ECSEL Consortium Building Event 2015

ENABLE-S^3

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ECSEL JU

European Initiative to Enable Validation for Highly Automated Safe and Secure Systems
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Highly automated systems will help to solve many societal challenges

- Automatic vehicles gives mobility to the aging society, enable fatality free mobility and CO_2 reductions
- Unmanned aerial vehicles help to protect the environment in identifying problems
- Automated ground traffic for airports enable efficiency improvements and help to prevent accidents
- Automated Medical Interventions allows to heal new diseases
- …

Unsolved problems:

- Automated systems have to work **safely** in **uncountable environmental conditions** and scenarios
- Validation in real-world **too time consuming**
- Validation in real-world **too dangerous** (e.g. automated operations)

Project Summary of Innovation Action
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- Drastically reduction of validation of highly automated systems
- Safety and security validation using virtual environments

- OEM use case driven project
- Demonstrators from
  - Aerospace,
  - Maritime,
  - Rail,
  - Automotive,
  - Health

Expected impacts
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- Validation in virtual environments removes one important blocker of industrialization
- Enable hugh ECS market for automated systems (automotive: 50 B€)
- Decreases validation time of automated system by 50 %
- European industry trained to new validation platform by use cases

- Cooperation with validation competence centers to help SMEs enter new business domain
- Cooperation with standardization bodies to stimulate attractive tool market (reduce tool costs by 50 %)

Consortium
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- Present consortium in brief
  - LE: 36
  - SME: 10
  - ACA: 23
  - Coordinator: AVL
  - Countries: 14

- Partners needed to complete consortium:
  - SMEs
  - Partners from Italy (funding for IA-projects)