

Informal document No. GRSP-39-8
(39th GRSP, 15-19 May 2006,
agenda item A.1.)

Transmitted by the expert from Japan

**Status Report on
Flexible Pedestrian Legform Impactor
Technical Evaluation Group
(Flex-TEG)**

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Chairperson of Flex-TEG, Japan

1. Delegations (appointed members/parties)

Chairperson

A. Konosu (J-MILT/JARI)

Secretariat

B. Been (FTSS-Europe)

Governmental Parties

EU/EEVC, Korean government, J-MLIT

Industrial Parties (related to car product)

ACEA, JAMA

Independent Parties

UTAC, TUV

Dummy Product Makers

FTSS, JASTI

and other interested parties are welcome!

2. Tasks

Task 1: Evaluation and Modification of usability, repeatability, reproducibility, and durability of Flex-PLI as a tool for GTR/PS legform test. And shows the comparison results of all the above issues between the TRL-LFI (used in the current PS/GTR draft) and Flex-PLI.

Task 2: Review for Injury Risk Functions

- Review for injury risk functions/curves related to the Flex-PLI, and propose threshold values.

Task 3: Technical Feasibility

- Can develop a car which complies Flex-PLI tests with the proposed threshold values.
- Evaluation of car design and car design process.

Task 4: Evaluation of Protection Level provided by the Flex-PLI and the proposed threshold values

- Evaluate protection level provided by the Flex-PLI and the proposed threshold values, and compare with that of the current PS/GTR draft.

3. Term

Originally planned by end of 2007

- The time schedule is based on an informal document No.GRSP-36-15.

4. Activities

1st Flex-TEG MT (OICA office, Paris, 5-6 Sep. 2005)

2nd Flex-TEG MT (BASt, Bergisch Gladbach, 22 Nov. 2005)

3rd Flex-TEG MT (BASt, Bergisch Gladbach, 24 April 2006)

4.1 Activities (1st Flex-TEG MT, 5-6 Sep. 2005)

- Confirmation of TOR for this working group
 - Introduction for the Flex-PLI type G (Flex-G)
 - Test results for the Flex-G (component tests and car tests)
 - Discussion
 - Confirmation of future action plan
- **Additional test results are required for detail discussions**

