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Date: 12 June 2018



Venue: Sheraton Munich

Global Test Methods Committee (GTMC) Meeting Minutes

Time: 14.00 – 17.30

	Arabellapark Hotel in Munich, Germany
Present:	See attached Delegation Attendee List (Attachment: Participants List GTF-GTMC Meetings 12 June 2018)
Chairman:	Lutz Jacob, Afera Technical Committee (TC) Test Methods (TMs) Consultant and Convenor of CEN TC 193
Secretary:	Astrid Lejeune, Secretary General of Afera
Date of Next Meeting:	16-19 November 2020 in Osaka, Japan, hosted by JATMA

Agenda

- 1. Opening, agenda, Competition Law compliance
- 2. GTMC composition
- 3. Review of GTMC action list, Beijing 2016
- 4. Harmonisation of TMs
- 5. Status of new Loop Tack TM
- 6. Harmonisation (development) of additional TMs
- 7. Review and approve a procedure for developing and accepting new GTF TMs
- 8. PSTC proposal on Methodology to Develop Measurement Uncertainty TM
- 9. Classification of pressure sensitive adhesive (PSA) products (discussion)
- 10. Additional business





1. Opening, agenda, Competition Law compliance

1.1 Mr. Lutz Jacob, Afera TC TMs Consultant and Convenor of CEN TC 193, opened the afternoon meeting by welcoming the group of nearly 30 international delegates. He said that this was his last meeting as GTMC Chairman, marking the end of 3 terms that he has served.

2. GTMC composition

2.1 Michael Yang, Secretary General of CATIA and GTF Chairman, discussed the transitioning of the position of GTMC Chairman and creation of the office of Vice Chairman. For Chairman, he nominated Kiran Malhotra, the outgoing GTF Chairman, PSTC Member and Product Development Director at Berry Specialty Tapes. For Vice Chairman, Ms. Lejeune nominated Uwe Maurieschat, Afera TC Member and Adhesive Engineer at Fraunhofer Institute IFAM. The delegates confirmed the positions through unanimous agreement.

3. Review of GTMC action list, Beijing 2016

3.1 The Minutes of the GTMC 2016 Meeting held on 18 May 2016 in Beijing were approved and signed as a true record of proceedings. (Attachment: GTMC Meeting Minutes 18 May 2016)

Outstanding action items from the previous meeting are addressed in the agenda items below.

4. Harmonisation of TMs

- 4.1 Afera to review list of approved and proposed TMs:
 - See attached list of Afera's approved and proposed TMs (Attachment: Afera - Review of List of Approved and Proposed TMs, GTMC 2018).
- 4.2 Presentation of current TM harmonisation by each association (CNAIA, JATMA, PSTC, TAAT):
 - See attached 12 slides of China's TMs and adoption status (Attachment: CATIA Overview of China Test Methods).
 - Mr. Yang reported that the ISO published a 2018 version of Static Shear Adhesion (ISO 29863/EN 1943 2002/Afera 5012/PSTC 107), which is available online. Probably only minor edits were made to the text. Mr. Jacob will follow up with DIN and report back on this (including the exact edit) to the GTMC.
- 4.3 Inclusion of ISO TMs into national TMs (CNAIA, TAAT):
 - The GTF members decided today to adopt the 3 ISO TMs, giving them each a GTF number and year of issue. Each GTF TM will be updated automatically as they are updated by the ISO. Normally, TM updates consist of minor editorial changes, which are noted at the bottom of the ISO document. The TMs will retain their original dates, and in each central document, a reference will be made to the latest (ISO) version of it. The GTF TMs do not have to match word-for-word, as long as the content remains the same.
 - The numbering of the GTF TMs will be the following:
 - o SAFT (GTF 6001)

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- Thickness (GTF 6002)
- Width & Length (GTF 6003)
- Peel Adhesion (GTF 6004)
- Breaking Strength and Elongation (GTF 6005)
- Static Shear Adhesion (GTF 6006).
- The national/regional tape associations should not have to submit these or any other minor changes to their national bodies for approval. They will retain the official ISO TM numbers but be referred to in their manuals with GTF numbers as well.
- Mr. Kim Sung, TAAT Chairman, reported that his organisation is pushing to the have the 3 ISO TMs adopted as national TMs CNS 15721, CNS 15722 and CNS 15723. They also have agreed to approve GTF 6002 and 6003, as they are similar to their present TMs.
- 4.4 Approve Thickness TM (GTF 6002):
 - All GTF members agreed on this TM's finalisation. It will be officially added to the *Afera Test Methods Manual*.
- 4.5 Approve Width & Length Guideline (GTF 6003/PSTC 171):
 - JATMA has agreed to the Guideline in its current form, although they might not make use of it. Mr. Jacob noted that a 2mm difference should not affect the results.
 - All GTF members agreed to the TM's finalisation. It will also be officialised in the *Afera Test Methods Manual*.

