Draft Minutes and Resolutions of combined technical meeting of:
- CEN/TC 289: WG 1, WG 2 and WG 3
- IULTCS: IUC, IUP and IUF

Held at: UNIC - Unione Nazionale Industria Conciaria
Via Brisa 3
20123 Milano, Italy

Date: 5th March 2019

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General Issues Related to IU Commissions & CEN Working Groups

1. Welcome and agreement of agenda
The Convenors, Karine Lio, Mike Wilson and Campbell Page welcomed everyone to the meeting. They thanked UNIC for providing the facilities and meeting room.

The previously circulated meeting Agenda was approved.
The experts signed the Attendance list, a copy is attached at the end.

2. Approval of the minutes of the last meeting
The draft minutes (N 253) of the last meeting held at Milan, Italy, 18th & 19th September 2018, had been circulated prior to the meeting. The minutes were approved unanimously.

3. Other IU Commission / CEN TC 289 business

CEN TC 289/WG1 & IUC Commission meeting

4. Progress of active work items (IUC & WG1)

4.1 New published EN and ISO standards

- **EN ISO 5398-4:2018 / IUC 8-4 Leather – Chemical determination of chromic oxide content - Part 4: Quantification by inductively coupled plasma (ICP)**
  Published December 2018.

- **EN ISO 17072-1:2019 / IUC 27-1 Leather – Chemical determination of metal content - Part 1: Extractable metals**
  Published February 2019.
Published February 2019.

Published December 2018.

Published December 2018.

Published September 2018.  
Note: Concerning the organic fluorine analytical methods, a joint meeting between CEN/TC 289/WG1, TC 309/WG2 and TC 248/WG26 will take place in Madrid the 21st May 2019. The purpose is to define a list of compounds and share the actual methods and consider the possible collaborations.

4.2 Documents in parallel CEN/ISO Formal Vote

The joint FDIS formal vote opened on 14th March and closes on 9th May 2019.

4.2.1 Documents in ISO only Formal Vote

- ISO/FDIS 22517 / IUC 38 Leather – Chemical tests – Determination of pesticide residues content in leather  
The ISO only FDIS formal vote opened on 11th February and closes on 8th April 2019.

4.3 Documents in parallel CEN/ISO DIS Enquiry

The joint DIS Enquiry with ISO lead opens on 19th March and closes on 11th June 2019.  
Note: Oliver Haubrich proposes to change the Part 1 title because it is more correct as “solvent extractable content” and not “total content”. Also he proposed to add an annex to include other substances that can be determined by this method. The document is on enquiry, so everybody has the opportunity to submit comments.

The joint DIS Enquiry with ISO lead opens on 19th March and closes on 11th June 2019.  
Note: Oliver Haubrich proposes to change the Part 2 title to “aqueous extractable content” instead of “extractable content”.

The joint DIS Enquiry with ISO lead opens on 18th March and closes on 10th June 2019.

- **prEN ISO/DIS 17234-1 / IUC 20-1 (Revision of EN ISO 17234-1:2011)** Leather – Chemical tests for the determination of certain azo colorants in dyed leathers -- Part 1: Determination of certain aromatic amines derived from azo colorants
  The joint DIS Enquiry with ISO lead opens on 20th March and closes on 12th June 2019.

  Reason for this revision is the re-naming of ISO 18219 to ISO 18219-1.
  The joint DIS Enquiry with ISO lead opens on 27th March and closes on 19th June 2019.

  *Note:* In October 2018 a NWI has been activated by CEN/TC 289 Secretariat (N928). ISO have also activated a new project. The draft document can be submitted for a joint DIS Enquiry with CEN lead. Karine Lio will check with Paola Visintin if the document is officially opened and put on the Livelink the version sent to CEN.
  Information subsequent to the meeting: Submitted for joint DIS Enquiry with CEN lead.

  Joint DIS Enquiry (with ISO lead) closes on 7th March 2019.
  *Note:* If there are no technical comments, WG1 decided to take into account the editorial changes, put comments, answers and updated document on the Livelink. WG1 asks Spain to review the technical comments because the document is written by them.
  Information subsequent to the meeting: Several technical comments have been received so Spain is asked to comment on them for the next meeting.

