



## Minutes of the 26<sup>th</sup> Solar Keymark Network meeting

**Meeting time:**

Tuesday, March 5<sup>th</sup>, 2019, 13:00 - 18:00

Wednesday, March 6<sup>th</sup>, 2019, 09:00 - 13:00

**Meeting location:**

**RISE-** Research Institutes of Sweden, Stockholm, Sweden



## Opening of the meeting /AB

- Welcome to the 26th SKN Meeting.
- Appreciation to RISE for the meeting hosting – special thanks to Ms Charlotte Ehn from RISE for her help and excellent collaboration in the preparation phase of the meeting.
- The SKN competition rules ("[SKN\\_N0426R0\\_NonCompetition.pdf](#)") were distributed in advance (link on the invitation) and they were showed to the attendees at the beginning of the meeting. The attendees were asked to comment in case they would not agree to the document. Harald Drück proposed to delete the phrases:
  - a. "Off the record" conversations are strictly prohibited" and
  - b. "Price or any elements of price or pricing policies, including costs, discounts, rebates, profit margins, etc." referring to the areas that should not be discussed during meetings.

### M26.D1 Proposal for Decision to modify the Document " SKN\_N0426R0\_NonCompetition"

#### Voting result:

PG-A: 5 Yes 1 No 2 Abstentions (100%)  
PG-B: 10 Yes 1 No 2 Abstention (100%)  
PG-C: 7 Yes 0 No 0 Abstention (100%)  
Total: 22 Yes 2 No 4 Abstention (100%)

All voting requirements for decisions are fulfilled: The decision is approved by the SKN. Revised document: "[SKN\\_N0426R0\\_NonCompetition.pdf](#)"

It will be checked before the next meeting together with PD how to modify this document to match the needs of the SKN and whether the document is really needed."

The agenda for this meeting is the document "[SKN\\_N0434R2\\_Agenda26\\_Stockholm.docx](#)" (sent out on Tuesday 19 February 2019)

- Thanks to Leopoldo Mico for managing the webmeeting/voting.
- Explanation of the role of the SKN: The main task of the SKN is to agree on uniform procedures between the different actors (accredited solar thermal test labs, certifiers, inspectors and manufacturers) working according to the Solar Keymark Scheme Rules as well as the further development of Solar Keymark certification in particular and certification of solar thermal products in general.
- Applicable Internal Regulations for this Solar Keymark Network: "[SKN\\_N0102R19\\_InternalRegulations](#)", approved by the SKN on 2018-10-23
- Reminder: **Resolution and Decision**  
**Resolutions** are decisions to be implemented in the Solar Keymark specific Scheme Rules (document SKN\_N0106RX) and the SKN Internal Regulations (document SKN\_N0102RX).
  - Modifications of the Scheme Rules (incl. Annexes) must be approved by the Keymark Management Organisation KMO (DINCERTCO). This may take 2-3 weeks.
  - Modifications of the Internal Regulations need no external approval and enter into force upon approval of the resolution by the SKN.**Decisions** concern any other decisions of the SKN (e.g. Formation of a WG, financial issues, elections, etc.).
  - Decisions are included in the latest version of the Solar Keymark Decision list (document SKN\_N0100RX) and enter into force upon approval of the Decision by the SKN.
- **Voting Rules**  
According to the IR the Certification bodies and testing laboratories are obligatory members of the SKN and have to participate in the SKN meetings.
  - Additional requirement for Decisions: 50% of majority and majority of peer groups
  - Additional requirement for changing the Internal Regulations RESOLUTION: 2/3 majority and unanimous decision of peer groups
  - Additional requirement for changing the "Solar Keymark Scheme Rules" (RESOLUTION): 2/3 majority.
  - 2/3 of the industrial representatives can postpone a decision to the next meeting
  - 2/3 majorities within a peer group can veto any decision.
  - Abstentions are not counted as vote to define the 2/3 majority
  - Peer Groups as defined in internal regulations: PG-A: Certification bodies, PG-B: Test labs and Inspection bodies, PG-C: Industry.

