

**PROPOSAL FOR “CANDIDATE ITEMS FOR TECHNICAL REGULATIONS  
APPLICABLE TO INTERNATIONAL WHOLE VEHICLE TYPE APPROVAL  
(IWVTA)” AND “GUIDELINE FOR GRs TO REVIEW TECHNICAL REGULATIONS  
APPLICABLE TO IWVTA”**

Submitted by the Chairman and the co-Chairmen of the WP.29 informal group on the future  
direction for the 1958 Agreement and IWVTA

1. The World Forum for Harmonization of Vehicles Regulations (WP.29), at its March 2010 session, decided to set up an informal group to establish an inventory of items to be addressed in a review of the 1958 Agreement and roadmap for future actions to be undertaken relating to i) the quality assurance of type approval, ii) its functional improvement, and iii) establishment of IWVTA. The inventory (list of elements to be addressed in the review of the 1958 Agreement) and the roadmap for the revision of the 1958 Agreement and introduction of IWVTA proposed by IWVTA Informal Group were approved by WP.29 at its 155<sup>th</sup> session in November, 2011. According to the roadmap, IWVTA Informal Group is to submit “candidate items for technical regulations applicable to IWVTA” and “guideline for GRs to review technical regulations applicable to IWVTA” to WP.29 at its 156 session for consideration. The target completion date for the work of the informal group shall be the 168<sup>th</sup> session of WP.29 in March 2016 as indicated in terms of reference (informal document No.WP.29-150-25) and as reflected in the roadmap (Annex 2 of informal document No.WP.29-155-27)

**I. Candidate items for technical regulations applicable to IWVTA**

2. The informal group selected candidate items for technical regulations applicable to IWVTA in the following procedure. The information on national or regional technical regulations submitted by EU, Russia, South Africa, Australia and Japan was summarized on a list. National regulations were sorted into 4 categories of “A”, “B”, “C” and “n”. “A”s are those for which IWVTA Informal Group considers it appropriate to specify only one requirement as the international regulations. “B”s are those for which IWVTA Informal Group considers it appropriate to specify several requirements as the international regulations considering the characteristics of different regions. “C”s are those for which it is difficult to formulate justifications that they are appropriate as the international regulations. “n” means there are no national regulations for the subject. As a result of various discussions, the Chairman proposed the following approach to select technical requirements for IWVTA. (1) The subjects sorted into all “A” or “A + n” should be a basis for IWVTA and allocated to each GR for further consideration as indicated in Annex 3. (2) The subjects sorted into “A + B” should be allocated to each GR. Each GR is expected to explore the way to make a regulation to stipulate only one level of requirements wherever possible. (3) Non technical subjects should be considered by IWVTA Informal Group. (4) The subjects sorted into “C + n” should not be allocated to each GR, and their consideration should be stopped as they are considered to be inappropriate for IWVTA by IWVTA Informal Group.
3. The list of candidate items for technical regulations applicable to IWVTA is attached as Annex 1 to this document. Annex 2 is the same list of candidate items grouped into six GRs bearing responsibility for the items.

## **II. Guideline for GRs to review technical regulations applicable to IWVTA”**

4. In the process of discussion on the candidate for technical regulations applicable to IWVTA, the informal group prepared a guideline which could help each GR to review and finalize the technical regulations applicable to IWVTA. The guideline is to request each GR to examine the followings: (i)-a whether the said UN Regulation is valid or not (whether the requirements are suitable as IWVTA purpose) (i)-b whether split of the said UN Regulation is necessary or not (Some of the UN Regulations cover different parts or systems in one Regulation.), (ii) whether amendments of the said UN Regulation is necessary or not (Some requirements should be converted into “If fitted” category.) (iii) whether the regionally applicable requirements can be unified or not, (iv) whether separate UN Regulation applicable to only M1 is necessary or not.
5. The guideline for GRs to review technical regulations applicable to IWVTA is attached as Annex 3 to this document. Annex 4 is the review process by GRs as described by the guideline.

