

行政院所屬各機關因公出國人員報告書
(出國類別：其他(國際會議))

亞太經濟合作會議
第四十七次運輸工作小組會議
報告書

服務機關：交通部

職 稱：科 長

姓 名：趙晉緯

出國地點：加拿大溫哥華

出國期間：108年4月23日至4月28日

報告日期：108年7月

目 錄

	頁次
一、會議目的.....	1
二、會議時間與地點.....	1
三、我國與會代表.....	2
四、會議議程.....	5
五、陸運專家小組會議.....	7
六、結論與建議.....	13
七、附件.....	15

亞太經濟合作會議第四十七次運輸工作小組會議報告

一、會議目的

整合區域內運輸系統，發展智慧型運輸科技，訂定運輸技術與安全標準，促成運輸技術合作，並加速運輸部門自由化，以促進亞太地區之貿易自由與經濟發展。

二、會議時間與地點

會議時間：108年4月24日至26日。

會議地點：加拿大溫哥華 Pan Pacific Hotel。

三、我國與會代表

我國出席本次運輸工作小組會議代表團員總計 18 人，由本部運輸研究所黃副所長新薰擔任領隊；出席會議代表依陸海空領域分工，詳如下表：

序次	姓名	單位	職銜	備註
1	黃新薰	交通部運輸研究所	副所長	領隊
2	邱佩諄	交通部運輸研究所	研究員	複合運輸
3	張祐榕	交通部科技顧問室	薦任科員	複合運輸
4	趙晉緯	交通部路政司	科長	陸運
5	林文閔	交通部道路交通安全督導委員會	技正	陸運
6	許志成	財團法人車輛安全審驗中心	處長	陸運
7	陳惠智	台灣區車輛工業同業公會	總工程師	陸運
8	陳勁睿	交通部航政司	副研究員	海運
9	胡凱程	交通部航港局	副組長	海運
10	陳逸勳	交通部航港局	專員	海運
11	蘇建榮	臺灣港股股份有限公司	資深處長	海運
12	李東陽	交通部民航局	專門委員	空運
13	朱衍達	交通部民航局	科長	空運
14	張任緯	交通部民航局	專員	空運
15	劉佳昀	桃園國際機場股份有限公司	高級專員	空運
16	薛富謚	桃園國際機場股份有限公司	專員	空運
17	顏君聿	財團法人台灣經濟研究院	組長	專案
18	劉禹伸	財團法人台灣經濟研究院	副研究員	專案



圖 1 我國代表團合照
(前右八為本次領隊黃副所長新薰)

交通部路政司趙晉緯科長、交通部道路交通安全督導委員會林文閔技正、財團法人車輛安全審驗中心許志成處長及台灣區車輛工業同業公會陳惠智協理共同參加陸運專家小組 LEG 會議。



圖 2 陸運專家小組 LEG 會議與會人員合照
(左後 1 陳惠智協理、4 趙晉緯科長、5 林文閔技正、7 許志成處長)



圖 3 交通部路政司趙科長晉緯於陸運專家小組會議發言

四、會議議程

本次 APEC 運輸工作小組(TPT-WG)會議是以全體會員大會及 4 個專家小組會議為主，期間召開 1 場領隊會議及 1 場女性參與運輸任務小組周邊會議，4 個專家小組皆無分場舉行次級專家小組會議，其下次級專家小組討論議題納入所屬專家小組會議議程中討論。最後，由 4 個專家小組會議主席彙整其專家小組(含次級專家小組議題)討論之共識，向全體會員大會報告。

本次 APEC 運輸工作小組(TPT-WG)會議於 4 月 24 日至 4 月 26 日共分 3 天舉行，領隊會議於第 1 天上午舉行，由主事成員主持；第 1 天上午及第 3 天下午的全體會員大會之開幕式及閉幕式，依例由主事成員與本次會議之主辦會員體(加拿大)共同主持；第 1 天下午到第 3 天上午安排專家小組會議(含次級專家小組議題討論)，由各主導會員體主持；女性參與運輸任務小組周邊會議於第 3 天上午舉行。

本次運輸工作小組會議各日會議如下：

Date	Time	Activity	Venue
April 23 (Tues)	12:00-17:00	Registration	Lobby Foyer
	14:00-17:00	Pre-arrangement meeting - Lead Shepherd, Deputy LS, EG Chairs, Program Director, Canada	Gallery Boardroom
April 24 (Wed)	07:00-17:00	Registration	Lobby Foyer
	08:00-9:00	Head of Delegation Meeting <i>9:00-9:30 Coffee Break</i>	Crystal Pavilion
	9:30-12:20	Opening Plenary	Crystal Pavilion
	12:30-13:30	Lunch	Oceanview Suite 1-2
	13:30-17:00	Expert Group Break-out Meetings	
- Aviation Experts Group (AEG)		Pacific Rim 1	

