



# Executive Summary: Harmonisation Potential for Computer Test Methodologies, Product Definitions and Specifications

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The SEAD Standards & Labelling Computers Collaboration has investigated the potential for, benefits of, and barriers to harmonisation of computer test methodologies, product definitions, and performance specifications. This report is the first in a series of guidance documents and tools that SEAD is developing to facilitate harmonisation of energy efficiency policies for computers.

## Harmonized Product Definitions

The report identifies computer product definitions from major environmental initiatives, and compares these definitions to ENERGY STAR v5.0/5.2. While product definitions can be similar, mandatory measures and ENERGY STAR v6.0/6.1 ultimately adapt these definitions to meet legal or program specific requirements. Differences in product definitions are therefore necessary under different types of programmes, but harmonisation opportunities do exist.

## Harmonized Test Methodologies

ENERGY STAR program test methodologies are the most widely adopted methodologies, but they too are often adapted. There are various legal and technical issues that explain differences in the methodologies employed across the major environmental initiatives, and these issues cannot

be immediately resolved. While there are significant benefits to test methodology harmonisation, no one methodology can be agreed to in the short term. With improved cooperation and coordination, further opportunities exist to move towards a harmonised methodology.

## Harmonized Performance Specifications

ENERGY STAR v5.0/5.2 is the primary source for performance specifications for computers amongst the various environmental initiatives. As with product definitions and test methodologies, however, mandatory measures mostly use adapted specifications.

## Harmonisation: Good or Bad?

The report explores both the advantages and disadvantages to harmonisation of each policy aspect. Harmonisation can reduce costs for manufacturers, initiative developers, and enforcement bodies, and can eliminate barriers to trade across regions. Most importantly, harmonisation can increase the influence of ambitious specifications across multiple regions. However, there are disadvantages to harmonisation as well. For example, harmonisation of a lenient specification could lead to significantly decreased anticipated energy savings.

## Hurdles and Recommendations

Barriers to harmonisation are often “technical” or “institutional” – the report discusses each of these in detail. Disadvantages to harmonisation can be outweighed by the benefits, and hurdles can be overcome through implementation of appropriate tools and guidance. The report explores the potential to use existing computer initiatives as the source of a harmonised approach – and then proposes recommendations for harmonized product definitions, test methodologies and specifications for both mandatory and voluntary environmental initiatives.

## Harmonisation Support Tools

The report provides an overview of two tools currently in development by the Collaboration: 1) a Database that will include detailed information on each environmental initiative listed in the report, which will help identify similarities and differences between initiatives; and 2) a Standards & Labelling Toolkit for Computers that will support policy makers to develop Computers standards from start to finish, through the provision of templates, resources and guidance. This tool is intended to be used alongside the Computers Database.