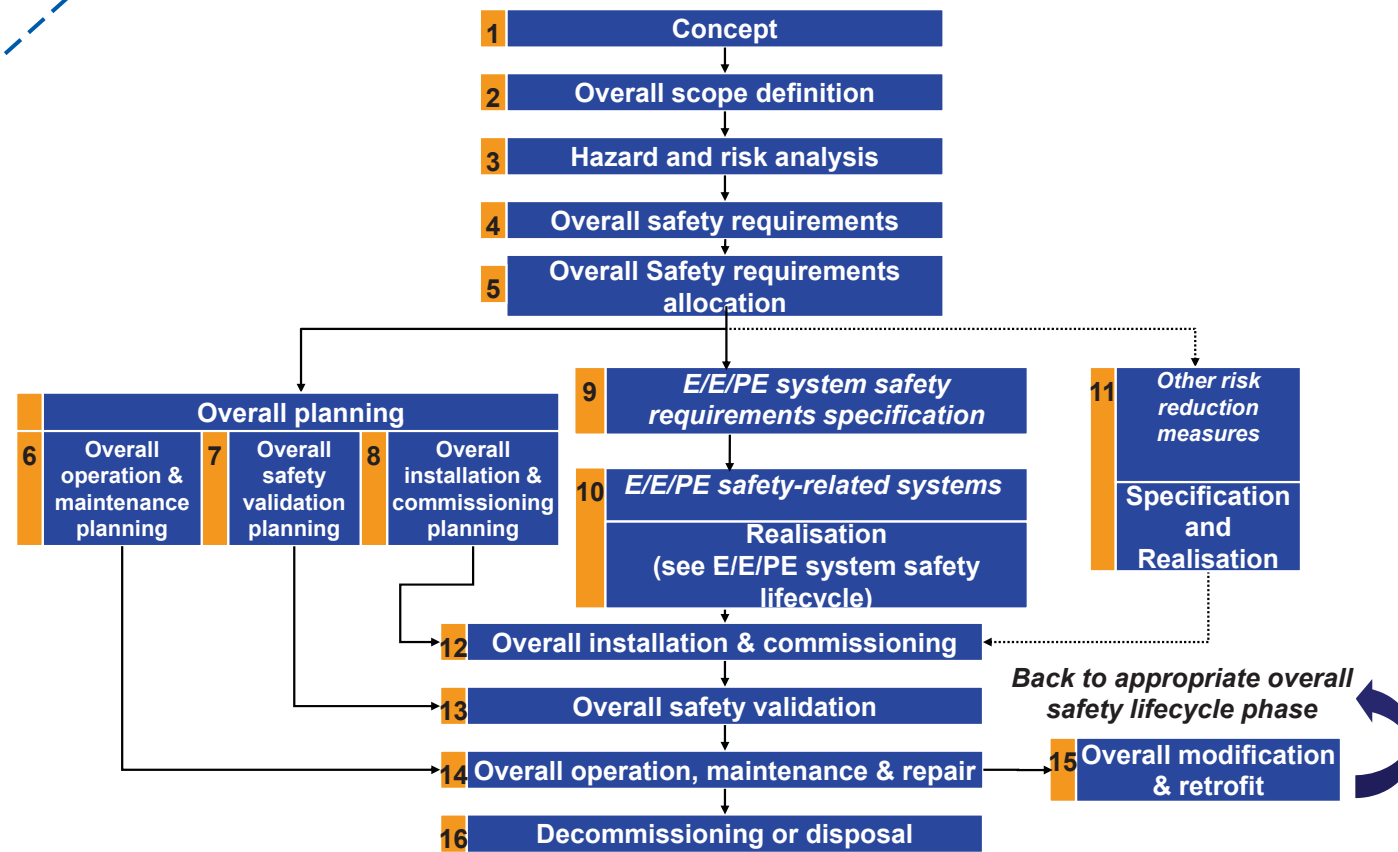
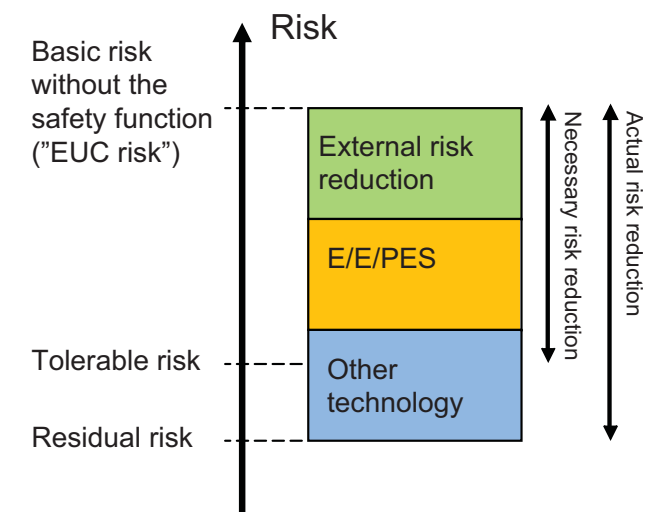


