

SYMPOSIUM ON STEPPING STONES TO THE FUTURE: STRATEGIES, ARCHITECTURES,
CONCEPTS AND TECHNOLOGIES (D3)

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TOOLS AND METHODS TO PREPARE TECHNOLOGIES AND COMPETENCES OF FUTURE
ORBITAL SYSTEMS: THE TECHNICAL POLICY AT CNES.

Abstract

Space programs appear more and more technically challenging, financially constrained and involving numerous actors. In this context, and in order to be always more efficient in the development of our future projects, we need to prepare today the technologies and the competences which shall be necessary tomorrow. This preparation for a company implies important investments (financial and human) involving various tools, methods and processes which must be managed in a consistent and coordinated way. We can list at CNES: technological roadmapping, research development, research grants allocation, technology demonstrators, technical facilities and laboratories, technology readiness levels and assessment, technology survey, knowledge management, standardization, technical competence centres, and orbital system feasibility study office. The paper describes CNES technical policy for the preparation of future orbital systems. What are the tools, methods, processes and their links? What are their inputs/outputs? How the consistency is insured?