## **III. Conclusions and propositions**

6. The informal group submits proposals on (a) candidate items for technical regulations applicable to IWVTA and (b) guideline for GRs to review technical regulations applicable to IWVTA” to WP.29 for consideration. The informal group requests WP.29 to consider and endorse this document.

(a) Candidate items for technical regulations applicable to IWVTA

7. The informal group requests validation of the candidate items for technical regulations applicable to IWVTA (Annex 1) by WP.29.

(b) Guideline for GRs to review technical regulations applicable to IWVTA

8. The informal group requests validation of the guideline for GRs to review technical regulations applicable to IWVTA (Annex 3) by WP.29.

## Annex 1. Candidate items for technical regulations applicable to IWVTA

Group (1): IWVTA items for technical regulations with unified requirements (Item No.1-55)

Group (2): IWVTA items for potential technical regulations with regionally applicable requirements (Item No.56-60)

Group (3): IWVTA items for non-technical regulations (Item No.61-64)

Further prioritization of the IWVTA items will be provided to WP.29 at its 157<sup>th</sup> session to be held in June, 2012.

Items in Group (1) and (2) will be sent to responsible GRs for review in accordance with the guideline.

Items in Group (3) will be considered by IWVTA Informal Group.

Group	Item No.	Item	EU WVTA	Russia	Australia	South Africa	Japan	UN R	Notes
(1)	1	Permissible sound level	A	A	A	A	A	51	
(1)	2	Fuel tanks	A	A	n	n	A	34	
(1)	2a	Rear Protective devices	A	A	n	n	A	58	
(1)	3	Steering effort	A	A	A	n	A	79	
(1)	4	Door latches and hinges	A	A	A	A	A	11, GTR1	
(1)	5	Audible warning	A	A	A	A	A	28	
(1)	6	Braking	A	A	A	A	A	13H	GR is to check the necessity to split R13H.
(1)	6a	ESC	A	A	A	A	A	13H-Sup.9	
(1)	6b	BA(Brake Assist)	A	A	A	A	A	13H-Sup.9	
(1)	7	Radio interference	A	A	A	A	A	10	
(1)	8	Anti-theft / immobiliser	A	A	A	A	A	97, 116	GR is to check the validity of R97.
(1)	9	Protective steering	A	A	A	A	A	12	
(1)	10	Seat strength	A	A	A	A	A	17	
(1)	10a	Head Restraints	A	A	A	A	A	25	GR is to check the validity of R25 applicable to M1.
(1)	11	Speedometer and reverse gear	A	A	A	A	A	39	
(1)	12	Seat belt anchorages	A	A	A	A	A	14	
(1)	13	Installation of lighting and light signalling devices	A	A	A	A	A*1	48	*1: Installation of DRL is prohibited in Japan
(1)	14	Retro reflectors	A	A	A	A	A	3	
(1)	15	End-outline, front-position(side) rear-position(side), stop, side marker, DRL	A	A	A	A	A	7,87, 91	
(1)	16	Direction indicators	A	A	A	A	A	6	
(1)	17	Front fog lamps	A	A	A	A	A	19	
(1)	18	Towing hooks	A	n	n	n	n		
(1)	19	Rear fog lamps	A	A	A	A	A	38	
(1)	20	Reversing lamps	A	A	A	A	A	23	
(1)	21	Parking lamps	A	A	A	A	A	77	
(1)	22	Seat belt and restraint System	A	A	A	A	A	16	
(1)	22a	Child restraint system*2	A	A	A	A	A	44	*2: Built-in type CRS only
(1)	23	Forward vision	A	A	A	n	A	125	
(1)	24	Identification of controls, tell-tales and indicators	A	A	n	n	A	121	
(1)	25	Heating system	A	A	n	n	n	122	
(1)	26	Wheel guards	A	A	A	n	A		
(1)	27	Engine power	A	n	n	n	A	85	
(1)	28	Safety glazing	A	A	A	A	A	43	
(1)	29	Tyres	A	A	A	A	A	30,54	
(1)	29a	Tyres (Installation)	A	n	A*3	n	A		*3: No harmonized standard
(1)	29b	Temporary tyres / TPMS	A	A	n	n	n	64	GR is to check the necessity to split R64.
(1)	29c	Tyre rolling noise/RR/ wet grip	A	A	n	n	n	117	
(1)	30	Front impact	A	A	A	A	A	94	
(1)	31	Side impact	A	A	A	n	A	95	
(1)	32	Pedestrian protection	A	A	A	n	A	GTR9	
(1)	33	Air-conditioning system	A	C	n	n	n		
(1)	34	Headlamp cleaners	A	A*4	A	n	A	45	*4: apply through R48

