

Guide to the CB Scheme

Safety testing for a Global Market



Safety compliance grows business opportunities for manufacturers selling in global markets.

Australian manufacturers are now looking to sell their products outside of Australia as a means of growing business activity. These opportunities usually identify the need for compliance to international standards and if not handled correctly, non-compliance can effectively become a trade barrier. The IECEE CB Scheme simplifies the compliance process for safety and resulting in new opportunities.

IECEE CB SCHEME – BENEFITS & OVERVIEW

Australian manufacturers of electrical and electronic products supplying to a Global Market, have to consider compliance to international standards before entering the key markets of the world. It has become increasingly more common for manufacturers to prove their product complies with International Standards or National Standards of the country of destination before sales and shipment can proceed. Customers are also seeking proof of compliance.

Compliance to Safety, Minimum Efficiency Performance Standards (MEPS), Standby Power, Electromagnetic Compatibility (EMC), Immunity, Radio Communications and Electromagnetic Radiation (EMR) standards are becoming mandatory. The IECEE CB Scheme is an international system for safety testing and proving compliance to safety standards.

THE CONCEPT:

The IECEE CB Scheme is the world's international system for mutual acceptance of test reports and certificates dealing with the safety of electrical and electronic components, equipment and products. This is a system that runs in parallel to the NATA system and has greater acceptance by Governments throughout the world.

Comtest Laboratories Pty Ltd
Unit 1, 570 City Road,
South Melbourne,
Victoria, 3205
Australia

www.comtest.com.au

Telephone: (+613) 9645 5933
Facsimile: (+613) 9645 5944



The Scheme is essentially based on the use of international (IEC) Standards. The CB Scheme utilizes CB Test Reports and Certificates to attest that product samples have successfully passed the test conditions and are in compliance with the requirements of the relevant IEC Standard(s).

ACCEPTABILITY:

The IECEE CB Scheme is the system used by Australian Electrical Regulators as the basis for issuing approvals of electrical products and appliances in Australia, that is, the mandatory approvals of Prescribed Items.

This is the same system used by most international Government Regulators for allowing products to be sold within their own country. There are over 52 countries that have adopted the IECEE CB Scheme as a means of mutual acceptance of electrical safety test reports.

The listed nations include:

- New Zealand;
- Australia;
- most Asian nations, such as Japan, Taiwan, China & South Korea;
- North America such as USA, Canada & Mexico;
- All European nations of the European Community (CE) such as England, Italy, Sweden, Spain, Switzerland, Germany, etc;
- South Africa;
- most Eastern European nations;
- most South American nations.

When applicable, the CB Test Certificate and its associated CB Test Report can also include declared national differences, Special National Conditions (SNC) and Regulatory Requirements of various member countries.

The main objective of the Scheme is to facilitate trade by promoting harmonization of the national standards with international standards.

ASSEMBLIES, COMPONENTS AND COMPONENTS PARTS:

For manufacturers of assemblies and components, IECEE CB Scheme also offers advantages. Having items tested and then being offered with CB Test Reports and CB Test Certificates makes them very attractive when buyers are choosing suppliers. The buyers recognise the benefits of their own reduced compliance costs and getting to market quicker through the choice of certified components and assemblies.

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CB TESTING LABORATORY (CBTL)

A CB Testing Laboratory (CBTL) is a laboratory recognized in the CB Scheme to conduct testing and issue CB Test Reports for safety standards in one or more product categories under the responsibility of its associated NCB. Comtest is a CBTL.

CB TEST REPORTS AND CB TEST CERTIFICATES

CB Test Report is a standardized report in a clause by clause checklist format referencing, the requirements of the relevant IEC Standard for safety. The Test Report provides clear and unambiguous results of all the required tests, measurements, verifications, inspections and evaluations. It also contains photographs, electrical diagrams, artwork drawings as well as a description of the product. Under the rules of the CB Scheme, a CB Test Report is considered valid only if accompanied by its CB Test Certificate.

CB Test Certificate is a formal CB Scheme document issued by an authorized Notified Certification Body (NCB) is used to inform other NCB's that a sample of the product tested was found to be in compliance with the applicable safety requirements. CB Test Certificates should not be used for advertising purposes; however reference to the existence of a CB Test Certificate is permitted.

BENEFITS OF THE CB SCHEME TO THE MANUFACTURER

The CB Scheme may provide significant benefits to those manufacturers who wish to export their products to countries that participate in the Scheme. The process will expand markets and sales opportunities as products can be shown to comply with National and International Standards. Many countries accept testing and certification to International Standards as they do not have their own unique requirements.

Under the IECEE CB Scheme, manufacturers can:

- Select and deal with one CBTL or NCB of their choice.
- Have their products tested, including testing to the national differences, special national conditions and regulatory requirements of the product's destination countries.
- Use the CB Test Report from CBTL and Certificate obtained from one NCB to obtain national approvals in many other member countries through their participating NCBs.

When using the IECEE CB Scheme, generally there is no additional testing needed in the country of destination and only administrative work should be involved in processing such applications.

Applications for obtaining certifications based on CB Test Certificates and CB Test Reports are given priority over other applications as no testing is involved.

For further information contact:

Peter Arms parms@comtest.com.au or
Greg Caspar gcaspar@comtest.com.au

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THE PROCESS:

Often compliance test laboratories, including CBTL's, are offered a product for compliance assessment and testing where, on a quick review, it is realised the product is non-compliant. In a large percentage of testing projects, Comtest has found the design and component choice will mean the product cannot comply without significant redesign.

From our many years of experience as a test laboratory, we suggest the following strategy will ensure compliance and a minimum of cost for testing.

Our suggested process is as follows:

- Choose a test lab with the skills, capabilities and accreditations to perform the testing and provide technical advice. Have in mind the target markets for your product.
- Purchase the safety requirement standard, your test laboratory can advise on the correct standard to purchase.
- Consult with your chosen laboratory on design issues to ensure compliance.
- Design and Build in accordance with the compliance Standard and the national requirements of your clients.
- Testing of your product to the standard and obtaining a test report is the normal process.
- Certifying a CB Test Report via the CB Scheme will result in the acceptance of your test reports in many international markets. *(partially extracted from IECCE document "cbfunct.pdf")*



Comtest Laboratories Pty Ltd is an accredited CB Testing Laboratory (CBTL).

Scope of Accreditation

Standard	Description
IEC 60950	Safety of information technology equipment, including electrical business equipment
IEC 60950-1	Safety of information technology equipment, including electrical business equipment
IEC 61010-1	Safety requirements for electrical equipment for measurement, control and laboratory use

Comtest Laboratories can assist with all steps in the process including CB Scheme accredited testing, preparing the necessary paper work and obtaining the CB Test Certificate from the NCB.

For further information contact:

Peter Arms parms@comtest.com.au or
Greg Caspar gcaspar@comtest.com.au