

TEG doc no.	Rev.	Meeting no.	Source	Name	Impactor version	Main subject	Other subjects	Comments
001		1	Chair/ Secretary	Agenda for the first meeting of Flex-PLI Technical Evaluation Group		meeting documents		replaced by TEG-005
002		1	JARI	Flex-G general information	Flex-G, Flex-2004	impactor design	impactor comparison, biomechanics	
003		1	JARI	Flex-G preparation manual	Flex-G	test preparation	impactor design, certification testing	
004		1	BAST	BAST Flex-G test programme	Flex-G, EEVC LFI	vehicle testing		
005		1	Chair/ Secretary	Revised agenda for first Flex-G meeting		meeting documents		
006		1	JAMA, JARI	Development of a pedestrian lower extremity protection car using a biofidelic flexible pedestrian legform impactor	Flex-2004	vehicle testing	impactor design	ESV paper 05-0106
007		1	J-MLIT, NTSEL, JARI	J-MLIT research onto a pedestrian lower extremity protection	Flex-2003	impactor design	biomechanics	ESV paper 05-0193
008		1	NHTSA, Transport Canada	Component leg testing of vehicle front structures	Flex-2004, EEVC LFI	vehicle testing	impactor comparison	ESV paper 05-0194
009		1	Chair/ Secretary	Attendance list of the first Flex-PLI meeting		meeting documents		
010	1	1	Chair/ Secretary	Revised minutes of the first Flex-PLI meeting		meeting documents		
011	1	2	Chair/ Secretary	Modified agenda for the second meeting of Flex-TEG		meeting documents		
012		2	JARI	Flex-G minor modifications on the Flex-G serial number 01	Flex-G	impactor design	certification testing	
013		2	JARI	Flex-G repeatability and reproducibility for thigh, leg and knee	Flex-G	impactor certification	biomechanics	

014		2	JARI	Flex-G assembly test results and tentative corridors	Flex-G	impactor certification	certification testing	
015		2	JARI	Report on Flex-G car test results	Flex-G, EEVC LFI	vehicle testing	impactor comparison	supplemented by doc. TEG-023
016	1	2	Chair/Secretary	Revised Flex-TEG schedule		meeting documents		
017		2	Chair/Secretary	Attendance list of second Flex-TEG meeting		meeting documents		
018	1	2	Chair/Secretary	Final minutes of second Flex-TEG meeting		meeting documents		
019		3	Chair/Secretary	Draft agenda for third Flex-TEG meeting		meeting documents		
020		3	Chair/Secretary	Status report on action items		meeting documents		
021		3	JARI	Flex-Gt-alpha general information	Flex-GT, Flex-G	impactor design	impactor comparison, impactor certification	
022		3	JARI	Evaluation Activities on Injury Assessment Ability of the Flex-GT-alpha	Flex-GT, Flex-G	impactor comparison	vehicle testing, biomechanics, simulation tool	Flex-GT-alpha is the prototype of Flex-GT
023		3	JARI	TRL-LFI retry test	EEVC LFI	vehicle testing	impactor comparison	supplements doc. TEG-015
024		3	JARI	Flex-GT-alpha typical dynamic assembly calibration test result	Flex-GT	certification testing		
025		3	Chair/Secretary	Attendance list of third Flex-TEG meeting		meeting documents		
026	1	3	Chair/Secretary	Final Minutes of the 3rd Flex-TEG meeting		meeting documents		
027		3	ACEA	Preliminary ACEA comments to the papers presented during the 3rd Flex-TEG meeting	Flex-GT, EEVC LFI	meeting documents	impactor comparison	refers to docs. TEG-021, TEG-022, TEG-023 and TEG-024
028		3	JARI	Chairperson answers to the ACEA comments to the papers of the 3rd Flex-TEG meeting	Flex-GT, EEVC LFI	meeting documents	impactor comparison	refers to doc. TEG-027
029	1	4	Chair/Secretary	Final agenda of the 4th Flex-TEG meeting		meeting documents		

