

TEG 1

6th WG1 meeting

Questionnaire on Suspension Test 2014

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3-4 Feb. 2015, Oviedo, Spain, hosted by ITVASA and co-hosted by RYME

Chairperson: Frank Leimbach, CITA Policy Expert on Safety Systems

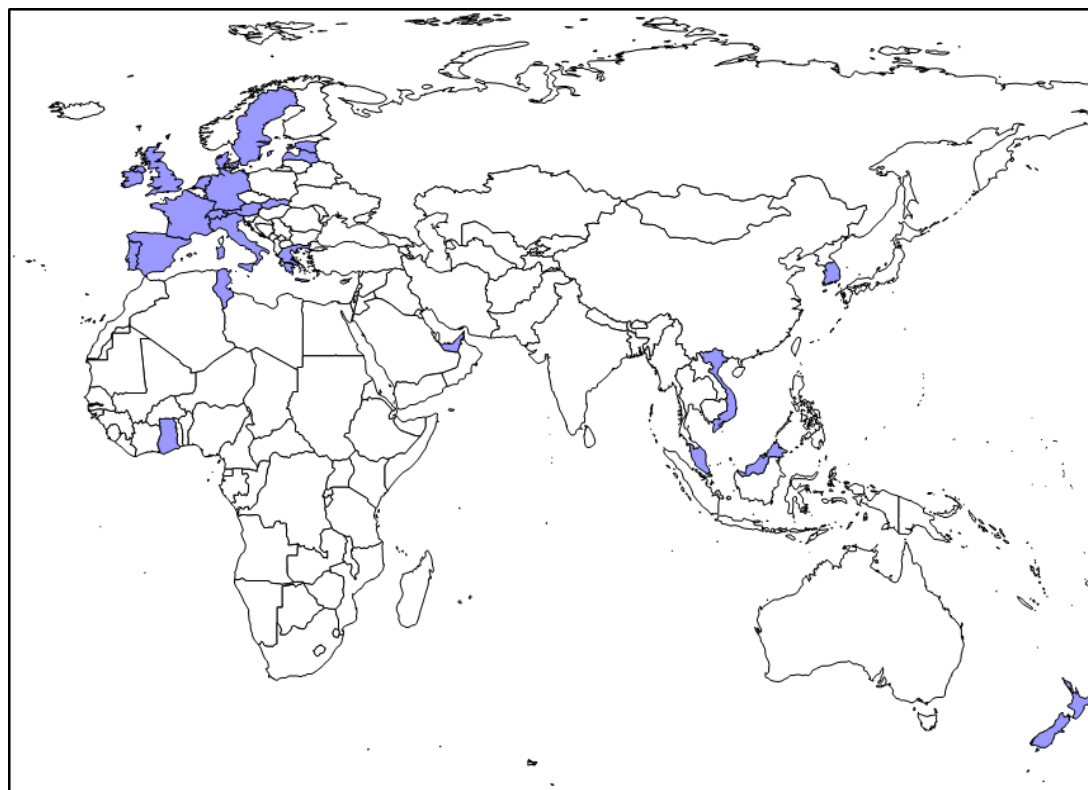
Respondents

Amt der Niederösterreichischen Landesregierung Abteilung WST8	Austria
ANCIA	Portugal
Applus Car Testing Service Limited	Ireland
APPLUS ITEUVE TECHNOLOGY S.L.	Spain
Applus+ Danmark A/S	Denmark
asa / Association des services des automobiles	Switzerland
AUTOVISION SAKAR S.A.	Greece
BM Autoteknik A/S	Denmark
Bureau Veritas, BIVAC INTERNATIONAL GHANA LIMITED – VEHICLE INSPECTION STATION	Ghana
CAPELEC	France
DEKRA Automobil GmbH	Germany
DEKRA Automotive	France
Driver & Vehicle Agency (DVA)	Northern Ireland
Driver and Vehicle Standards Agency	Great Britain
Estonian Road Administration	Estonia