Group	Item No.	Item	EU WVTA	Russia	Australia	South Africa	Japan	UN R	Notes
(1)	35	Equipment for LPG vehicles/ installation	A	A	n	n	A	67	
(1)	36	Specific component for CNG installation	A	A	n*5	n	A	110	*5: Regulated by different authority
(1)	37	Speed limiters	n	A	n	n	n	89	
(1)	38	Battery electric vehicles	A	A	n	n	A	100	
(1)	39	Cornering lamps	A	A	n	n	A	119	
(1)	40	Fuel system– High pressure gas for FCV	A	n	n	n	A	GTR draft	
(1)	41	Engine and Power-train System	n	n	n	n	A*6		*6: Requirements for two accelerator return springs, etc.
(1)	42	Interior burning behaviour of materials	n	n	n	n	A		
(1)	43	Riding accommodation	n	n	n	n	A		
(1)	44	Odometer	n	n	n	n	A		
(1)	45	Electrical system	n	n	n	n	A		
(1)	46	Running system	n	n	n	n	A		
(1)	47	Diesel smoke	A	A	n	A	A	24	
(1)	48	Interior fittings	A	A	A	A	A	21	
(1)	49	Exterior projections	A	A	A	n	A	26	
(1)	50	Defrost/ demist	A	A	A	n	A		
(1)	51	Washer/ wiper	A	A	A	n	A		
(1)	52	CO2 emissions and fuel consumption	A	A	A	A	A	101	
(1)	53	Arrangement of foot control	n	A	n	n	A	84	GR is to check the validity of R84.
(1)	54	Head lamps (including bulbs)	A	A	A	A	A	35	GR is to check the validity of R35.
(1)	55	Advance warning triangle*7	n	n	n	A	A	1,2,5, 8,20, 31,37 98,99 112,	GR is to check the validity of R1, R2, R5, R8, R20, R31. GR is to check whether R37 and R99 have performance-based requirements. UN Regulation on LED light source is Pending.
(2)	56	Emissions (Euro 5 and 6) Light duty vehicles/ access to information	A	A	A	A	B	27	*7: Built-in type AWT only GR is to check the validity of R27.
(2)	56a	Diesel emissions *9						83*8	*8: to be amended after adoption of WLTP GTR
(2)	57	Indirect vision devices	A	A	A	A	B*10	49	*9: M1 (only 3.5t or more)
(2)	58	Rear registration plate lamps	A	A	A	A	B*11	46	*10: Japan has different requirements for radius curvature for mirrors.
(2)	59	Masses and dimensions	A	B	B	n	A	4	*11: Japan has registration plates of different size. Accordingly Japan needs different requirements for rear registration plate lamps.
(2)	60	Couplings	A	A	B	n	A		
(3)	61	Definition of terms	A	A	B	A	A	55	
(3)	62	Rear registration plate space	A	B*12	C	n	n		*12: corresponds to ISO 7591:1982
(3)	63	Statutory plates (VIN)	A	B	C	n	n		
(3)	64	Recyclability	A	n	n	n	n		

Note) A: those on which it is appropriate to specify only one requirement as the international regulations  
B: those on which it is appropriate to specify several requirements as the international regulations considering the characteristics of different regions  
C: those on which it is difficult to formulate justifications that they are appropriate as the international regulations.  
n: No national regulations

