

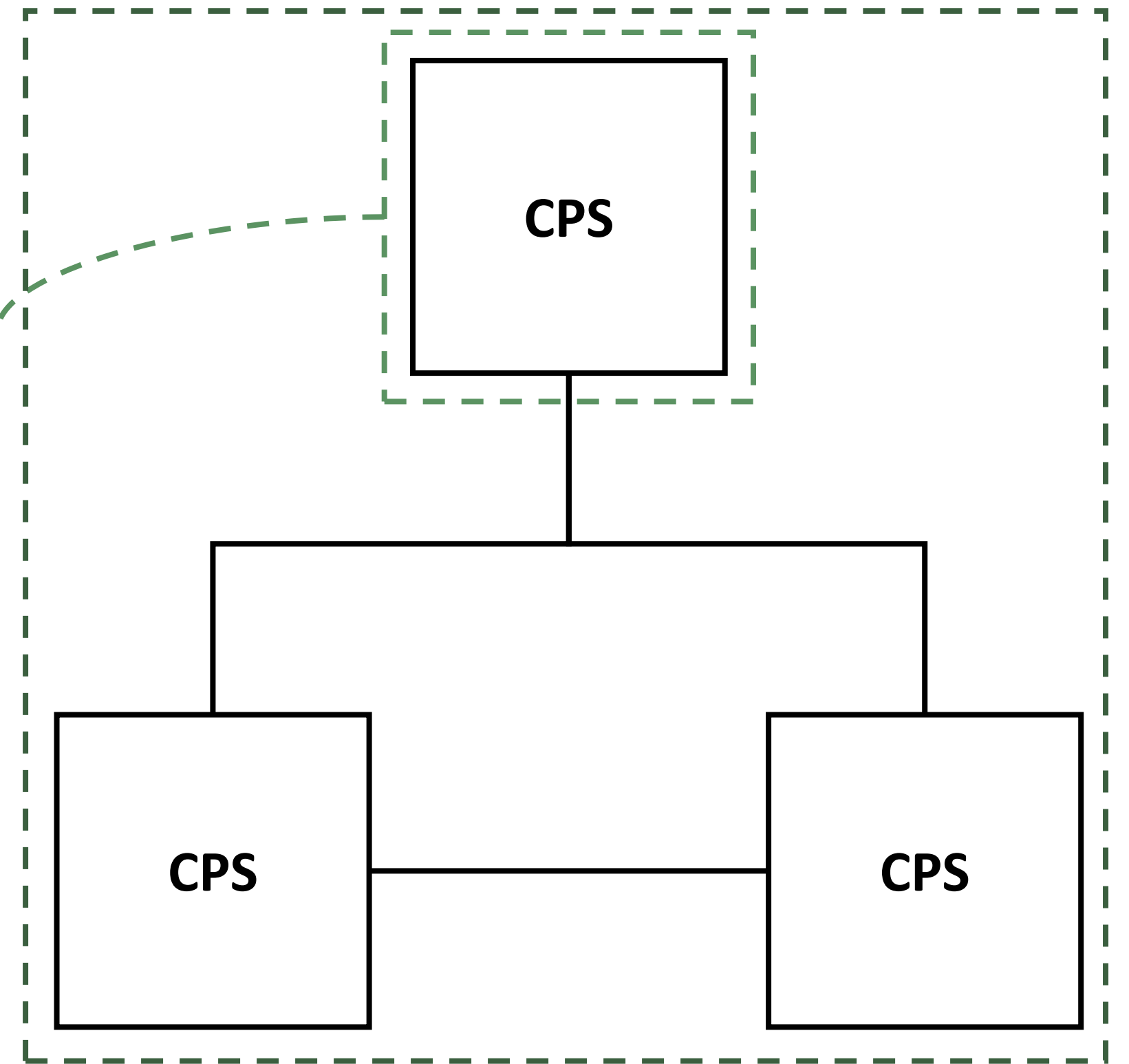
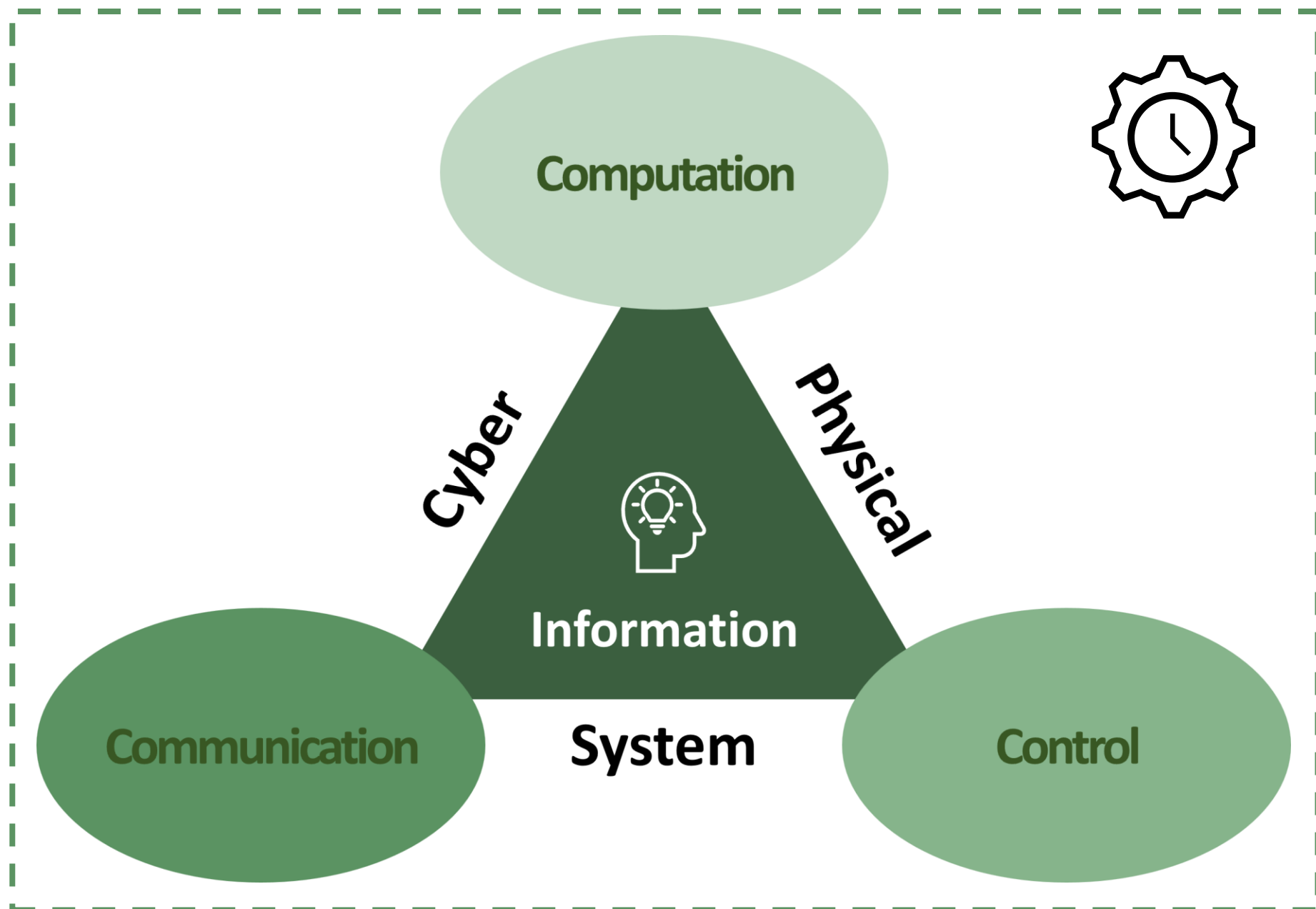
An Approach for Safety Testing of Cooperative Cyber-Physical Systems Using STPA and Quality Attribute Scenarios

