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# **THE EUROPEAN PREFERRED PARTS LIST (EPPL) AND ITS MANAGEMENT**

**ESCC 12300**

Issue 2 Draft <del>43</del>	<del>May</del> 2013
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Document Custodian: European Space Agency – see <https://escies.org>

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DCR No.	CHANGE DESCRIPTION

## FOREWORD

An objective of the ESCC, as stated in the Charter, is to “implement a system for rationalising the diversity of components for space use, based on the usage of a European preferred parts list (EPPL), giving preference to European components offering competitive performance and costs”.

~~The fulfillment of~~~~Making available an EPPL with~~ this objective actively promotes the selection of parts for which there is an established body of data ~~demonstrating to support~~ their suitability for space application. Further, ~~thean~~ EPPL supports the component engineering disciplines of part selection and type reduction.

The EPPL is issued, and published in ESCIES, with the approval and under the authority of the SCSB. The EPPL is ~~managed by a manager contributed to the Executive Task by an ESCC member and is~~ subject to technical review and oversight by ~~thean~~ EPPL Technical Authority (TA) nominated by the SCSB. The PSWG is tasked by SCSB with overall supervision of the EPPL ~~processesactivity~~. The EPPL is managed by an ESCC member organization as an active contribution to the Executive tasks.

ECSS-Q-ST-60 requires the use of the EPPL as a primary component selection tool for class 1 components. However, the EPPL as a whole and in particular for its part 2 represents a suitable reference also for the selection of class 2 and class 3 components.

**Comment [RdM1]:** Proposal in accordance with PSWG action 57.2. However, PSWG members are requested to reconsider the need for this action or to clarify the purpose and scope of the message to be given.

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## 1 DESCRIPTION, PURPOSE AND OBJECTIVES OF THE EPPL

### 1.1 DESCRIPTION

The European Preferred Parts List (EPPL) is a product of ESCC and is under configuration control. Each release of the list is the product of the review work by the EPPL TA. Therefore, the verification by the TA of the compliance with the inclusion-listing and maintenance requirements specified in this document will be a prerequisite for the listing-inclusion of the concerned component in the EPPL.

Eligible components for listing in the EPPL are all EEE components categories as listed-defined in ECSS-Q-ST-60. In addition, the following may also be listed in the EPPL: semiconductor die, semiconductor foundry processes, hybrid assembly processes, ESCC Capability Approvals and ESCC Technology Flow approvals.

The EPPL is made up of two parts:

- ❖ Part 1 components: components which are fully qualified or evaluated to recognised space standards (e.g. ESCC) giving full or high confidence for space usage.
- ❖ Part 2 components: components for which the potential capability to satisfy space application requirements has been demonstrated but which have not yet reached the level of full confidence.

By this means the objective is to direct the user towards a limited number of component types, covering all design applications. The aim is to avoid duplication, achieve type reduction and hence through increased volumes achieve cost reduction and procurement effectiveness.

The components listed in the EPPL shall be available in screening levels which conform to the requirements of ECSS-Q-ST-60 (Class 1).

### 1.2 PURPOSE AND OBJECTIVES OF THE EPPL

The EPPL shall be useful to space hardware manufacturers and projects in their selection of EEE components. For this purpose, the EPPL may be used to achieve part type reduction as an effective way to improve parts procurement and so lead to lower costs of ownership of components. The EPPL shall at the same time provide a list of components recommended for space application as they will be:

- available in the mid to long term, and, if possible from various sources
- backed by sufficient, substantiated, technical information
- not affected by any serious technical, quality, workmanship, reliability or procurement risks

The EPPL is also set to contribute to the promotion and recognition of the technology development activities, i.e. ESCC evaluations, as coordinated by various bodies of ESCC in Europe the ESCC Executive (?).

Finally, the EPPL shall be consistent with ESCC policies. Apart from its reference to the ESCC QPL and QML, it shall also be used as a way to express a positive selection on external QPLs. The EPPL shall be prepared in accordance with workable, clearly stated requirements.

**Comment [FM2]:** Added as proposed by CNES during the PSWG review of DCR 724

**Comment [RdM3]:** Needed to avoid the impression that qualification has no added value

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**Comment [FM4]:** PSWG AI 57.2

**Comment [RdM5]:** This statement in this place creates more work for the TA, increasing EPPL overhead. Therefore it would be better placed in para. 6 as a User responsibility: 'The user shall be responsible for procuring EPPL listed components in accordance with ECSS-Q-ST-60 quality and screening levels.'