**Annex 2: Responsible GRs for candidate items for technical regulations applicable to IWVTA**

Item No.	Items	UN Regulation	Responsible GR
4	Door latches and hinges	11, GTR1	GRSP
9	Protective steering	12	GRSP
12	Seat belt anchorages	14	GRSP
22	Seat belts and restraint systems	16	GRSP
10	Seat strength	17	GRSP
10a	Head restraints	25	GRSP
22a	Child restraint system (built-in)	44	GRSP
30	Frontal impact	94	GRSP
31	Side impact	95	GRSP
38	Battery electric vehicles	100	GRSP
32	Pedestrian protection	GTR 9	GRSP
40	Fuel system- High pressure gas for FCV	GTR draft	GRSP
43	Riding accommodation	none	[GRSP]
45	Electrical system	none	[GRSP]
48	Interior fittings	21	GRSP
49	Exterior projections	26	GRSG
<del>55</del>	<del>Advance warning triangle</del>	<del>27</del>	<del>GRSG</del>
2	Fuel tanks	34	GRSG
53	Arrangement of foot control	35	GRSG
11	Speedometer / reverse gear	39	GRSG
28	Safety glazing	43	GRSG
57	Indirect vision devices	46	GRSG
2a	Rear protective devices	58	GRSG
35*	Equipment for LPG vehicles/ installation	67	GRSG
8	Anti-theft / immobiliser	97,116	GRSG
36*	Specific component for CNG/ Installation	110	GRSG
24	Identification of controls, tell-tales and indicators	121	GRSG
25	Heating systems	122	GRSG
23	Forward vision	125	GRSG
26	Wheel guards	none	GRSG
50	Defrost/demist	none	GRSG
51	Washer /wiper	none	GRSG
59	Masses and dimensions	none	GRSG
44	Odometers	none	[GRSG]
41	Engine and power-train system	none	[GRSG]
42	Interior burning behaviour of materials	none	GRSG

\* Second order of priority

Item No.	Items	UN Regulation	Responsible GR
54	Headlamps (including bulbs)	1,2,5,8,20,31,37,9 8,99,112,123	GRE
14	Retro reflectors	3	GRE
58	Rear registration plate lamps	4	GRE
16	Direction indicators	6	GRE
15	End-outline, front-position (side), rear-position (side), stop, side marker, daytime running lamps	7,87,91	GRE
7	Radio interference (electromagnetic compatibility)	10	GRE
17	Front fog lamps	19	GRE
20	Reversing lamps	23	GRE
55	Advance warning triangle	27	GRE
19	Rear fog lamps	38	GRE
34	Headlamps cleaners	45	GRE
13	Installation of lighting and light signalling devices	48	GRE
21	Parking lamps	77	GRE
39	Cornering lamps	119	GRE
6	Braking	13H	GRRF
6a	ESC (Electric Stability Control)	13H-Sup.9	GRRF
6b	BA (Brake Assist)	13H-Sup.9	GRRF
29	Tyres	30,54	GRRF
29a	Tyres (installation)	none	GRRF
60	Couplings	55	GRRF
29b	Temporary Tyres / TPMS	64	GRRF
3	Steering effort	79	GRRF
37	Speed limiters	89	GRRF
18	Towing hooks	none	GRRF
46	Running system	none	GRRF
29c	Wet grip	117	GRRF
29c	Tyre rolling noise/ RR	117	GRB
5	Audible warning	28	GRB
1	Permissible sound level	51	GRB
56	Emissions (Euro 5 and 6) light duty vehicles/access to information	83	GRPE
47	Diesel smoke	24	GRPE
56b	Diesel emissions	49	GRPE
52	CO2 emissions/fuel consumption	84,101	GRPE
27	Engine power	85	GRPE
33	Air-conditioning systems	none	GRPE