		- Maritime Experts Group (MEG)	Coal Harbour
		- Land Experts Group (LEG)	Crystal Pavilion
		- Intermodal and ITS Experts Group (IIEG)	Pacific Rim 2
	17:30-19:30	Official Reception	Cypress
April 25 (Thurs)	09:00-12:30	Expert Group Break-out Meetings <i>10:30-10:45 Coffee Break</i>	
		- Aviation Experts Group (AEG)	Pacific Rim 1
		- Maritime Experts Group (MEG)	Coal Harbour
		- Land Experts Group (LEG)	Crystal Pavilion
		- Intermodal and ITS Experts Group (IIEG)	Pacific Rim 2
	12:30-14:00	Lunch	Oceanview 1-2
	14:00-18:00	Expert Group Break-out Meetings <i>15:45-16:00 Coffee Break</i>	
		- Aviation Experts Group (AEG)	Pacific Rim 1
		- Maritime Experts Group (MEG)	Coal Harbour
		- Land Experts Group (LEG)	Crystal Pavilion
- Intermodal and ITS Experts Group (IIEG)		Pacific Rim 2	
April 26 (Fri)	09:00-10:30	Expert Group Break-out Meetings (Preparation for EG Report to the Plenary) <i>10:30-10:45 Coffee Break</i>	
		- Aviation Experts Group (AEG)	Pacific Rim 1
		- Maritime Experts Group (MEG)	Coal Harbour
		- Land Experts Group (LEG)	Crystal Pavilion
		- Intermodal and ITS Experts Group (IIEG)	Pacific Rim 2
	10:45-12:30	Side Meeting on Women in Transport	Crystal Pavilion
	12:30-14:00	Lunch	Oceanview 1-2
	14:00-17:00	Closing Plenary	Crystal Pavilion

五、陸運專家小組會議

本次陸運專家小組會議 LEG 會議摘要如下：

1. 本次會議 2019.4.24~4.26 在加拿大溫哥華舉行，由俄羅斯 (Mrs. Irina Bykova) 擔任主席，並選任巴布亞紐幾內亞為副主席(本次未出席)。
2. 參與會員體有澳洲、加拿大、印尼、韓國、馬來西亞、巴布亞紐幾內亞、菲律賓、俄羅斯、新加坡、我國、泰國、美國及越南等 13 個會員體出席會議。另有人力資源發展工作小組(HRDWG)、APEC 企業諮詢委員會(ABAC)及澳門以來賓身分與會。
3. 我國與會代表為交通部路政司趙晉緯科長、交通部道路交通安全督導委員會林文閔技正、財團法人車輛安全審驗中心許志成處長、台灣區車輛工業同業公會陳惠智協理等 4 人出席。
4. LEG 回顧 2019 年工作計畫草案，主席並請各會員體在會議結束後繼續思考提出未來可採行的工作計畫。為支持 2018 年 2 月於俄羅斯莫斯科舉辦「有助 APEC 運輸連結性之運輸教育領域合作」會議理念，俄羅斯提出於下次 TPT-WG48 會議舉辦運輸教育周邊會議的建議，並將邀請 HRDWG 代表參與。
5. 陸運專家小組 LEG 會議下次會議預定今(2019)年 11 月 18 日-22 日，於俄羅斯莫斯科舉行。建議討論主題：
 - (1) APEC 會員體在運輸部門人員培訓方面合作的最佳實務。
 - (2) 在 APEC 會員體參與下國際運輸計畫人員與科學支持之協調與提供。
 - (3) APEC 會員體提高技能品質之產學合作人員培訓。

- (4) APEC 會員體額外的專業人員訓練形式(如進階培訓、再培訓等)。
6. 在運輸工作小組大會主事成員的指導下，陸運專家小組 LEG 會議未來將討論下列議題：
- (1) 陸路運輸之重大發展(基礎設施項目、供應鏈連結項目等)
 - (2) 陸運方面之創新和新興技術
 - (3) 陸路運輸安全
 - (4) 車輛標準調和。
7. 陸運專家小組 LEG 會議討論了將女性參與運輸活動納入專家小組會議的方法，並建議將關於運輸中的女性參與運輸列入俄羅斯提議的 TPT-WG 48 運輸教育會議議程。
8. 陸運專家小組 LEG 會議指出需要更多時間來考慮 APEC 服務競爭路徑圖矩陣。
9. 此次陸運專家小組 LEG 會議中，各會員體分享其陸運發展、道路安全和鐵路安全之發展概況：
- (1) 加拿大報告「Zero Emission Vehicles」：全球零排放車輛目標是到 2030 年新電動汽車銷量至少達到 30%。加拿大 2019 年 1 月宣布零排放車輛銷售目標：2025 年 10%、2030 年 30%、2040 年 100%。2019 年預算宣告將提供廠商稅率減免、消費者購買補助、5 年補助廣設充電站等措施來完成。
 - (2) 俄羅斯報告旅遊運輸安全改善「Safety Improvement in Tourists Transportation」。俄羅斯已全面於車輛安裝緊急呼救裝置(ERA-GLONASS)，縮短救護單位抵達事故地點時間，提升救援黃金時間，達成 2030 年零死亡的目標。
 - (3) 韓國報告聯合國道路安全信託基金「UN Road Safety Trust Fund」：全球道路安全行動計畫是聯合國永續發展

目標的重要課題，聯合國大會於 2018 年 4 月正式啟動與成立聯合國道路安全信託基金，展愾加速推行改善全球道路安全、專注於加強道路安全的治理能力(特別是在中低收入國家)、支持以協調和整體的方法來改善全球道路安全、及車輛安全是道路安全的根本支柱等行動方案。