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## 2 SCOPE OF THE PROCEDURE

This document defines the content of the EPPL and provides the rules for establishing and maintaining the list of preferred and suitable components to be used by European manufacturers of spacecraft hardware and associated equipment.

The inclusion of a component in the EPPL does not automatically imply its suitability for any specific application. The need of project review and approval of EEE components remains necessary.

The operating rules for management, administration and maintenance of the EPPL are also defined in this document.

This document applies to all parties involved at all levels in the realisation of Space segment hardware and its interfaces.

## 3 DEFINITIONS AND ABBREVIATIONS

### 3.1 DEFINITIONS

For the purposes of this specification, the terms and definitions found in ESCC 21300 shall apply. In addition, the following shall apply:

European Component	A component which may have the benefit of ESCC qualified status by virtue of at least the quality operations (e.g. inspections and tests), as defined in the ESCC Specifications, being performed in one or more, and the delivered component originating from one, of the Member States of ESA or a state or country with a cooperation agreement with ESA. <u>The component shall be freely available to the ESCC user industry on a commercial basis without let or hindrance, inter alia being free from any form of selective export controls.</u>
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**Comment [FM6]:** Added as requested at PSWG 57. This last sentence was missing, so now the complete definition here is exactly the same introduced for ESCC components in ESCC 21300 iss3, as per DCR 416, in accordance with SCSB A113.3

### 3.2 ABBREVIATIONS

The following abbreviations are used in this document:

Charter	Charter of the European Space Components Coordination
CF	Change Form
<del>CTB</del>	<del>Components Technology Board</del>
<del>DD</del>	<del>Displacement Damage</del>
EAF	Entry Application Form
ECSS	European Coordination for Space Standardisation
EEE	Electrical, Electronic and Electro-mechanical
EPPL	European preferred parts list

**Comment [FM7]:** Removed as result of CNES' review of DCR 724

**Comment [FM8]:** Removed as result of CNES' review of DCR 724

ESA	European Space Agency
ESCIES	European Space Components Information Exchange System, <a href="https://escies.org">https://escies.org</a>
ESCC	European Space Components Coordination
<del>FFF</del>	<del>Fit, Form and Function</del>
JAXA	Japan Aerospace Exploration Agency
LVT	Lot Validation Test (as per ESCC Generic specifications)
MIL (spec)	Specification of the U.S. Department of Defense, maintained by its Defense Logistics Agency (DLA) Land and Maritime
NASA	National Aeronautics and Space Administration
<del>NPSL</del>	<del>NASA parts selection list</del>
PID	Process Identification Document
<del>PPL</del>	<del>Preferred Parts List</del>
PSWG	Policy and Standards Working Group
QML	Qualified manufacturers list (ESCC REP 006 is the ESCC QML)
QPL	Qualified parts list (ESCC REP 005 is the ESCC QPL)
RAF	Removal Application Form
SCSB	Space Components Steering Board
TA	Technical Authority for the EPPL
SEE	Single Event Effects
SEF	Summary Evaluation Form
TID	Total Ionising Dose

**Comment [FM9]:** Removed as result of CNES' review of DCR 724

**Comment [FM10]:** Removed as result of CNES' review of DCR 724

## 4 **RELATED DOCUMENTS**

### 4.1 **RELATED DOCUMENTS**

#### 4.1.1 **Applicable documents**

The following documents are applicable to the extent specified herein.

ESCC 11102	Procedure for Complaints and Appeals
ESCC 23600	Complaints and Appeals

#### 4.1.2 Reference documents

ESCC 00000	Charter of the European Space Components Coordination
ECSS-Q-ST-60	Space Product Assurance Electrical, Electronic and Electromechanical (EEE) Components
ECSS-Q-ST-60-05	Generic requirements for hybrids
ECSS-Q-ST-60-12	Design, selection, procurement and use of microwave, monolithic, integrated circuits (MMICs)

### 5 RULES FOR INCLUSION, MAINTENANCE AND REMOVAL

#### 5.1 GENERAL

The inclusion and maintenance of components in the EPPL indicates that those components meet all of the following requirements:

- ✓ are known in their technology and show potential for use in flight hardware.
- ✓ have a significant chance of being utilized for current and future programmes.
- ✓ are available from sources for which there is evidence that they are capable of providing products of the required quality.
- ✓ are freely available on a commercial basis without let or hindrance to the ESCC User Industry. (This precludes the selection of a component subject to any form of selective export control.)
- ✓ are not known to be affected by any notice of obsolescence
- ✓ are not known to be affected by any reliability/quality problems not resolved
- ✓ have an established radiation performance
- ✓ are available for procurement in accordance with a procurement specification. The specification shall be available in English freely and without restrictions. ~~easy available and in English.~~

In addition, preference is to be given to those components to which one or more of the following conditions apply:

- available from a European supplier manufacturer of European components. Where an European component, FFF-equivalent, is not available, a suitable non-European component may be listed.
- from suppliers/manufacturers whose product(s) line has/have been assessed by the ESCC Executive or by another recognised third party authority against space requirements.
- for which a second source is available
- available from non-European manufacturers in conformance with the requirements of other recognized space components qualification systems such as Japan's JAXA system or the United States' DoD DLA MIL system
- originating from manufacturers based on states with a Space Agency with which ESA may hold specific cooperation agreements, such as Japan's JAXA
- originating from manufacturers located in countries with a space agency with which ESA holds pertinent cooperation agreements, such as with Japan's JAXA.

**Comment [FM11]:** Added as result of CNES' review of DCR 724

**Comment [FM12]:** Modified after PSWG57

**Comment [FM13]:** Modified as result of CNES' review of DCR 724

**Comment [FM14]:** Added as requested by PSWG 57

**Comment [FM15]:** An attempt to address PSWG AI 57.3

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**Comment [FM16]:** An attempt to address PSWG AI 57.3

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## 5.2 THE INCLUSION OF COMPONENTS IN THE PART 1 OF THE EPPL

Provided that the selection criteria in paragraph 5.1 are met, the Part 1 components shall be selected from those meeting at least one of the following criteria:

- ✓ components included in the QPL and QML issued by ESCC (REP 005 and REP 006 respectively, both published in <https://escies.org>).
- ✓ ~~components for which a satisfactory ESCC Evaluation phase (Component and manufacturer evaluation) has been completed and approved components that have been evaluated successfully according to ESCC, ECSS-Q-ST-60 or other equivalent sets of requirements for which a recognized procurement specification is available~~
- ✓ ~~Only if FFF equivalent components are not available from the QPL or QML of ESCC,~~ components from:
  - MIL QPLs/QMLs: Quality levels and specifications as listed in Table 7-1 of ECSS-Q-ST-60, "Quality levels for Class 1 components"
  - JAXA QML

The inclusion of MIL and JAXA parts in the EPPL shall be possible when an acceptable data-package of supporting information is provided. Such data package shall be written in English and shall contain, as a minimum:

- Evaluation and/or Qualification data package
- Radiation evaluation test data, if applicable
- Construction analysis

### 5.2.1 Additional special cases eligible for inclusion in the EPPL Part 1

In addition to the criteria included in the previous paragraph, the EPPL Part 1 may list the following:

1. Hybrid ~~As~~sembly ~~P~~rocesses which hold an ESA PSS Capability Approval (CA) certification, as acknowledged by the relevant listing publication in <https://escies.org>, may be listed in the EPPL part 1 with reference to the approved issue of the PID.
2. Individual hybrid products may ~~also~~ be listed in the EPPL part 1, when:
  - ✓ manufactured in accordance with a PID covered under a valid ESA's PSS and ESCC Capability Approval certification and when
  - ✓ procurement records of already finished lots, processed in accordance with the requirements of ECSS-Q-ST-60-05, are available and when
  - ✓ a procurement specification is available without any restrictions
3. Microwave Monolithic ~~I~~ntegrated ~~C~~ircuit (MMIC) ~~die processes: A MMIC die~~ processes may be listed in the EPPL Part 1 after when it has been successfully completion of an ESCC evaluation.
4. ~~MMIC Naked Die~~ MMIC Naked ~~D~~ie may be listed in the EPPL part 1 when provided the following conditions are met:
  - ✓ ~~The applicable production relevant process is must be~~ already listed in EPPL part 1 and when
  - ✓ ~~The design of the circuit was purposely designed for a space application implemented on the die must have been done in the frame of a space related activity, under the control of the ESCC Executive, and~~ in accordance with ECSS-Q-ST-60-12 and when

**Comment [FM17]:** Updated after PSWG 57

**Comment [RdM18]:** Already stated in 5.1

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**Comment [FM19]:** Removed after PSWG 57

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**Comment [RdM20]:** The ESCC Executive is not a design authority and is not involved in design verification and validation. At most the Executive can be expected to determine product compliance with the detail specification on a best effort basis.