030		4	Chair/ Secretary	Status Report on action items		meeting documents		
031		4	JARI, JAMA	Flex-GT prototype FE model	Flex-GT	simulation tool	impactor validation	
032		4	JARI, JAMA	Flex-GT development	Flex-GT	simulation tool	impactor validation	
033		4	JARI, JAMA	Flex-GT information	Flex-GT	impactor design	impactor validation	
034		4	J-MLIT, NTSEL	Flex-GT evaluation test results	Flex-GT	impactor validation	certification testing, vehicle testing	
035		4	JAMA	Flex-GT car test results	Flex-GT	injury criteria	vehilce testing, impactor validation	
036		4	BASt	Flex-G and GT-alpha: a comparison of test results	Flex-GT, Flex-G	impactor comparison	vehicle testing, certification testing	
037		4	BGS	Flex-GT-alpha: handling and usage	Flex-GT	impactor testing	impactor validation, impactor design	
038		4	BGS	Flex-GT-alpha: Certification Histories	Flex-GT	certification testing		
039		4	ACEA	Preliminary results collection with the Flex-GT-alpha	Flex-GT	vehicle testing	cerification testing	
040		4	Chair/ Secretary	Attendance list of the 4th Flex-TEG Meeting		meeting documents		
041	1	4	Chair/ Secretary	Finalized 4th Flex-TEG Meeting Minutes		meeting documents		
042		4	ACEA	ACEA comments on the current development stage of FlexPLI	Flex-GT	meeting documents		
043		4	BGS	Report on tests with the Flexible Pedestrian Legform FlexGT-alpha and FlexGT	Flex-GT	vehicle testing	certification testing, imactor comparison, impactor design	
044	2	5	Chair/ Secretary	Finalized 5th Flex-TEG Meeting Agenda		meeting documents		
045		5	J-MLIT	J-MLIT Flex-GT Simplified Car Test Results	Flex-GT	vehicle testing		
046		5	JARI, JAMA	Answer for the ACEA Comments Sep 2007	Flex-GT	meeting documents		refers to doc. TEG-042
047		5	JARI, JAMA	Flex-GT Full Calibration Test Procedures	Flex-GT	impactor certification	certification testing	
048		5	JARI, JAMA	Review of Injury Criteria and Thresholds for Flex	Flex-GT	injury criteria	biomechanics	
049		5	JAMA, JARI	Evaluation of Protection Level Provided by Flex-PLI	Flex-GT	injury criteria		

050		5	Chair/ Secretary	Status Report on Action Items		meeting documents		
051		5	BASt	Flex-GT repeatability and reproducibility preliminary results (part 1 - 3)	Flex-GT	certification testing	impactor variation	
052		5	FTSS	First technology safety system Flex-PLI gtr development	Flex-GTR	impactor design	certification testing	
053	1	5	Chair/ Secretary	Final Minutes of the 5th Flex-TEG Meeting		meeting documents		
054	1	5	FTSS	Flex-GTR Mechanical Design (part 1 - 2)	Flex-GTR, Flex-GT	impactor design	impactor comparison	
055	1	5	FTSS	Flex-GTR Instrumentation Electrical Design	Flex-GTR	impactor design		
056	1	5	FTSS	Flex-GTR Full Calibration Test Procedure	Flex-GTR	impactor certification	certification testing	
057	1	5	FTSS	Flex-GTR Optional Instrumentation	Flex-GTR	impactor design	DAS	
058	1	5	Messring	M=BUS Onboard DAS Information	Flex-GTR	DAS		
059		5	DTS	Slice Onboard DAS Information	Flex-GTR	DAS		
060	1	6	Chair/ Secretary	Final Agenda 6th Flex-TEG Meeting		meeting documents		
061		6	Chair/ Secretary	Status of the Action Items		meeting documents		
062		6	BASt	Proposal for a Full Assembly Certification Test	Flex-GTR	certification testing		
063		6	NHTSA	Flex-GT Test summary	Flex-GT, EEVC LFI	vehicle testing		
064		6	NHTSA	Flex-GT Certification Tests	Flex-GT	certification testing		
065		6	NHTSA	Design Upper Body Mass	Flex-GT	impactor design		
066		6	JARI	TIPS for Measurement Cable Repairment		certification testing		
067		6	JAMA, JARI	Repeatability of Dynamic Assembly Test Stopper Material	Flex-GTR	certification testing		
068	1	6	Chair/ Secretary	Finalized Minutes of the 6th Flex-TEG Meeting		meeting documents		
069	1	7	Chair/ Secretary	Finalized Agenda 7th Flex-TEG Meeting		meeting documents		
070	1	7	Chair/ Secretary	Finalized Status Action Items		meeting documents		