- (4) 馬來西亞報告道路相關發展「Road Related Development」：機車的高死亡率(每天有 11 人死亡，占比超過 6 成)是馬來西亞道路安全最關注的議題，其討論內容包括機車事故/死亡主要來自其他車輛或二次事故所造成並非天候和環境造成、操控機車的能力、從根本解決機車駕駛行為與心態、機車設計的科技和技術方面、交叉口或專用車道的道路設計(非常有限)、醫療救援的可及性和反應時間等改善方法，同樣值得我國來加以重視。
 - (5) 韓國報告鐵路安全—月台門屏障安裝計畫「Screen Door Platform for Rail Safety」。
 - (6) 印尼報告大眾運輸導向的鐵路發展「Transit Oriented Railway Development in Indonesia」。
 - (7) 俄羅斯報告過境貨櫃裝運的發展「Development of Transit Container Shipments」。
10. 我國配合 APEC RTHP 計畫確立的法規調和原則，於本次陸運專家小組 LEG 會議，說明每年 2 次檢視國內車輛安全法規與聯合國車輛安全法規之調和增修狀況，並提供我國車輛安全法規調和進展資料與各國代表交換意見；此呈現出我國在車輛安全法規維持國際水平的努力，以及對於達成 APEC 摒除技術性貿易障礙目標的貢獻。
 11. 各經濟體目前導入聯合國法規(簡稱 UN 法規)狀況更新(主席也再次提醒各經濟體配合 VSHG 同意之每次會議前更新資料庫維護如 Certification Circle 與 UN 法規採用進度)：

- (1) 澳洲 – 44 項 UN 法規 (考慮未來 14 項)
- (2) 南韓 – 65 項 UN 法規
- (3) 我方 – 74 項 UN 法規+1 Guideline RE3
- (4) 新加坡 – 97 項 UN 法規
- (5) 日本– 81 項 UN 法規
- (6) 加拿大 – 21 項 UN 法規
- (7) 香港 – 44 項 UN 法規
- (8) 印尼 – 7+3 項 UN 法規(規劃依據 ASEAN 腳步，第一階段 2015 年 19 項，第二階段 32 項)
- (9) 馬來西亞 – 77(2015)/99(2017)/100(2019)/134(2020)項 UN 法規 (包含有排污與噪音，可以作為我國後續導入項目參考)
- (10) 越南 – 14 項 UN 法規
- (11) 中國 – 70 項 UN 法規
- (12) 俄羅斯 – 142 項 UN 法規

12. 自上次 APEC 會議日期至今，WP29 有兩次會議，各有以下相關的 UN / GTR 法規增修版定案，將分別納為我方 107 年上半年及 107 年下半年基準增修案討論案

	174 次會議	175 次會議
UN 法規增修版	43 項 (基準相關的有燈具 8 項，被動安全性能 19 項，行駛配備 0 項，一般安全性能 7 項等)	57 項 (基準相關的有燈具 35 項，被動安全性能 0 項，行駛配備 0 項，一般安全性能 16 項等)
新 UN 法規項目	0 項 (車輛安全)	4 項 (自行車偵測盲點資訊系統、訊號燈裝置、道路照明裝置及反光裝置)

