

Accellera Systems Initiative

Functional Safety Working Group

Alessandra Nardi, FS Working Group Chair
Franck Galtié, FS Working Group Vice-Chair

March 12, 2020



Accellera Functional Safety Working Group



Automotive



Aerospace
and Defense



Medical



Industrial

Functional Safety

Reduction of risk related to malfunction of E/E systems

Stakeholders

EDA
Experts

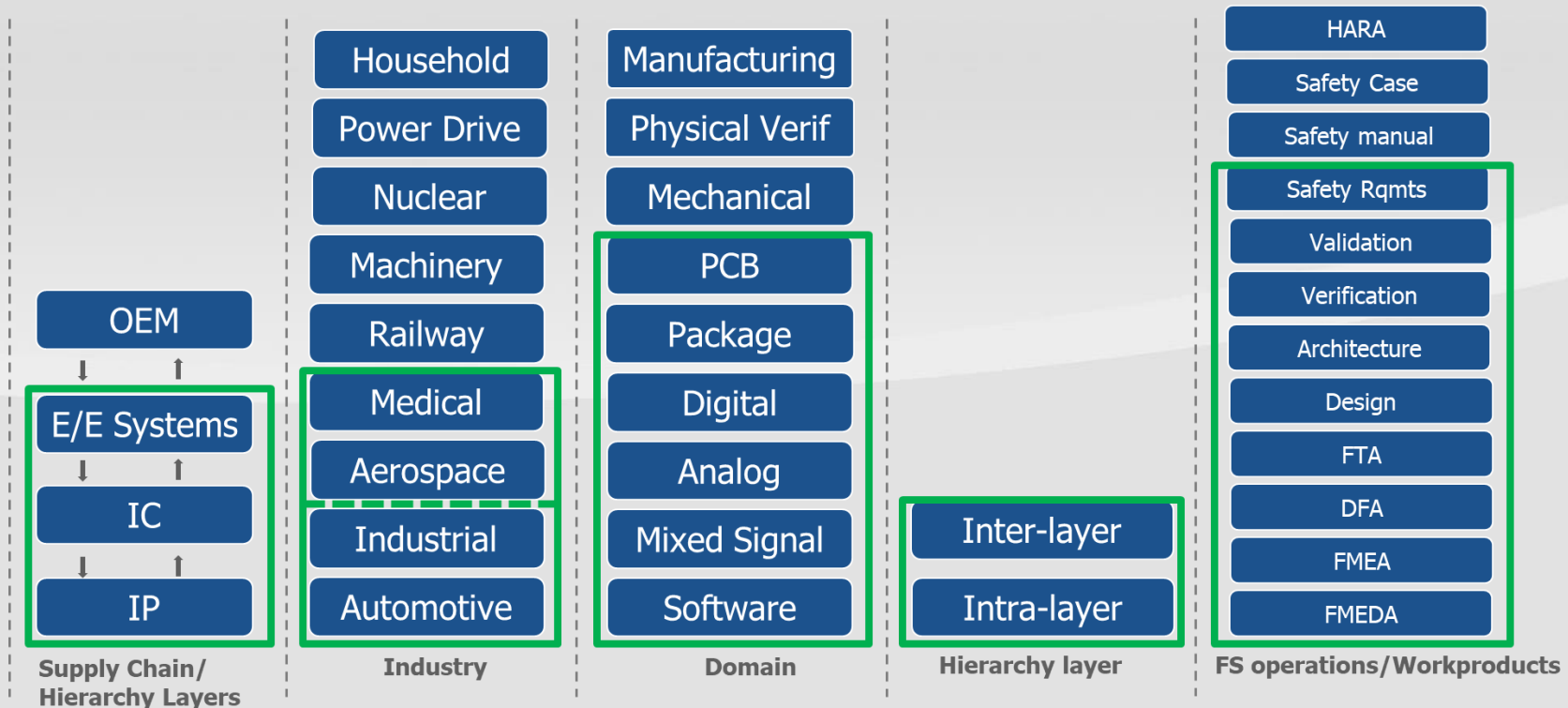
IP
Experts

Silicon
Experts

System
Experts

Functional Safety: Industry Needs and Requirements

- Several gaps between safety lifecycle/best practices and the system/IC design world
- Need for formalization and categorization to enable automation, interoperability and traceability
- Enablement throughout different dimension of the FS scope



FS WG Scope: Enabling Interoperability and Traceability

- **Standardized information to capture and propagate the FS intent**

- Inter-layer: through different safety analysis/operations of the same hierarchy level, e.g. FMEDA analysis, verification
- Inter-layer: between layers of design hierarchy, e.g. System ↔ Module ↔ IC ↔ IP