FSD – Zentrale Stelle	Germany
Korea Transportation Safety Authority	R.O.Korea
Ministero delle Infrastrutture e dei Trasporti	Italy
Ministry of Infrastructure and Transport – Department of Transport – General Direction for Motorization	Italy
NZ Transport Agency	New Zealand
OPUS BILPROVNING	Sweden
PUSPAKOM SDN. BHD.	Malaysia
Road Traffic Safety Directorate	Latvia
RYME (Técnicas Reunidas de Automoción)	Spain
SGS	France
SNCT	Luxembourg
Swedish Vehicle Inspection Company	Sweden
TASJEEL	U.A.E.
TESTEK, a.s.	Slovak Republic
TÜV NORD Mobilität GmbH & Co. KG	Germany
Van Leeuwen Test Systems B.V.	The Netherlands
Vehicle Testing New Zealand Ltd	New Zealand
VEIASA	Spain
VIETNAM REGISTER	Vietnam

Responses and represented States

State	Responses
Austria	1
Denmark	2
Estonia	1
France	3
Germany	3
Ghana	1
Great Britain	1
Greece	1
Ireland	1
Italy	2
Latvia	1
Luxembourg	1
Malaysia	1
New Zealand	2
Northern Ireland	1
Portugal	1
R.O.Korea	1
Slovak Republic	1
Spain	3
Sweden	2
Switzerland	1
The Netherlands	1
Tunisia	1
U.A.E.	1
Vietnam	1
Total	35



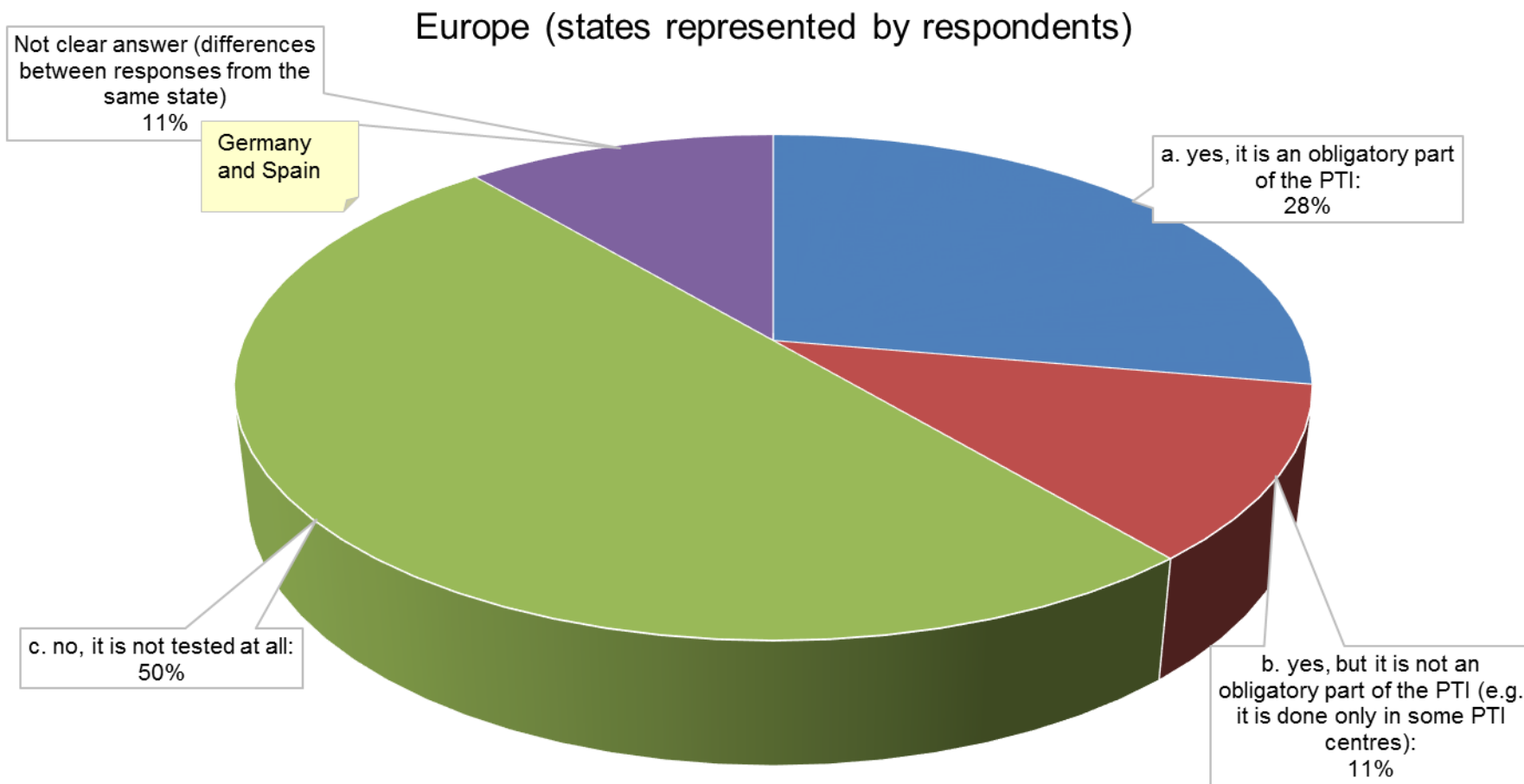
Region	Responses	States represented
EU	26	17
Europe (except EU)	1	1
Africa	2	2
Asia	4	4
Australia and Oceania	2	1
Total	35	25

