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Lessons learned in 20 years of application of Systems Concurrent Engineering to space products

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Abstract

This paper aims to present the lessons learned in 20 years of application of the SCE (Systems Concurrent Engineering) approach that evolved over the last 20 years being applied to the development of more than 200 complex system solutions. SCE is an approach to the integrated development of complex systems that applies the systems engineering process, simultaneously, to the

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²Declarations of interest: none

³Acronyms/Abbreviations

Assembly, Integration and Testing (AIT)
Brazilian Institute for Space Research (INPE)
Electrical Ground Support Equipment (EGSE)
Geostationary Defense and Strategic Communications Satellite (SGDC)
Concept of Operations (CONOPS)
International Astronautical Congress (IAC)
Integration and Testing Laboratory (LIT)
Measures of Effectiveness (MoEs)
Measures of Performance (MoPs)
Mechanical Ground Support Equipment (MGSE)
Space Systems Strategic Program (PESE)
Systems Concurrent Engineering (SCE)
Systems Engineering (SE)
System of Systems (SOS)
System operational architecture (SOA)
Telematics International Mission (TIM)
University Space Engineering Consortium (UNISEC)

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