**Comment [FM21]:** Removed as result of TAS' review of DCR 724

- ✓ ~~a~~A detail specification ~~in English language is shall be~~ available for the naked die component ~~and when~~
- ✓ 100% on-wafer electrical testing ~~is shall be~~ performed in accordance with the detail specification ~~and when~~
- ✓ 100% visual inspection ~~is shall be~~ performed after wafer sawing

5. ~~Microcircuit and Discrete Naked Die~~ ~~die~~ ~~EPPL part 1. The die~~ used for ~~assembled packaged~~ components listed in the ESCC QPL and QML may be listed ~~as well~~ in the EPPL part 1 provided ~~the following conditions are met when~~:

- ✓ ~~a~~A detail specification ~~in English language is shall be~~ available for the naked die component ~~and when~~
- ✓ 100% on-wafer electrical testing ~~shall be is~~ performed in accordance with the detail specification ~~and when~~
- ✓ 100% visual inspection ~~is shall be~~ performed after wafer sawing.

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### 5.3 THE INCLUSION OF COMPONENTS IN THE PART 2 OF THE EPPL

Part 2 components complement Part 1 components and ensure improved coverage of future programme requirements. In general, additional effort is necessary to satisfy specific programme requirements. The selection of components is based on available data resulting from ~~internal manufacturer evaluation or~~ qualification ~~and successful completion of an ESCC evaluation~~. Their entry application shall be supplemented with documentation covering, at least:

- ✓ relevant and up to date information on the manufacturing, ~~production~~, assembly and test facilities related to the component in question-
- ✓ A component detail specification in English language at least content compliant with ESCC format
- ✓ constructional analysis report
- ✓ electrical characterisation data
- ✓ endurance test results
- ✗ ~~mechanical data~~
- ✓ environmental test data (vibration, mechanical shock, temperature)
- ✓ radiation effects test data – as applicable for the technology
- ✓ all of the above including the test conditions used

Comment [FM22]: Removed as result of CNES' review of DCR 724

Comment [FM23]: Removed as result of CNES' review of DCR 724

Components for which an entry form for the EPPL part 1 has not been found acceptable may still be listed in the EPPL Part 2 if the TA finds the application to be in conformance with the requirements of this paragraph.

The components in Part 2 are not to be intended as a ~~second-third~~ source for ~~similar-FFF~~ equivalent types already listed in Part 1.

Comment [RdM24]: Otherwise in contradiction with clause 5.1 where 2<sup>nd</sup> source availability is a desired criteria

### 5.4 THE MAINTENANCE OF COMPONENTS IN THE EPPL

The EPPL is a list to be updated every ~~34~~ months by the TA. Each issue is dated and published electronically in <https://escies.org> upon approval by the SCSB Chair.

Comment [FM25]: As agreed in PSWG 57

Once a component enters the EPPL in a particular issue of the EPPL it will continue to be listed in subsequent issues unless removed as per para. 5.6 criteria ~~the TA is made aware, at any time, of any problems that affect the component in such a way that they would have prevented its original inclusion in the list as per criteria set in paragraphs 5.1, 5.2 and 5.3.~~

Comment [FM26]: Added as result of CNES' review of DCR 724

Comment [RdM27]: Appears redundant

~~Every two years~~In addition, the TA shall confirm the suitability of the component to remain in the EPPL ~~every two years~~, by verifying and keeping explicit record of their ~~review~~verification, of the following points:

- ✓ ~~There are n~~No known problems ~~are known to~~ affecting the component or its manufacturer to an extent that would have prevented the inclusion of the component as per paragraph 5.1.
- ✓ ~~A statement from the manufacturer (or the originator of the entry form that introduced the part in the EPPL) supported by relevant data has confirmed that the component remains in production and is actively being procured by space customers. Any changes affecting the product since inclusion or last review shall be identified in the statement (design, production, testing facilities).~~
- ✓ For components listed in EPPL Part 1 or Part 2 and also originally listed in ESCC QPL, ESCC QML, MIL QPL, MIL QML or JAXA QPL, a verification shall be made to confirm that the component continues to appear in the relevant list.

