

(11) Title

Prospect for availability of STAMP/STPA as safety analysis in international safety standards

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Abstract

In international safety standards such as IEC 61508 and ISO 26262, safety analyses are conducted multiple times according to the product development phases.

These standards give recommended analysis methods, but traditional methods such as FMEA, FTA and HAZOP are used in many actual developments.

This presentation represent following (1), (2) and so on.

(1) Characteristics and differences between traditional analysis methods and STAMP/STPA,

(2) Availability of STAMP/STPA according to purpose and procedure of safety analysis in standards.

We present these analyses are mutually complementary such as STAMP/STPA is the most suitable for the conceptual design in uppermost development phase and traditional analyses can be fully used in lower development phases.

In addition, we present STAMP/STPA can be useful as a method to expand the scope of safety analysis in standards and to enhance safety of products through intent of the standards and the results of surveys from some public information.

This presentation includes outline and aspect of safety analysis in standards such as IEC 61508, ISO 26262, ISO 14121, ISO 12100 and so on, but it does not include detailed explanation of STAMP/STPA and international safety standard, and case example.

Keywords

(1) STAMP/STPA

(2) Safety Analysis

(3) International Safety Standards

(4) ISO 26262

(5) Development Phase