## **Annex 3: Guideline for GRs to review technical regulations applicable to IWVTA**

### **General:**

- The Ultimate goal for IWVTA is realize complete mutual recognition of whole vehicle approval without any additional national requirements or approvals remaining.
- Each GR will review the provisions of the UN Regulations under their competence which are proposed by the IWVTA Informal group and endorsed by WP.29 as IWVTA item for technical regulations with unified requirements (group (1) of Annex 1 of this informal document).
- As for group (2), proposals for regionally applicable requirements have to be accompanied by justification in order to be incorporated in the corresponding UN Regulation. GRs will make their best efforts to minimize differences in requirements due to differences in local characteristics (infrastructure, climate, philosophy, etc.) among the Contracting Parties to ensure that the UN Regulations concerned can successfully be incorporated in the IWVTA concept<sup>#1</sup> and that the ultimate goal of IWVTA<sup>#2</sup>, as described above can be achieved.
- In reviewing the UN Regulations under its competence, each GR will take due account of the principle that the performance-based requirements are provided.
- When after the review undertaken by GRs there would still remain unresolved issues, the GR involved will report on such "disagreements", "the history of discussion", and "the background and reasons of disagreements" to WP.29, which will discuss solutions and, if necessary, commission the GR to do further work to resolve the issues.
- "IWVTA Ambassador" liaises between GR experts and IWVTA Informal Group. The role of "IWVTA Ambassador" is illustrated at "N.B.: How to proceed at GR" below.

### **#1 IWVTA Concept:**

UN Regulation No.0 (hereafter "UN R0") will prescribe requirements for whole vehicle type approval, including UN Regulations candidate items identified at Annex 1, and this for the groups:

- (1) IWVTA item for technical regulations with unified requirements
- (2) IWVTA items for potential technical regulations with regionally applicable requirements
- (3) IWVTA items for non-technical regulations

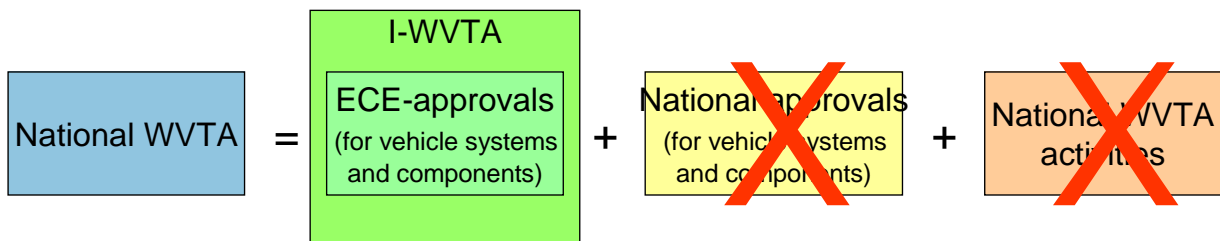
UN R0 will be developed based on the following principles (see also IWVTA-03-09-Rev.1):

- ✓ Contracting Parties to the 1958 Agreement (hereafter "Contracting Parties") can choose to apply UN R0.
- ✓ A Contracting Party who applies UN R0 (hereafter "UN R0 Contracting Party") can accept and issue the UN R0 approvals (pursuant to Article 2 of the 1958 Agreement).
- ✓ A Contracting Party who applies UN R0 is allowed to continue to accept and issue individual UN approvals. (pursuant to Article 2 of the 1958 Agreement)

- ✓ Further examination will be necessary as to whether Contracting Parties who apply UN R0 may or may not impose additional national/regional requirements.
- ✓ When a Contracting Party has applied UN R0, it is deemed to have automatically applied all the UN Regulations (but limited to M1 category) included in the list of UN Regulations applicable to IWVTA, even if this contracting party has not applied them individually prior to applying UN R0. (pending)
- ✓ Once a UN R0 approval is obtained, it shall be unnecessary to obtain and affix each individual UN type approval mark for vehicle system. (pending)

**#2 the Ultimate goal for IWVTA (cf. IWVTA-04-10)**

Complete mutual recognition of whole vehicle approval, without any additional national requirements or approvals remaining.





