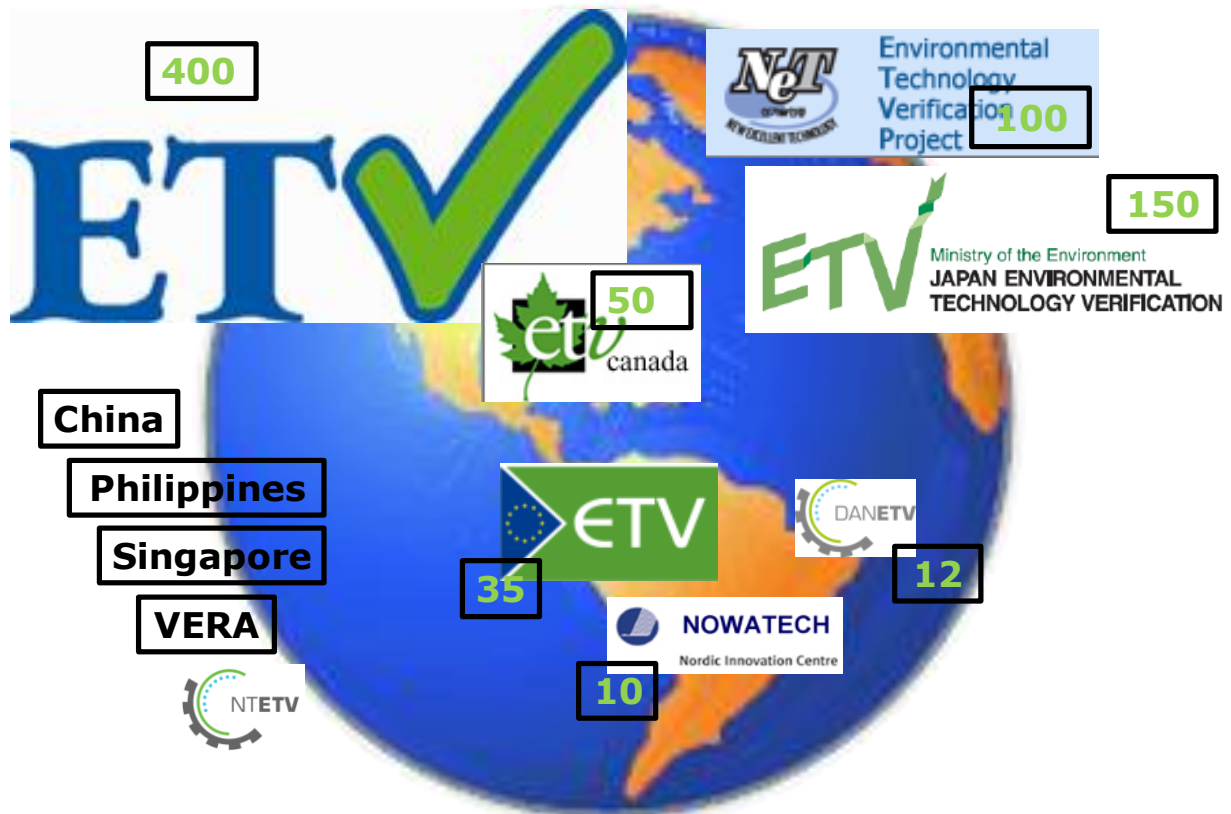


How ETV in developed countries responds to environmental challenges; current activities and proposed future directions leading to mutual recognition of ETV

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Environmental technology verification, ETV, is a form of third party assessment providing quality assured documentation of relevant performance for innovative environmental technologies or applications. ETV is intended to support technology vendors in accessing the markets with their new technologies, technology buyers in taking the risk with new technologies and authorities in accepting them. If the full benefits of ETV are to be achieved, and the costs and delays in market introduction kept at a minimum, it is essential that ETV done under one verification scheme is accepted by other ETV schemes. Currently, a number of ETV schemes exist and more are being introduced, see Figure 1.