Suspension (shock absorber) test with use of test equipment as part of the PTI

Is the suspension (shock absorber) test with use of test equipment part of the PTI in your state?	No. of states represented by respondents					
	EU	Europe (except EU)	Africa	Asia	Australia and Oceania	Total
a. yes, it is an obligatory part of the PTI:	4	1	2	2	0	9
b. yes, but it is not an obligatory part of the PTI (e.g. it is done only in some PTI centres):	2	0	0	1	0	3
c. no, it is not tested at all:	9	0	0	1	1	11
Not clear answer (differences between responses from the same state)	2	0	0	0	0	2

Germany and Spain

Suspension (shock absorber) test with use of test equipment as part of the PTI



Vehicle categories covered

On which vehicle categories is the suspension test performed? (it is possible to indicate more than one alternative)	No. of states represented by respondents					
	EU	Europe (except EU)	Africa	Asia	Australia and Oceania	Total
a. M1	8	1	1	2	0	12
b. N1	8	1	1	0	0	10
c. other	2	0	1	1	0	4

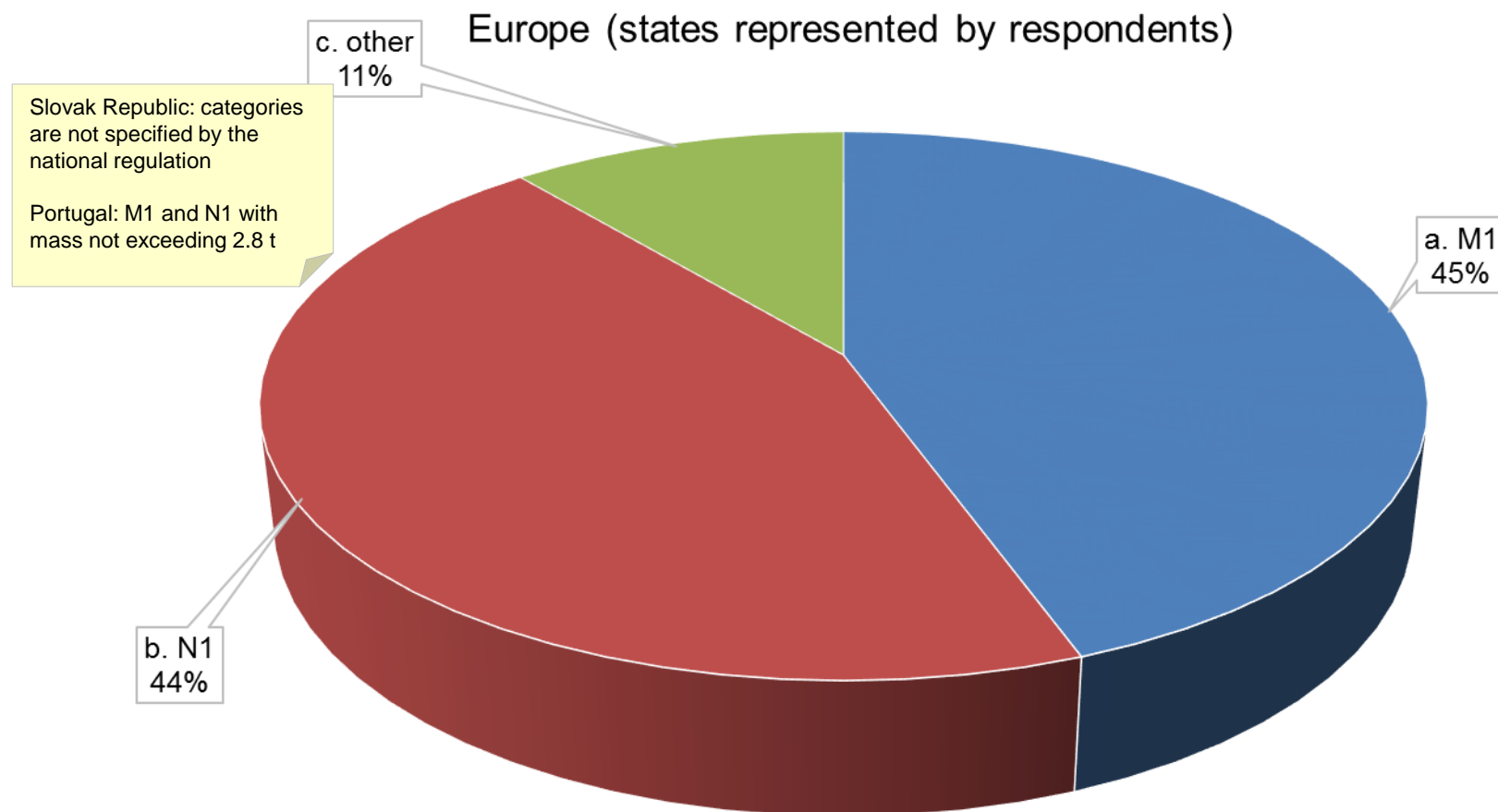
Malaysia and R.O.Korea: only M1, not N1

Slovak Republic: categories are not specified by the national regulation
Portugal: M1 and N1 with mass not exceeding 2.8 t

Tunisia: vehicles with GVW not exceeding 3.5 t

Vietnam: all vehicles

Vehicle categories covered (it was possible to indicate more than one alternative)



Allowed and forbidden methods

What is the method used for the suspension test? (it is possible to indicate more than one alternative)	No. of states represented by respondents											
	EU		Europe (except EU)		Africa		Asia		Australia and Oceania		Total	
	allowed	forbidden	allowed	forbidden	allowed	forbidden	allowed	forbidden	allowed	forbidden	allowed	forbidden
a. EUSAMA:	5	1	1	0	2	0	3	0	0	0	11	1
b. MAHA/BOGE:	5	0	1	0	2	0	2	0	0	0	10	0
c. other	4		0		1		1		0		6	
Not clear answer (differences between responses from the same state)	1		0		0		0		0		1	

CAPELEC (France): phase shift allowed

DEKRA Automobil GmbH (Germany): MAHA Theta allowed

ANCIA (Portugal): forbidden - measurement range < 6mm or max. excitement frequency < 16 Hz