### **N.B.: How to proceed at GR**

- The informal group provided a list of candidate items for technical regulations applicable to IWVTA with the necessary justifications. Please refer to Annex 1 of this document. This list is submitted to WP29 for endorsement at 156<sup>th</sup> WP.29 session in March, 2012. WP29 will then submit the list to the appropriate GR groups for further actions described below.
- Before proceeding to the review of the identified UN Regulations under their competence, GR members will establish a common understanding on the ultimate goals of IWVTA and the principles that the requirements are performance-based criteria upon which UN Regulation will be developed.
- As an optional approach, GR may have a preliminary review of the candidate items by a smaller group of experts taken from GR members. The output from this group could form the basis for the main discussion within the formal GR process.
- “IWVTA Ambassador” to GR will attend GR meetings where UN Regulations applicable to IWVTA are reviewed as a representative of IWVTA Informal Group. The role of “IWVTA Ambassador” to GR is as follows:
  - explain the guideline at the first GR meeting to be held after the 156th WP29 session in March, 2012
  - monitor the progress of GR to review UN Regulations applicable to IWVTA and report it to IWVTA Informal Group
  - assist GR to solve the unsettled issues.
- To proceed to specific review of items with regionally applicable requirements, the chairman and secretariat of each GR will invite “the sponsor”, the Contracting Party who have introduced a request, to clarify the difference between their national/regional requirements and those of the corresponding UN Regulations, and to indicate what changes to the UN Regulations are considered necessary to apply the UN Regulations in their territory. The Contracting Parties will eventually submit proposals to amend the concerned UN Regulation to GRs together with justification. The GRs will examine such proposals always bearing in mind to achieve the ultimate goal of IWVTA.
- If the concerned Contracting Party does not submit such proposals to amend the concerned UN Regulation, or if GRs and WP.29 consider that there is no need for amending the UN Regulation, the concerned UN Regulation without the amendment will be treated as IWVTA item for the technical regulations with unified requirements (group (1) of Annex 1 of this informal document).
- For the cases where domestic requirements are not covered by UN Regulations, GRs will assess the suitability of including such domestic requirements within the Annexes of the 1958 Agreement (either by amending existing UN Regulations or developing new UN Regulations), based on the justification and the request provided by “the sponsor”. If GRs would confirm the justification and suitability of such request, they develop appropriate proposals.
- Each GR will proceed with the review of technical regulations keeping the followings in mind:
  - Each GR will examine the validity of technical regulations identified at Annex 1 to be included in the UN Regulations applicable to IWVTA.
  - Each GR will review the UN Regulations identified at Annex 2 of this informal document under its competence, to ensure that each technical requirement in these UN Regulations is a unified, single

performance-based requirement. At the same time best efforts should be made to eliminate, or when this is not possible, to minimize differences in requirements due to differences in local characteristics. In case it would appear not possible to eliminate these differences, GRs should flag the issue to WP.29 for consideration.

- Based on the notes provided in the table of Annex 1, each GR will verify the validity of existing UN Regulations and the appropriateness to split the identified UN Regulations and report the results to WP.29. The final decision on the validity of existing UN Regulations and the need to split some of them will be made by WP.29. If WP.29 considers that a UN Regulation should be split, it will request the responsible GR to elaborate proposals based on the instructions of WP.29.
- If GTR is identified at Annex 1, the responsible GR will develop proposals for UN Regulation based on the GTR with a view to including it in UN R0.
- For the time being, discussion on IWVTA concerns solely vehicles of M1 category, concentrating efforts for harmonization firstly on those vehicles. If the GR would find it necessary to sort out requirements for vehicles of category M1 and requirements for the vehicles of the other categories within the same UN Regulation, it will report to WP.29 accordingly, and develop proposals based upon the decision WP.29 has taken and any guidance WP.29 may have issued. The final decision on the separation of UN Regulations for the vehicles of category M1 and the vehicles of other categories will be made by WP.29.

Milestones: Each GR/ IWVTA Informal Group will report on the followings to WP.29 at its June, 2013 session.

- the validity of the identified UN Regulations
- the necessity of the identified UN Regulations to be included in IWVTA
- the necessity to split the identified UN Regulations
- the necessity to amend the identified UN Regulations,
- the possibility to develop the unified requirements
- the necessity to separate the identified UN Regulations for the M1 category vehicles and the vehicles of the other categories

For the other milestones, please refer to the roadmap provided at Annex 2 of the informal document No. IWVTA-155-27.

Annex.4: Flow chart for "Guideline for each GR to review technical regulations applicable to IWVTA"

