Chapter 1.4
System of Systems

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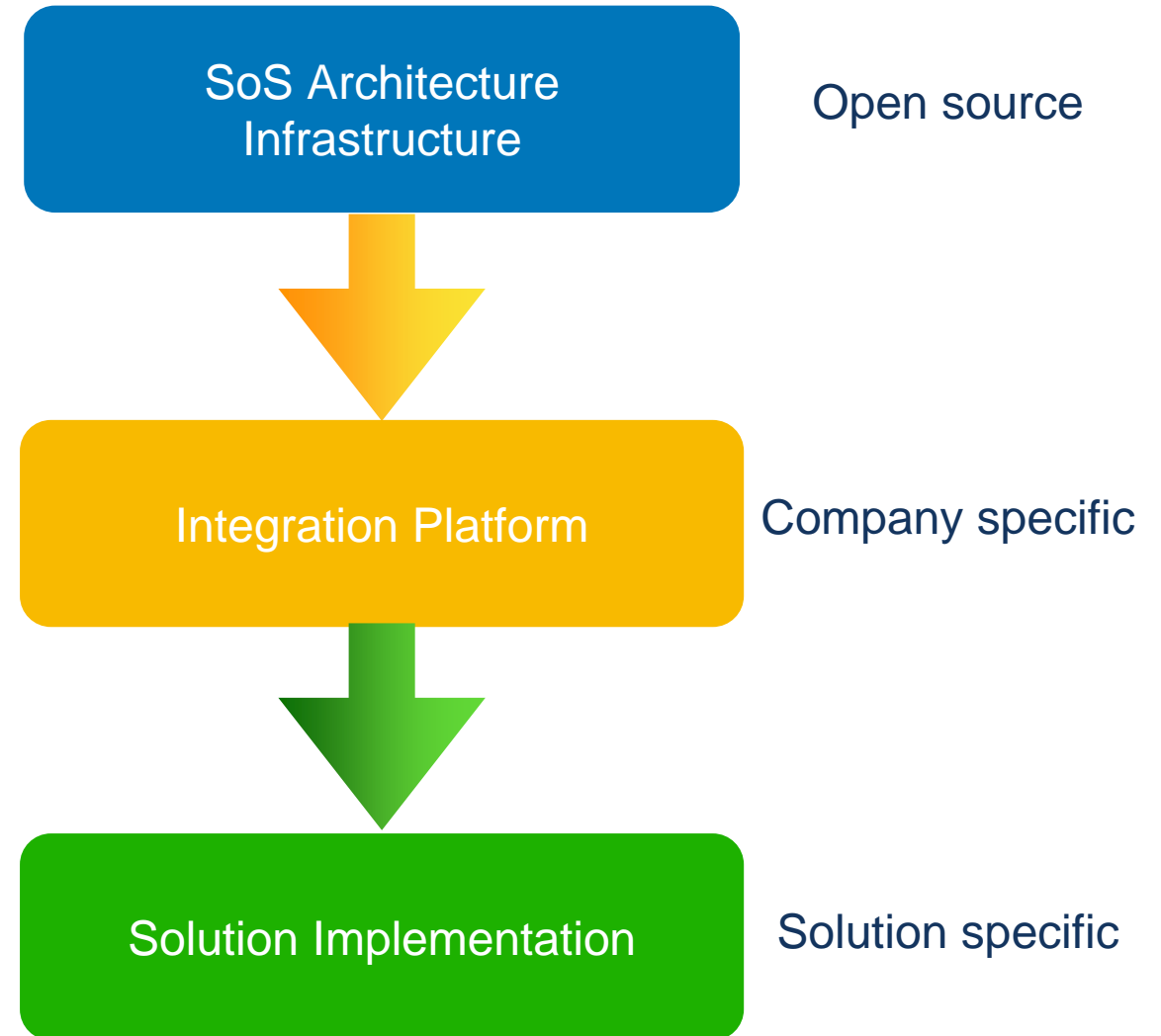
Scope - shortened and clarifications

- Introduced the SoS infrastructure concept

- Enabling company and application specific platforms

- Enabling efficient engineering of solutions

SoS Architecture Infrastructure — Open source

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Integration Platform — Company specific

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Solution Implementation — Solution specific

SoS complexity

The scale and complexity of SoS integration, monitoring and management over its life cycle is emphasized

The importance of SoS engineering efficiency is emphasized:
- Key concepts to be addressed are
  - **model based engineering and**
  - **low code technologies**
  - **AI supported engineering tools**
  - **Automation of test, verification and validation processes**

Major challenges updates

- **Major Challenge 1**: Open SoS architecture and infrastructure.
- **Major Challenge 2**: SoS interoperability.
- **Major Challenge 3**: Evolvability of SoS composed of embedded and cyber-physical systems.
- **Major Challenge 4**: SoS integration along the life cycle.
- ~~**Major Challenge 5**: Control in SoS composed of embedded and cyber-physical systems.~~
- **Major Challenge 5~~6~~**: SoS monitoring and management.

Updates to MC visions, expected outcomes and key focus areas to reflect achieved and expected advancements.

Time line update

- The updates reflects achieved advancements and expected progression