RDW

Software Security

WP29 IWG ITS/AD

3-11-2015

Dangerous?

- Kristina Svechinskaya, creator Zeusbot, stolen 35 million euro

RDW

Definition Security

- Security = certain level of
  - confidentiality
  - integrity
  - availability

Approval system principles

?

- Software Security is not yet included in testing/certification for type approval

Impact software security

- Security affects safety, environment and functionality

- Proper security serves Liability and Privacy

Security threat increases

- More internet connected cars (and infra)
- More wireless
- More networks within vehicle
- More connection with Nomadic Devices
- Better tools for breaking codes
- Faster communication of hacking methods
- THERE IS AN INCREASING BUSINESS CASE

Aspects for security

- Architecture (hardware & software)
- Security level components (chips e.a)
- Software Process (SDLC)
- Software Updates (OTA? While driving?))
- Memory capacity hardware

Windows - Out of Virtual Memory

Your system is low on virtual memory. To ensure that Windows runs properly, increase the size of your virtual memory paging file. For more information, see Help.

OK

- Response time
- Quality level components and data

Proposal to proceed

- Decide that software security should be part of Type Approval requirements

- Develop a seperate (modular) Regulation for Software security

- Determine Security requirements, preferably based on existing standards

- Define a flexible process to support future developments/requirements

RDW

Considerations

- Find the right balance

Practical use   Security level

- Distinguish between software function:
  - safety: high
  - environment: medium
  - other (e.g. infotainment): non

- If software combines functions, the highest level should be realized

RDW

Considerations (2)

- Importance of data analysis (surveillance) will increase as part of approval

- How about "self-learning software"

RDW

Thoses who surrender freedom for security will not have, nor do they deserve, either one
(Benjamin Franklin, 1706-1790)

Thank you for your attention
Peter Striekwold