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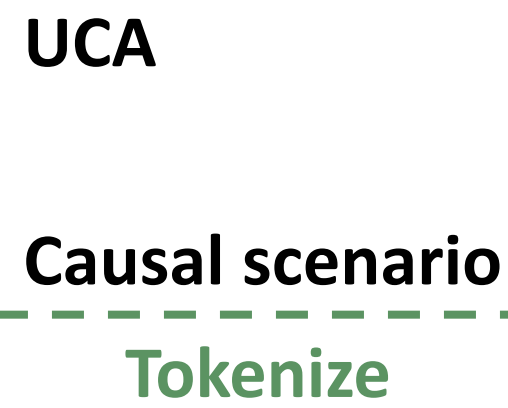
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BACKGROUND



PROCESS

STPA Results

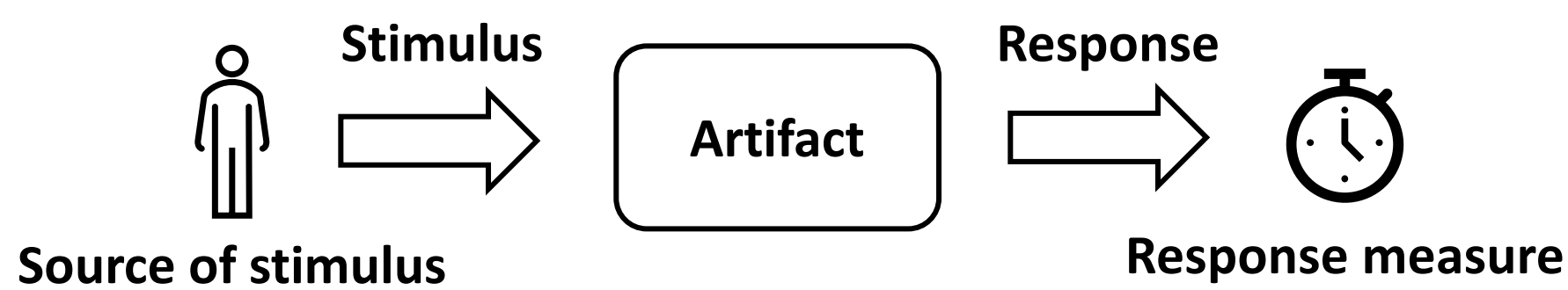


Guidewords

- Without failure
- Until (operation)
- Within (time)
- After (operation)

Safety general scenario

Quality Attribute Scenario (QAS)



