## GRB subjects for the future: Results of the informal meetings

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Р	No	Existing regulation (n°), New regulation (GTR, UN, RE3, SR1)	Topic	Explanations	Short, Mid or Long terms	When to start	When to close	Constracting parties and/or organization concern	Discussions in GRB, IWG, Task force	Priority	Comments
1	1	R51-03	Limit value	Evaluation of limit values of phase 3	М	<del>2018</del> 2019	2020	EC, Japan, OICA, France, UK, NL,China		В	Préparation of the work in 2018: how to do?  For EC: in the context of Article 11 of Regulation (EU) 540/2014, for the EC study on sound level limits, that should be published by 1/7/2021
2	2	IK51-03 I	Annexe 3 - Update technical progress	Improvement of the test method for M3 gasoline vehicles, Non lockable gear for Passenger car, Hybrid vehicle	S	<del>2016</del> 2019 ?		EC, Japan, France, OICA, UK	GRB discussions with ISO imput	Α	2019 ?
2	3	IK51-03	Next-generation test methods	The current test methods take a great number of man-hours and a long time; next-generation test methods need to be studied.	М	2016	2020	Japan, OICA, France, UK		В	
1	4	R51-03	ASEP	ASEP Work package:  1) update the text to improve clarity and simplification in short term  2) Missing sound limit values for N1 and Offroad in Annex7 para. 5.3 to be added.  3) Series hybrid vehicles are excluded from the ASEP until 30 June 2019; new test methods will be necessary in R51.  4) ASEP as a part of type approval (not as a manufacturer declaration)  5) More general technical review in cooperation with ISO (Improvement of methods)		2016	2019	All	IWG in place	A	not only for R51-03 , R41-04
3	5	R51-03	gtr on pass-by test procedure	As agreed in grb in 2002 (?), it should be considered to develop a gtr after finalization of R51.03	M?/L	2018 2019/2020 ?		OICA, France, UK, China	GRB/ISO ?	В	start 2019/2020 & M/L for China ? For passenger cars only, since new test procedure is established in almost all countries worldwide, except in USA ?
2/ISO	6		Pass by test light for roadside- checks and PTI	Because stationary noise has often lost the direct link of sound of vehicles in motion (e.g. mapping, variable geometries, gear sensors, OBD modifications, etc.) or when stationnary noise test is not applicable (HEV). The test should be performed easily at usual streets without buildings and walls and the result (OK or not OK) should consider differences in measurement and surface etc. (tolerances of speed, rpm, ageing of silencer/vehicle, etc.). It may be a longterm substitute to stationary sound	М	2016	2020	Germany, Japan, OICA, France, UK, NL,IMMA	To be define	A for L cat To be define for M &N category	Work in progress for L cat Clarification have to be done about scope, national regulation, responsabilities,
3	7	R51-03 or RE3	Special Purpose Vehicles	SPV like mobile cranes etc are not covered by UNECE (see Framework Directive 2007/46)	S	2016	ASAP	OICA, France, UK	GRB	Α	2019 ?
DONE	8	All vehicle regulations	Indoor type approval	Include indoor testing as an alternative to outdoor test tracks as test facility to noise tests	S/M	2017	2018 - 2019 (ECE51)	OICA, France, EC	GRB work with ISO	А	Done for UN R51.03 Passby, but not for Stationary Sound, UN R138 done, how about UN R117?
3	9	All	Virtual Type Approval	Some Regulations enable an assessment of compliance by calculation, instead of physical testing. GRB should start considering to develop the framework for type approval based on calculation	L			OICA, France		В	
1	10	IR9. R63. R92 — I	Anti-Tampering, other requirements	Information / exchange of views on the probable tabling of proposals to GRB and the estimated time schedule;	S	2018	2019	EC, IMMA, Germany, Japan, Netherland			To be included in line 9; NL: questionnable

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1	11	R9, R63, R92	Limit value	The strengthening of the limit values as proposed by the European Commission will be considered.	S	2018		EC		A	- Review of R9 and R63 limit values not a priority for Japan EC forsees a strengthening of limit values for category L as outlined in the EU regulation IMMA and some CP's consider such exercise not useful until in use compliance problems are solved. Strengthening of type approval limit values would not solve concerns of citizens, which is caused by aftermarket (e.g. illegal or
1	12	R41-04		The strengthening of the limit values as proposed by the European Commission will be considered. Collecting information on experience with R41.04, that could lead to proposals for improvement: Clarification of the ASEP for motorcycles (CVT), hybrid electric vehicles	L (within 5 years)	2018		Japan, EC,IMMA		A	- EC forsees a strengthening of limit values for category L as outlined in the EU regulation IMMA and some CP's consider such exercise not useful until in use compliance problems are solved. Strengthening of type approval limit values would not solve concerns of citizens,
3	13	R28	l Pedestrian norn	Much quieter than present situation (eg rgulation 3/2014/EC part 1 §1.3 and part 2 §1,5) Horn related to vehicle speed	S	2016	On going	Germany, France, India	IWG ?	В	2019? CP to take the initiative ? What about a GTR for horn tests?
