

Harmonized system of quality
assessment for electronic components

Requirements for process assessment schedules for process approval

Committees responsible for this British Standard

The preparation of this British Standard was entrusted by the Electronic Components Standards Policy Committee (ECL/-), upon which the following bodies were represented:

- British Standards Society
- British Telecommunications plc
- EEA (the Association of the Electronics Telecommunications and Business Equipment Industries)
- Electronic Components Industry Federation
- Ministry of Defence
- National Supervising Inspectorate

This British Standard, having been prepared under the direction of the Electronic Components Standards Policy Committee, was published under the authority of the Standards Board and comes into effect on 15 August 1993

© BSI 01-2000

The following BSI references relate to the work on this standard:
Committee reference ECL/-
Draft for comment 92/32870 DC

ISBN 0 580 22214 4

Amendments issued since publication

Amd. No.	Date	Comments

Contents

	Page
Committees responsible	Inside front cover
National foreword	ii
Foreword	iv
Text of CECC 200000	1
List of references	Inside back cover

National foreword

This British Standard has been prepared under the direction of the Electronic Components Standards Policy Committee. It is identical with CECC 200000: *Harmonized system of quality assurance for electronic components. Requirements for process assessment schedules for process approval*, published by the European Committee for Electrotechnical Standardization (CENELEC) Electronic Components Committee (CECC).

This standard prescribes the rules for the preparation of process assessment schedules (PAS).

Cross-references

International Standard	Corresponding British Standard
IEC 50	BS 4727 <i>Glossary of electrotechnical, power, telecommunication, electronics, lighting and colour terms</i> (Some Parts identical)
IEC 68	BS 2011 <i>Environmental testing</i> (Identical)
IEC 617	BS 3939 <i>Graphical Symbols for electrical power, telecommunications and electronics diagrams</i> (Most Parts identical)
IEC 1000:1992	BS 5555:1993 <i>Specification for SI units and recommendations for the use of their multiples and of certain other units</i> (Identical)
EN 29000:1987	BS 5750 <i>Quality system</i> Section 0.1:1987 <i>Guide to selection and use</i> (Identical) BS CECC 00114 <i>Rule of Procedure 14. Quality assessment procedures</i>
CECC 00114-0:1992	Part 0:1992 <i>An introduction to the types of approval available under the CECC System</i> (Identical)
CECC 00114-I:1992	Part 1:1993 <i>Approval of manufacturers and other organizations</i> (Identical)
CECC 00114-V:1993	Part 5:1993 <i>Process approval of specialist contractors within the electronic components industry</i> (Identical)

The British Standard which implements the CECC Rules of Procedure is BS 9000 *General requirements for a system for electronic components of assessed quality — Part 2: Specification for the national implementation of the CECC system*.

A British Standard does not purport to include all the necessary provisions of a contract. Users of British Standards are responsible for their correct application.

Compliance with a British Standard does not of itself confer immunity from legal obligations.

Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, the CECC title page, pages ii to iv, pages 1 to 20, an inside back cover and a back cover.

This standard has been updated (see copyright date) and may have had amendments incorporated. This will be indicated in the amendment table on the inside front cover.

Förderverein für Elektrotechnische Normung (FEN) e. V.
Cenelec Electronic Components Committee

CECC

Système Harmonisé d'Assurance de la Qualité
des Composants Electroniques

**EXIGENCES
POUR LES
PROGRAMMES D'EVALUATION
DE PROCEDE
POUR
L'AGREMENT DE PROCEDE**

Harmonized System of Quality Assessment for
Electronic Components

**REQUIREMENTS
FOR
PROCESS ASSESSMENT
SCHEDULES
FOR
PROCESS APPROVAL**

Harmonisiertes Gütebestätigungssystem für
Baulemente der Elektronik

**ANFORDERUNGEN AN DIE
PRÜFABLAUFPLÄNE
FÜR DIE
VERFAHRENSBEWERTUNG
BEI DER
VERFAHRENSANERKENNUNG**



1

Edition
Issue
Ausgabe

CECC 200 000

1993

Contents

	Page
Foreword	iv
Section 1. General introduction	
Introduction	1
1 General	1
1.1 CECC 00114 Part V (RP 14/V)	1
1.2 Process Assessment Schedules (PASs)	1
1.3 Audit Check Lists	1
Section 2. Preparation of process assessment schedules (PASs)	
1 General	2
2 Requirements for Individual Clauses	2
2.1 Introductory Information	2
a) Front Page	
b) Organizations responsible for preparing a PAS	
c) Foreword	
d) Preface	
e) Contents	
f) Introduction	
2.2 General Requirements	3
a) Scope	
b) Definitions	
c) Related Documents	
d) Units, Symbols and Terminology	
e) Standard and Preferred Values	
2.3 Quality Requirements of the Process/Service	4
a) Process Description	
b) Quality Factors	
c) Process Specifications	
d) Process Approval Programmes	
e) Maintenance Programmes	
f) Test Methods	
g) Release to Customer	
h) Modifications to Approval	
2.4 Specialist Contractor Documentation Requirements	6
a) Process Manual	
b) Process Approval Reports	
c) Abstract of Description of Process Approval	
d) Specialist Contractors Audit Preparation Plans	
— Internal Audit Preparation Plan	
— External Audit Preparation Plan	
2.5 Audits	7
a) Audit Check Lists	
b) Internal Audits	
c) External Audits	
2.6 Corrective Actions and Failure Analysis	7
a) Corrective Actions	
b) Failure Analysis	

