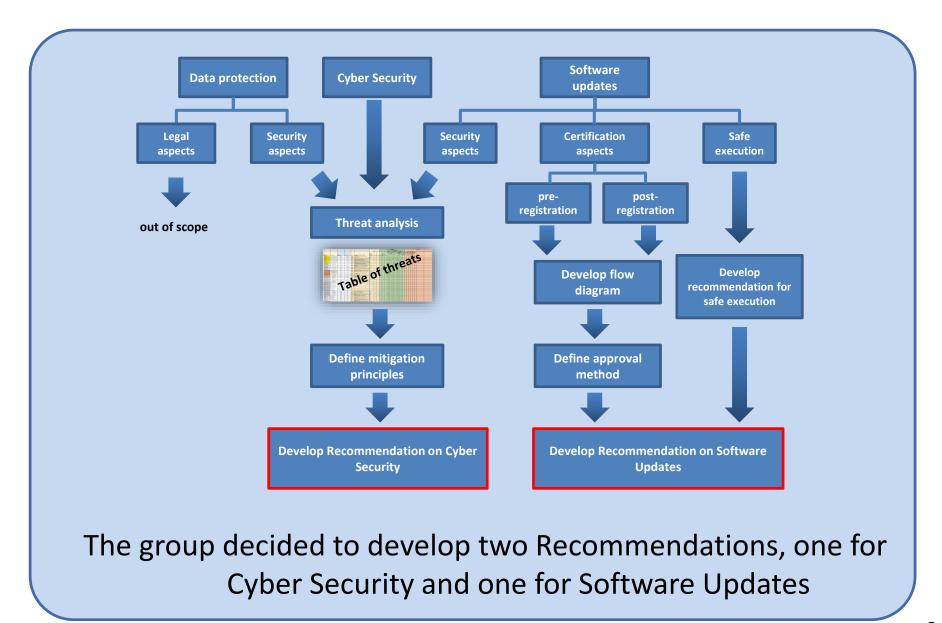
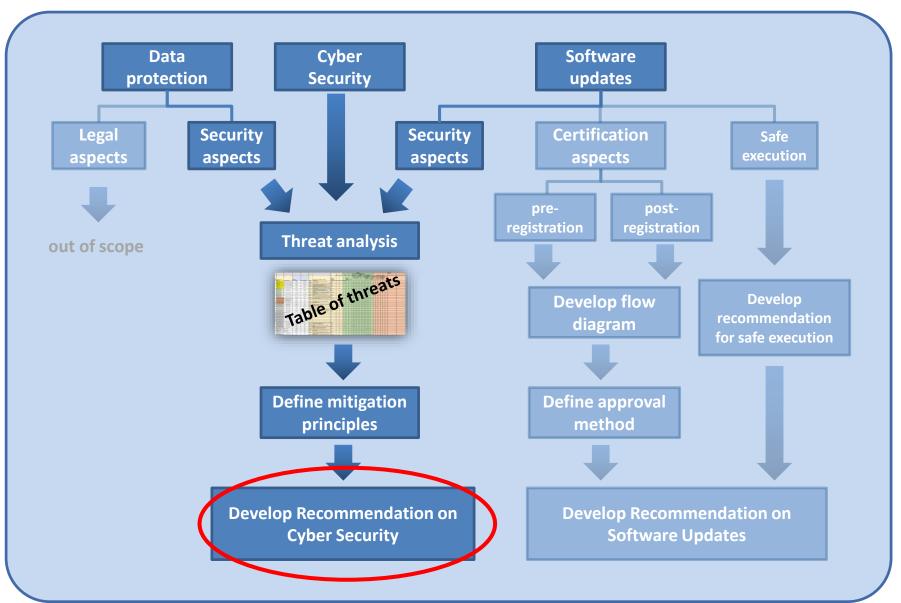
# Status report on the activities of TF-CS/OTA

13<sup>th</sup> session WP.29 IWG ITS/AD 16 November 2017, UNECE, Geneva

# Scope of TF-CS/OTA and delivery of results



## Closer look at the Recommendation on Cyber Security



#### Status on the Recommenadtion for Cyber Security

#### Status of work:

- Document structure developed
- Drafting has started: Initial draft available with full set of text
- Not yet fully reviewed, more time needed
- Need to agree wording and detailed content based on further discussions.

# Potential approach:

Recommendation may be taken forward as part of the Consolidated Resolution (R.E. 3) or its own standalone Resolution

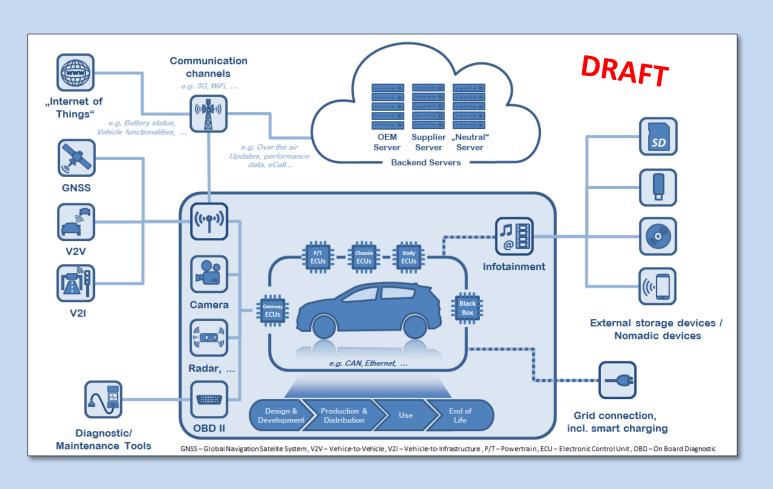
## Structure of the Recommendation on Cyber Security