071		7	FTSS, JAMA, JARI	Flex GTR prototype development Add. 1 Bone Core Durability Improvement Add. 2 Develop Dynamic Assembly Calibration Test Methods	Flex-GTR, Flex-GT	impactor design	impactor validation, impactor certification, certification testing, DAS, simulation tool	
072	1	7	J-MLIT, JARI, JAMA	Technical Evaluation Tests for the Flex-GTR-prototype; Repeatability & Reproducibility of the Flex-GTR-prototype and Comparability between Flex-GT and Flex-GTR-prototype	Flex-GTR, Flex-GT	impactor validation	impactor certification, certification testing	
073		7	Messring	ISO-Codes for FlexGTalpha proposal	Flex-GT	DAS		
074		7	FTSS	Flex Pendulum Dynamic Calibration proposal	Flex-GTR	impactor certification	certification testing	refers to TEG-062
075		7	BASt	Dynamic full assembly certification test procedure (inverse test setup) in conjunction with functional test	Flex-GTR	impactor certification	certification testing	comparison of both certification procedures
076		7	JAMA	Injury Threshold for the Flex-PLI Medial Collateral Ligament (MCL)	Flex-GTR	injury criteria	biomechanics	
077		7	JAMA	Injury Threshold for the Flex-PLI Tibia Bending Moment	Flex-GTR	injury criteria	biomechanics	
078		7	BASt	Open questions and proposals for ACL, PCL and MCL injury thresholds	Flex-GTR	injury criteria	biomechanics	
079		7	JAMA	Evaluation Test schedule for the Flex-GTR-prototype		meeting documents		
080		7	J-MLIT	Proposal for the Flex-TEG working schedule		meeting documents		
081		7	JAMA	Flesh part sensitivities to the atmosphere (TRL vs. Flex)	Flex-GTR, EEVC LFI	impactor comparison	impactor design	
082		7	VDA, BASt, BGS	Evaluation of the effects of test parameters on the results of the Lower legform impactor	EEVC LFI	certification testing		ESV paper 07-0009
083	1	7	Chair/Secretary	Finalized minutes 7th Flex-TEG meeting		meeting documents		
084		7	JAMA	Injury Criteria for Tibia - JAMA Proposal	Flex-GTR	injury criteria	biomechanics	refers to TEG-077
085	1	8	Chair/Secretary	Finalized agenda 8th Flex-TEG meeting		meeting documents		