	174 次會議	175 次會議
GTR 增修版	1 項 (車輛安全)	0 項 (車輛安全)
新 GTR 法規項目	0 項	0 項

13. 關於全球法規調和論壇 WP29，目前的法規調和活動重點資訊：

(1) 1958 協定現有 55 國家(最新的是 Romania & Nigeria, 2018, 編號為 EXX)。

A. 其中 APEC 經濟體有日本/澳洲/紐西蘭/南韓/馬來西亞/俄羅斯/泰國等 7 個

(2) 1998 協定現有 36 國家(最新的是 San Marino, 2011.01.26)。

A. 其中 APEC 經濟體有日本/澳洲/紐西蘭/南韓/馬來西亞/俄羅斯/美國/加拿大/中國大陸等 9 個

(3) 全球技術法規(GTR)到目前為止已有 19 項(2018 增 1 項)如下：-- 與車輛安全相關的有 11 項

A. 門門與鉸鍊(此項已轉入 UN 法規，交通部已於 99 年 8 月公告)

B. 二輪機車氣態污染排放與油耗量測程序(簡稱 WMTC) (無關車輛安全)

C. 機車煞車(此項已轉入 UN 法規，交通部已於 2010 年 8 月公告)

D. 重型引擎 -- 壓縮點火引擎及火星塞點火引擎(使用天然氣與液態瓦斯) -- 污染排放量測程序(簡稱 WHDC) (無關車輛安全)

E. 車上診斷系統技術要求(OBD) (無關車輛安全)

F. 安全玻璃(2008)(已納入 UN R43.01 版，交通部已於 2014 年 1 月公告)

- G.頭枕(2008) (目前修訂中，GRSP 討論後會進行納入 UN R17 的程序)
- H.ESC(2008) (已轉入 UN 法規)
- I.行人安全保護 (2009) (UN 法規 127，我國已納入全球車輛安全法規推動規劃案，惟國內無檢測能量建置規劃)
- J.非標準循環污染排放(2009)(Off-Cycle Emission, OCE, 無關車輛安全)
- K.非道路移動機具(2009) (NRMM, Non-Road Mobile Machinery)(無關檢測基準項目)
- L.機車控制器標誌(2011)(已納入 UN R60.S4 版，已完成於 102 年下半年 UN 法規增修案討論)
- M.氫燃料電池車輛(2013)(hydrogen fuel cell vehicle (HFCV, 2014.11 已通過為 UN 法規項目，已於 2017.03.31 公布實施，交通部已公告)
- N.側方立桿碰撞防護(2013)(Pole Side Impact，2014.11 已通過為 UN 法規項目，後續再參考國內檢測能量於國內對應期程討論)
- O.全球輕型車輛污染測試程序(2014)(WLTP) (與車輛安全無關)
- P.輪胎(2014)(已轉換為 UN 法規，刻進行國內對應討論)
- Q.二/三輪機車曲軸箱與油氣蒸發污染排放(2016)(與車輛安全無關)
- R.二/三輪機車 OBD(2016)(與車輛安全無關)
- S.電動車輛安全(2018)(EVS，觀察後續轉入 UN 法規的狀況)
14. 我方提供車輛安全型式認證制度進展說明、及與聯合國 Decade of Action for Road Safety(Pillar 3 – Safer Vehicle)有

關之新 UN 法規導入資訊，說明已完成之車輛安全法規建立，並歡迎各經濟體與我方聯繫以了解更詳盡資訊，與會代表無相關回應意見。

六、結論與建議

1. APEC 會議為我國能參與之少數國際會議，而運輸工作小組會議陸運專家小組 LEG 及其車輛標準調和次級專家小組會議 LEG-VSHG，為我國參與及瞭解國際車輛安全法規調和及發展趨勢之重要管道之一，本次會議已援例僅召開陸運專家小組會議（合併道路與軌道安全次級專家小組 LEG-SAF 及車輛標準調和次級專家小組 LEG-VSHG），整體來說議程仍有相當比例為原車輛標準調和次級專家小組會議持續討論議程。
2. 陸運專家小組 LEG 會議主要目的在資訊分享交流及促進國際合作，本次 LEG 會議，我國由交通部路政司、道路交通安全督導委員會、審驗機構財團法人車輛安全審驗中心、國內業界台灣區車輛工業同業公會等共同派員參與會議，我國代表就國內車輛安全法規調和進展與各國代表交換意見，並同時瞭解 APEC 各經濟體辦理車輛安全法規調和發展情形，圓滿達成本次會議目標，並且收穫成果豐碩，未來應有持續派員參加會議之必要。
3. 觀察最近數次陸運專家小組 LEG、車輛標準調和次級專家小組 LEG-VSHG 會議舉辦情形，除我國持續派員參加外，其他 APEC 經濟體參與代表的人員流動性高，相關經驗有限，對 LEG、LEG-VSHG 會議可獲致成果略有影響，建議我國應能固定參與人員，以為資深代表領導會議進行，並利我國國際人才養成及會議經驗傳承。
4. 本次陸運專家小組 LEG 會議主席由俄羅斯 Irina Bykova 女士擔任，渠為第二次擔任主席，已較首次擔任主席時熟稔會議主持及行政庶務，惟仍仰賴熱心的澳洲代表及地主加拿大代表協助，仍值得持續觀察作為我國未來如擬規劃派員擔任主席之準備。

5. 觀察最近數次 LEG 會議各國報告目前調和導入聯合國 UN/ECE 車輛安全法規狀況，各國均持續導入並積極參與全球法規調和論壇 WP29，我國定期每年 2 次檢視 UN/ECE 法規增修狀況並檢討導入國內實施之法規項目、內容及其實施期程，並積極參與陸運專家小組 LEG 會議各項議題討論，無論是簡報我國車輛安全法規調和情形，以及對其他 APEC 經濟體的報告提供意見，均獲主席肯定，另我國提案建請 APEC 各經濟體持續更新 Certification Circle 與 UN 法規採用進度表，已納入本小組成員應定期更新資訊，且 APEC 各經濟體陸續加入並持續配合辦理，相信對於我方提案擬達成相關車輛安全法規發展進度訊息即時掌握之目標，後續應可有具體進展。
6. 最後，APEC 會議為我國能參與之少數國際會議，透過 APEC 平台可促進與 APEC 各經濟體的交流合作。本次陸運專家工作小組 LEG 會議中中國大陸代表（中華人民共和國國家鐵路局綜合司秦方云女士）曾臨時提出動議略以：Ministry 文字為具有主權象徵意義用詞，中華台北非主權國家，應不得使用該等文字。現場經秘書處計畫指導員 (Programme Director, PD) 說明，可以使用 Ministry，況且中國大陸簡報亦使用 Ministry 文字，其他會員體包括中華台北亦得使用，中國大陸代表即無再追問。後經本人洽 PD 瞭解澄清，我方簡報並無使用 Ministry 文字，中國大陸代表應係授國內高層指示，伺機動作提出；我方使用 Ministry 文字符合 APEC 規定，我方無需退讓。本人立即依規定妥為處理，現場並即通報代表團領隊知悉，圓滿完成本次開會任務。