DONE	14	R28	Update technical progress	Revision of regulation	S	2016	On going	Russian federation, IMMA, OICA, France	IWG ?	Α	
3	15	R28	Horn (bell)	EC L1A category tests Harmonize L1A AWD specification	S/M	2016	On going	France	IWG ?	В	2019 ?
1	16	New regulation	Reversing Alarm	Reversing alarm of M &N category vehicles because present situation causes a lot of negative reactions from peoples living in urban-areas (alarm belongs to road-building vehicles with road-building backround noise), to include additionnal active safety	М	2019 (to submit WD to GRB)		Japan, Germany, France, OICA,Turkey	Task Force	Δ	When to complete the discussion and adopt the WD to be considered in GRB
3	17	R117-03	· ·	General discussion about the application of R117 in junction with OEM tyres Alternative Test Conditions (50 km/h cruising / acceleration)	М	2016		OICA	GRB	В	
2	18	R117-03		NL proposal to amend R 117 with stage 3 limits	S	2015	2017- 2018	NL			
2	19	R117-03	ITVITAC	- The scope of R117 may need to be extended with retreaded tyres (ref GRBinf doc 42-7). Or a separate regulation may be considered. Bipaver is studying a technical framework for the combination of different carcasses and tread profiles.	M		2018	NL			
2	20	R117-03 (related to studless)	Clarification / addition of	Addition of ice performance requirements for winter tyres	М		2020	Japan	GRRF &GRB	В	GRPB!
3	21a	QRTV (UN)	Non-acoustic measures	QRTV Work package:  1) Non-acoustic measures: The new ECE Reg should be forwarded to other GRs for further development of alternative, non-acoustic measures according to the footnote of the scope of Regulation.		2016	2017	OICA, JAPAN, France	other GR's and IWG QRTV for UN	В	To see if the information was transferred to other GR ( GSRG) and if they are some initiatives
2	21b	QRTV (UN)	update of technical progress	QRTV Work package: 2) Update technical progress: Review more recent studies on EVs to verify the effectiveness of ECE R138 QRTV		2016	<del>2017</del>	OICA, JAPAN, France	other GR's and IWG QRTV for UN	В	
1	22	QRTV (GTR)	Early establishment of QRTV- UNR and gtr	Harmonisation with the gtr to be developed in the future	On going	2016	On going	Japan, OICA		A related to US regulation publication	
2/ISO	23	RE3 or GTR	Interior Noise	ISO is undertaking a full review of the scope and technical issues related to ISO 5128 - which is presently incorporated into RE3	М		On going	OICA, Hungria, Russian Federation		В	report from ISO
3	24		agricultural and forestry	Sound emission by agricultural and forestry tractors, in view of the future update to technical progress of the new type approval.  Opportunity to harmonize.	М		On going	EC, France		В	
3/ISO	25		Noise emitted by the engine cooling system		S/M		2020	Brazil,OICA		A related to Brazil	
3	26	All		Sound level meter specifications (analyzer, last IEC)	S		On going	France		A	
1	27			Exchange information on methods to measure traffic noise, and relating these to the impact of vehicle regulations.	L			IMMA		В	Info should come from CPs
3/LABE L	28	-	Delivery noise	Harmonize testing method on delivery vehicle	М			France, NL			Report from NL expected sept 2016

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3/LABE L	29	-	Quiet City Bus	Harmonize testing method for Quiet City Bus	М			OICA	ISO		
3	30	-	Siren	Harmonize testing method for siren To be include in RE3 or a new regulation	L			France		В	
3/EC	31		Road noise	Method or recommendation for definition of the type of road surface regarding rolling noise.				Russian federation / EC / NL		В	
3	32	QRTV (UN/GTR)	Extension of the scope	Develop a definition for quiet vehicles (not just electrical or hybrid) and a qualification method for vehicles to be considered as quiet	M-L		1	Russian Federation looking for help of other CPs and OICA			
3	33		Infrasound	Assess the need for rulemaking as the first step. Information exchange.	М	2019 ?	<del>2018?</del> 2020 ?	Russian Federation			looking for help of other CPs
1	34	AII	Clarification of interpretation	Definition of representative vehicle,	S	2016				A (A for ECE51.03)	
2/ISO	35	R117-03	Indoor testing (on drum)						ISO	В	
3/ISO	36		Alignment ECE117 and ISO 13325,2003						ISO	В	
1	37	R117-03 + R51	Improve reproducibility	Track aligment and temperature correction						В	
DONE	38	R9	ASEP	add ASEP requirements in ECE R9 for those vehicles, whose power to mass ratio exceeds 50 W/kg, in correspondence to ECE R41-04.	М	2018	2018	EC	IWG ASEP / GRB	А	Do we need a working group? Explicit provisions for in-use testing are needed. Required provisions for vehicle status, tyres condition, environment and test track
1	39	R9 + R 41-04	Hybrid Electric Vehicles (HEVs) to be included in ECE R9 and ECE R41-04	Hybrid electric vehicles should also be included in ECE R41-04.	М	to consult ISO		EC	GRB / ISO	А	
2	40		Revision of the measurement methods for L4?,L5 category vehicles	Tricycles and trikes designed for the carriage of passengers have similar operation conditions in real traffic as L3 category vehicles and thus should be measured accordingly.	S	2019		EC	GRB	А	Revision of the measurement methods for L5 category vehicles