Figure 1: Existing ETV schemes with number of verifications done and new ETV initiatives inserted



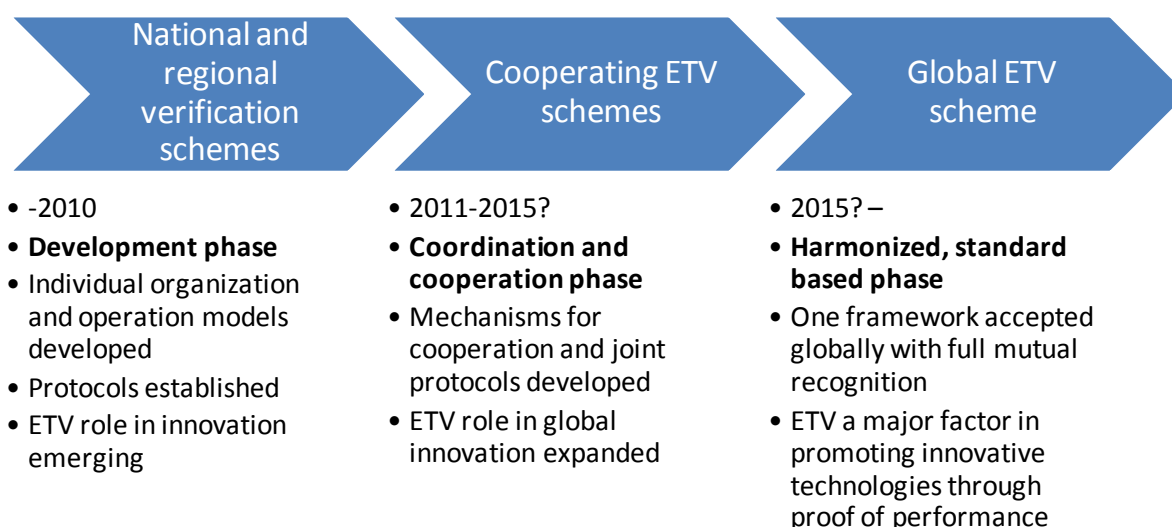
Whereas the growing number of ETV schemes may be seen as recognition of the need for ETV and accordingly as a success for the principles behind, it may ultimately jeopardize the idea of:

Verified once, verified everywhere

Towards mutual recognition

It is therefore essential for achieving the overall objective of faster use of smarter environmental technologies, that an internationalization process of ETV towards coordination, cooperation and ultimately mutual recognition is initiated. A process from national and regional ETV schemes over cooperating schemes to full mutual recognition between ETV schemes is illustrated in Figure 2.

Figure 2: An example of development process from national/regional to global ETV



ETV development

Whereas the ETV schemes have been operating for 10-15 years in the US and Canada, efforts are currently made to establish a broad European ETV scheme under the Commission of the European Union (EU). Furthermore, an ETV scheme is currently being established for agricultural environmental technologies based in Denmark, Germany and the Netherlands: Verification of Environmental Technologies

for Agricultural Production (VERA). ETV schemes have been established and are developing fast in Japan and South Korea, and initiatives are taken in the Philippines, Singapore, China and the Nordic, European countries Nordtest ETV: NTETV).

In essence, these schemes work according to similar principles towards a common goal: promotion of environmental technologies through performance documentation, but with different organizations, processes of work and applying different terminologies.

ETV coordination and cooperation

If a fully recognized global ETV regime shall be possible, it requires development of a coordinating organization (ensuring harmonized performance parameters for verified applications), involvement of the standardization organizations (providing an environmental technology verification standard) and participation of conformity assessment bodies (oversight with verification and tests bodies, and with analytical laboratories) and not the least dedicated cooperation between existing ETV schemes.

Accordingly, cooperation has been established between existing and emerging ETV schemes in the form of the International Working Group – Environmental Technology Verification (IWG – ETV). Also, the EU has funded a project, AdvanceETV, aiming at supporting the international cooperation on ETV.