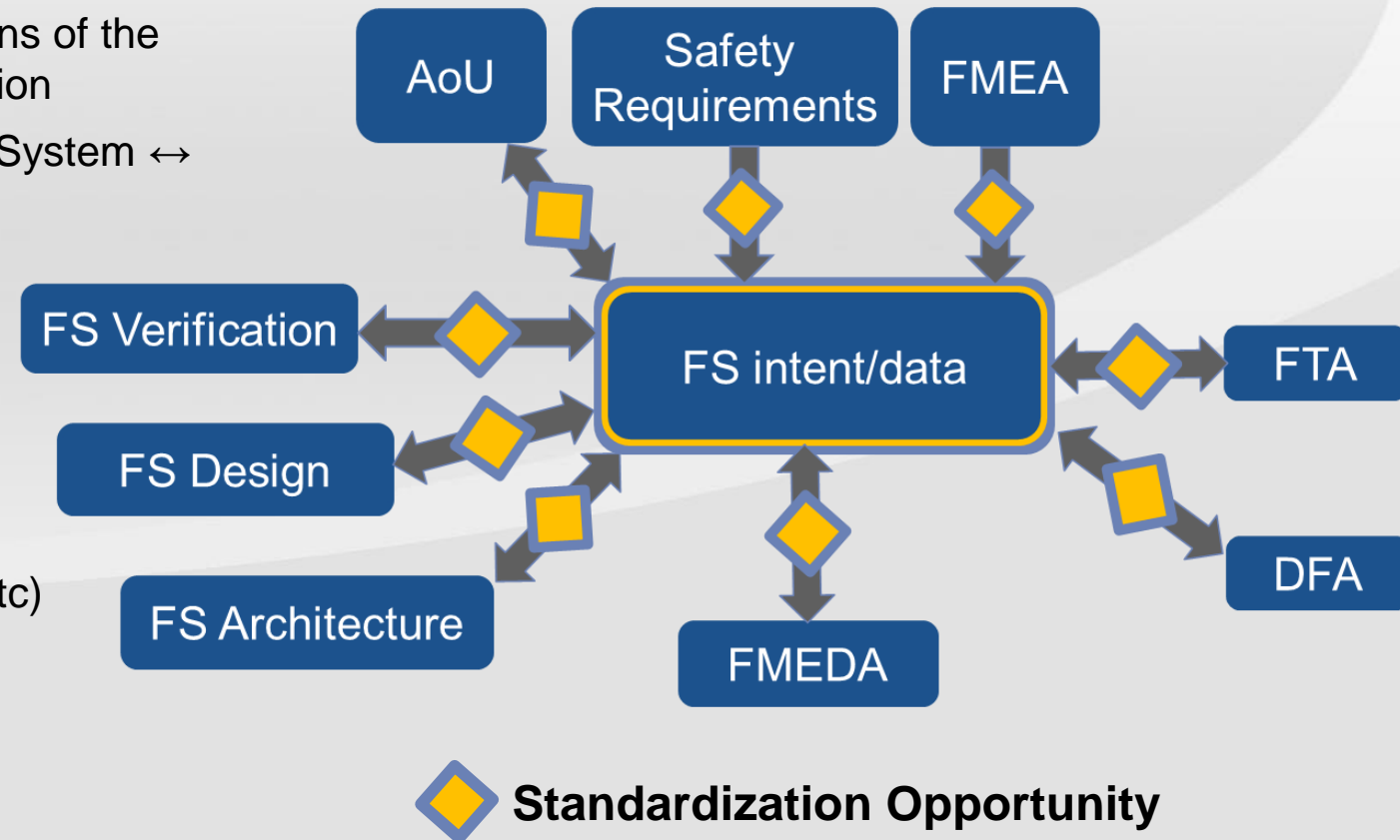
- **FS-aware flow: bridge between the FS work products and the design and verification flow**

- **Enablement throughout**

- Different domains (Digital, Analog, Package, PCB, etc)
- Industries (e.g. automotive, industrial)
- Supply chain layers (IP, IC, system)

- **Out of Scope**

- Changes to existing FS standards (e.g. ISO26262, IEC61508)



◆ Standardization Opportunity

Industry Collaboration and More Information

- **Strong participation and contribution from key industry leaders during and after the formation of the WG**
- **Urgent need from the community to define a much needed format**
 - High energy team
 - Ambitious schedule
 - Welcome more participation
- **More information from the [Press Release](#) and here:**
 - [Accellera Functional Safety Working Group](#)
 - Alessandra Nardi, Chair (anardi@cadence.com)
 - Franck Galtié, Vice-Chair (franck.galtie@nxp.com)