1	41	UN R51/R41		Manipulation safe active components and software	М			OICA			
1	42	Regulations	Consider Extended uncertainty for all acoustic relevant regulations	Upcoming field surway and monitoring practises must be investigated. Sound emission regulations take into consideration run-to-run variations, but not site-to-site variations.	М			OICA		А	Do we need a working group? Explicit provisions for in-use testing are needed. Required provisions for vehicle status, tyres condition, environment and test track
1	43	ALL GRB related Regulations		Clarification of not precisely prescribed provisions (soft criteria) in regulations	S			OICA			Ongoing process
1	44	All regulations	see item 34	Selection scheme for a representative vehicle for type approval test	S			OICA			
1	45	All regulations		Consideration on tolerances for type defining parameters	М			OICA			
3	46	R28	Horn (bell)	Use of the horn as additional warning device, e.g. when people (children) are locked within the car, or when a locked car is damaged or as antitheft-protection	М			OICA			see line 16
1	47	UN R51	Autonomous vehicles	Testing	S			OICA			

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2	48	R138	PEVs	Minimum Sound PEVs, special sound for Autonomous Driving Vehicles				OICA			
1	49	R92	ASEP NORESS	There are more and more NORESS which uses flap-systems designed for older typ approved of L-cat-vehicles (ASEP-test not mandatory), where the silencer works only under special condictions (e.g. only at one manual choosed mode or automatically steered only in 2nd and 3rd gear at a speed range from 50 to round about 65 km/h). With the amendment NORESS with "felexibilities" have to undergo ASEP, if they are designed for older L-cat-vehicles (back-to-back-test). The test procedure of "Standard-NORESS" have to be unchanged.	S	2018		Germany	GRB	А	
1	50	R51	Detailed 6.2.3	Last sentance of 6.2.3 ("The sound emission of the vehicle under typical on-road driving conditions, which are different from those under which the type-approval test set out in Annex 3 and Annex 7 was carried out, shall not deviate from the test result in a significant manner.") have to be defined more detailed (see Comments)	S	2018	2019	Germany	IWG ASEP / GRB	А	What is "typical on-road driving style" (speed, accleration, gears etc.), "sinficant manner"? What are the "important boundary conditions" and how to test (workload for manufacturer)?
1/IWG ASEP	51	K51	Anti-Tampering, other requirements	Typeapproved M1-vehicles which use "flexible techniques" (e.g. flap-systems, soundgenerators) have to be save against manipulation also from electronical side. Existing anti tampering requirements (R9, R41, R63, R92) only handle with mechanical aspects.	М	2019	2020	Germany	GRB	А	
1	52	K9. K41. K63	Anti-Tampering, other requirements	Typeapproved L-cat-vehicles which use "flexible techniques" (e.g. flap-systems, soundgenerators) have to be save against manipulation also from electronical side. The existing anti tampering requirements of R9, R41, R63, R92 only handle with mechanical aspects.	М	2019	2020	Germany	GRB	А	
1	53	R59	ASEP NORESS	There are NORESS which uses flap-systems or soundgenerators designed for older typ approved of M1-vehicles (ASEP-test not mandatory), where the silencer/soundgenartor works well only under special condiotions (e.g. only at one manual choosed mode or automatically steered only in 2nd and 3rd gear at a speed range from 50 to round about 65 km/h). With the amendment NORESS with "felexibilities" have to undergo ASEP, if they are designed for older M1-vehicles (back-to-back-test). The test procedure of "Standard-NORESS" have to be unchanged.	S	2018	2019	Germany	IWG ASEP /GRB	А	
	55	R51-03	ASEP	Limit and measurement methods for noise emitted by vehicles in multiple driving mode conditions (urban and express) for M&N categories based on "real test cycle" and combined with the IWG of additional sound emission provision (ASEP)	S	2018		China	GRB / ASEP / ISO	А	Extend the work of IWG ASEP , next step ?
	56	R51-03	Limit value	Noise limit for M&N categories (revision phase 3)	М	2019		China	GRB	A	to transfer to line 4, item n°1
	57	R51-03	new products series	limit and measurement methods of exterior noise emitted by electric vehicles (M&N categories)	М	2019		China	GRB	А	new
	58	R51-03	new fields and requirements	NVH Comfort limit and measurement methods inside the vehicles for M&N categories.	L	2020		China	GRB	В	new
	59	New GTR	new fields	A GTR of pass-by noise should be considered, first for commercial vehicles, and then for passenger cars based on UN R51-03.	M/L	2019 / 2020		China	GRB / ISO	A for commercial vehicles and to be define for passenger cars.	to include in line 8, item n° 5
2/ISO		All vehicle regulation	Indoor type approval	Indoor testing for special vehicle, further development	S/M	1	2018 - 2019 (ECE51)	OICA, France, EC	GRB work with ISO	А	