- **prEN ISO/DIS 27587 / IUC 26 (Revision of EN ISO 27587:2009)** Leather – Chemical tests – Determination of free formaldehyde in process auxiliaries (N97)
  The revision document N126 in WG1 e-committee is on Livelink and if there are no comments the document can go to joint DIS Enquiry with ISO lead.
  Information subsequent to the meeting: Submitted for joint DIS Enquiry with ISO lead.

**General note:** For next meeting comments will be available for 6 or 7 of these above documents, so we will need a full day to treat all.

### 5. Active work items (IUC & WG1)

#### 5.1 Documents after CEN/ISO DIS Enquiry

- **prEN ISO/DIS 17489 / IUC 33** Leather -- Chemical tests -- Determination of tan content in synthetic tanning agents
  Systematic review closed on 4th March 2019 and comments became available only on the day of this meeting. 6 supported the re-confirmation, one (China) proposed revision and sent some technical comments. One (Italy) proposed to withdraw and 4 abstained. Campbell Page
noted this method was not for determining tanning agents in leather (as mentioned by Italy) but for determining the tan content in syntans. The users of this method are the chemical manufacturers of synthetic tanning agents for their production quality control purposes, so its use is specialized. Decision “to keep it as it is” or “to revise it” will be discussed at the next meeting.

7. Work item progress and proposals for new work items & comments received since the last meeting

7.1 Progress of work items and proposals for new work items

- Decided to activate a new work item in CEN for ISO 10195: 2018 / IUC 41 Leather — Chemical determination of chromium (VI) content in leather — Part 3: Thermal pre-ageing of leather and determination of hexavalent chromium (Published May 2018)

- Decided to activate a new work item in CEN for ISO 22517:2019 / IUC 38 Leather – Chemical tests – Determination of pesticide residues content in leather (Formal vote closes April 2019)

  - For some leathers, the level of formaldehyde can increase during the time after the reaction of derivatization. Refer to studies of Italy and Spain.
  - The number of positions on a HPLC sampler can be 30 to 40. The time to analyze a series can be between 3 or 4 hours. So to analyze all the samples within 60 to 80 min is not practical in the routine of most labs.

  Karine Lio presented a ppt presentation (put on the Livelink) where we can see that another way to derivatize can produce less hydrolysis of formaldehyde (50°C without acid) or add NaOH could stop the reaction after derivatization (as in the cosmetic method see N160). WG1 decided to carry out a study with a pH buffer during derivatization and the addition of NaOH at the end. The results will be available in 2 months. If the results are okay the revision of 17226-1 can integrate this new derivatization.

  Re-word the calibration parts and maybe delete the time of 180mn.

  In parallel, Spain and Italy want to solve the current problem of manufacturers with an amendment. An agreement had been achieved taking into account the issue of the manufacturers to have the best results as we can and the labs that need to carry out more than 30 samples in one series. The document N158 is ready for an amendment.

- Method for determining VOC:

  Xin xia Huang of China has proposed developing a method for determining VOC but for the moment no information from China on the different questions:
  - What is the aim of this project? VOC emitted by leather or in the air of a container.
  - What is determined? Total VOC or the individual value for each VOC component.
  - What is the differences between VDA (German automotive standards) and Chinese?

Comments received since the last meeting:

1) TUV-Sud (Bangladesh) asked about the dilution factor F in ISO 17226-1.

WG1 agreed that the definition of F is not clear. We will take the opportunity of the revision of 17226-1 to clarify it.
2) IBTeC, Brazil asked about ISO 17070:
- The standard specifies that the point of calibration 0.04 mg/L equals 5 mg/kg on the sample. However, the deduction of the calculation resulted in 2 mg/kg. Can you tell us why the divergence?

On behalf of WG1, Oliver Haubrich sent the following answer to IBTeC:
"the comment is correct. The concentration that is given in clause 8.2.4.1. in the first paragraph is approximately 4 μg/ml not 2 μg/ml. At the technical meeting, we changed the calibration procedure and forgot to change the concentration. The concentrations in the following clause, are correct. These values are calculated with the correct concentration of 4 μg/ml.”

We keep this correction in mind for the next revision.