086	1	8	Chair/ Secretary	Finalized status report on action items		meeting documents		
087		8	JAMA, JARI	Technical Evaluation Tests for the Flex-GTR-prototype	Flex-GTR	vehicle testing	impactor validation	
088		8	JAMA, JARI	Round Robin Tests Using the Flex-GTR-prototype (SN03)	Flex-GTR	vehicle testing	impactor validation	
089		8	BGS	BASt/ACEA test series with three prototypes of the Flex-GTR	Flex-GTR	vehicle testing	impactor validation, impactor comparison	
090		8	ACEA	Summary of ACEA Tests	Flex-GTR, Flex-GT	vehicle testing	impactor validation	
091		8	Opel	First experiences of a manufacturer with FlexPLI	Flex-GTR	vehicle testing		
092		8	FTSS	Proposed Flex PLI GTR Updates	Flex-GTR	impactor design	DAS	
093		8	JAMA, JARI	Study for inverse test	Flex-GTR	certification testing	impactor certification	
094		8	BASt	Proposal for (tentative) Certification Corridors for the Dynamic Full Assembly (Inverse) Certification Test Procedure	Flex-GTR	certification testing		
095		8	JAMA	Investigation on Injury Criteria for MCL	Flex-GTR	injury criteria	biomechanics	
096		8	JAMA, JARI	Development of a FE Flex-GTR-prototype model and Analysis of the Correlation between the Flex-GTR-prototype and Human Lower Limb Outputs	Flex-GTR	impactor validation	simulation tool	
097		8	JAMA	Proposal of injury criteria for FLEX-GTR MCL and tibia	Flex-GTR	injury criteria	biomechanics	
098		8	BASt	Flex-GTR: Proposal for Tibia Bending Moment Injury Threshold	Flex-GTR	injury criteria	biomechanics	
099		8	Chair/ Secretary	Flex-GTR-prototype Technical Evaluation Test Schedule (overall)		meeting documents		
100	1	8	Chair/ Secretary	Final Minutes of the 8th Flex-TEG Meeting		meeting documents		
101	1	9	Chair/ Secretary	9th Flex-TEG Meeting agenda		meeting documents		
102		9	JAMA, JARI	Review of dynamic calibration corridor making method	Flex-GTR	certification testing		

103	1	9	Chair/ Secretary	Status of action items		meeting documents		
104		9	JARI	Pushing surface information for Flex-GTR- prototype for Flex-GTR prototype	Flex-GTR	vehicle testing		
105		9	JAMA, JARI	JAMA round robin test results Flex-GTR prototype (SN03)	Flex-GTR	vehicle testing	certification testing	
106		9	ACEA	ACEA comments, 9th TEG meeting	Flex-GTR	meeting documents	injury criteria, certification testing	
107		9	Chair/ Secretary	9th Flex-TEG Meeting discussion results of day 1		meeting documents	certification testing	
108		9	BASt	Refinement of (tentative) certification corridors for the dynamic full assembly (inverse) certification test procedure	Flex-GTR	certification testing		
109	1	9	Chair/ Secretary	Final: 9th Flex-TEG minutes		meeting documents		
110	1	10	Chair/ Secretary	Final: 10th Flex-TEG agenda		meeting documents		
111	1	10	Chair/ Secretary	Final: status of action items		meeting documents		
112		10	NHTSA	Flex-GTR testing, NHTSA	Flex-GTR, Flex-GT, Flex-G	vehicle testing	impactor comparison	
113		10	Korean MLTM, KATRI	KATRI round robin tests using Flex-GTR-prototype (SN03)	Flex-GTR	vehicle testing		
114		10	ACEA	ACEA comments, 10th Flex-TEG meeting	Flex-GTR	vehicle testing	injury criteria, transitional conditions	
115		10	BGS, ACEA, BASt	Influence of test parameter variations on the Flex GTR joint project of ACEA and BASt	Flex-GTR	injury criteria	certification testing	
116		10	BASt	Impact Parameter Tolerances for Inverse Certification Test and Vehicle Testing	Flex-GTR	vehicle testing	certification testing	
117		10	FTSS	Minor updates and pusher plate discussion for Flex Pli GTR	Flex-GTR	impactor design	vehicle testing	

