



# IAA-BR-20-1P-01 METHODOLOGY FOR CONCEPTUAL DESIGN PHASE ASSESSMENT OF TRADITIONAL VS SMALL SATELLITE MISSION SPACE SEGMENT CONCEPTS PART 1: INPUT AND OUTPUTS

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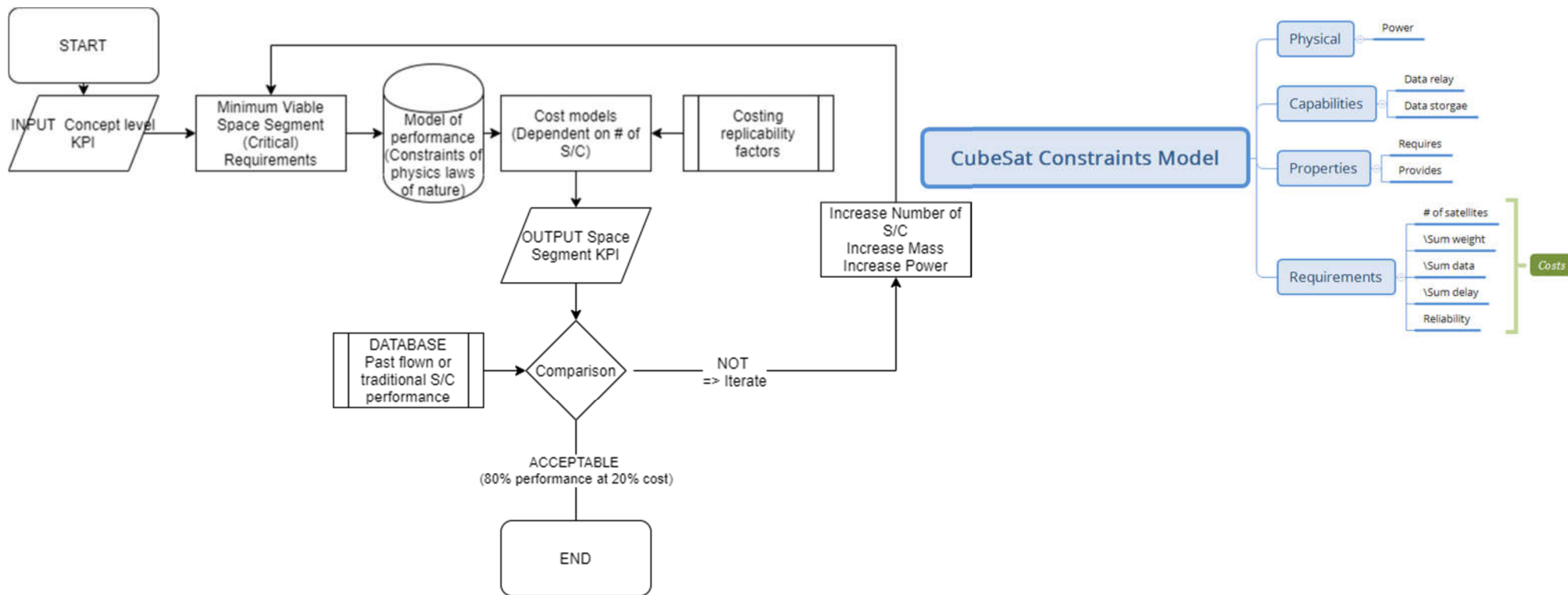


# NanoSatDev Project, at INPE & this work

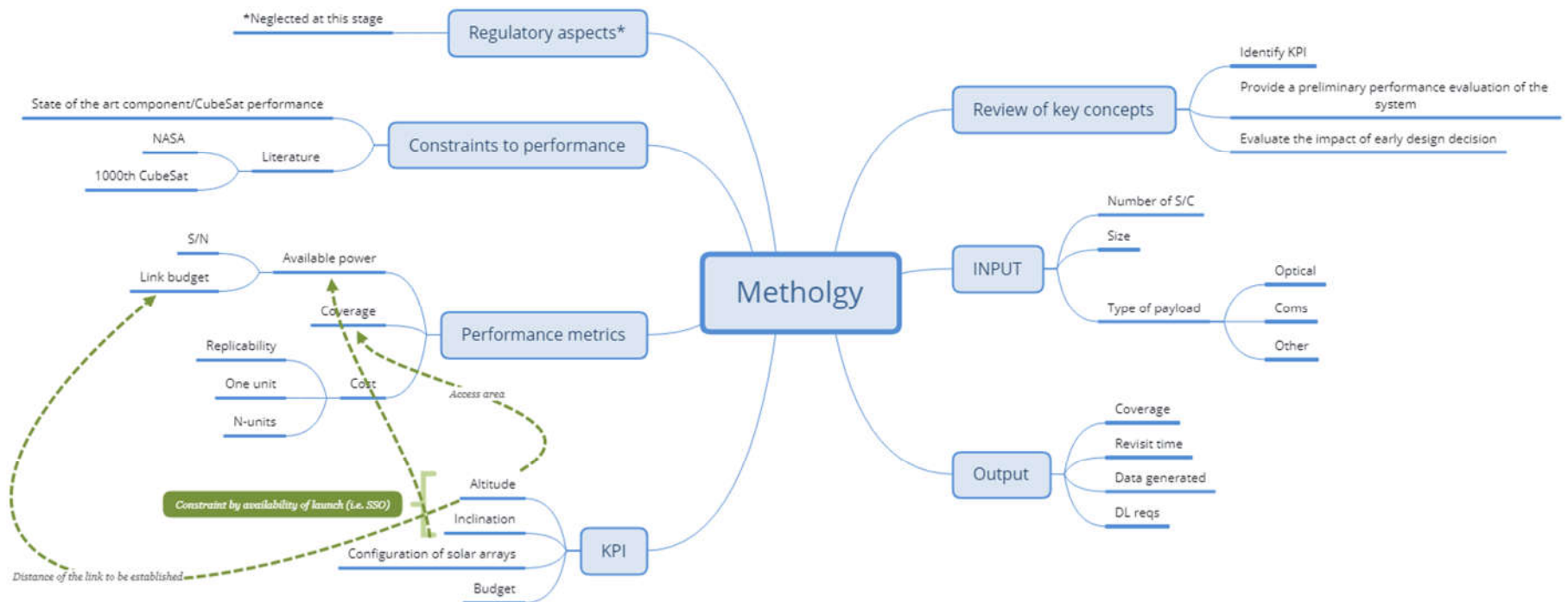
- **NanoSatDev Project:** Look into ways to analyze “traditional” spacecraft concepts into “small” satellite designs where a bigger number of spacecraft, coupled with the use of different hardware (non-space heritage necessarily) and processing strategies can make new space segment feasible.
- **This work:** A strategy to assess the performance of the systems at an early design stage is required. This is constrained to CubeSats in LEO for EO/RS missions. Specifically CubeSats, as a form factor, in SSO or ISS like orbits are of interest due to their numbers above 1000 deployed to date.



# Conceptual Discussion Approach for Analysis



# Approach for discussion





## Some (new) questions

- How to effectively track/estimate real project cost in different integrating institutions (i.e. Universities, “Legacy” Industries, Start ups, Government Agencies)?
- What about difference between first vs repeated missions?

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