- The standard specifies that the phenols must have a recovery rate above 90%. However, even after we follow the requirements of the standard, we weren’t able to reach this value. Can you to help us with this?

Labs have no problem to obtain this recovery rate.

7.2 Comments received since the last meeting
- 

7.3 Requests for new work items
- 

8. Any other business for WG1 / IUC
- 

Meeting of CEN TC 289/WG2 and IUP Commission

9. Progress of active work items (WG2/IUP)

9.1 New EN and ISO standards
- EN ISO 26082-1:2019 / IUP 53-1
  Leather - Physical and mechanical tests - Determination of soiling - Part 1 - Rubbing (Martindale) method
  Published March 2019.

9.1.1 Re-confirmed ISO standards after systematic review
- 

9.2 Documents in parallel CEN/ISO Formal Vote
- FprEN ISO/FDIS 23910 (Revision of EN ISO 23910:2017) / IUP 44
  Leather - Physical and mechanical tests – Determination of stitch tear resistance
  The joint FDIS formal vote opens on 13th March and closes on 5th May 2019.

9.3 Documents in parallel CEN/ISO Enquiry
- prEN ISO/DIS 3376 (Revision of EN ISO 3376:2011) / IUP 6
  Leather - Physical and mechanical tests - Determination of tensile strength and percentage extension
  The joint DIS Enquiry with ISO lead opens on 23rd January and closes on 17th April 2019..
10. Discussion on active work items (WG2/IUP)

10.1 Documents after CEN/ISO Enquiry
(comments to be discussed and documents to be finalised for formal vote)

- prEN ISO/DIS 17076-1 (Revision of EN ISO 17076-1:2012) / IUP 48-1
  Leather – Determination of abrasion resistance – Part 1: Taber method
  Enquiry comments (N054) were discussed. Convener to circulate revised draft of EN ISO 17076-1 to WG2 for 4 weeks consideration before sending to joint FDIS with ISO lead.

10.2 New Work Items for discussion and to progress to CEN/ISO Enquiry

- ISO 17130:2013 / IUP 55  Leather - Physical and mechanical tests - Determination of dimensional change
  Decision made in Milan Sept 2018: request to CEN TC289 to raise NWI to revise this standard with ISO lead.
  Proposed revisions (N053) from Germany were discussed. It was agreed to retain clause 6.4 (measure immediately after ageing) as optional and clause 6.6 (measure after reconditioning) as mandatory but with 6.4 amended to facilitate cycling tests without further conditioning (Table 3, ISO 17228). The following wording was proposed to be added at the end of clause 6.4: "If cyclic ageing regime is required this can be completed before proceeding to 6.5 (Table 3)."
  Also agreed to review time period given in 6.5, 24 or 48 hrs, and to add option of a 'suitable stainless steel mesh' support at clause 4.4.
  FILK and SSIP to jointly prepare a revised draft document to be sent to the convener for circulation to WG2 prior to the next meeting.

- ISO 17131:2012 / IUP 56  Leather - Identification of leather with microscopy
  Decision made in Milan Sept 2018: request to CEN TC289 to activate a NWI to revise this standard with ISO lead.
  Documents are in process of being sent to ISO SC for joint DIS Enquiry with ISO lead.

  FILK to clarify/recirculate test data comparing the 2011 and 2017 clamp specifications. It was understood that the data shows no significant differences except with some extreme materials such as thin foil (not relevant to leather testing), but that further comparative testing of a wider range of leathers may be required.
  The convener reported that SATRA had some early original drawings from Bally showing the top clamp plates to be wedge shaped as commonly seen today in many machines.
  Convener to circulate revised draft to WG2 as soon as possible with view to sending to DIS at the earliest for wider comment. Both 2011 and 2017 clamps will be included but if possible combined into a more generic diagram identifying only the important dimensions with tolerances encompassing both 2011 and 2017 specifications.

11. Review of published standards under WG2/IUP responsibility

11.1 Decisions on the comments received during ISO systematic review

11.2 Published EN ISO standards currently under ISO systematic review process

- ISO 3378:2002 / IUP 12 Leather – Physical and mechanical tests - determination of resistance to grain cracking and grain crack index

Systematic review closes 4th June 2019.

