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Report of Assurance Study Group



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Assurance Study Group Report

- **Resolution 794 of the May 2004 Plenary established a study group**
 - *to determine the derived system and software assurance requirements from ISO/IEC 15288, ISO/IEC 12207, and ISO/IEC 15026, and to recommend requirements for the development, modification, adoption, or reference of supporting standards.*
- **The group eventually consisted of 9 persons who conducted business via email.**
- **This group, chaired by Jim Moore, presented a report, 07N3185, on 15 February 2005.**

Assumptions

- **ISO/IEC 12207 and ISO/IEC 15288 (or their eventual harmonized equivalents) will be umbrella documents for the software and system life cycle processes.**
- **The current project to revise 15026 is intended to accomplish several goals:**
 - retain the concept of "integrity level" from the existing standard; introduce the concept of a rigorous "assurance argument";
 - explain the relationship to risk management;
 - and embed the process implications of system and software assurance in the life cycle processes provided by the two standards mentioned previously.

Approach

- **The group used WD3 of 15026 as the source of the initial set of “assurance requirements”.**
- **We followed the approach of mapping the provisions of WD3 15026 to the relevant clauses of ISO/IEC 12207 and ISO/IEC 15288. This established the “derivation”.**

Example of Results

ISO/IEC 15026.3 Activity Clause 6	ISO/IEC 12207 Process Amd.1, Annex F	Explanation / Justification
6.2.1.1	F.1.1.1 (3) F.3.1.5 (3, 4)	Initial customer requirements, critical or not (15026.3), are defined by the customer prior to selecting a supplier. <i>Note 1.</i>
6.2.1.2	F.1.2.2 (1)	This (15026.3) is a technical part of contract negotiation (12207 Amd.1).
6.2.1.3	F.1.3.2 (3)	To fully understand and analyze requirements, the domain properties (15026.3) must be understood. Without the Domain Engineering of F.3.7 (<i>Note 2</i>), the only other mapping is to System Requirements Analysis (12207 Amd.1).