# EUROPEAN SPACE AGENCY (ESA): SPACE DEBRIS MITIGATION POLICY FOR AGENCY PROJECTS

#### International mechanism:

"Space Debris Mitigation Policy for Agency Projects", administrative instruction of the European Space Agency (ESA) Director General, entered into force on 28 March 2014.

Note: This administrative instruction replaces ESA's previous instruction of 2008, fully aligning ESA's space debris mitigation policy to ISO Standard 24113 "Space Systems – Space Debris Mitigation Requirements" issued in May 2011 and adopted by the European Coordination on Space Standardisation (ECSS) as the ECSS-U-AS-10C standard in 2012.

## **Description:**

The administrative instruction "Space Debris Mitigation for Agency Projects" of the ESA Director General establishes ECSS-U-AS-10C as the ESA standard for the technical requirements on space debris mitigation for Agency projects, sets out the principles governing its implementation and defines the associated internal responsibilities. It applies to a) the procurement of ESA space systems (e.g.: launchers, satellites, inhabited or robotic vehicles) and b) operations, under the responsibility of ESA, of any given space system. For the procurement of launch services for ESA space systems, all reasonable efforts shall be made to ensure the use of launchers which are compliant with ECSS-U-AS-10C. The instruction contains two annexes listing a) implementation requirements (see below) and b) terms and definitions.

The "Implementation Requirements", annexed to the administrative instruction "Space Debris Mitigation Policy for Agency Projects" of the ESA Director General, define a set of requirements for the limitation of space debris and a set of risk reduction measures in the case of re-entries of space systems (or their components) into the Earth's atmosphere, including the definition of a maximum acceptable casualty risk for ESA space systems.

## Applicability:

The European Space Agency is an international intergovernmental organisation with international legal personality (Art. 15 ESA Convention) and thus a subject of public international law. The ESA Director General is its executive organ (Art. 10, 12 ESA Convention). Within the ESA legal system, the Director General's administrative instructions and policies are binding for all ESA staff, who, in applicable cases, have to ensure the correct implementation of such acts in ESA's relation with third parties.

### Relation to international mechanisms:

The European Code of Conduct for Space Debris Mitigation, the Inter-Agency Space Debris Coordination Committee (IADC) Guidelines for Space Debris Mitigation, the Space Debris Mitigation Guidelines of the Committee and the United Nations Treaties and Principles on Outer Space are referenced in the administrative instruction "Space Debris Mitigation for Agency Projects" of the ESA Director General; the technical requirements in the administrative

instruction are similar, yet more specific, and meet the same intent of the requirements that are listed in the ISO Standard 24113 of 2011. Therefore, ESA's space debris mitigation policy is fully in line with the non-binding guidelines listed above. It shall be reminded that ESA has taken an active role in the elaboration of some of these instruments, in particular through its involvement in the IADC and through its endorsement of the European Code of Conduct for Space Debris Mitigation of 2004.

#### Link to national mechanisms:

There is no legal relation between the administrative instruction "Space Debris Mitigation for Agency Projects" of the ESA Director General and national space debris mitigation mechanisms of ESA Member States or non-Member States. However, the administrative instruction specifies that all reasonable efforts shall be made to ensure that, whenever relevant, ESA programmes comply with re-entry regulations and procedures of launching states [cf. Art.VII Outer Space Treaty].

#### References:

 ESA's space debris mitigation mechanisms and ESA activities regarding space debris mitigation are described on the website of ESA under http://www.esa.int/Our Activities/Operations/Space Debris