七、附件

本次會議資料



Advancing
Free Trade for Asia-Pacific
Prosperity

Progress Report on Vehicle Regulation Harmonization in Chinese Taipei

25 APR 2019 – Vancouver

Presented by

Simon HSU, Vehicle Safety Certification Center, Chinese Taipei

Copyright © 2018 APEC Secretariat

CONTENTS



- **Amendment/Revision as considering UN Regulations**
- **Plan for Introducing New UN Regulations**
- **Summary**

P1. Amendment/Revision as considering UN Regulations



1. Periodical Review :
Twice a year (1st half & 2nd half),
2. Proposal by any interest group
 - ① Extensive concerns
 - ② Clarification
 - ③ Harmonization issue

3

P1. Amendment/Revision GRRF & GRB



Item	1 st half of 2018	2 nd half of 2018
Tyre		UN R54 00-23 · R75 00-S17-C1 · R30 02-S20
Dynamic Braking	UNR13 11-S14 · R13 11-S15 · R13H 00-S17	UNR13 11-S16 · R13h 01-S1
Brake assist systems		UNR139 00-S1
Electronic stability control systems (ESC)	UNR140 00-S1	UNR140 00-S2
Steering equipment	UNR79 02	UNR79 02-S1 · R79 03
Installation of tyre	UNR142 00-S1	
Speed limitation devices		UNR89 00-S3

4

P1. Amendment/Revision GRSP



Item	1 st half of 2018	2 nd half of 2018
Seat Belt	UN R16 06-S10 、 R16 07- S2	UN R16 06- S9-C1 、 R16 06- S10-C1 、 R16 07- S1-C1 、 R16 07- S2-C1 、 R16 07- S3
Belt anchorage	UN R14 08	UN R14 09
Seat Strength	UN R17 08-R5-C1 、 R17 08-S4	
ISOFIX anchorage systems, ISOFIX top tether anchorages and i-Size seating positions	UN R145 00	
Protection of drivers against the steering mechanism in the event of impact	UN R12 04-S5	
Head restraint	UN R17 08-S4	
Frontal impact with focus on restraint systems		UN R137 00-S1 、 R137 01-S1

5

P1. Amendment/Revision GRSG



Item	1 st half of 2018	2 nd half of 2018
Rear-View Mirrors Device & Installation	UN R46 04-S5	UN R46 04-R6-C1
Lateral protection(Good vehicle)	UN R73 01-S1	
Rear underrun protection	UN R58 03	
The location and identification of hand controls, tell-tales and indicators	UN R121 01-S2 、 R121 01-S2-C1	UN R121 00-S10 、 R121 01-S3
General construction (M2 - M3 category)		UN R107 06-S7 、 R107 07-S2 、 R107 08
Flammability of the interior materials for motor vehicle & Installation		UN R118 02-S4 、 R118 03-S1
Safety Glass	UN R43 01-R4-C1 、 R43 01-S6 、 R43 01-S7	

6

P1. Amendment/Revision GRE



Item	1 st half of 2018	2 nd half of 2018
Light Installation	UN R48 06-S10 - R53 02-S1	
Light Source	UN R37 03-S46	
LED		UN R 128 00-S7
Hydrogen and fuel cell vehicles	UN R134 00-S3	

7

P2. Plan for Introducing New UN Regulations

UN DECADE OF ACTION FOR ROAD SAFETY



Pillar 3 :

Safer Vehicles

8

P2. Plan for Introducing New UN Regulations Group #1



No	UN Reg.	Title	Status Quo
1-1	R58	RUPD	Waiting for announcement
1-2	R73	LPD	
1-3	R93	FUPD	
1-4	R26	External Projection for M1	Announced
1-5	R61	External projections of commercial vehicles	Announced
1-6	R87	DRL	Announced
1-7	R121	Location and identification of hand controls, tell-tales and indicators	Announced
1-8	R128	LED Light Source	Announced
1-9	R89	Speed limitation devices	Announced
1-10	R130	LDW(S)	Announced
1-11	R127	Pedestrian Safety	Waiting for announcement
1-12	R131	AEBS	Announced

9

P2. Plan for Introducing New UN Regulations Group #2



No	UN Reg.	Title	Status Quo
2-1	R21	INTERIOR FITTINGS	Waiting for announcement
2-2	R29	CAB OF A COMMERCIAL VEHICLE	Waiting for announcement
2-3	R70	REAR MARKING PLATES	Announced
2-4	R125	THE FORWARD FIELD OF VISION	Waiting for announcement

10

P2. Plan for Introducing New UN Regulations Group #3



No	UN Reg.	Title	Status Quo
3-1	R34	Prevention of fire risks in the event of collision	Announced *for rear-end collision
3-2	R32	Rear-end collision	Waiting for announcement
3-3	R117	Tyres, rolling resistance, rolling noise and wet grip	Drafted for discussion *for rolling resistance and wet grip
3-4	R136	Electric Safety of category L (EV-L)	Drafted for discussion
3-5	R137	Frontal impact with focus on restraint systems	Waiting for announcement
3-6	R145	ISOFIX anchorage systems, ISOFIX top tether anchorages and i-Size seating positions	Drafted for discussion