12. Proposals for new work items

- ISO 14268:2012 / IUP 15 Leather – Physical and mechanical tests – Determination of water vapour permeability

The proposal is only to reduce the pre-conditioning time with the specimen on the jar from 16 - 24h to 1h (without replacing the silica gel); this follows the standard ISO 2419 24hr conditioning at standard atmosphere. Additional supporting data from Spain had been circulated in document N052 (updating N045) and was briefly discussed.

(It was confirmed that there is no intent or desire to consider test specimen orientation nor correction factors).

Germany have strong objections and will circulate evidence and data to show that shortening this pre-conditioning time can affect results with certain types of leathers, perhaps including heavy apparel leathers. Convener to write a provisional work programme for Elena: 1hr vs 16h; extended range of leathers (as previously minuted, perhaps including light gloving leathers from Pittards and heavy clothing leathers from FILK) and considering the preparatory abrasion or flexing options in clause 5.2.

A NWI is not required at this stage.

13. Any other business for WG2/IUP

None raised.

Meeting of CEN TC 289/WG3 and IUF Commission

14. Progress of active work items (WG3/IUF)

14.1 New published EN and ISO standards

- EN ISO 22700:2019 / IUF 474 Leather – Measuring the colour and colour difference of finished leather


14.1.1 Re-confirmed ISO standards after systematic review


14.2 Documents in CEN/ISO formal vote

- 

14.3 Documents in CEN/ISO Enquiry/DIS vote

- 

15. Discussion on active work items (WG3/IUF)

15.1 Documents after CEN/ISO Enquiry
15.2 New Work Items for discussion and to progress to CEN/ISO Enquiry

16. Review of published standards under WG3/IUF responsibility
16.1 Decisions on the comments received during ISO systematic reviews

16.2 Published EN ISO standards currently under ISO systematic revision process
The following ISO Standard is undergoing a systematic review, closing 4th June 2019.

17. Proposals for new work items
- Area measurement SSIP have been working on a project comparing different measurement techniques as given in EN ISO 19076:2016 Leather - Measurement of leather surface – Using electronic techniques and EN ISO 11646 Leather – Measurement of area.
Rosario Mascolo reported that for the SSIP project 16 different leather types, each with 3 pieces, are being measured. It is planned to complete the collection of measurement data by June 2019. To date the following measurements on machines in tanneries have been undertaken:

<table>
<thead>
<tr>
<th>Machine Type</th>
<th>Quantity</th>
<th>Completed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roller</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>(small)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(large)</td>
<td>14</td>
<td>11</td>
</tr>
<tr>
<td>Conveyor (no aspiration)</td>
<td>15</td>
<td>10</td>
</tr>
<tr>
<td>(with aspiration)</td>
<td>8</td>
<td>5</td>
</tr>
<tr>
<td>Scanning</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Pin wheel</td>
<td>7</td>
<td>1</td>
</tr>
</tbody>
</table>

Noted so far:
- roller machines are used commercially for furniture or automotive leathers;
- only one conveyor machine with 3.2 metres dimension was sold in Italy last year;
- pin wheel measurements were not possible with larger leathers;
- the normal tannery procedure was used for the speed for roller machines and for the aspiration for conveyor machines.

Comments about specific machine types that need to be considered for a future review of EN ISO 19076:

Roller type
- grain side up or down influences the result. Grain side down is about 1.5% more;
- speed (24 or 40 m/min) influences the results. Approx. 4% more at higher speeds;
- angle of insertion can change the surface measurement value.

Conveyor type
- aspiration influences the measurement result. Aspiration is necessary for long and heavy leathers to avoid slippage.

Digital image capture machines
- hairs influence measurement more than with other types of machines

Scanning machines
- gave very similar results to conveyor machines;
- wrinkled edges need to be flattened.
Comments regarding commercial measurement techniques:
- tanneries generally work at high speed;
- tanneries generally do not follow official calibration procedures;
- only 2 tanneries controlled the temperature and RH during measurement;
- results are normally rounded to 0,1 dm²;
- lack of knowledge about EN ISO 19076 and none are measuring according to the MID Directive.

