

プログラム等改変システム試験
(協定規則第 156 号 (同規則の規則 7. 2. に限る))

1. 総則

プログラム等改変システム試験の実施にあたっては、「道路運送車両の保安基準の細目を定める告示」(平成 14 年国土交通省告示第 619 号)に定める「協定規則第 156 号の技術的な要件(同規則の規則 7. 2. に限る。)」の規定及び本規定によるものとする。

2. 試験条件

自動車での実車試験及び書面等の説明により試験を行うことができる。

3. 試験記録及び成績

試験記録及び成績は、付表の様式に記入する。

3. 1. 当該試験時において該当しない箇所には斜線を引くこと。

3. 2. 記入欄は、順序配列を変えない範囲で伸縮することができ、必要に応じて追加してもよい。

3. 3. 試験記録及び成績は、日本語又は英語のみの記載でもよい。

付表

Attached Table

プログラム等改変システム試験記録及び成績
SOFTWARE UPDATE TEST DATE RECORD FORM
(協定規則第156号(規則7.2.車両型式に関する要件))

1958 Agreement of the United Nations Economic Commission for Europe Regulation No.156
(Restricted to paragraphs 7.2. Requirements for vehicle types)

試験期日	年	月	日	試験場所	試験担当者
Test Date	Y.	M.	D.	Test Site	Tested by

○ 改訂

Series

改訂番号

補足改訂番号

Series No.

Supplement No.

○ 試験自動車

Test vehicle

車名	型式	類別	車台番号
Make	Type	Variant	Chassis No.

○ 試験成績

Test Results

要件 Requirements		適合性 Conformity
段落 Paragraph	内容 Contents	
7.2.1.	Requirements for Software updates	
7.2.1.1.	The authenticity and integrity of software updates shall be protected to reasonably prevent their compromise and reasonably prevent invalid updates.	pass / fail
7.2.1.2.	Requirements for RXSWIN:	
7.2.1.2.1.	Each RXSWIN shall be uniquely identifiable. When type approval relevant software is modified by the vehicle manufacturer, the RXSWIN shall be updated if it leads to a type approval extension or to a new type approval.	pass / fail / N.A
7.2.1.2.2.	Each RXSWIN shall be easily readable in a standardized way via the use of an electronic communication interface, at least by the standard interface (OBD port). If RXSWINs are not held on the vehicle, the manufacturer shall declare the software version(s) of the vehicle or single ECUs with the connection to the relevant type approvals to the Approval Authority. This declaration shall be updated each time the declared software version(s) is updated. In this case, the software version(s) shall be easily readable in a standardized way via the use of an electronic communication interface, at least by the standard interface (OBD port).	pass / fail / N.A
7.2.1.2.3.	The vehicle manufacturer shall protect the RXSWINs and/or software version(s) on a vehicle against unauthorised modification. At the time of Type Approval, the means implemented to protect against unauthorized modification of the RXSWIN and/or software version(s) chosen by the vehicle manufacturer shall be confidentially provided.	pass / fail / N.A

7.2.2.	Additional Requirements for over the air updates		
7.2.2.1.	The vehicle shall have the following functionality with regards to software updates:		
7.2.2.1.1.	The vehicle manufacturer shall ensure that the vehicle is able to restore systems to their previous version in case of a failed or interrupted update or that the vehicle can be placed into a safe state after a failed or interrupted update.	pass / fail / N.A	
7.2.2.1.2.	The vehicle manufacturer shall ensure that software updates can only be executed when the vehicle has enough power to complete the update process (including that needed for a possible recovery to the previous version or for the vehicle to be placed into a safe state).	pass / fail / N.A	
7.2.2.1.3.	When the execution of an update may affect the safety of the vehicle, the vehicle manufacturer shall demonstrate how the update will be executed safely. This shall be achieved through technical means that ensures the vehicle is in a state where the update can be executed safely.	pass / fail / N.A	
7.2.2.2.	The vehicle manufacturer shall demonstrate that the vehicle user is able to be informed about an update before the update is executed. The information made available shall contain: In case of groups of updates with a similar content one information may cover a group.		
(a)	The purpose of the update. This could include the criticality of the update and if the update is for recall, safety and/or security purposes;	pass / fail / N.A	
(b)	Any changes implemented by the update on vehicle functions;	pass / fail / N.A	
(c)	The expected time to complete execution of the update;	pass / fail / N.A	
(d)	Any vehicle functionalities which may not be available during the execution of the update;	pass / fail / N.A	
(e)	Any instructions that may help the vehicle user safely execute the update;	pass / fail / N.A	
7.2.2.3.	In the situation where the execution of an update whilst driving may not be safe, the vehicle manufacturer shall demonstrate how they will:		
(a)	Ensure the vehicle cannot be driven during the execution of the update;	pass / fail / N.A	
(b)	Ensure that the driver is not able to use any functionality of the vehicle that would affect the safety of the vehicle or the successful execution of the update.	pass / fail / N.A	
7.2.2.4.	After the execution of an update the vehicle manufacturer shall demonstrate how the following will be implemented:		
(a)	The vehicle user is able to be informed of the success (or failure) of the update;	pass / fail / N.A	
(b)	The vehicle user is able to be informed about the changes implemented and any related updates to the user manual (if applicable).	pass / fail / N.A	
7.2.2.5.	The vehicle shall ensure that preconditions have to be met before the software update is executed.	pass / fail / N.A	

