Developed by consensus
- Repeatability and harmonisation
- Time-scales – 5 to 10 years
- Long process of review, revision and voting
- EU member states must adopt EN standards
- EN standards take precedence over ISO and national standards within EU

EN/Technical Specification

- Normative and prescriptive
- Lower down on the hierarchy of standards
- Can serve as a pre-standard for innovative features of technology
- Helpful for future harmonisation
- Time-scales – 3 to 5 years
- Can become a full standard after 3 years following publication

Technical Reports (TR)

- Descriptive – guidance only
- Background information
- For example, how to apply a standard
- Time-scales – 2 to 3 years

CEN Workshop Agreements (CWAs)

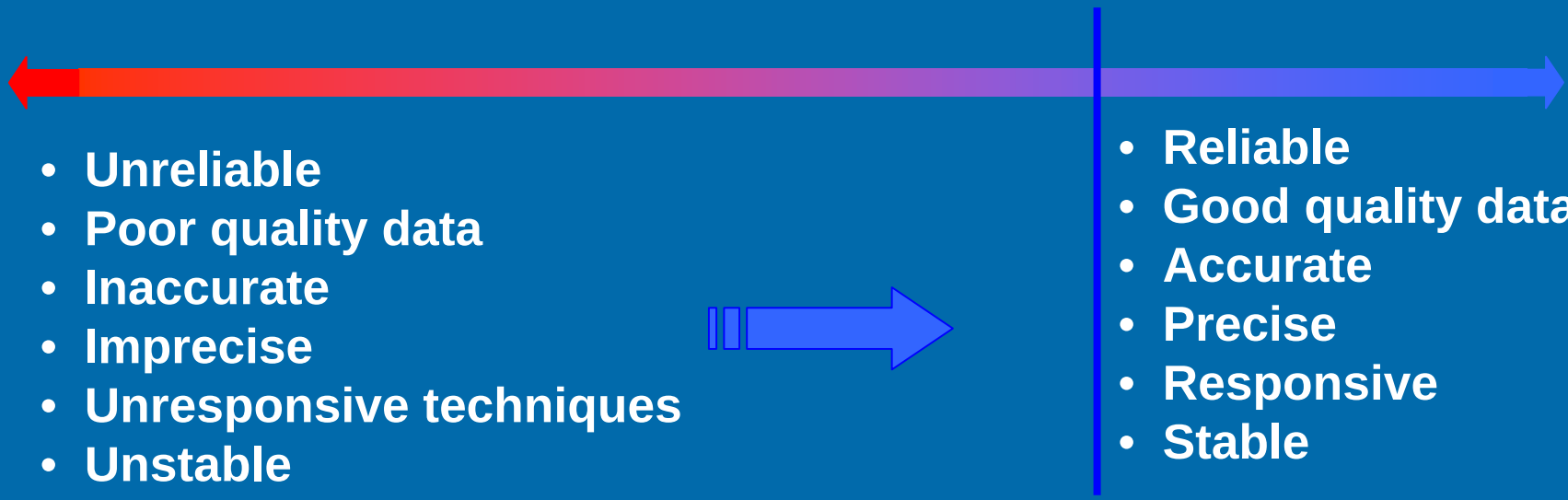
- Specification based on consensus
- Can be normative and prescriptive
- Produced in an open workshop-environment
- Lowest on the hierarchy – not the same status as an EN standard or EN/TS
- Can be produced rapidly – 1 to 2 years
- Ideal for specific projects
- Can serve as a future standard

Standards, specifications and air-quality

- Regulated industries typically have:
  - Emissions limit values
  - Air emissions-abatement systems
- Monitoring used to assess compliance:
  - Compliance with emission-limit values
  - Effectiveness of air-emissions abatement systems
- Many CEN standards for monitoring air-emissions
- Standards have improved the quality of monitoring
- But....no systematic, framework-standard for verifying air-emissions abatement-systems

Benefits of standards for monitoring

The spectrum for the quality of monitoring



- Unreliable
- Poor quality data
- Inaccurate
- Imprecise
- Unresponsive techniques
- Unstable