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Comment [RdM28]: Replacing the suggested deletion below

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~~For components listed in EPPL as a result of their evaluation in accordance with ESCC specifications or other requirements reviewed for inclusion in the EPPL, a data package shall be submitted to be reviewed by the TA. Such data package shall provide evidence of appropriate quality of workmanship and successful screening and LVT results on a manufacturing lot dated in between the time of component inclusion in the EPPL (or last maintenance check) and the time of the current review of the TA. The LVT results shall be produced by tests from all subgroups specified in the relevant ESCC generic specification. The data package shall identify any changes, within the last two years, in the manufacturing, production, assembly process and test facilities related to the component in question. Such changes need to be reviewed and agreed by the TA.~~

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Comment [FM29]: Added as result of CNES' review of DCR 724

Comment [RdM30]: The notion of a data pack for maintenance either needs more detailed definition or we settle for the 'statement' as inserted above

The validity of the radiation information provided in the EPPL for a certain component type shall be verified by the TA at the time of maintenance.

~~It was suggested to ease the maintainance and frequency of the EPPL TA to reserve one meeting to Maintenance and to provide a kind of checklist for maintainance...~~

Comment [AP31]: It was suggested to ease the maintainance and frequency of the EPPL TA to reserve one meeting to Maintenance and to provide a kind of checklist for maintainance...

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## 5.5

### ENTRY CHANGES

The EPPL entry for a component type shall be changed to correct errors or when:

- a component type listed in Part 2 has been developed to a point where it meets the requirements for entry into Part 1 as indicated in paragraph 5.2.
- new variants or range of values are to be added or further type reduction leads to the removal of variants or range of values.
- new data leads to a change in the relevant characteristics to be listed.
- a new procurement specification in a preferred format is issued.
- manufacturer details change.

Changes shall be under configuration control

## 5.6

### REMOVAL

A component type shall be removed from the EPPL when any of the following situations arise:

- the component has ceased to conform to the requirements of paragraph 5.1, 5.2 and 5.3.

OR

- the TA can not verify that the component meets the maintenance requirements of paragraph 5.4

OR

- an EPPL listed component/technology has not been procured for the last 5 years.

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## 6 USER RESPONSIBILITY

Components in the EPPL met the appropriate criteria of paragraph 5 at the time of inclusion. However, it is the responsibility of the each user, who is considering using components selected from the EPPL, to determine that the selected component adequately fulfills all relevant application and mission requirements, satisfy himself/herself of the suitability of the component, in all respects, for the intended application. A user who proposes a component for inclusion or removal undertakes to provide the technical information required by the appropriate criteria of paragraph 5, as reflected into the current EAF and RAF, and to respond to any resulting queries from the EPPL Manager in support of the review and decision process of the TA.

**Comment [RdM32]:** Submission condition is out of place here as not related to the previous responsibility

## 7 EPPL PUBLICATION AND CONTENT

The EPPL is available on the ESCIES web site at: <https://escies.org>

The EPPL is published in the months of March, July and November around the middle of the month.

A “what’s new” section shall provide details of new entries, changes and deletions applied to the latest issue of the EPPL.

### 7.1 GENERAL

For each component, the following information shall be provided:

- Part type, family code and group code
- Process name for MMIC processes and MMIC naked dice references
- Package
- Description, including: preferred variants, temperature range, range of values –for passive parts-
- Remarks on radiation sensitivity, TID and SEE information Radiation Hardness Assurance information, as applicable, see paragraph 7.2
- Detail specification (whenever possible, the specification propose is to be from the ESCC system preferably in ESCC format but at least content compliant to ESCC)
- Manufacturer Details
- Remarks, if any (such as restrictions or additional, specific, relevant information)

**Comment [FM33]:** Added as result of TAS' review of DCR 724

### 7.2 RADIATION HARDNESS ASSURANCE INFORMATION

The EPPL shall provide information related to the performance of components when tested under radiation with regards to total dose, displacement damage and single event effects.

The TA ~~shall use ESSB-ST-Q-001, issue 1, may use ECSS-Q-ST-60-15~~ Radiation Hardness Assurance, or other recognized space and industry standards if endorsed by the SCSB, to decide on the acceptability of test data ~~in this respect~~.

**Comment [FM34]:** As agreed in PSWG 57

## **8 MANAGEMENT OF THE EPPL**

**Comment [RdM35]:** Entirely new draft for the old para.8 retained as para 9 below in an attempt to eliminate redundancies and provide a clearer structure

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### **8.1 ROLES AND RESPONSIBILITIES**

The following paragraphs identify the participants in the EPPL maintenance process and define their roles and responsibilities.

