



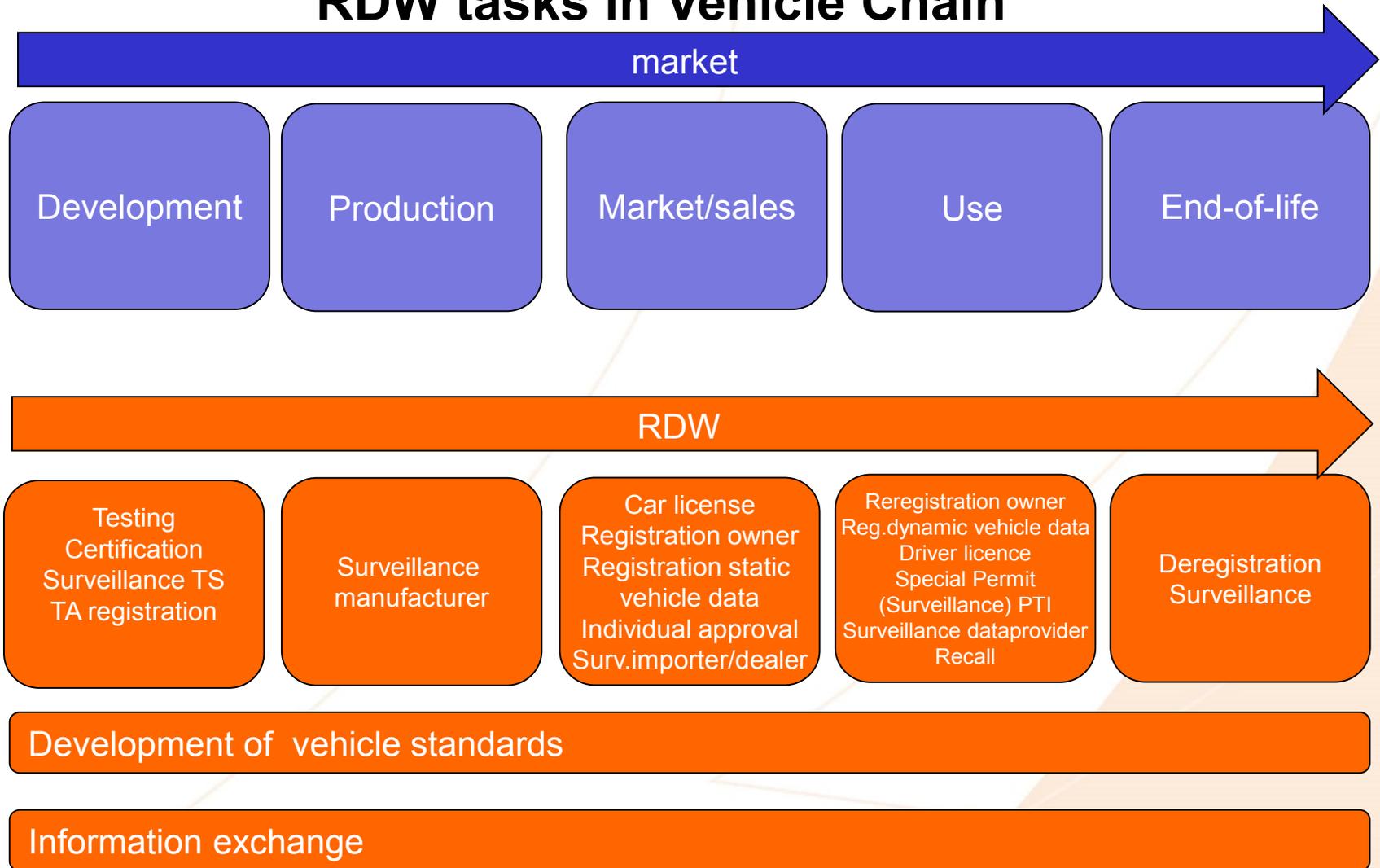
RDW

ITS from a legislative perspective

Dr.ir. P. Striekwold

**Manager Vehicle Standards
development, RDW**

RDW tasks in Vehicle Chain



Expected sequence of impact from ITS

Testing

Special Permit

Individual approval

Surveillance data provider

Certification

Surveillance Technical Service

Type Approval registration

Surveillance importer/dealer

Surveillance manufacturer

Registration static vehicle data

Registration dynamic vehicle data

Recall

Driver licence

(Surveillance) PTI

Car License

Development

Production

Market/sales

Use

Development vehicle standards.....Development vehicle standards



Some challenges for regulations

- Approval system principles
- Scope
- Priorities
- Software changes



Approval system principles



TYPE APPROVAL OF PASSENGER CARS

Category **M₁**

Topics with Base EC / ECE numbers

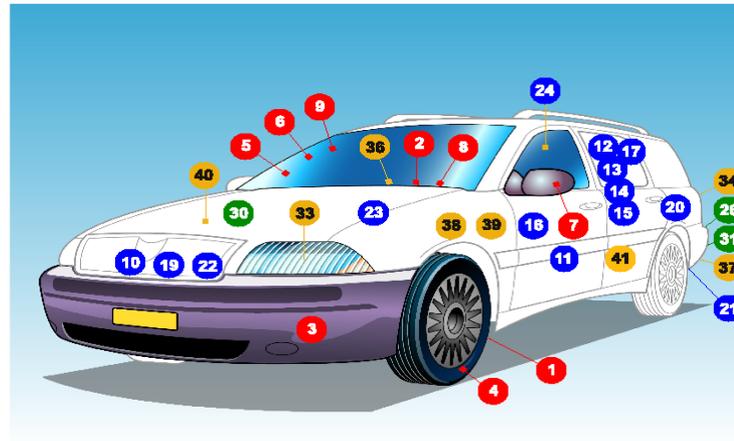
ACTIVE SAFETY

1	Braking	71/320	R13H
			R90
2	Steering Equipm.	70/311	R79
3	Audible Warning	70/388	R28
4	Tyres	92/23	R30
5	Forward Vision	77/649	R125
6	Defrost / Demist	78/317	-
7	Rear View Dev.	2003/97	R46
8	Speedometers	75/443	R39
9	Wipers / Washers	78/318	-

PASSIVE SAFETY

10	Front Impact	96/79	R94
11	Side Impact	96/27	R95
12	Seat Belt Anchor.	78/115	R14
13	Seat Belt Instal.	77/541	R16
14	Seat Strength	74/408	R17
15	Interior	74/60	R21
16	Latches-Hinges	70/387	R11
17	Head Restraints	78/932	R25
18	Ext. Projections	74/483	R26
19	Pedestrian Prot.	2003/102	-
20	Wheel guards	78/549	-

general topics: 18 25 27 28 29 32* 35



For more information about all directives and regulations: visit www.rdw.nl and choose International visitor

Framework directive: 70/156, 2007/46 from 29 April 2009 onward

PASSIVE SAFETY (cont.)

21	Tank	70/221	R34
	Rear Underrun		R58
22	Front Protection	2005/86	-
23	Protect. Steering	74/297	R12
24	Safety Glazing	92/22	R43

ENVIRONMENT

25	Emissions	70/220	R83
	future requirement / recommended now	715/2007	R103
26	Sound Levels	70/157	R51
27	Recyclability	2005/64	-
28	CO ₂ / Fuel Cons.	80/1268	R101
29	EMC	72/245	R10
30	Aircondit. systems	2006/40	-
* 31	Diesel smoke	72/306	R24
* 32	Diesel Emissions	2005/55	R49

*: If applicable

OTHER

33	Light Installation	76/756	R48
34	Registration plate	70/222	-
35	Masses-Dim.	92/21	-
36	ID of Controls	78/316	R121
37	Towing Device	77/389	-
38	Anti-theft	74/61	R116
39	Heating Systems	2001/56	R122
40	Engine Power	80/1269	R85