- Reliable
- Good quality data
- Accurate
- Precise
- Responsive
- Stable

Emissions abatement systems

Emissions abatement systems

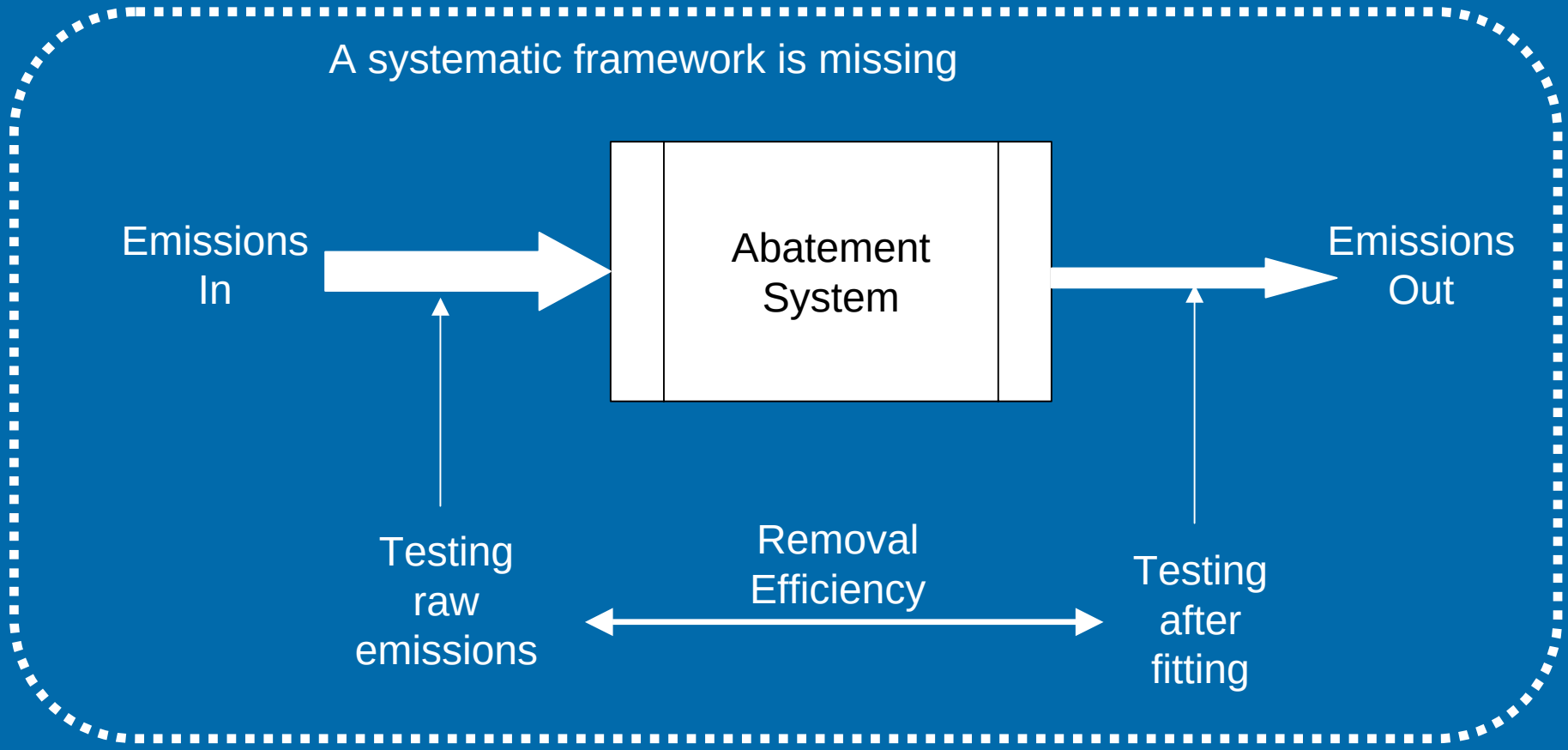
Emissions abatement systems

Emissions abatement systems

Some types of abatement system

- Simple filters, e.g. bag filters for particulates
- Carbon filters for volatile organic compounds
- Wet scrubbing systems - acid
- Wet scrubbing systems - alkali
- Electrostatic precipitators for particulates
- Carbon capture and storage

Verifying abatement systems



Example

- Wet- scrubbing system for a highly toxic gas
- Emissions tested after design, construction and installation
- Initial testing by an unaccredited laboratory
  - Everything seemed okay
- Subsequent testing by an accredited laboratory
  - Applied framework of CWA 42
  - Emissions well above limit
  - Tested at inlet and outlet
  - No elimination of toxic gas
- There is a need for a verification framework
- New abatement systems – investors, customers and regulators need assurance
- CWA 42 – a systematic approach for verifying air-emissions abatement systems

CEN Workshop agreement 42

A tool to establish innovative air emission abatement technologies on the market

Why a CEN workshop within AIRTV?