#3rd Group Candidates

- UN R35-00-S1 - Foot controls;
- UN R111-00-S1 - Handling and stability of vehicles;
- UN R135-00 - Pole Side Impact (PSI)

11

SUMMARY

P1. Amendment/Revisions



1. Keep moving

2 times yearly, Periodical Review on updating of UN Regulations and just completed the discussion with industry

2. 1st half of 2017 announced on April 25, 2018

3. ~2nd half of 2018 ready for discussion

GRRF: 6 items 1st half of 2018 / 10 items 2nd half of 2018

GRSP : 8 items 1st half of 2018 / 8 items 2nd half of 2018

GRSG: 8 items 1st half of 2018 / 8 items 2nd half of 2018

GRE : 4 items 1st half of 2018 / 1 items 2nd half of 2018

12

SUMMARY

P2. Plan for Introducing New UN Regulations



4. Introducing more UN Regulations

- **1st** Group of 12 candidates
 - **8 Announced**
 - 4 Waiting for announcement(UNR 58, 73, 93, 127)
- **2nd** Group of 4 candidates (UN R21, 70, 125, 29)
 - **1 Announced**
 - 3 Waiting for announcement(UN R21, 125, 29)
- **3rd** Group of 9 candidates
 - **1 Announced**
 - 2 Waiting for announcement
 - 3 Drafted for discussion

13



Thank you for your attention!



VSCC 財團法人車輛安全審驗中心
Vehicle Safety Certification Center

SUMMARY OF LEG REPORT FOR CLOSING PLENARY

1. Mrs. Irina Bykova (Russia) chaired the TPT-WG47 LEG meeting. Thirteen economies attended: Australia, Canada, China, Indonesia, Republic of Korea, Malaysia, Papua New Guinea, Russia, Singapore, Thailand, Chinese Taipei, the United States and Viet Nam. As well as representatives from Macao, China and ABAC.
2. LEG reviewed the draft of its Workplan 2019 and decided to consider the Workplan further and adopt it intersessional.
3. Papua New Guinea submitted the draft Concept Note “Best Practices in Building Resilient Land Transportation Infrastructure” for LEG comments and endorsement. LEG agreed to consider the proposed draft Concept Note intersessional and provide any comments to LEG Chair by 13 May, 2019.
4. Russia provided information about its proposal to hold a side meeting on Transport Education at the TPT-WG 48 meeting with the participation of HRDWG representatives.
5. LEG discussed seven presentations on land transport development and on road and rail safety:
 - “Zero Emission Vehicles” (Canada)
 - “Safety Improvement in Tourists Transportation” (Russia)
 - “UN Road Safety Trust Fund” (Korea)
 - “Screen Door Platform for Rail Safety” (Korea)
 - “Transit Oriented Railway Development in Indonesia” (Indonesia)
 - “Road Related Development” (Malaysia)
 - “Development of Transit Container Shipments” (Russia)
6. Chinese Taipei, Korea, Russia and Malaysia provided progress reports on Vehicle Standards Harmonization.
7. Australia, Republic of Korea and Malaysia from LEG provided presentations at the IIEG-LEG-ITF joint session on the topic of Autonomous Vehicles.
8. Guided by the Lead Shepherd’s direction, LEG identified four main themes for further discussion:
 - Major developments in land transport (infrastructure projects, supply chains connectivity projects, etc.);
 - Innovative and emerging technologies in land transport;
 - Safety in land transport;
 - Vehicle standards harmonization.
9. LEG discussed ways of incorporating Women in Transport activities into the expert group meetings and suggest including the topic of Women in Transport on the agenda of Russia’s proposed Side Meeting on Transport Education at TPT-WG 48.
10. LEG noted the need for additional time to consider table of APEC Services Competitiveness Roadmap.

INTRODUCTION

Mrs. Irina Bykova (Russia), as Chair of LEG, welcomed delegates to the TPT WG 47 LEG meeting. The attendees included delegates representing thirteen economies: Australia, Canada, China, Indonesia, Republic of Korea, Malaysia, Papua New Guinea, Russia, Singapore, Thailand, Chinese Taipei, the United States and Viet Nam as well as representatives from Macao, China and ABAC.

A list of participants is attached at Attachment A.

The agenda was adopted as proposed.

CHAIR'S REMARKS

The Chair highlighted that, in accordance with Transport Ministers Meeting direction to streamline TPT-WG meeting structure, Road and Rail Safety sub groups as well as Vehicle Standards Harmonization sub groups items were included into the LEG meeting agenda.

REVIEW OF LEG WORKPLAN 2019

As agreed at the LEG meeting during TPT-WG 46 in Peru, the Chair prepared the draft LEG Workplan 2019. LEG decided to further consider the Workplan and adopt it intersessional. The Chair encourages LEG members to provide any comments on the Workplan by 13 May, 2019.

ANTICIPATED APEC-FUNDED PROJECTS

Papua New Guinea submitted the draft Concept Note “Best Practices in Building Resilient Land Transportation Infrastructure” for LEG comments and endorsement. LEG agreed to consider the draft Concept Note intersessional and provided any comments to the LEG Chair by 13 May, 2019.

