

International Summer School on:
FRONTIER TECHNOLOGIES FOR
“SPACE 2.0” COMMUNICATIONS
5th Edition, September 1-5, 2025
Italian Space Agency (ASI), Rome, Italy

2nd September 2025

Lecturer:

Lieutenant Colonel Claudio GIZZI
of the Italian Air Force

Air and Space Operations Command – Space Situational Awareness Centre

Title: the Space Situational Awareness as a capability tool for the Safety and Security of the Space Environment and Space Operations

Abstract: the Space and its related Data, Products and Services are a strategic achievement for the global community but somehow their availability is largely and critically related to space environment dependencies, vulnerabilities and capabilities. Nowadays the Space is declared congested, contested and competitive but also a “warfighting domain”, by recalling some behaviours that foresee a weaponization trend. In that ambiguous and complex contest, the Space Situational Awareness (SSA) represents one of the functional areas of the Space Domain devoted to make the Space even Safe and Secure. The Italian Air Force delivers an enhanced SSA in favour of national and international Military and Civilian communities through its SSA Centre (SSAC), thus playing its Dual role. Among some activities, the Centre releases the Re-Entry and Fragmentation Services for the Partnership EU-SST, where a network of sensors and some scientific and statistical applications enable orbital determination or space objects re-entry trajectories to assess reports and information in favour of the final users. Furthermore, the SSAC constantly monitors the Italian Military and Dual satellites to warn in case of potential collisions, hence a certain number of products and data are provided to Operators for the safeguard of these strategic and valuable assets.