TESTEK (Slovak Republic): method is not specified in the national regulation

France:

SGS: EUSAMA allowed; MAHA/BOGE forbidden

CAPELEC: EUSAMA, MAHA/BOGE and phase shift allowed

DEKRA Automotive: no answer

Bureau Veritas, BIVAC INTERNATIONAL GHANA LIMITED: ACTIA MULLER allowed

Units of measurement and criteria

Which units of measurement are used for suspension test evaluation?	No. of responding organizations					
	EU	Europe (except EU)	Africa	Asia	Australia and Oceania	Total
% of suspension efficiency	6	1	2	1	0	10
mm	1	0	0	0	0	1
other (theta values, adhesion, damping ratio, Hz)	5	0	0	1	0	6

What are the criteria for suspension test evaluation? (it is possible to indicate more than one alternative)	No. of responding organizations					
	EU	Europe (except EU)	Africa	Asia	Australia and Oceania	Total
a. database of vehicle type specific values	0	0	1	2	0	3
b. universal criteria	10	1	2	1	0	14
c. other	1	0	0	1	0	2
no answer	1	0	0	0	0	1

Defects classification

What is the classification of the corresponding defect?	No. of responding organizations					
	EU	Europe (except EU)	Africa	Asia	Australia and Oceania	Total
only minor	2	0	0	0	0	2
only major	3	1	1	1	0	6
minor or major	3	0	0	0	0	3
minor, major or dangerous	0	0	1	0	0	1
no or not clear classification	4	0	0	2	0	6

Statistics

Organization	number of inspected vehicles	year	minor defects (%)	major defects (%)	dangerous defects (%)	Undifferentiated Defect (%)
SGS (France)	21000000	2013	less than 1	less than 1	-	-
DEKRA Automotive (France)	4300000	2014	3,09	0,47	-	-
ANCIA (Portugal)	-	2013	0,00	1,80	-	-
Agence Technique des Transport Terrestre (Tunisia)	1500000	2010	70,00	20,00	5,00	5,00

Organization	number of inspected vehicles	year	minor defect (%)						major defect (%)					
			insufficient efficiency				difference between wheels on same axle		insufficient efficiency				difference between wheels on same axle	
			front left	front right	rear left	rear right	front	rear	front left	front right	rear left	rear right	front	rear
AUTOVISION SAKAR S.A. (Greece)	approx. 500.000 per year	2012, 2013	0,26	0,40	2,10	2,86	1,41	3,50 - 4,00	below 1,00				0,90	0,12

Future plans and usefulness of suspension test

German organizations

U.A.E. and R.O.Korea

If there is no suspension test during the PTI in the present, is there intention or plan to introduce it?	No. of responding organizations					
	EU	Europe (except EU)	Africa	Asia	Australia and Oceania	Total
yes	3	0	0	2	0	5
no	13	0	0	0	2	15
no answer	10	1	2	2	0	15

According to the opinion of your organization is it appropriate to include the suspension test into the scope of the PTI?	No. of responding organizations					
	EU	Europe (except EU)	Africa	Asia	Australia and Oceania	Total
yes	14	1	2	3	1	21
no	6	0	0	1	0	7
no answer	6	0	0	0	1	7

Studies

CAPELEC, FSD-Zentrale Stelle,
DEKRA Automobil GmbH, Driver
and Vehicle Standards Agency,
Swedish Vehicle Inspection
Company

Korea Transportation
Safety Authority,
VIETNAM REGISTER

Have you done or been participating in research, studies or analysis in connection with the benefits of the introduction of suspension test into the scope of the PTI	No. of responding organizations					
	EU	Europe (except EU)	Africa	Asia	Australia and Oceania	Total
yes	6	0	0	2	0	8
no	15	1	2	2	2	22
no answer	5	0	0	0	0	5

Thank you for your attention