INITIATIVE OF SIDE MEETING ON TRANSPORT EDUCATION AT TPT-WG 48

To support the idea of cross-fora collaboration, Russia suggested holding a side meeting on Transport Education at the TPT-WG 48 meeting with the participation of HRDWG representatives. Russia informed LEG that an informal paper about the proposed side meeting has also been sent to Russian representatives in HRDWG for presentation at 44th HRDWG meeting in May, 2019.

ECONOMY REPORTS ON MAJOR DEVELOPMENTS IN LAND TRANSPORT

1. Canada provided an update on its goal of achieving greater consumer adoption of zero-emission vehicle (ZEVs) and scaling-up the production of ZEVs and their associated infrastructure. Canada has set a target to sell 100 percent zero-emission vehicles by 2040, with sales goals of 10 percent by 2025 and 30 percent by 2030. In order to achieve these milestones, Canada's 2019 federal Budget had provisions for expanding the network of ZEV charging and refueling stations, securing

voluntary auto manufacturers' zero-emission vehicle sales targets to ensure adequate supply, a purchase incentive for businesses and individual consumers, and investments in the automotive manufacturing and parts sector.

2. Russia introduced the ERA-GLONASS system which is the first full-scale national solution for using satellite navigation to increase safety in road transport. The System complies main global regulations, such as

- United Nations Regulation No.144 (which sets international standards for equipment and solutions for Accident Emergency Call Systems);

- Technical Regulation of Customs Union TR 018/2011 on vehicle safety;

- And is harmonized with eCall system of EU, as well.

The ERA-GLONASS System operates since 2015 for a new types of vehicles. Since January 2017 all new vehicles are equipped with onboard emergency call devices. More than 3,5 mln road vehicles across the Russian Federation are connected to the ERA-GLONASS system. Safety service is available for all Russian citizen and visitors and is free of charge.

JSC GLONASS offers to obligate all tour operators to organize Russian touristic group transfers only with buses equipped with onboard emergency call devices registered in the ERA-GLONASS system. The solution architecture looks like this: local bus with an onboard emergency call device in case of an accident send an information to local emergency service (112-system) and at the same time to ERA-GLONASS system by pressing emergency button. Emergency alert via email to all specified addressees: Consular Services, Insurance companies and Tour Operator.

3. Korea introduced the United Nations Road Safety Trust Fund (UNRSTF), which was newly organized in the United Nations in 2018. The goal of UNRSTF is to reduce the casualties of traffic accidents in underdeveloped and developing countries. The UNRSTF selects projects and provides funding to them. Five pilot projects have been selected so far. As a member of an advisory board to the UNRSTF, Korea encouraged member economies to make contributions or apply for projects.

4. Korea introduced the PSD (Platform Screen Door) installation project for all metropolitan subway stations, which reduced safety and traffic accidents by approximately 80% (2014: 55 to 2018: 8).

5. Indonesia made a presentation about Transit Oriented Railway Development. Nowadays, Jakarta is growing very rapidly. There are more than 18.6 million private vehicles in Jakarta. Users of public transport in the capital city have only reached 24%. The rapid and under-controlled trend of expansion significantly increases transportation costs, reduces the level of mobility, and decreases the quality of life. Additionally, Jakarta currently does not have enough area for future development.

In order to solve the issues, it is time for Jakarta to change its development paradigm by moving from being private vehicle (especially cars) oriented to being pedestrian and mass public transportation oriented. The current situation has not only stopped the provision of adequate mass transportation systems but also the concepts of urban development that provide convenience and comfort for residents, including regional stakes and passenger flows.

This concept development is Transit Oriented Development. Public Private Partnership schemes as alternative funding for Transit Oriented Development of railway in Indonesia needs to be explored to find effective and efficient financing schemes. Indonesia has identified some potential railway projects for Transit Oriented Development, such as MRT Jakarta, LRT Jabodebek. Cooperation in joint research is needed in order to accelerate the implementation of Public Private Partnerships to build Transit Oriented Development of railway in Indonesia. Conducting joint research with APEC members will ensure the transfer of knowledge about the development of Transit Oriented Development in railways more efficiently and effectively through the Public Private Partnership schemes.

6. Malaysia updated the meeting on two (2) road related developments. On the segment entitled “Revamping Strategy Towards Tackling Road Safety Issues”, Malaysia reported that to achieve the UN Decade of Action by 2020, the number of fatalities has to be reduced from 10,716 to 5,358. However, based on existing/recent accidents/fatalities data, this target cannot be achieved unless a rethink/outside the box intervention strategies are formulated and adopted. Given that more than 80% of accidents can be attributed to the drivers (especially resulting from behaviour and competency), more is needed to be done to ensure the competency level of the driver is at the highest level. Hence, Malaysia is actively reviewing its driver’s licensing process including the curriculum, quality of the instructors and the possibility of implementing a certain level of automation during the assessment/driver’s practical examination. This is to eliminate integrity issues and human intervention during these processes. In this regard, Malaysia welcomes and invites cooperation from other economies towards developing APEC level guidelines on realising automated testing processes during the driver’s licensing process. Malaysia is planning to prepare a concept note for the consideration of LEG.