Proposed next steps:
- complete data collection;
- consider revision of EN ISO 19076;
- consider including statistical precision data for the pin wheel.

- China has proposed developing a method for determining the cleaning efficiency of products for leather based on 10 rubs with a VESLIC rub tester. There are some methods for cleaning, especially from upholstery and automotive companies. China was requested to present a document outlining the method they are proposing.

18. Any other business for WG3/IUF


   The meeting resolutions are summarised in an Annex to these minutes.

20. Any other business for WG1/IUC, WG2/IUP and WG3/IUF

21. Date and location of next meeting:

   Next combined WG1/IUC, WG2/IUP and WG3/IUF meeting will be a 2 day meeting
   - at SSIP, Naples, Italy.
   - on Wednesday and Thursday, 25\textsuperscript{th} & 26\textsuperscript{th} September 2019 at 09.00 - 17.30h

   \textbf{Note}: there will also be a WG4 meeting of CEN/TC 289.

For information:

\textbf{Address of the new SSIP lab in Naples:}

Stazione Sperimentale per L’Industria delle Pelle (SSIP)
Via Campi Flegrei 34,
80078 Pozzuoli
Napoli, Italy.

SSIP plan to operate a shuttle bus from the Central Station in Pizza Garibaldi, Naples (hotels available here) and from the centre of Pozzuoli to SSIP.
Also there is a subway train from the Central Station to Pozzuoli. There are hotels and B&B at Pozzuoli for those wanting to stay there.
Please contact the respective Chairman for comments to these minutes.

**Convenors/Chairmen**
- Karine Lio (WG1/IUC)  
  klio@ctcgroupe.com
- Mike Wilson (WG2/IUP)  
  mike.wilson@satra.com
- Campbell Page (WG3/IUF)  
  campbellpage3@gmail.com

17th June 2019
ISO and CEN Resolutions

Decisions by combined meeting:
- IULTCS test Commissions: IUC, IUP and IUF
- CEN/TC 289 WG 1, WG2 and WG3

UNIC, Milan, 5th March 2019

1) **Activate new work project/work item - revision of EN ISO 17226-1:2018/IUC 19-1**
   - Leather – Chemical determination of formaldehyde – Part 1: Method using high performance liquid chromatography
   - Open a new project/work item and submit revised document for joint DIS Enquiry with ISO lead. (High priority project)

2) **Activate new work project/work item - revision of EN ISO 17130:2013/IUP 55**
   - Leather – Physical and mechanical tests – Determination of dimensional change
   - Open a new project/work item and submit revised document for joint DIS Enquiry with ISO lead.

3) **Activate new work project/work item - revision of EN ISO 17131:2012 / IUC 56**
   - Leather – Identification of leather with microscopy
   - Open a new project/work item and submit revised document for joint DIS Enquiry with ISO lead.

Proceed to joint FDIS formal vote (ISO lead) for the following Standards:

4) **- prEN ISO/DIS 17076-1:2012/IUP 48-1**
   - Leather – Determination of abrasion resistance – Part 1: Taber method
   - DIS /Enquiry comments reviewed and modified document prepared. Proceed to formal vote.

5) **- prEN ISO/DIS 20136:2017 / IUC 37**
   - Leather – Determination of degradation by micro-organisms
   - DIS/Enquiry closes on 7th March. If no significant technical comments, proceed to Formal vote.

CEN only Resolutions

6) **Activate new work item – adoption of ISO 10195:2018 as EN Standard**
   - Leather – Chemical determination of chromium (VI) content in leather – Thermal pre-ageing of leather and determination of hexavalent chromium
   - Open a new work item to adopt ISO 10195 as EN Standard.

7) **Activate new work item – adoption of ISO 22517:2018 as EN Standard**
   - Leather – Chemical determination of pesticide residues content in leather
   - Open a new work item to adopt ISO 22517 as EN Standard.
Systematic reviews - ISO only Resolutions
Decisions by IULTCS leather test method meeting (IUC, IUP & IUF)
in a combined meeting with CEN/TC 289/WG1, WG2 & WG3

Milan, 5th March 2019

Systematic reviews:

ISO 15702:2013   No technical comments received. Meeting approved a resolution that the Standard be re-confirmed.