- How do results maintain after the project?
- How to bridge the gap between the end of the project and implementation of a EU ETV System?
- How to collect experiences with verification now?
- How to succeed in case a EU ETV system will not be set up?

→ CEN Workshop 42:
Environmental Technology Verification
for air emission abatement technologies
(ETV AEA)
May 2008 – July 2009

Aims of the CEN workshop 42

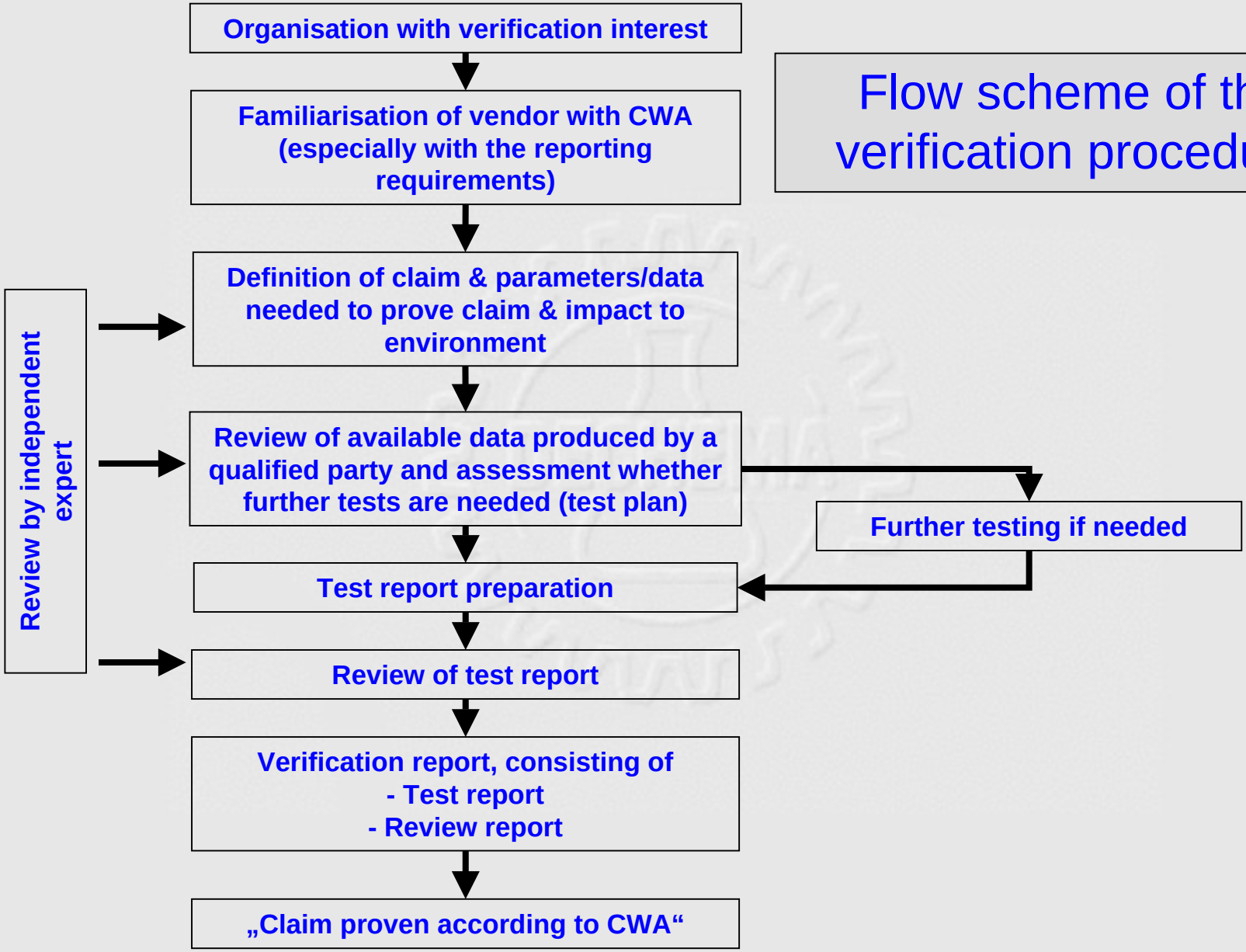
- Establishment of a generic system that gives systematic and documented proof of a technology
- Give guidance on technology verification on a voluntary basis
- Bridging the time until a European ETV system is set up

