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**ORGANISATION AND BASIC RULES OF THE
COMPONENTS TECHNOLOGY BOARD**

ESCC 10400

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1. **INTRODUCTION**

The Charter defines the structure of the ESCC and the responsibilities and tasks of the Components Technology Board (CTB). It also details the rules concerning the CTB liaison with, and representation at, the SCSB.

2. **SCOPE**

This document amplifies the responsibilities and tasks of the CTB given in the Charter.

3. **DEFINITIONS AND ABBREVIATIONS**

3.1 **DEFINITIONS**

A EEE part or component is taken to mean any item or device determined by the SCSB to be treated as a component within the ESCC framework, in line with the definitions found within ECSS-Q-60.

3.2 **ABBREVIATIONS**

The following abbreviations are used in this document:

Charter	Charter of the European Space Components Coordination
AQP	Annual Qualification Programme
CTB	Components Technology Board
EC	European Commission
ECSS	European Cooperation for Space Standardisation
EEE	Electrical, Electronic and Electro-mechanical
ESCC	European Space Components Coordination
SCSB	Space Components Steering Board

4. **RELATED DOCUMENTS**

4.1 **APPLICABLE DOCUMENTS**

The following documents are applicable to the extent specified herein:

ESCC 00000	Charter of the European Space Components Coordination
ESCC 10000	ESCC Organisation and Membership
ESCC 11100	Internal Audit Procedure for the ESCC System

ESCC 11102	Complaints and Appeals Procedure
ESCC 11103	Performance Metrics Procedure
ESCC 12001	The ESCC Documentation System

4.2 REFERENCE DOCUMENTS

ECSS-Q-60	Space Product Assurance Electrical, Electronic and Electromechanical (EEE) Components
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5. RESPONSIBILITIES

The CTB shall be responsible for the formulation of strategic programmes and work plans for technology research and development in the area of European EEE space components. It shall also be responsible for the harmonisation and co-ordination of the collectively funded European space component and technology research and the related development, evaluation, qualification and quality assurance activities.

Detailed aims within these broad objectives shall achieve:

- Identification and anticipation of user needs.
- Maximum co-ordination of all space component technology research and development.
- Maximum coverage of all required component technologies.
- Maintenance of a practical awareness of both the technical and commercial trends of relevant component technologies.

6. PROGRAMME OF WORK

6.1 PROGRAMME MANAGEMENT

One of the key outputs from the CTB shall be a programme of work extending up to five years which shall address both the long term, strategic objectives and the short term component technology needs of the European space community. The CTB programme of work is referred to as the Strategic Plan.

The CTB shall propose a breakdown of the plan into dossiers along technological lines in accordance with priorities set by the SCSB. Each technology dossier shall include a number of technology programmes. Each technology dossier shall be placed under the responsibility of a recognised authority in the field, coming from a member organisation and designated as the dossier coordinator. The Strategic Plan and its constituent dossiers shall be approved by the SCSB. Throughout the course of its work, the CTB shall keep the programme of work under review and shall consult the SCSB regarding changes to any of the elements in the dossiers.

The CTB programme of work shall form a major input to the SCSB programme. The factors that

influenced the selection of the proposed technology programmes shall be detailed, together with the knowledge base used by the CTB, particularly in selecting the longer-term elements of the programme.

To assist the CTB to harmonise tasks and projects, the ESCC Members shall provide details of any separate programmes which they are conducting or proposing, with the aim of integrating them into the overall ESCC work plan. ESCC observers are encouraged to provide similar information for their programmes.

The CTB shall use written procedures covering its selection and submission of technology programmes and the associated activities. In particular, provision shall be made for:

- Iterative assessment and final selection of programme elements.
- Use of a consultation process to ensure understanding of the European space community needs.
- Identification of proposals as suitable candidates for submission to the EC.
- Selection and use of any specialist teams.
- Maintenance of links with the separately funded and managed projects conducted by the CTB members.
- Regular review of the work in progress.
- Methods for both progress and final reporting.

6.2 ANNUAL PLANS

Annual plans shall be used as a basis to formulate the ongoing CTB Strategic Plan. Included in this shall be the preparation of the AQP for specific approval by the SCSB. Although the CTB technology programmes may contain individual project time scales of up to five years, each technology dossier shall be updated in the Strategic Plan and be subject to annual SCSB approval. In its continuation of longer-term projects, or the provision of plans and arrangements for them, the CTB shall take appropriate account of current project findings and developments.

6.3 RESOURCES

The CTB activities concerning the AQP, the Strategic Plan and its annual updates, will be led by experts that the CTB has named as being responsible for each technology dossier. The experts shall be selected by the CTB from qualified candidates proposed by the participating organisations. Participation in this role shall be governed by the Charter and in particular by Section 7 thereof. Participating organisations contributing the services of an expert shall ensure that the person can effectively carry out the assigned activities.