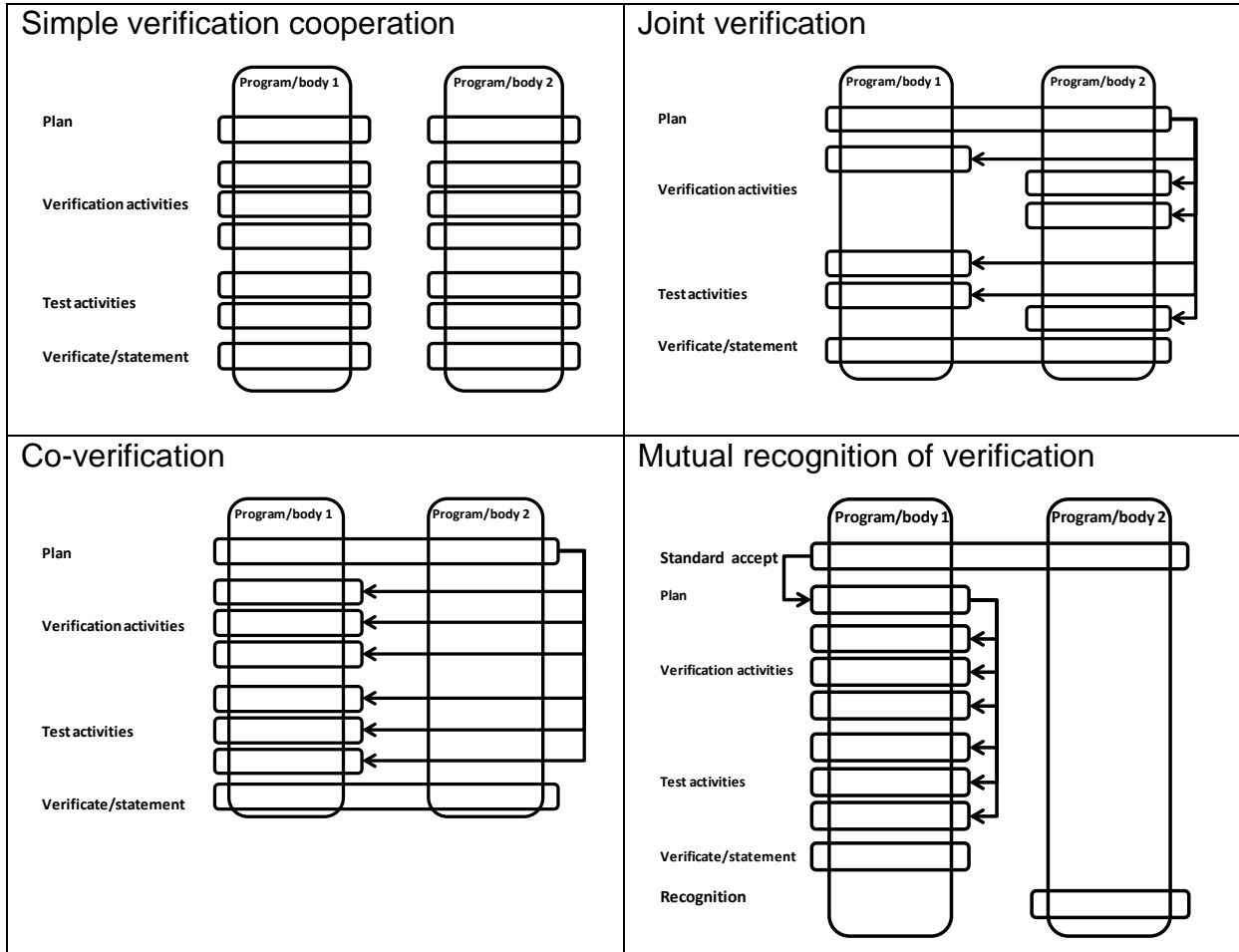
A key activity in this phase is to promote common understanding of required organization, processes of work and terminologies among the ETV schemes of the world.

Finally, practical cooperation on verifications has been initiated, and this is also enhanced through e.g. AdvanceETV. The verification cooperation may have the form of repetition, joint verification and co-verification, see Figure 3.

Evidently, the only way to avoid repetition of verification with the derived costs, delays and trade barriers is to move from requiring verification repeated under each

verification scheme over cooperation forms such as joint and co-verification to full mutual recognition of verification done under one scheme by all other schemes.