118		10	FTSS	General status from FLEX Pli GTR model consortium	Flex-GTR	simulation tool		
119		10	BASt	Finalization of impact and assessment conditions for inverse certification test	Flex-GTR	certification testing		
120		10	JAMA, JARI	Requirement corridor (BASt-method) for pendulum type (Type 3) dynamic calibration test method	Flex-GTR	certification testing		
121		10	JAMA, JARI	Flex-GTR flesh dimensions and mass tolerance, JAMA-JARI with FTSS communications	Flex-GTR	impactor design		
122		10	JAMA, JARI	Flex-GTR (Mass, COG, Inertia) Tolerances, JAMA-JARI with FTSS communications	Flex-GTR	impactor design		
123		10	DTS	SLICE updates for FLEX-GTR, DTS	Flex-GTR	DAS	impactor design	
124	1	10	Chair/Secretary	Finalized Minutes 10th Flex-PLI Technical Evaluation Group (Flex-TEG) Meeting		meeting documents		
125	1	11	Chair/Secretary	Finalized Agenda 11th Flex-PLI Technical Evaluation Group (Flex-TEG) Meeting		meeting documents		
126		11	Chair/Secretary	Status Report on Action Items at 11th Flex-TEG meeting		meeting documents		
127		11	JARI, BASt	Technical Background Information Document for the UN-ECE GRSP explaining the Derivation of Threshold Values and Impactor Certification methods for the FlexPLI version GTR agreed by the FlexPLI-TEG at their 9th Meeting	Flex-GTR	injury criteria	certification testing	
128		11	ACEA	Injury values : impact vs rebound	Flex-GTR	injury criteria		
129		11	ACEA	ACEA Comments	Flex-GTR	injury criteria	feasibility	
130		11	BASt	Flex-GTR: Proposal for ACL/PCL injury threshold	Flex-GTR	injury criteria	biomechanics	
131		11	Chair/Secretary	TEG Agreement on the Tibia and ACL Issues (Finalized)		meeting documents		summary of proposed transitional conditions
132		11	FTSS	Flex PLI Catch Rope Bracket Proposal	Flex-GTR	impactor design		
133		11	FTSS	400 Nm Tibia Gage Loading Results	Flex-GTR	impactor design	certification testing	



134		11	FTSS	FLEX PLI GTR Model development status	Flex-GTR	simulation tool		
135	1	11	JARI, FTSS	Corrigendum for the Knee Measurements Locations	Flex-GTR	impactor design		
136	1	11	Chair/ Secretary	Finalized Minutes 11th Flex-PLI Technical Evaluation Group (Flex-TEG) Meeting		meeting documents		
137	1	12	Chair/ Secretary	Draft Agenda of the 12th Flex-PLI Technical Evaluation Group (Flex-TEG) Meeting		meeting documents		
138		12	JAMA, JARI	Flex-GTR Pendulum type and Inverse type Dynamic Certification Test Data	Flex-GTR	certification testing		
139		12	BASt	Flex-GTR: Comparison of Test Results from Prototype and Series Production Legforms - BASt / ACEA joint project, November 2010	Flex-GTR	vehicle testing	injury criteria	
140		12	Humanetics	Flex-GTR Humanetics presentation	Flex-GTR	certification testing		
141		12	BGS, ACEA, BASt	Report Flexible Pedestrian Legform Impactor Flex GTR Evaluation Tests	Flex-GTR	vehicle testing	certification testing, impactor comparison, impactor design	detailed report
142	1	12	BGS, ACEA, BASt	Report Flexible Pedestrian Legform Impactor Influence Of Test Parameter Variations On The Flex-PLI	Flex-GTR	impactor design	impactor certification	detailed report
143	1	12	Chair/ Secretary	Finalized Minutes 12th Flex-PLI Technical Evaluation Group (Flex-TEG) Meeting		meeting documents		

**List of meetings:**

1st 05 - 06 September 2005  
2nd 22 November 2005  
3rd 24 April 2006  
4th 2 April 2007  
5th 7 December 2007  
6th 31 March 2008  
7th 8 December 2008  
8th 19 May 2009  
9th 3 - 4 Septmeber 2009  
10th 1 - 2 December 2009  
11th 21 April 2010  
12th 2 December 2010

Paris, OICA  
Paris, OICA  
Bergisch Gladbach, BASt  
Bergisch Gladbach, BASt  
Bergisch Gladbach, BASt  
Bergisch Gladbach, BASt  
Bergisch Gladbach, BASt  
Bergisch Gladbach, BASt  
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Bergisch Gladbach, BASt  
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