Agenda item 3(c)

# **GRRF Request:**

Include a cross reference to R10 in R78

## **Purpose:**

Ensure Electromagnetic Interference (EMI) does not affect electronic brake modules in a way that causes unsafe brake operation.

## **IMMA Concerns:**

## The request does not enhance product safety

- R10 brake requirements are general and rely on agreement between OEMs and Type Approval agencies.
- In markets where R10 is already required, those requirements must already be met regardless of a cross reference.

## The request does not increase compliance

• In markets where R10 is already required, those requirements must already be met regardless of a cross reference.

## The request may hinder R78 adoption

- In markets where R10 is not adopted R78 adoption is more difficult with the cross reference.
- Even if getting an R10 approval and certificate is not required, the burden of having test facilities and running the tests still exist.

## The request does not promote harmonization

- An R10 cross reference is not appropriate in a GTR.
- R78 would become dis-harmonized with GTR-03.

## **Question:**

How can the GRRF purpose of ensuring EMI Immunity be met and the IMMA concerns be addressed?

### The IMMA proposal:

### Add a new paragraph 3.1.14 to GTR-03

3.1.14 The operation of the electronic braking device must not be affected adversely by electromagnetic fields.

Until uniform test procedures have been adopted, manufacturers shall maintain (and provide on request) vehicle immunity test procedures and results.

#### Harmonize R78 to that version of GTR-03

5.1.14 The operation of the electronic braking device must not be affected adversely by electromagnetic fields.

Until uniform test procedures have been adopted, manufacturers shall maintain (and provide on request) vehicle immunity test procedures and results.

#### Rationale:

- EMI Immunity is a stated requirement.
- The paragraph is consistent with language in ECE R78-02 and
- The language is appropriate in a GTR.

# **IMMA** proposal:

To develop consistent, objective requirements for EMI Immunity of electronic brake modules by IMMA EMC technical experts. To propose to GRRF how to incorporate those requirements into regulations, be it R10, R78 or other.

# Timing:

	2015				2016			
GRRF meetings		79		80		81		82
IMMA group established								
EMC proposal development		Δ						
Proposal to GRRF								Δ