8. Russia shared information on the development of transit container shipments in the Russian Railways’s network. Russia noted key areas of container shipments: East–West–East route, Central Asian countries, China–Belarus–China route and international transport corridor Primorye-2. In addition to the traditional overland delivery routes, the Russian Railways’s affiliates are developing multimodal services. Russian Railways and its affiliates also are going to develop the current services and sales channels and launch new ones, to optimize technological processes, and to

digitize. Russian Railways is working with governmental authorities, in particular, with the Federal Customs Service, on simplifying document flow.

IIEG-LEG-ITF JOINT SESSION ON THE TOPIC OF AUTONOMOUS VEHICLES

1. Australia from LEG gave a report on some of the challenges and opportunities it faces deploying automated vehicles, and what Australia is doing to take advantage of emerging transport technologies. The presentation highlighted Australia has a federated government system with multiple layers of government involved in regulating road vehicles across a large area, high rates of vehicle ownership and are heavy users of cars, but also noted it is an early adopter of consumer technologies. Technology is seen as an enabler for improved safety outcomes, increased economic productivity and enhanced accessibility and liveability. Key initiatives underway include implementing 14 actions under the National Policy Framework for Land Transport Technology Action Plan which will consider safety, insurance and liability issues, prevent the misuse of data, and investigate future infrastructure requirements as well as work to develop a lifecycle approach to safety assurance systems. The presentation also summarised trials of connected and automated vehicles happening in Australia.

2. Republic of Korea from LEG introduced its progress and policies related to autonomous vehicles that are currently being promoted in Korea. Korea explained the establishment of the Data Sharing Center for Autonomous Vehicles and an improvement plan for the autonomous vehicle testbed "K-City", and summarized recent legislation for early commercialization and support of autonomous vehicles.

3. Malaysia from LEG reported on the ongoing domestic process to develop guidelines (relevant to road and traffic regulation) in order to support and encourage research activities, the growth of local industries and attracting investments in the development of automated/autonomous vehicles. This work aims to allow and support AV testing on Malaysian roads which will enable realistic and invaluable data collections processes.

VEHICLE STANDARDS HARMONIZATION

1. Chinese Taipei's progress update noted that, regarding vehicle safety regulation harmonization through a twice-a-year practice, amendments of UN (WP29) Regulations from 1st half of 2018 and 2nd half of 2018 are compiled and ready for review before announcement. Additionally, as for introducing more UN Regulations to be in line with the Pillar 3 - Safer Vehicle under "UN DECADE OF ACTION FOR ROAD SAFETY", five regulations are waiting for announcement (UNR32/137) or are drafted for discussion (UNR117/136/145).

2. Upon the request of member economies, Korea shared information on the amendment of UN Regulations and Global Technical Regulations (GTRs) according to the result of the 176th and 177th WP.29 plenary meetings.

Korea also summarized the current status of the Working Party on Autonomous Vehicles (GRVA)'s activities, which is the latest issue, and the progress of regulation research on environmentally friendly vehicles such as hydrogen and electric vehicles.

3. The Russian Federation made the presentation “United Nations Regulation application in the Russian Federation” outlining how the UN Regulations are implemented in the legislation of the Russian Federation and at the present time in the Euro-Asian Economic Union (EAEU) of five countries: Armenia, Belarus, Kyrgyzstan, Kazakhstan and the Russian Federation. This legislation contains direct references to the particular UN Regulations. The main regulatory document establishing the requirements for vehicles and their components is the Customs Union Technical Regulation «Concerning Safety of Wheeled Vehicles» (CU TR 018/2011). Its legal basis is in international agreements with the participation of the Russian Federation, Treaty on the Euro-Asian Economic Union, as well as several Russian Laws. For the time being, 112 UN Regulations are mandated in the EAEU. The regulatory approach in EAEU facilitates access of foreign products to the EAEU market as valid type approvals to UN Regulations granted by other Contracting Parties to the 1958 Agreement are accepted.

4. Malaysia updated the current implementation/adoption status of WP.29 UNR Regulations and UN GTR plus the latest activities in the development of standards and regulations towards allowing a safe application of AV on roads that are currently taking place at the UNECE WP.29 platform.

5. LEG expressed thanks to Korea for its efforts summarizing information about economies' activities in vehicle standards harmonization. The Chair will recirculate the summary table and encourages economies to provide the requested information before the TPT-WG 48 meeting.

LEAD SHEPHERD'S DIRECTION TO EXPERTS GROUPS

1. According to the Lead Shepherd's direction, LEG identified four main themes for further discussion:

- Major developments in land transport (infrastructure projects, supply chains connectivity projects, etc.);
- Innovative and emerging technologies in land transport;
- Safety in land transport;
- Vehicle standards harmonization.

2. LEG discussed ways of incorporating Women in Transport activities into the expert group meetings and suggest including the topic of Women in Transport on the agenda of Russia's proposed Side Meeting on Transport Education at TPT-WG 48.

3. LEG noted the need for additional time to consider table of APEC Services Competitiveness Roadmap.

ATTACHMENT

A-Attendance