

Reliability, Availability, Maintainability and Safety (RAMS) in Railway's Assurance System and Implementation Challenges: A Review

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Abstract

RAMS forms an integral part of railway's system assurance. It integrates reliability engineering, availability or performance calculation, maintenance strategies and system safety. While RAMS is widely implemented in other industries like petroleum, aviation and chemical, the practice in railway is relatively new. RAMS task needs to be implemented from earliest phase of system design, tendering, project execution, operation up to decommissioning. Due to its compulsory extensive involvement of railway personnel as well as authorities, RAMS is not being fully utilized as an assurance tool in railway industry. This paper will introduce the core components of RAMS and their stakeholders

Keywords: RAMS railway; System assurance; Railway stakeholder.