41	Plates (statutory)	76/114	-

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Approval system principles



?

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



Approval system principles



- Business cases for cybercrime increase with the level of connectivity and wireless data
- Two options: (1) include software in testing/verification or (2) selfcertification



(1) Testing/certification software

- Determine relevant standards related to risklevel (non/medium/high) of software



- Software security serves liability/privacy



(2) Selfcertification software

- Uniform surveillance by 28 authorities in EU? UNECE?
- Interoperability?



Scope

- Vehicle becomes part of system including other vehicles, infrastructure, telecom, driver etc.
- Use references to existing standards for transport systems (telecom, HMI, etc.)
- Clear responsibilities of - and collaboration between UNECE WP's
- Involve new related organisations



Priorities

- Focus on the sequence in which current standards will be affected
- Stimulate those features which contribute most to safety and environment (e.g. ISA)



Software changes

- Software updates are essential for security and beneficial for functionality/recall

- Memory?



- Response time?



- Software update may affect Type approval during lifetime; traceability becomes issue



Conclusions for developing legislation

- Where legislation is non-existing, stimulate exchange of experience and anticipate
- Where legislation is existing and blocking improvements: evaluate the process of developing and modifying legislation



Current developments in the Netherlands

- Strong commitment from Ministry of Infrastructure and Environment
- New national law to streamline requests for special permits by RDW for ITS testing on public roads





Posted under [Cars](#) | 24th Jan 2015 | by Jon Kristian Coa, POP Herald

Netherlands opens its doors to driverless cars testing

MODULE

LIVE TV

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World

Dutch OK large-scale tests of self-driving cars

AFP
January 25, 2015, 12:06 am TWN

Dutch Government Approves Large-Scale Testing of Self-Driving Cars

Agence France-Presse, January 24, 2015



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Thank you for your attention!

Peter Striekwold

pstriekwold@rdw.nl

+31615054465



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