

ESA LCA HANDBOOK

EcoDesign Team

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ESA LCA approach

ESA has performed LCA of the 3 different segments:

LCA Launch Segment



LCA Space Segment

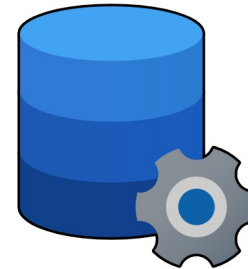


LCA Ground Segment



ESA LCA Handbook

Available under request



ESA LCA Database

Available under ESA contract*



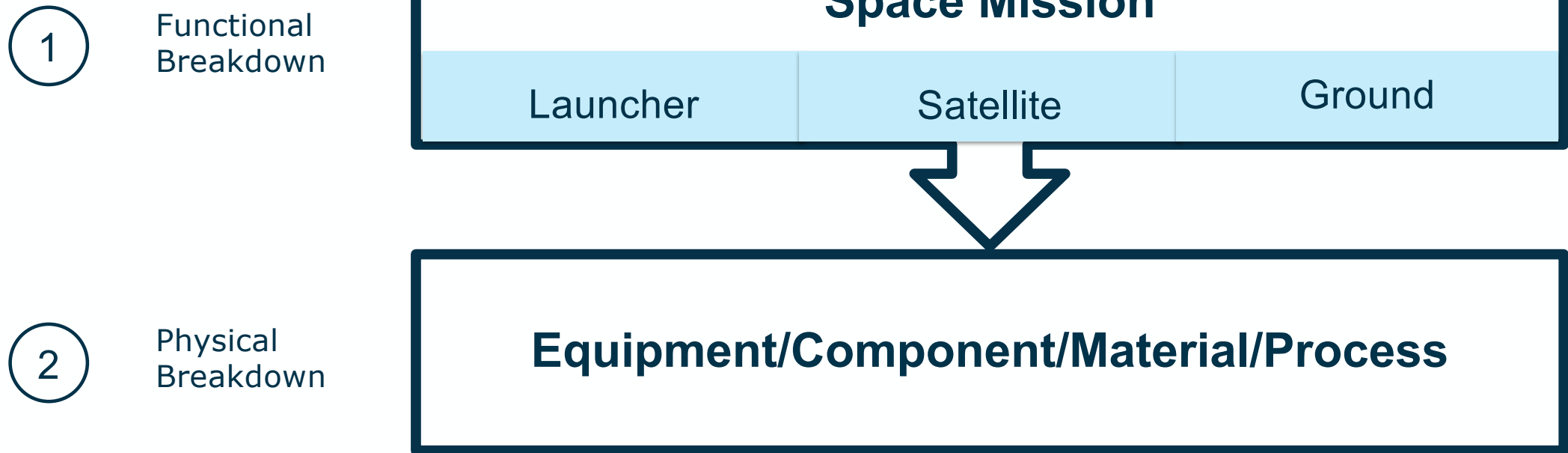
The aim of the ESA LCA Handbook is to:

- ❖ Establish the **methodological rules** on how to correctly perform space-specific LCAs
- ❖ Define rules and guidelines to support a **consistent and harmonized approach to LCA** within the European space sector
- ❖ **Support the competitiveness of the European space sector** by sharing its knowledge with the European space actors
- ❖ **Promote and facilitate** the use of LCA within the space sector

To that end the handbook addresses the following:

- Explanation on **how to use** the handbook (for all user types)
- Introduction to the **LCA general methodology** (first time users)
- Specificities and difficulties of applying **LCA to the space sector**
- **Guidelines** that are taken into account when conducting a space LCA
- **Communication** of the LCA results

Aid LCA practitioners performing space sector LCAs at the following levels:



ESA wants to provide an up-to-date Handbook to facilitate and support the LCA activities by European Space stakeholders.

As the last publication of the handbook was in October 2016, an activity is undergoing to **critically assess the readiness** of the current Handbook in order to prepare **the update** of the latest.

This activity is foreseen to end by **the end of 2021**.

ESA aims to update the ESA LCA Handbook **by the end of 2022**.

The main objectives of the critical review is :

- ❖ To review the coherence with other relevant European guidelines (incl. recommendations on methods and environmental indicators)
- ❖ To address options for inclusion on new space-specific LCA recommendations and eco-design guidelines (based on latest studies and users feedback)

How to get the Handbook ?



The handbook is available to anyone under request, please contact cleanspace@esa.int