5. Status of new Loop Tack TM

- 5.1 Presentation of Afera, latest attempt at Round Robin testing:
 - Mr. Jacob reviewed the process of developing and conducting Round Robin testing on the new Loop Tack TM. See his 5 attached slides. (Attachment: Afera - Loop Tack GTMC Presentation)
- 5.2 Discussion of results and path forward:
 - According to Afera's TC, this TM is ready for use. In terms of setting specifications, one must establish 2 different sets of number values, from which the company can choose for use. Mr. Jacob will send the current version of the new Loop Tack TM to all GTF members for their feedback.
 - Ms. Joyce Lee, Secretary General of TAAT, said that the Taiwanese rarely use the Loop Tack TM but are willing to offer feedback to the GTF's current draft.

6. Harmonisation (development) of additional TMs

- 6.1 Each association to present proposal:
 - Mr. Malhotra explained the PSTC's proposals:
 - Refer to the PSTC's TM Committee update. (Attachment: PSTC -TM Committee Update)
 - Dynamic Shear/Lap Shear see item 6.3.
 - Test Panel Cleaning Study They will start with a screening DOE to determine which factors to study for Round Robin testing.
 - Reliability Statements in TM manuals They are adding reliability statements to the PSTC's SAFT (GTF 6001) and Peel Adhesion (GTF 6004) and will develop statements for all the other GTF TMs. All the





GTF members should do the same for their own manuals.

- 6.2 Discussion and selection of candidates: This was covered in items 6.1, 6.3, 6.4 and 8.
- 6.3 Proposal from PSTC's last meeting in May 2015: Dynamic Shear/Lap Shear (PSTC):
 - **Mr. Malhotra** explained why North America wants to develop this TM (see attachment in item 6.1). He will prepare a list of conditions used for distribution to all GTF members for feedback prior to starting a Round Robin study.
- 6.4 Proposal from GTF's last meeting in May 2016: Peel Adhesion Depending on Test Plate Surface Roughness (JATMA):
 - Refer to JATMA's corresponding 9 slides (Attachment: JATMA Peel Adhesion Depending on Test Plate Surface Roughness)
 - Mr. Kensei Takahashi, JATMA Secretary General, reported on their progress in developing this TM. They have concluded that surface roughness has little influence on peel adhesion. The following have varying degrees of minimal variation, in ascending order: Silicone, synthetic rubber, rubber-based, acrylic emulsion, solvent-base acrylic.
 - Mr. Sung said that he thinks the difference in how one cleans the plates is key.
 - The GTF members' conclusion: Test plate surface roughness is not so important to peel adhesion if it is between 25 and 95 nanometres.
 - Mr. Jacob said that he looks forward to the PSTC's evaluation of solvents.

7. Review and approve a procedure for developing and accepting new GTF TMs

- 7.1 PSTC to take lead and use its current process as a template:
 - Refer to the PSTC's proposed procedure (Attachment: PSTC Process to Propose a TM for Harmonisation).
 - Mr. Malhotra explained that any GTF member wishing to harmonise a TM globally can utilise the attached flow sheet consisting of 5 steps. Ms.
 Lejeune will circulate this via email to all GTF members for feedback.
 - All GTF members agreed that the procedure was acceptable.
 - **Mr. Malhotra** will prepare a template for the first item.

8. PSTC proposal on Methodology to Develop Measurement Uncertainty TM

- 8.1 Each organisation to review and comment (CNAIA, JATMA, TAAT):
 - Refer to the PSTC's attached document on TM variability (Attachment: PSTC - Statement of Variability).
 - Mr. Malhotra explained that it is important to have a methodology to develop measurement uncertainty not only for comparison between labs, but for comparison within the same lab, so there are 2 sets of numbers. It is also important in setting specs.
 - His conclusion: The method that Afera uses is fine. If the GTF counterparts do not have other available methods, they can adopt this one. This could be adopted as a GTF guideline.
 - **Mr. Jacob** said that the Afera TC will discuss having to perform Round Robin tests for each TM if adopting this.
 - **CATIA**, **TAAT** and **JATMA** must study the attached document on TM





variability and submit their questions and feedback to Mr. Malhotra.

9. Classification of pressure sensitive adhesive (PSA) products (discussion)

9.1 Mr. Yang reminded the GTF members that he had provided an English version of China's "Classification of PSA Products" document to them at their GTF 2016 meeting in Beijing. He will send this to Ms. Lejeune who will distribute it to all the GTF members to use as guidelines for terminology.

JATMA indicated that South Korean regulations define tape as a "substance", and Japan lacks experience in dealing with this situation. Mr. Ian Grace, Afera TC Vice Chairman and Global Technical Support Manager for Tapes at Bostik Smart Adhesive, said that tape can be a "compound" or an "article" but never a substance. Japan must identify each substance in a tape in fractional content over 7%. TAAT added that paper, a large component in tape, is a problem. Mr. Evert Smit, Afera Technical Committee Chairman and Global Head of R&D at Lohmann GmbH & Co. KG, emphasised that manufacturers have a standard questionnaire which every supplier is required to fill out.

10. Additional business

- 10.1 The next GTMC meeting will take place on 16-19 November 2020 in Osaka, Japan, hosted by JATMA.
- 13.2 Mr. Jacob thanked everyone for 10 exciting years in the GTMC and for their valuable presence today and at the Tape Summit in Munich. He then closed the meeting.

Astrid Lejeune The Hague, 23 June 2018

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