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#### **8.1.1 Technical Authority**

The members of the TA to review and disposition entry and removal applications and change requests ensuring the periodic update of the EPPL. Additionally every two years the TA performs a review of EPPL entries without ESCC qualification status to confirm that they have not become obsolescent and that there is continued user interest evidenced by recent procurement activity (para. 5.6).

The EPPL chairperson is a member appointed from within the ESA ESCC Executive team. He/she supports the EPPL manager w.r.t. any issues arising from the EPPL tool and submits new EPPL issues to the SCSB chairperson for release approval.

The TA is responsible for ensuring the full traceability of its decisions (recoding of justifications used) and shall respond to queries from the PSWG and SCSB.

The TA through its chairperson informs the SCSB and PSWG addressing the respective chairpersons of any special situations arising from their review and decision process.

The TA shall have a minimum of two face-to-face meetings (video conferencing counts as such) per year. Meetings shall be held around 4 weeks prior to the next scheduled issue of the EPPL.

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#### **8.1.2 EPPL Manager**

The EPPL Manager is an EPPL TA member facilitating the preparation and maintenance of the EPPL. Using the EPPL tool on <https://spacecomponents.org> the EPPL Manager screens the incoming applications for completeness and admissibility and provides the TA members with appropriate and timely selection, change and removal data via the Summary Entry Form (SEF) foreseen in the EPPL tool to enable the TA to process application forms and perform the maintenance reviews in an efficient manner. The EPPL Manager serves also as focal point for manufacturers and users.

Following the last issue of the EPPL for the calendar year the EPPL manager prepares a summary activity report to be submitted to the SCSB and PSWG for information.



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#### 8.1.3 Proposer

The proposer is the person or organization submitting a proposal for inclusion (EAF), removal (RAF) and change (CF) of components/technologies in the EPPL.

The proposer is responsible for obtaining the manufacturer's agreement to support the application and for the completeness and pertinence of the submission and shall respond to technical and other relevant clarification requests from the EPPL manager.

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#### 8.1.4 Manufacturer

The manufacturer shall be in agreement with any EAF submitted on his behalf.

The manufacturer shall respond to clarification request made by the proposer and EPPL manager.

The manufacturer of a non-ESCC qualified component/technology listed in the EPPL shall be responsible for communicating any relevant information (availability, technical changes, etc.) to the EPPL manager that may potentially affect the status of his listing.

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#### 8.1.5 PSWG

The PSWG to exercises oversight over the EPPL procedure and processes and advises the SCSB on its continued utility and of any changes in policy or operation deemed necessary.

#### 8.1.6 SCSB

The SCSB appoints the members of the TA representing the users and agencies and may specifically decide to include manufacturers. The SCSB appoints the TA chairperson from the team of ESA members of the ESCC Executive. The SCSB chairperson approves the release of a new EPPL issue.

#### 8.2 EPPL MAINTENANCE WORKFLOW

The submission of a proposal for inclusion, removal or change may be made at any time.

Proposals for inclusion or removal of components or changes to an entry are to be made by using the online tool available in <https://spacecomponents.org>, which can also be reached through dedicated web links in the EPPL area of <https://escies.org> using the EAF, RAF and CF forms/formats provided.

**Comment [FM36]:** Editorial error in numbering corrected (unchanged vs. iss.1)

Complete and admissible application and change forms received at least 30 work days before the publication date of the next following EPPL issue shall normally be dispositioned in the associated TA meeting.

The EPPL manager requests information and clarifications from the proposers as needed.

The EPPL manager prepares the Summary Evaluation Form prior to the TA meeting.

The TA members review the SEF, discuss as required and vote using the EPPL tool.

The EPPL manager prepares the new EPPL issue in the tool.

The TA chair submits it to the SCSB chair for release approval and publishes the new issue on ESCIES.

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### 8.3 COMMUNICATIONS

Information shall be exchanged between all parties involved primarily by electronic means

The reception of each application and change form shall be expediently confirmed to the proposer.

Upon disposition of the TA the EPPL manager informs the proposer about the decision made.

The SCSB and PSWG are provided with the annual EPPL activity summary report. No further routine report shall be provided as a change summary is posted on ESCIES together with each new issue of the EPPL.

