

Considerations for space capacity management topic

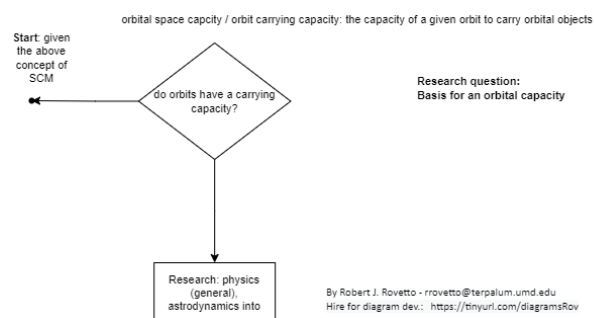
Robert J. Rovetto

rrovetto@terpalum.umd.edu, <https://ontospace.wordpress.com/contact>

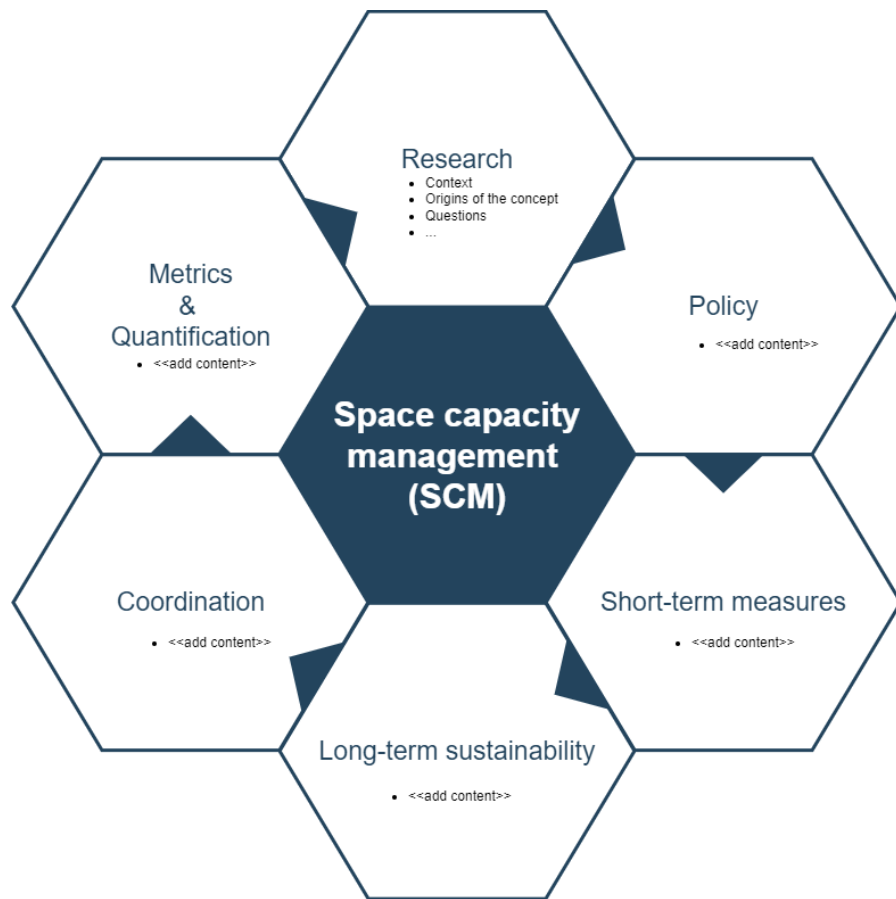
March 2022 Contribution to the IAF STM 3.1 working group

Rob's Recommendations & Input:

- May be helpful to have a glossary or paragraph on terms we are using and their meaning
- Add a paragraph on *context* and on *origins* of the concept of space capacity management
 - FYI: the concept, or rather that of capacity management' is used in other non-astronautical disciplines
 - *Recommend we research these other senses*
 - What is the first use and sense of this in the context of astronautics?
 - Do orbits actually have a carrying capacity?
 - Recommend scientific research: consult professional astrodynamicists, physicists, etc.
(perhaps an intuitive, pre-theoretic, answer is 'yes' given an analogy to road traffic and given our ordinary naïve physics conceptualizations, but I'm not sure we should simply assume)



- Geopolitical considerations:
 - Why would a party want to argue for a limiting space capacity? (especially if there is no scientific basis for one)
 - What are the incentives? Would one party, rather than another, gain by it? (E.g., using an upper limit to somehow exclude entry-into-the-given-orbit by competing space actors?)



By Robert J. Rovetto - rrovetto@terpalum.umd.edu
Hire for diagram dev.: <https://tinyurl.com/diagramsRov>

space capacity management diagram v.1

Glossary

Candidate terms to use and/or define. Candidate definitions are indented. Each bullet marks a distinct definition.

space capacity

orbital space capacity

orbit capacity

orbital capacity

space capacity management

orbital space capacity / orbit capacity:

- the capacity of a given orbit to carry orbital objects

orbital space capacity management