Figure 3: Repetition, joint verification, co-verification and mutual recognition of verification

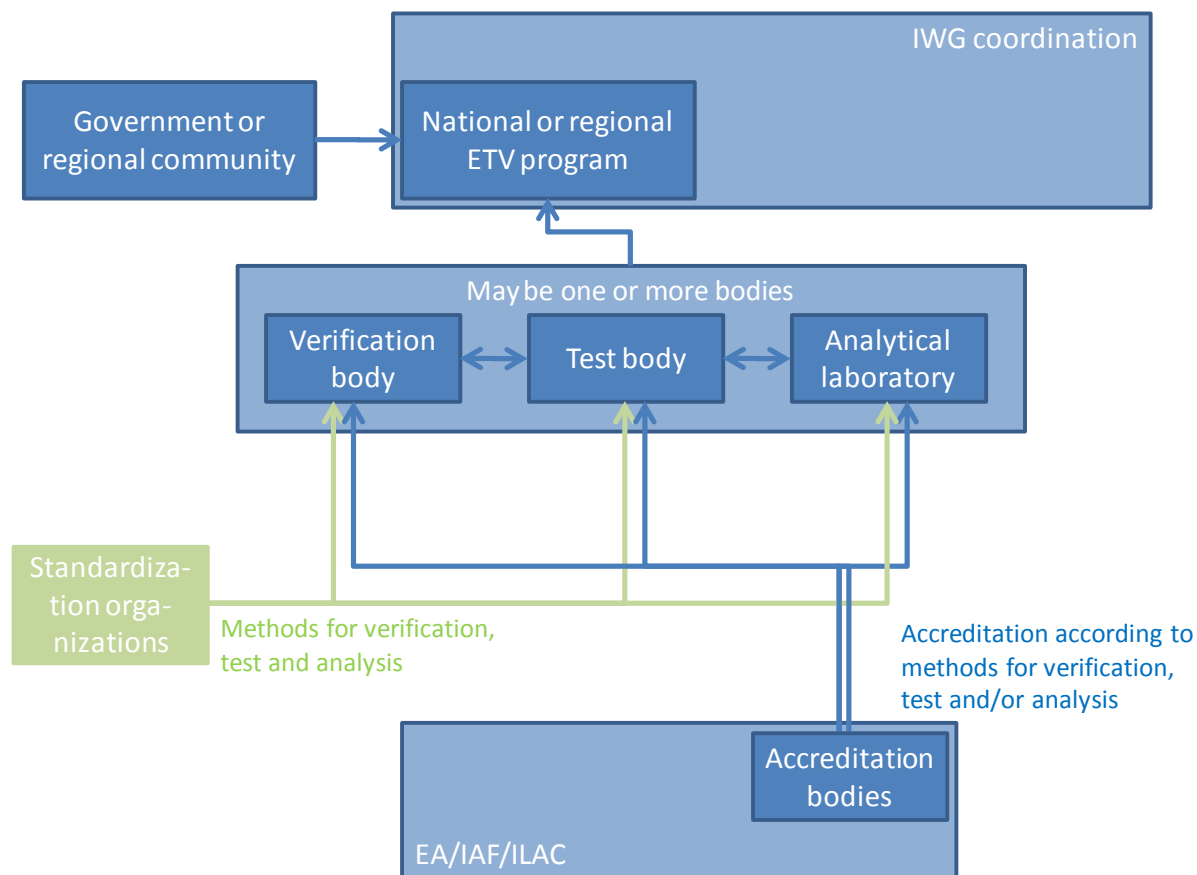


Harmonized ETV

A suggestion for an organization of a global, harmonized ETV scheme is shown in Figure 4, combining elements from ETV, standardization and conformity assessment.

The suggested organization combines the experiences and competences from current ETV schemes with the tools of conformity assessment (standardization and accreditation) under an umbrella of coordination by the IWG and maintaining the close cooperation with the national and regional interests.

Figure 4: Suggestion for organization of a global, harmonized ETV scheme



Apply smarter technologies faster

With a global, harmonized ETV scheme, technology vendors can accelerate global market introduction of innovative technologies through credible performance documentation, technology buyers can choose innovative technologies while minimizing the associated risks caused to lack of proof of performance and regulators can accept new solutions with confidence in the claimed benefits.

Selected references

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NOWATECH: www.etvnord.org

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