備考

Remarks

附則 1
Annex 1

資料文書
Information document

1. 車種(メーカーの商号)
Make (trade name of manufacturer) :
2. 型式および商品概要
Type and general commercial description(s)
:
3. 型式の識別手段(車両にそのマーキングが施されている場合)
Means of identification of type, if marked on the vehicle
:
4. 当該マーキングの位置
Location of that marking :
5. 車両のカテゴリ
Category(ies) of vehicle :
6. メーカー／メーカーの代理人の名称および所在地
Name and address of manufacturer/ manufacturer's representative
:
7. 組立工場の名称および所在地
Name(s) and Address(es) of assembly plant(s)
:
8. 代表車両の写真および／または図面
Photograph(s) and/or drawing(s) of a representative vehicle
:

9. ソフトウェア更新
Software Updates

9.1. 当該車両型式の一般構造特性
General construction characteristics of the vehicle type

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9.2. ソフトウェア更新管理システムの適合認定書の番号
The number of the Certificate of Compliance for Software Update Management System

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9.3. セキュリティ対策
Security measures.

9.3.1. 更新プロセスが安全に実施されることについて説明した認可対象の
車両型式に関する文書
Documents for the vehicle type to be approved describing that the update process will be
performed securely

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.....

9.3.2. 車両上のRXSWINが不正な改ざんから保護されることについて説明した
認可対象の車両型式に関する文書
Documents for the vehicle type to be approved describing that the RXSWINs on
a vehicle are protected against unauthorized manipulation

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9.4. Over the Air ソフトウェア更新
Software updates over the air

9.4.1. 更新プロセスが安全に実施されることについて説明した認可対象の車両型式に
関する文書
Documents for the vehicle type to be approved describing that the update process
will be performed safely

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9.4.2. 更新の実行前と実行後に更新に関する情報を車両ユーザーに知らせることが
できる方法
How a vehicle user is able to be informed about an update before and after its execution.

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9.5. RXSWIN の識別とアクセス
Identification and accessibility of RXSWIN

- 9.5.1. RXSWIN の読み取り方法に関する情報、または車両に RXSWIN が
搭載されていない場合の関連ソフトウェアバージョン
Information on how to read any RXSWIN, or the relevant software version(s)
in the case where the RXSWIN is not held on the vehicle

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- 9.5.2. RXSWINに関連するすべてのソフトウェアバージョンの監査可能レジスターから
情報を取得する方法の説明
Description of how to access the information from the auditable register of
all software versions relevant to any RXSWIN

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附則 1 付録 1
Annex 1 – Appendix 1

ソフトウェア更新管理システム適合表明書のモデル
ソフトウェア更新管理システムに関する要件に対するメーカーの適合表明書
Model of declaration of compliance for Software Update Management System
Manufacturer's declaration of compliance with the requirements for
Software Update Management System

UN 規則 No. 156 の改訂シリーズ番号
UN Regulation No. 156 series of amendments number

:

.....

メーカーの名称
Manufacturer Name

:

.....

メーカーの所在地
Manufacturer Address

:

.....

..... (メーカーの名称) は、UN 規則 No. 156 の 7.1 項に規定された
ソフトウェア更新管理システムに関する要件に適合するために必要なプロセスが導入されており、
かつ維持されることを証明する。

..... (Manufacturer Name) attests that the necessary processes to comply
with the requirements for the Software Update Management System laid down in paragraph 7.1
of UN Regulation No. 156 are installed and will be maintained.

署名場所
Done at

:

.....

(場所)
(place)

日付
Date

:

.....

署名者の氏名
Name of the signatory

:

.....

署名者の役職
Function of the signatory

:

.....

.....
(メーカーの代理人の印および署名)
(Stamp and signature of the manufacturer's representative)