4.2 Activities (2nd Flex-TEG MT, 22 Nov. 2005)

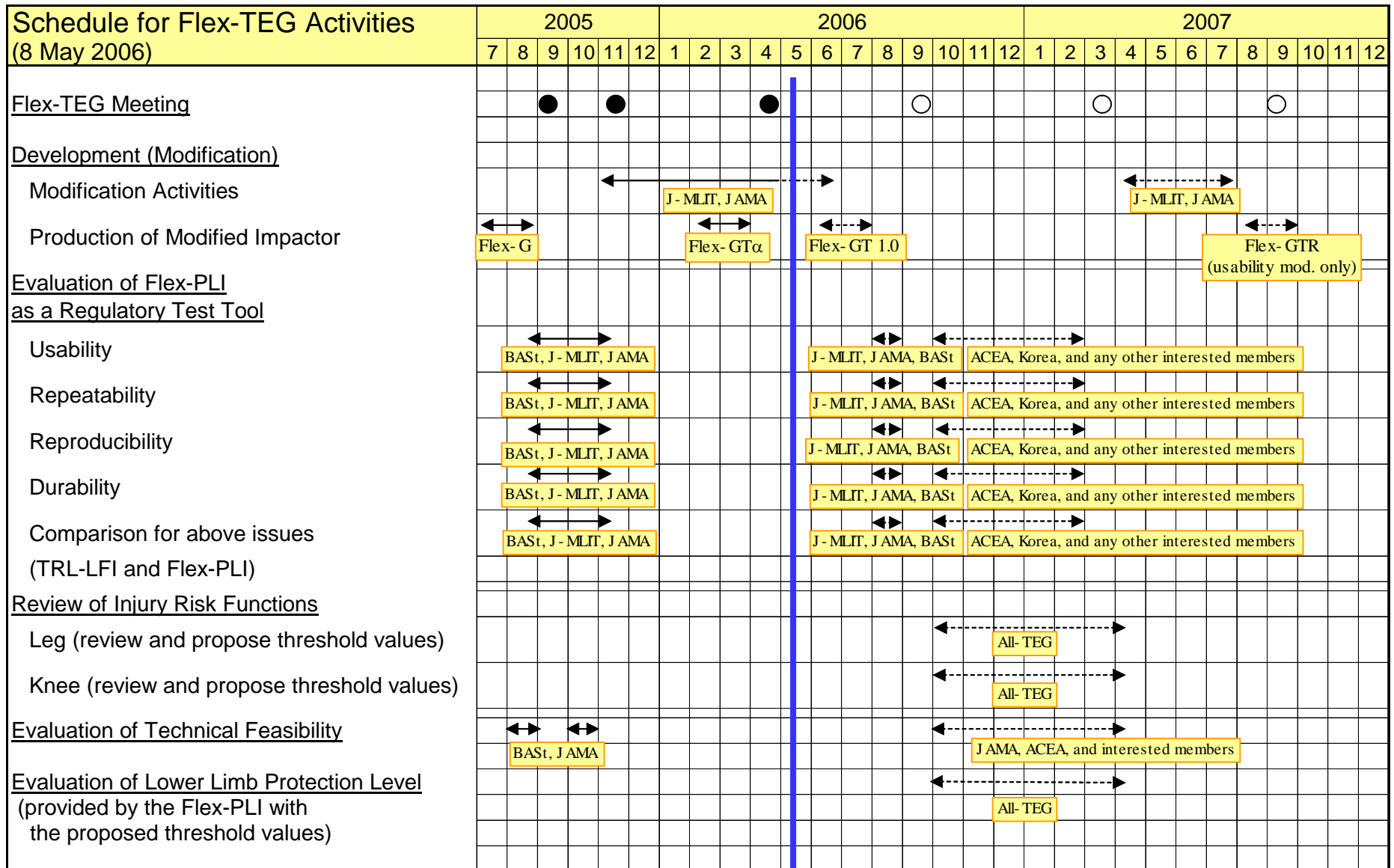
- Test results for the Flex-G (repeatability tests, reproducibility tests, and car tests)
- Tour for the Flex-G testing (at BAST/BGS)
- Discussion
- Confirmation of future action plan
- Usability, Repeatability, Reproducibility of Flex-G is seemed as good in component tests and assembly calibration tests. (those evaluations under car tests are still needed)
- The Flex-G, however, tends to reach at its knee bending limit (around 20 deg.) in car tests, impact velocities therefore had to be reduced. (In general, Flex-G test results were much more severe than that of Flex-PLI 2004)
- As a results, enlargement of its knee bending limit is required, especially to conduct high speed impact tests to cars.

4.3 Activities (3rd Flex-TEG MT, 24 April 2006)

- Information on the alpha version of Flex-GT (Flex-GT α)
 - Several modifications are applied onto the Flex-G.
 - 1) Enlargement of knee bending limit (around 30% increased)
 - 2) Improvement of its injury assessment ability
- Evaluations on injury assessment ability of Flex-GT α
 - 1) Comparison of Flex-GT α , Flex-G, and a Human FE Model
 - 2) Reconstruction Tests on the PMHS Test Using Flex-GT α
 - 3) Reconstruction Tests on Car-Pedestrian Traffic Accidents Using Flex-GT α
- This group members are evaluating above results in detail now. (by end of May 2006)
- Discussion
- Confirmation of future action plan*
 - Finalize Flex-GT specifications (by mid of June 2006)
 - Develop of Flex-GT 1.0 (by end of July 2006)
 - Conduct initial evaluation tests of Flex-GT 1.0 (by end of Aug. 2006)
 - Will have 4th Flex-TEG MT in Sep. 2006.

* will re-discuss more detail at end of May 2006

5. Current Overall Schedule



will re-discuss more detail
at end of May 2006

Flex-TEG

Thank you for your attention!

http://www.unece.org/trans/main/wp29/wp29wgs/wp29grsp/pedestrian_FlexPLI.html