# The group works on the basis of the following structure:

- Introduction
- 1.1. Preamble
- 1.2. Scope
- 1.3. Approach
- 2. Definitions (and abbreviations)
- Reference Model
- 4. Cyber security principles
- 5. Threat Assessment
- 6. Mitigations
- 7. How to evidence consideration of the threats, mitigations and principles identified
- 8. Conclusion and Recommendation for further proceedings
- Annex 1 List of threats and corresponding principles and mitigations
- Annex 2 List of Security Controls related to mitigations incl. examples
- Annex 3 List of reference documents

# Reference model for Cyber Security

The image below reflects the current status for the reference model:

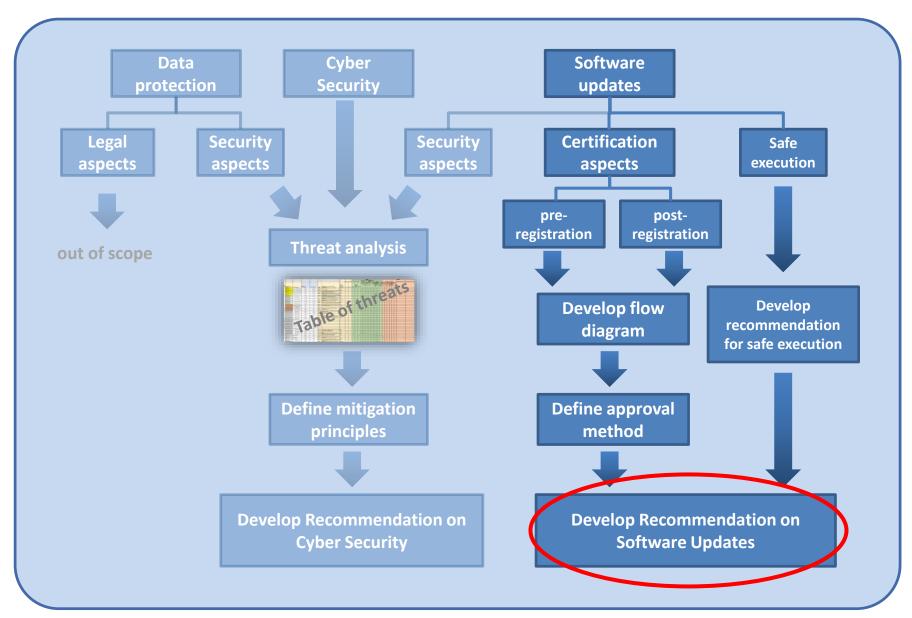


# Table of threats generated during Threat Assessment

The extensive excel file with the mitigation table ("table of threats") will be used in Annex 1 of the Recommendation on Cyber Security



## Closer look at the Recommendation on Software Updates



## Status on the Recommenadtion for Software Updates

#### Status of work:

- Document structure developed
- Drafting has started: some chapters still without content
- Existing text not yet fully reviewed, more time needed
- Need to develop content for blank sections
- Need to agree wording and detailed content based on further discussions.

## Potential approach:

Measures to identify updating or updated software should be introduced in existing Regulations (main body / annexes)

## Structure of the Recommendation on Software updates

# The group works on the basis of the following structure:

- 1. Introduction
- 1.1. Preamble
- 1.2. Scope
- 2. Definitions
- 3. Process on software updates
- 3.1. Overview
- 3.2. Software update approval process
- 3.3. Prerequisites
- 3.4. Type approval process responsibilities
- 4. Additional requirements for software updates
- 4.1. Requirements for safely and securely conducting an update
- 4.2. Safety requirement for all updates
- 4.3. Additional safety requirement for OTA updates
- 4.4. Security requirement for all updates
- 4.5. Requirements for evidencing that the update is safe and secure

#### Structure of the Recommendation on Software updates

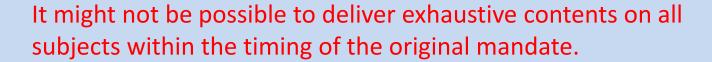
- 5. Identification of the installed software
- 5.1. Use of the Software Identification Number, RxSWIN
- 6. Conclusion and Recommendation for further proceedings
- Annex 1 an annex for how the vehicle shall ensure the safety of the update process (to be attached to appropriate regulations)
- Annex 2 an annex for where specific regulation require a part on software updates and help implementation (to be attached to appropriate regulation(s))

Some further amendments to be expected!

# Open issues and challenges

#### Issues/challenges encountered during the work:

- Non-harmonized registration process:
  especially an issue for post-registration software updates
- Database to cover RxSWIN concept:
  Potential extension of DETA may be suitable to support configuration control of software
- Concepts that organizational issues and S/W development should become part of type approval/certification
- Aftermarket issues
- Lifecycle of the vehicle vs. Type approval
- Software update process and recommendation to work in type approval and self certicifaction environment



# Extension of the mandate of TF-CS/OTA

Since the group was established on 21 December 2017, it had:

- 9 physical meetings in Europe, Asia and North America
- 6 web meetings on special topics

In order to deliver two recommendations until March 2018 following additional meetings are scheduled so far:

- 2 physical meetings in London and Washington (tbc)
- 3 web meetings to further develop the recommendations

In order to deliver the recommendations to ITS/AD and to take any feedback from its parental group, TF-CS/OTA is formally asking to to extend the mandate until June 2018.

# Workplan and timimg

