TATA ELXSI

FUNCTIONAL SAFETY

Secure | Safe | Reliable

Trending

Control by electronic systems such as ECUs are gaining importance to make automobiles more safe, reliable and comfortable.

In particular, electronic systems handle the main vehicle control functions of driver assistance systems such as collision mitigation by braking systems and automatic tracking systems; therefore the safety risks associated with control malfunctions in electronic systems are substantial.

The complexity of electronic systems require a greater level of safety and Functional Safety & other technologies, which can cope with any faults that may occur, are becoming very essential.

Opportunities & Challenges

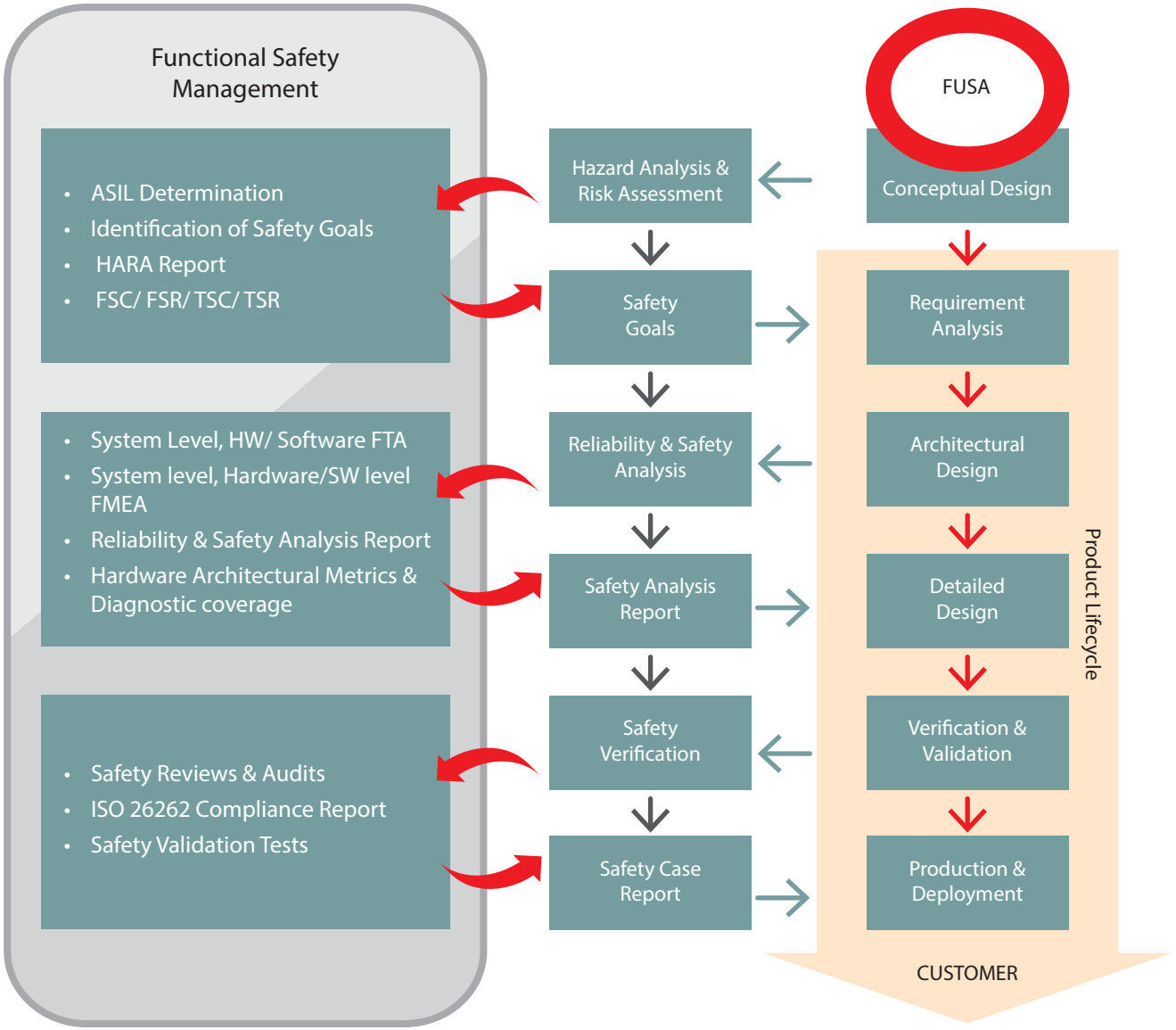
- Automotive industry's 'Vision Zero' programme aiming at zero fatalities with self driving cars
- Increase in safety critical components in vehicles
- Ensuring occupants' safety & security
- Strict attention to Functional Safety throughout the development process

Benefits for Your Customer

- Hardware & software design & development as per ISO26262
- Legacy software re-engineering & documentation for ISO26262 compliance
- Safety test cases development, HW-SW, HILS & vehicle level safety testing
- Expertise in cross domain FuSa
- Implementation of automotive, aerospace, rail, medical standards

FUNCTIONAL SAFETY

Service Framework



Differentiators

- Expertise in multiple FuSa standards across multiple industries like Automotive, Rail, Avionics: IEC 61508, DO-178C, DO-254, CENELEC- EN 50126/ 50128/ 50129
- Production project expertise in ASIL-D
- 75+ TUV Nord/ UL certified engineers

Case

ASIL-D

- Electronic Steering Control Lock
- Electronic Brake System
- Electronic Power Steering Control Lock

ASIL-C

- Gateway Development

ASIL-B

- EV Charge Communication Controller
- Automatic Parking System
- Digital Cluster

ASIL-A

- Rear View Camera System
- Head Lamp SW
- Sunroof Controlller

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