**Comment [FM37]:** Introduced again in this version of issue 2 (unchanged from issue 1)

### 8.4 LONG TERM DATA PRESERVATION

All records, including correspondence, completed forms, draft documents and minutes of meeting generated and received in the course of the work of the EPPL manager and that of the TA, are designated as the property of the SCSB and shall be stored by the EPPL manager and TA Chair respectively in a way that prevents degradation and facilitates ready retrieval for a period of 15 years from the time of edition or compilation of a document. They shall be accessible to the SCSB if so required and shall be passed on to successive EPPL managers and TA Chairs in an appropriate manner

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**Comment [FM38]:** Introduced again in this version of issue 2 (changed from issue 1 to add 15y)

### 8.5 COMPLAINTS AND APPEALS

A proposer whose proposal is rejected by the TA and who disputes the TA decision may resort to the complaints and appeals process in accordance with ESCC Basic Specification No. 23600.

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## 89 MANAGEMENT OF THE EPPL

**Comment [RdM39]:** Replaced entirely by the previous main para. 8; retained for traceability reasons

### 8-49.1 TECHNICAL AUTHORITY (TA)

The SCSB appoints a TA to manage the preparation and maintenance of the EPPL. The members elect a Chair and the Chair is proposed to, and confirmed by, the SCSB.

The TA is responsible for ensuring the EPPL is regularly updated with a target frequency of four per year.

### 8-29.2 EPPL MANAGER

An EPPL Manager is identified within the ESCC partners to manage the preparation and maintenance of the EPPL. The EPPL Manager provides the TA with appropriate and timely selection, change and removal data to enable the TA to review and approve the technical content of each planned issue of the EPPL. Note that the EPPL Manager may be a single individual or a small team responsive to the TA and proposers through a single point of contact, the EPPL Manager.

### 8-39.3 ESTABLISHMENT OF THE EPPL

#### 8-3-49.3.1 Parties involved

The parties involved in the EPPL life cycle are as follows:

- the proposer, as the person submitting a proposal for inclusion or removal of components from the EPPL.
- the TA, as the body monitoring the process, performing a technical review function and advising the SCSB on acceptance of the list.
- the EPPL Manager, as the person managing the process of inclusion or removal of components in the EPPL, facilitating the review by the TA and preparing each issue of the EPPL for publication.
- the SCSB for final approval to publish each issue of the EPPL.
- the PSWG to exercise oversight of the EPPL and advise the SCSB on its continued utility, reflection of the ESCC work plans and of any changes in policy or operation deemed necessary

#### 8-3-29.3.2 Management of the document

The EPPL is published in ESCIES after formal authorisation given by the TA, through its Chair, and approval by the SCSB, through its Chair.

Proposals for inclusion or removal of components or changes to an entry are to be made by using the online tool available in <https://spacecomponents.org>, which can also be reached through dedicated web links in the EPPL area of <https://escies.org>

~~Any change to the list proposed by the EPPL Manager shall be reviewed and authorised by the TA and subsequently approved by the SCSB through its Chair.~~

**Comment [RdM40]:** redundant

#### 8-3-39.3.3 Responsibilities

The proposer, for the inclusion, or removal of components in the EPPL, shall act as the technical interface with the EPPL manager.

The TA is responsible for the content of the EPPL, and, on behalf of the SCSB, also for the formal authorisation, via the TA Chair, to publish the EPPL, after approval by the SCSB Chair. The workings of the TA in the implementation of such requirements shall be minuted and traceable.

The TA shall monitor and may audit, on behalf of the SCSB, the EPPL activity performed by the EPPL manager, and, via the TA Chair, shall advise the SCSB and the EPPL manager on request.

The TA shall maintain appropriate records of its work.

The EPPL Manager is responsible for the preparation of the EPPL, and for providing it in a suitable form for subsequent authorisation, approval and publication in ESCIES.

The EPPL Manager shall maintain appropriate records of his/her work.

