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**Space systems — Space debris  
mitigation design and operation  
manual for launch vehicle orbital  
stages**

*Systèmes spatiaux — Lignes directrices de conception et de  
manœuvre des étages orbitaux de lanceurs pour réduire les débris  
spatiaux*

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## Foreword

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The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see [www.iso.org/directives](http://www.iso.org/directives)).

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This document was prepared by Technical Committee ISO/TC 20, *Aircraft and space vehicles*, Subcommittee SC 14, *Space systems and operations*.

This second edition cancels and replaces the first edition (ISO/TR 20590:2017), which has been technically revised.

The main changes compared to the previous edition are as follows:

- text has been updated to be aligned with ISO 24113:2019;
- information has been added that the total number of structural elements and orbital stages is limited according to the number of payloads;
- information has been added that the ejection of slag debris from solid rocket motors is limited newly in low Earth orbit in addition to GEO previously;
- information relating to collision avoidance against catalogued space objects has been improved;
- corresponding to the new requirement limiting the total probability of successful disposal to be at least 0,9, the state of the art to confirm the compliance with that taken in the world space industries and national agencies has been added;
- other information relating to the changes in ISO 24113 has been added.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at [www.iso.org/members.html](http://www.iso.org/members.html).