# FUNCTIONAL SAFETY

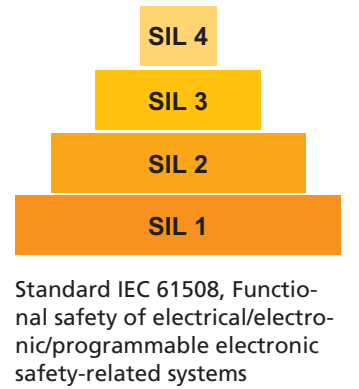
## Overall safety lifecycle



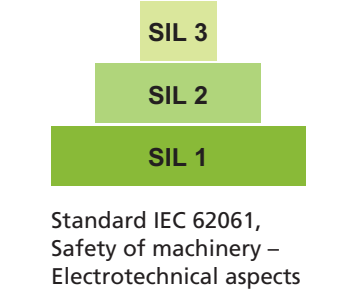
## Risk reduction



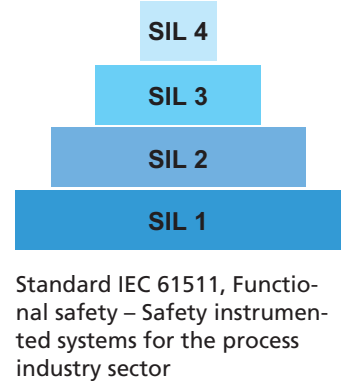
## Electrical/electronic/programmable electronic systems



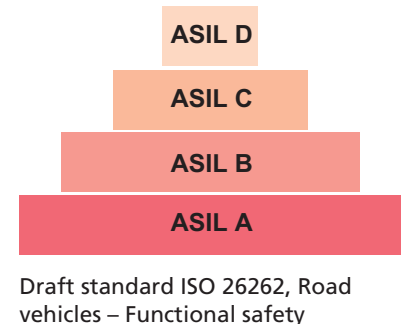
## Safety of machinery



## Process industry



## Road vehicles



## Functional safety

The part of the overall safety relating to the EUC (Equipment under control) and the EUC control system which depends on the correct functioning of the E/E/PE (Electrical/electronic/programmable electronic) safety-related systems, other technology safety-related systems and external risk reduction facilities.

## Safety function

Function to be implemented by an E/E/PE safety-related system, other technology safety related system or external risk reduction facilities, which is intended to achieve or maintain a safe state for the EUC, in respect of a specific hazardous event.

## Safety integrity level (SIL)

A discrete level (one out of a possible four) for specifying the safety integrity requirements of the safety functions to be allocated to the E/E/PE safety-related systems, where safety integrity level 4 has the highest level of safety integrity and safety integrity level 1 has the lowest.

## Functional safety assessment

An investigation, based on evidence, to judge the functional safety achieved by one or more E/E/PE safety-related systems, other technology safety-related systems or external risk reduction facilities

Definitions according to IEC 61508

## More information

[www.iec.ch/functionalsafety](http://www.iec.ch/functionalsafety)  
(the web site of the International Electrotechnical Commission includes "A basic guide" and FAQ)

[www.sp.se/en/index/services/functionalsafety/Sidor/default.aspx](http://www.sp.se/en/index/services/functionalsafety/Sidor/default.aspx)  
(SP's web site for Functional safety)

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## Qualitative assignment of SIL to a safety function