	Page
2.7 Contractor to Customer Interface	7
2.8 Training	7
2.9 Post Supply Liaison	8
Annex A Structure of process approval documents	9
Annex B Summary of introductory information, sections and clauses	10
Annex C Style form and content of a pas front page	11
Annex D Form and content of process specifications	12
Annex E Formulation of process approval programmes	15
Annex F Guidelines for guidance to customer documents (GCDs)	16
Annex G Guidelines for the generation of customer detail specifications (CDSs)	17
Annex H Notification of drafting a PAS	19
Figure 1 — Example CDS front cover blank page	18
Table 1 — Example process specification spreadsheet for microelectronic ceramic packages	14

Foreword

The CENELEC Electronic Components Committee (CECC) is composed of those member countries of the European Committee for Electrotechnical Standardization (CENELEC) who wish to take part in a harmonized System for electronic components of assessed quality.

The object of the System is to facilitate international trade by the harmonization of the specifications and quality assessment procedures for electronic components, and by the grant of an internationally recognized Mark, or Certificate, of Conformity. The components produced under the System are acceptable in all member countries without further testing.

This specification has been formally approved by the CECC, and has been prepared for those countries taking part in the System who wish to issue national harmonized specifications for specialist processes and services related to the manufacture of electronic components of assessed quality. It should be read in conjunction with the current regulations for the CECC System.

At the date of printing this specification, the member countries of the CECC are Austria, Belgium, Denmark, Finland, France, Germany, Ireland, Italy, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom, and copies of it can be obtained from the addresses shown on the blue fly sheet.

Preface

This specification was prepared by CECC WG — Quality Assessment Procedures (QAP)

It is based wherever possible, on Publications of the International Electrotechnical Commission.

The text of this specification was circulated to the CECC for voting in the document(s) indicated (listed) below and was ratified by the President of the CECC for printing as a CECC Specification.

Document	Date of Voting	Report on the Voting
CECC(Secretariat)3169	January 1993	CECC(Secretariat)3304

Section 1. General introduction

Introduction

The requirements for Process Approval of specialist contractors to the electronic components industry are given in RP 14-V. The mechanism for approval defined in that RP requires the specialist contractor to have available an appropriate Process Assessment Schedule (PAS). This schedule defines how the principles and requirements of RP 14-V are applied to a defined specialist process activity or service to be provided by one or more specialist contractor(s). PASs specify the production process and the associated quality factors which may reduce or eliminate the need for end of line testing. PASs also permit, as appropriate, the application of statistical process control techniques.

PASs shall follow a common format and contain the minimum requirements defined in this specification which provides the rules for the preparation of PASs.

Section 1 of this specification gives a general introduction. Section 2 of this specification provides requirements and guidance on the form and content of PASs. It is intended for use by CECC Working Groups, industrial task groups or individual specialist contractors wishing to prepare a new PAS or to enhance an existing PAS. The instructions in section 2 are presented in a section by section account of all clause headings and the basic content. It is recognized that the technologies which may be covered by Process Approval are broad and diverse. This specification has been formulated to permit maximum flexibility whilst setting a minimum standard for a specialist contractor to achieve before being approved under the system. In order to improve this flexibility and provide helpful information the reader is directed to RP 14-0 which gives general information concerning the relationship between Process Approval and other approvals within the CECC System.

1 General

Annex A gives a diagram indicating the structure, numbering and interrelationship of Process Approval documentation indicating the position of this specification and of PASs. The purpose and content of the documents and, where applicable, the requirements relevant to these documents are given for information. Except as otherwise stated, the documents referred to are subject to the voting and publication procedures of the CECC.

1.1 CECC 00114-V (RP 14/V)

CECC 00114-V defines the Rules of Procedure for Process Approval of specialist contractors within the CECC System, which shall be followed for all relevant approvals.

1.2 Process Assessment Schedules (PASs)

PASs are documents prepared in accordance with section 2 of this specification and describe the requirements for any specialist process activity or service relevant to the manufacture of electronic components. PASs are designed for use by specialist contractors undertaking such activities or services. Each PAS shall be allocated an unique number by the CECC General Secretariat in the CECC 200000 series, e.g. CECC 200001. There should be only one PAS for each defined specialist process activity or service. To ensure this, each body intending to commence work on the drafting of a PAS shall register this intention with the CECC General Secretariat before starting work. Procedures and regulations for PASs will be given in RP 11, Annex H gives forms for use by specialist contractors, industrial task groups, CECC Working Groups and User Groups when notifying the intention to commence drafting a PAS.

A PAS includes:—

- general requirements
- quality requirements of the technology
- specialist contractor documents requirements
- audits
- corrective actions and failure analysis
- contractor to customer interface
- training
- post supply liaison

A PAS shall be prepared in at least one of the official languages of the CECC System, and shall comply with the requirements of CECC RP 14-V and the relevant editorial requirements of CECC 00400.

1.3 Audit Check Lists

Each PAS shall include a check list of all key quality factors relevant to the defined process or processes. Audit check lists can be used by specialist contractors for self audits and audit preparations or by an ONS auditing a specialist contractor.