6.4 IMPLEMENTATION

Contributing authorities may stipulate specific management arrangements for the tasks which they fund. Where this is not the case, the CTB shall be responsible for the management of its programmed tasks, which can be delegated as appropriate. Guidelines shall be formalised by the CTB representatives covering the management of the technology programmes and

associated tasks. As a minimum, the guidelines shall cover:

- The degree and method of CTB approval which is necessary before work is started on a task or project.
- The provision of information to the CTB regarding the nature and content of any contract placed for the task or project.
- The methods and frequency of progress and other reporting to the CTB.
- The assessment and review of results and their effect upon other work planned or in progress.

7. SYSTEM PROMOTION

CTB contact with external organisations will be associated with the development and update of the Strategic and Annual Plans. Liaisons which could lead to promotion of the ESCC shall be undertaken with SCSB approval. The rules and guidelines governing the SCSB links with external groups shall be applied, as appropriate, to the CTB activities.

8. CTB BASIC RULES

8.1 DOCUMENTATION

All ESCC documentation produced under the authority of the CTB shall be in accordance with the procedures given in ESCC 12001.

8.2 INTERNAL AUDITS

The CTB shall document methods and publish plans for its internal auditing activities. These shall fulfil the rules and guidelines defined in ESCC 11100.

8.3 COMPLAINTS AND APPEALS

The CTB shall operate a system for dealing with complaints and appeals that are received relating to its work or responsibilities. Complaints and appeals that remain unresolved four months after the date of their receipt shall be referred to the SCSB.

The rules and guidelines for dealing with complaints and appeals are given in ESCC 11102.

8.4 PERFORMANCE METRICS

Performance metrics shall be defined and applied in line with the rules and guidelines shown in ESCC 11103. The performance metrics shall cover the full range of the CTB responsibilities and shall be approved by the SCSB.

8.5 MEETINGS

The rules concerning the membership of the CTB are provided in the Charter. Rules for the election of members of the CTB and the conduct of meetings shall follow those given in the Charter for the SCSB and those given in ESCC 10000.

The CTB shall make its own provisions for secretarial support at meetings. The ESCC Secretariat shall prepare and distribute the formal minutes of meetings.

With the prior approval of the Chair advisors may attend meetings for specific purposes.

8.6 AD HOC WORKING GROUPS

The CTB may use ad hoc working groups to assist in its short-term work. However, prior SCSB approval shall be required for any groups to whom it is intended to assign long-term programme tasks. The scope of tasks and responsibilities for ad hoc working groups, and the rules that apply to their work, shall be clearly specified through written terms of reference. In addition these shall address requirements for planning activities and progress and final reporting. The intended life of the group shall be stated. The work of ad hoc working groups shall be included in the periodic reviews conducted by the CTB.

9. APPROVALS

The CTB Chair is responsible for approving the following activities prior to submission of the pertinent outputs, as required by the Charter and ESCC 10100, to SCSB.

Activity	Responsibility	Submitting Body
Strategic Plan	CTB Chair	CTB
Technology Dossiers	CTB Chair	CTB
Meeting Minutes	CTB Chair	ESCC Secretariat
Annual Reports	CTB Chair	CTB
Performance Metrics	CTB Chair	CTB
Annual Plans	CTB Chair	CTB
Internal Audit Programme and Results	CTB Chair	CTB
Complaints and Appeals	CTB Chair	CTB
Annual Qualification Plan	CTB Chair	CTB
CTB Programme Reports	CTB Chair	CTB
Ad Hoc Working Groups	CTB Chair	CTB

10. RECORDS AND REPORTING

10.1 RECORDS

The following records shall be maintained:

Record	Responsibility	Retention Period
Membership Lists	CTB Chair/Technical Secretary	5 years
Meeting Minutes	CTB Chair/ESCC Secretariat	5 years
Annual Reports	CTB Chair/ESCC Secretariat	5 years
Performance Metrics	CTB Chair/ESCC Secretariat	5 years
Strategic Plan	CTB Chair/ESCC Secretariat	5 years
Annual plans	CTB Chair/ESCC Secretariat	5 years
Technology Dossiers	CTB Chair/ESCC Secretariat	5 years
Internal Audit Programme and Results	CTB Chair/ESCC Secretariat	5 years
Complaints and Appeals	CTB Chair/ESCC Secretariat	5 years
Ad Hoc Working Group Final Report	CTB Chair/ESCC Secretariat	5 years
CTB Programme Reports	CTB Chair/ESCC Secretariat	5 years

10.2 REPORTING

Reports on project and task progress, problems, and milestone achievements shall be made to each meeting of the CTB. The reports shall focus upon the salient points and shall identify any findings which may be relevant to other or future tasks within the overall programme. The need for further discussion or decision regarding the continued course of a task or project shall also be highlighted.

Additionally, an annual report of the progress of the CTB work programme including the implementation of the Strategic Plan shall be provided to the SCSB.