Analysis of the INCOSE Rules for Writing Good Requirement in Industry: A Tool Based Study

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Abstract The Requirements Engineering (RE) discipline has been promoted, implemented and deployed for more than 20 years through standardization agencies (ISO/IEC, IEEE) and national/international organizations (such as INCOSE). Ever since, despite an increasing maturity, RE remains a discipline unequally understood and implemented, even within the same organization. Problems found in current Systems Engineering projects with focus in RE could be mitigated using quality metrics in the process. Quality metrics aids in the process of writing good requirements by following a reference guide. INCOSE has promoted and published a guide for writing good requirements, with support of several industrial and academic partners. The more correct, complete and consistent a requirement is, the best performance it will have, and fewer errors will occur in system developments and operation. This paper presents a study where a set of the published INCOSE rules have been implemented in a tool for assessing requirements quality.

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