#### 8-3-49.3.4 Description of the Information Flow

- a. Proposals for component inclusion in or removal from the EPPL shall be made using an Entry Application Form (EAF) or a Removal Application Form (RAF). Proposals for changes to existing entries shall be made using a Change Form (CF). The submission of a proposal for inclusion, removal or change may be made at any time.
- b. The EPPL Manager shall review received EAFs, RAFs and CFs, applying the inclusion or removal criteria, as defined in paragraph 5, and taking into account appropriate standardisation and type reduction considerations. For each EAF, the EPPL Manager shall obtain sufficient supporting documentation (e.g. test data) to properly evaluate the acceptability of the component for inclusion in the EPPL.
- c. The EPPL Manager, using a suitable Summary Evaluation Form (SEF), shall generate a preliminary list of proposed inclusions, deletions and changes. This preliminary list shall be available to the TA members for review and approval. The members of the TA shall make use of the voting facility part of the online tool available in <https://spacecomponents.org> in order to express their recommendation on any inclusion, deletion or change.
- d. The TA Chair shall be responsible for authorising the publication of the EPPL in ESCIES after approval by the SCSB through its Chair. (Note that the SCSB Chair shall provide such approval outside the SCSB meeting schedule) ~~with the approval being added to the agenda of the next meeting for confirmation by the Board.~~
- e. The EPPL Manager shall be responsible for the accuracy, schedule and availability of the list
- f. Information shall be exchanged between the parties primarily by electronic means
- ~~e.g.~~ All records, including correspondence, completed forms, draft documents and minutes of meeting generated and received in the course of the work of the EPPL manager and that of the TA, are designated as the property of the SCSB and shall be stored by the EPPL manager and TA Chair respectively in a way that prevents degradation and facilitates ready retrieval for a period of 15 years from the time of edition or compilation of a document. They shall be accessible to the SCSB if so required and shall be passed on to successive EPPL managers and TA Chairs in an appropriate manner
- ~~e-h.~~ The TA Chair shall provide feedback in written, on behalf of the TA, to applicants with regards to their applications for inclusion, change or removal.

**Comment [FM41]:** Addition vs previous versions of this draft.

**Comment [RdM42]:** Too heavy

**Comment [FM43]:** Introduced again in this version of issue 2 (unchanged from issue 1)

**Comment [FM44]:** Introduced again in this version of issue 2 (unchanged from issue 1)

**Comment [FM45]:** Introduced again in this version of issue 2 (changed from issue 1 to add 15y)

The EPPL Manager shall be responsible for the accuracy, schedule and availability of the list. Information shall be exchanged between the parties primarily by electronic means. All records, including correspondence, completed forms, draft documents and minutes of meeting generated

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and received in the course of the work of the EPPL Manager and that of the TA, are designated as the property of the SCSB and shall be stored by the EPPL Manager and TA Chair respectively in a way that prevents degradation and facilitates ready retrieval for a period of 15 years from the time of edition or compilation of a document. They shall be accessible to the SCSB if so required and shall be passed on to successive EPPL Managers and TA Chairs in an appropriate manner.

Comment [AP46]: OK but new?

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#### ~~8.3.69~~3.5 EPPL Work Flow

Any user may propose at any time the inclusion, removal or change of an entry in the EPPL through his filling-in of dedicated forms available in the ESCC website.

The EPPL manager coordinates the review of the application forms pending disposition by the TA. For this purpose, he will set a deadline, typically one month prior to the TA meeting, for acceptance of application forms. Forms received after the deadline will be considered at the occasion of the following review by the TA.

The TA members will review the inputs provided by the EPPL manager. The TA members at their meetings will confirm their disposition and confirm a recommendation for approval or rejection for each application form.

The TA Chairman will be responsible for the reporting of the TA agreements up to the SCSB Chairman. The SCSB Chairman will receive via the online tool a proposal for his approval of the new release of the EPPL on the basis of the application forms as assessed by the TA.

Upon approval by the SCSB Chairman, the EPPL Manager authorises the EPPL in its new issue for release through <https://escies.org>

#### ~~8.3.69~~3.6 Communication

Receipt of an EAF, RAF or CF will be acknowledged by the EPPL Manager indicating the EPPL issue which will reflect the disposition of the application. A proposer who sees that his/her proposal has not been executed in the issue of the EPPL may contact the EPPL Manager (using the feedback form in the EPPL section of ESCIES) to request an explanation.

#### ~~8.3.79~~3.7 Complaints and appeals

A proposer whose proposal is rejected by the TA and who disputes the TA decision may resort to the complaints and appeals process in accordance with ESCC Basic Specification No. 23600.

#### ~~8.49~~4 FORMS

The Entry Application Form (EAF), Removal Application Form (RAF) and (Change Application Form) CF to be used are all online resources available through the ESCC websites <https://spacecomponents.org> and <https://escies.org>