CWA 42 contents

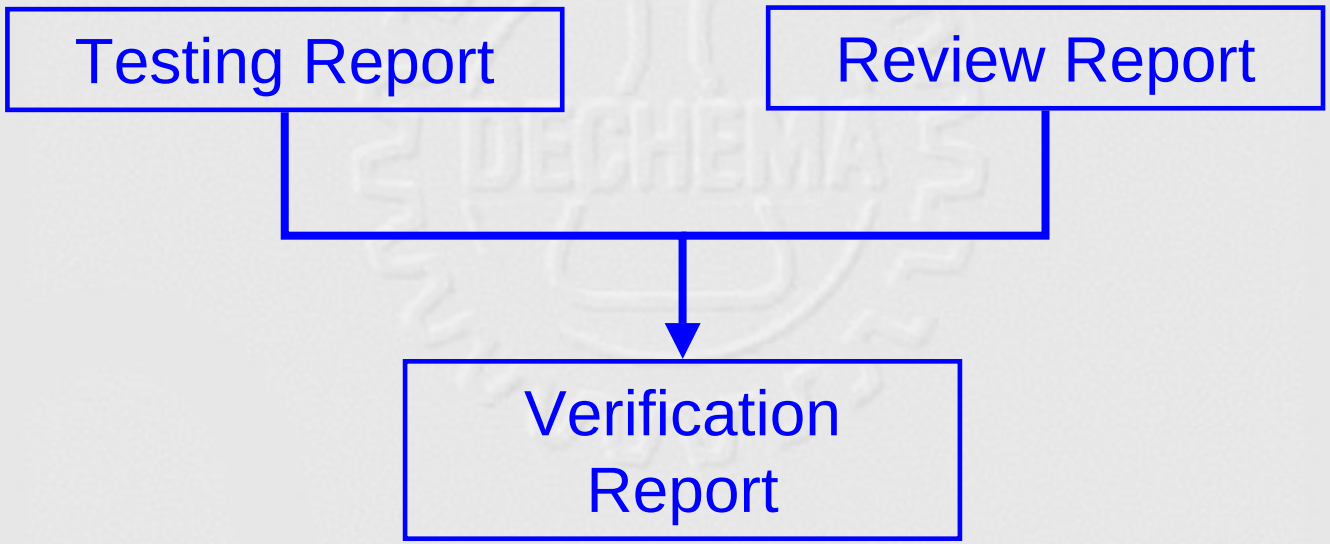
The CWA document will:

- include a glossary of terms
- give a procedure overview
- set up a standard reporting system, i.e. demand particular figures, tables, and contents that are to be considered for all technology verifications
- layout the review process