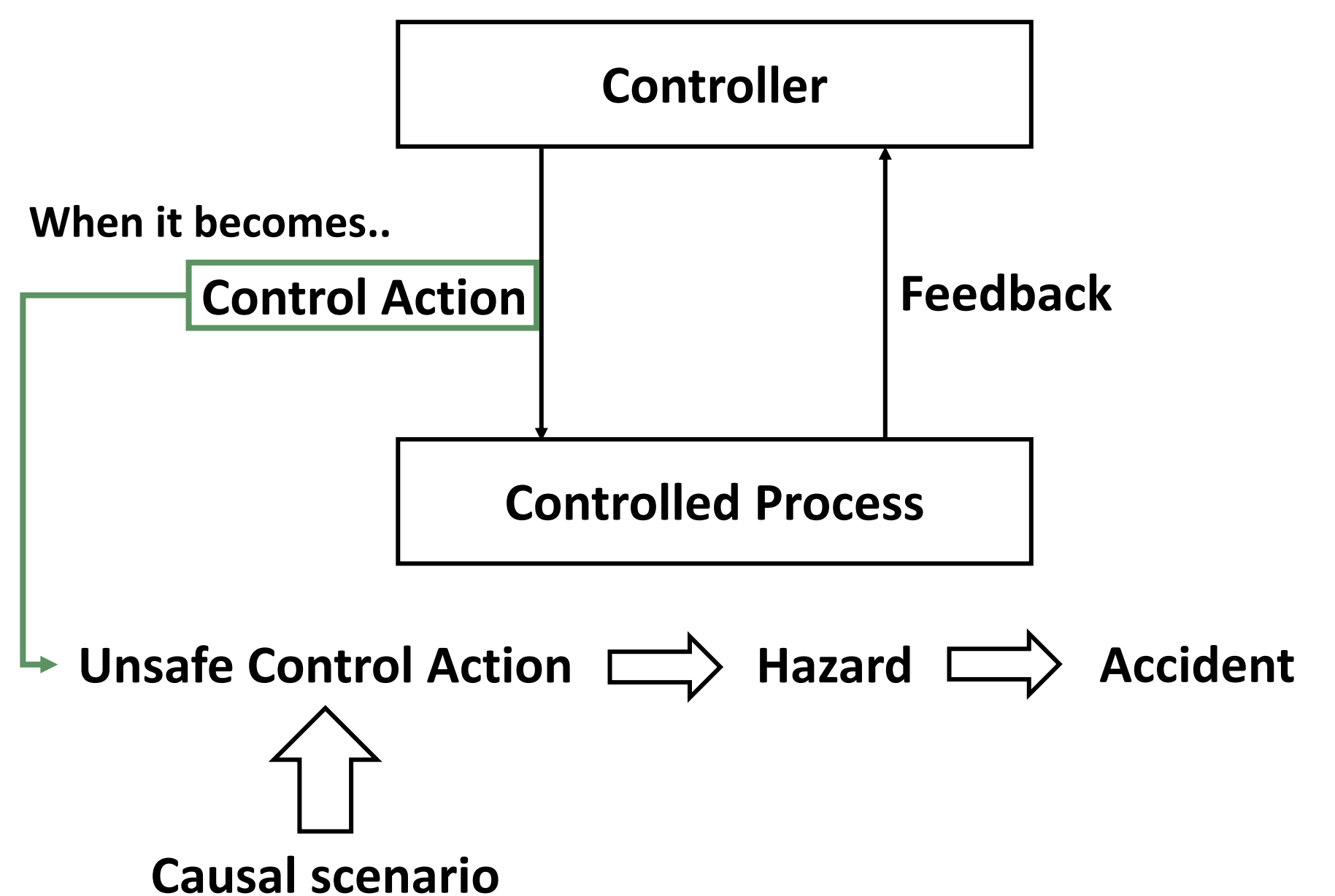
Safety Testing

Emergent properties

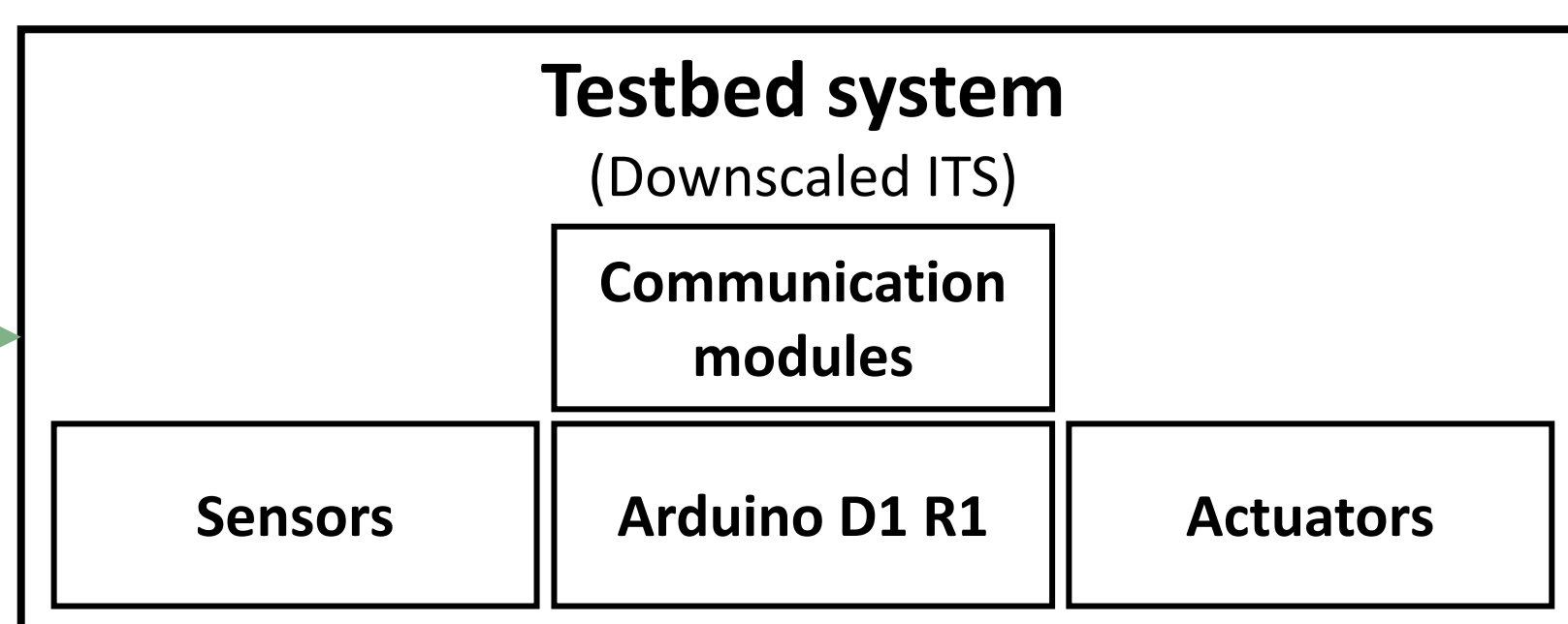
ex) Safety

- Physical safety
- Functional safety
- Control safety

Systems-Theoretic Process Analysis (STPA)



EVALUATION PLAN



Developed following SDLC

Evaluate effectiveness by..

- Pass rate
- Coverage