Flow scheme of the verification procedure



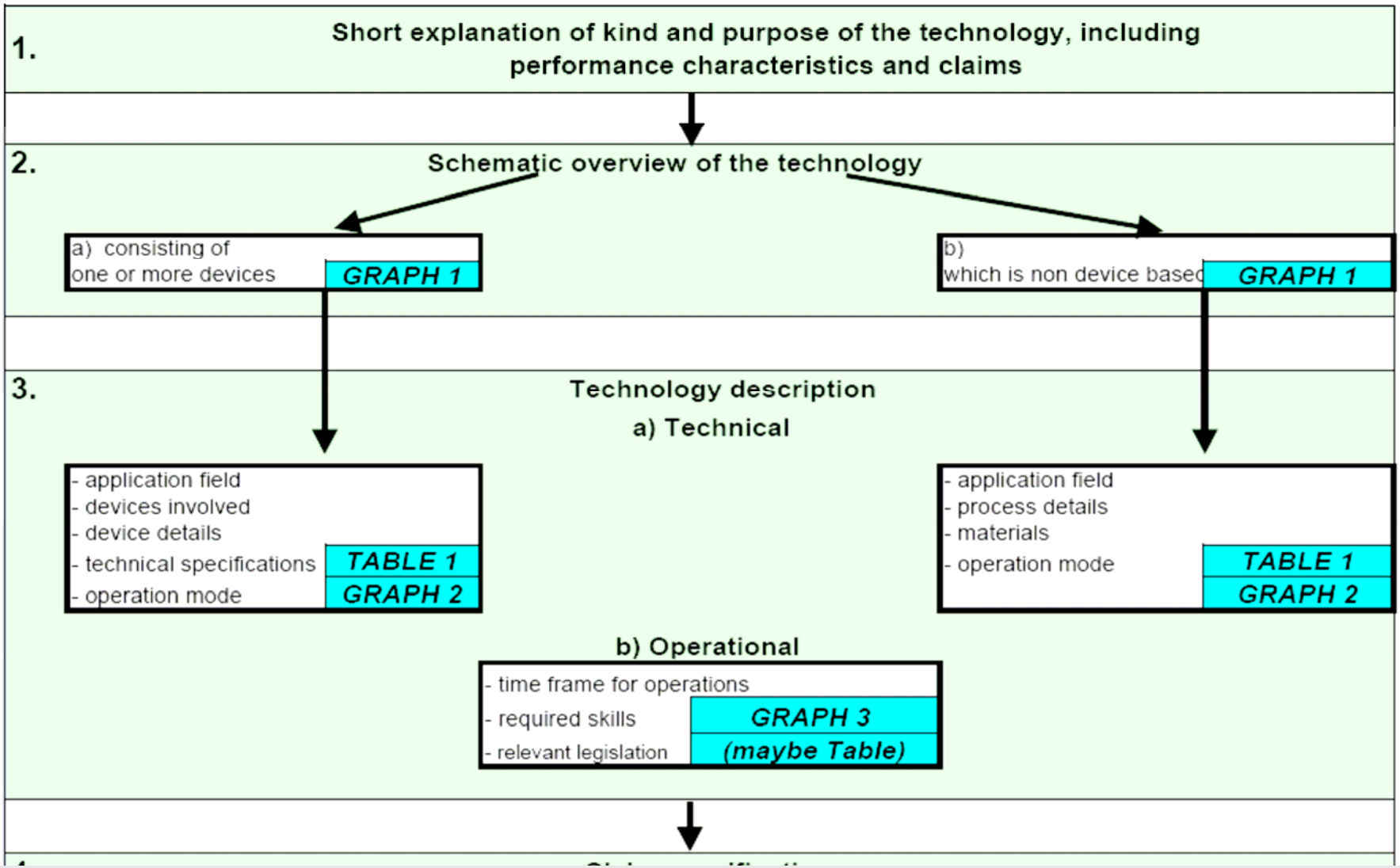
CWA 42 verification report



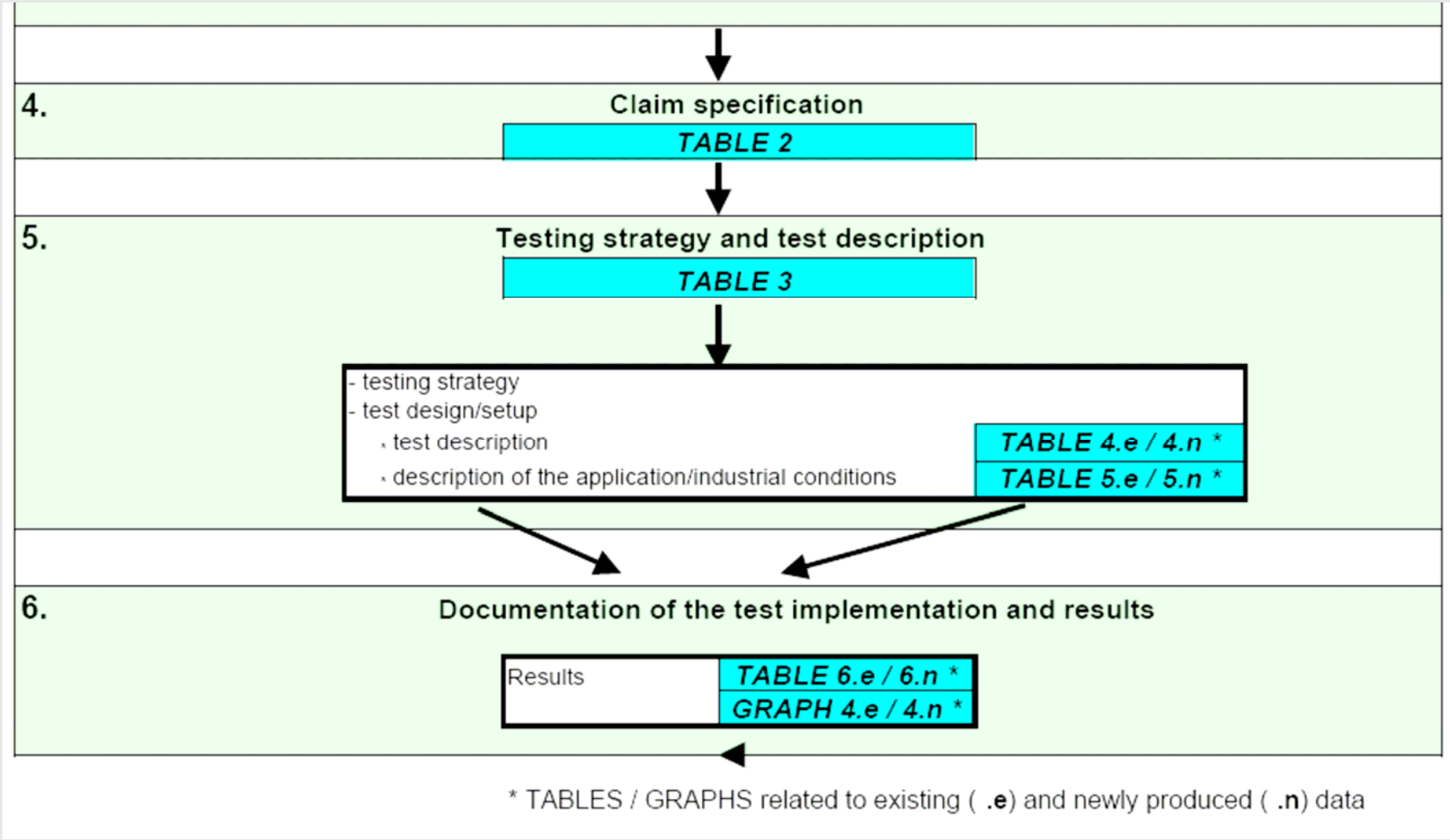
CWA 42 testing report

- General comments
- Short explanation of kind and purpose of the technology
- Schematic overview of the technology
- Technology description
- Claim specification
- Testing strategy and test description
- Documentation of the test results
- Interpretation

Structure of the test report (steps 1 - 3)



Structure of the test report (steps 4 - 6)



CWA 42 review report

- Evaluation of the test implementation
- Evaluation of the quality of test results
- Evaluation of the test results compared to the results of reference tests
- Evaluation of the test results compared to the claim defined
- Additional comments

Summarising advantages

- Flexible and open platform
- Can be set up within two months after description of the project (Business Plan)
- No formal procedure to set up a CEN workshop
- Structure decided by the members of the workshop to reach maximum efficiency
- Bottom-up approach
- All companies are allowed to participate
- Non European countries may be full members
- Direct participation:
  everyone may participate directly in the elaboration of the CWA and the consensus

Thank you!

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What is a CEN workshop?

The CEN Workshop is a flexible working platform open to the participation of any company or organization, inside or outside Europe, for rapid elaboration of consensus documents.

→ ***C***EN ***W***orkshop ***A***greement
CWA

Different steps to publish a CEN Workshop Agreement

Business Plan	Kick-off Meeting	Drafting and adoption of CWA	Publication of CWA
TIMEFRAME: 6 – 18 MONTHS			
Describing – Scope – Objectives – Financing – Schedule	Confirming – Business Plan – Rules of the Workshop – Chairmanship – Secretariat	Consensus: - Workshop participants - Public consultation as appropriate	Announced - by CEN National Members

CEN workshop examples

- Software for banking terminals
- eBusiness exchanges (linked to the UN)
- A European Handbook for Defence Procurement
- Data Protection and Privacy
- CEN Workshop 32:

  Environmental Technology Verification for Soil/Groundwater Remediation and Monitoring Systems (ETV-SGS)

EU ETV vs. CWA based verification

CWA on verification is a self sustaining system!

- Quality requirements for existing data and involved parties
- Clear definition of reporting requirements
- Prove of credibility