	<ul style="list-style-type: none"> <li>• <b>Participation in the meeting:</b> <ul style="list-style-type: none"> <li>- There are 20 listed test laboratories/inspection bodies. Present in the meeting : <b>16</b>. Not present in the meeting : 4 (<b>Demokritos /GR, ENEA/IT, INTA/ES, TSU Piestany/SK</b>).</li> <li>- There are 12 listed Certification Bodies. Present in the meeting: <b>8</b>. Not present in the meeting: <b>3</b> (<b>CERTIF/PT, MIRTEC /GR, TSU Piestany /SK</b>)</li> <li>- Industry and national associations representatives: <b>8</b></li> </ul> </li> </ul> <p>IMPORTANT: This attendance requirement is fulfilled if the organization has voted at least on 75% of the votes.</p> <p>Chairman / Manager and Secretary have no voting rights</p> <p>Considering the above the voting requirements were fulfilled.</p> <p>VD will send a relevant letter to the obligatory members that were not participating in the meeting.</p>
2	<p><b>Introduction of participants /All</b></p> <ul style="list-style-type: none"> <li>• Short participants introduction. The list of registered participants was distributed by VD on 19 February 2019.</li> <li>• The list of attendees can be found at the end of these minutes.</li> </ul> <p>Excuses from:</p> <ul style="list-style-type: none"> <li>- Stamatios Babalis, NCSR "DEMOKRITOS"</li> </ul> <p>Attending via web:</p> <ul style="list-style-type: none"> <li>- Costas Travarasos, Greek Solar Industry Association</li> <li>- Jean Marc Suter, Suter Consulting</li> <li>- Ozan Türk, SPF</li> <li>- Stathis Chrysafis, NCSR "DEMOKRITOS"</li> </ul>
3	<p><b>Approval of the agenda /All</b></p> <p>Agenda was approved, without voting. No objections from the Network. <span style="float: right;"><b>Document:</b> <a href="#">SKN_N0434R2_Agenda26_Stockholm.docx</a></span></p>
4	<p><b>Comments to the minutes of the 25<sup>th</sup> SKN meeting /AB</b></p> <p>The minutes of the 25<sup>th</sup> SKN meeting were approved, without voting. No objections from the Network. <span style="float: right;"><b>Document:</b> <a href="#">SKN_N0425R1_MeetingMinutes25thWeb_Final.pdf</a></span></p>
5	<p><b>Review of Decision list / VD</b></p> <p>Report from VD: No open items were identified where action is required. One editorial remark was received concerning the update of the contents that will be considered in the next version of SKN_N0100</p> <p style="text-align: right;"><b>Document:</b> <a href="#">SKN_N0100R24_DecisionList</a></p>
6	<p><b>Checking entries/certificates in SKN web / VD</b></p> <p>TLs and CBs shall check and update their entries in SKN web. Moreover all peer groups should update their contacts in the SKN communication lists, by mailing the contact persons (name/e-mail) to VD.</p>
7	<p><b>Dates and places of next meeting(s) /AB/VD</b></p> <ul style="list-style-type: none"> <li>- 27<sup>th</sup> meeting: 2019 - October 22<sup>nd</sup>, 09:00 - 12:00 and October 23<sup>rd</sup>, 09:00 - 12:00 Web Meeting</li> <li>- 28<sup>th</sup> meeting: 2020 - March 10<sup>th</sup>, 13:00-18:00 and March 11<sup>th</sup> 09:00-13:00, Tunis, Tunisia (hosted by CTMCCV)</li> <li>- 29<sup>th</sup> meeting: 2020 - October 20<sup>th</sup>, 09:00 - 12:00 and October 21<sup>st</sup>, 09:00 - 12:00 Web Meeting</li> <li>- 30<sup>th</sup> meeting: 2021 - March 9<sup>th</sup>, 13:00-18:00 and March 10<sup>th</sup>, 09:00 - 13:00 – Athens, Greece (hosted by EBHE)</li> </ul> <p><b>M26.D2 Proposal for Decision:</b></p>

	<p><i>"The 28<sup>th</sup> meeting: 2020 - March 10<sup>th</sup> 13:00 to March 11<sup>th</sup> 14:00, will be held in Tunis instead of Athens. The 30<sup>th</sup> meeting: 2021 - March 9<sup>th</sup>, 13:00-18:00 and March 10<sup>th</sup>, 09:00 - 13:00 will be held in Athens."</i></p> <p style="text-align: right;"><b>Document:</b> <a href="#">SKN_N0450R0_AB SKN Meeting 2020 in Tunis</a></p> <p><b>Voting result:</b></p> <ul style="list-style-type: none"> <li>PG-A: 5 Yes 1 No 2 Abstentions (100%)</li> <li>PG-B: 10 Yes 1 No 2 Abstention (100%)</li> <li>PG-C: 7 Yes 0 No 0 Abstention (100%)</li> <li>Total: 22 Yes 2 No 4 Abstention (100%)</li> </ul> <p>All voting requirements for decisions are fulfilled: The decision is approved by the SKN.</p>
8	<p><b>Funding of proposals from the 10<sup>th</sup> SCF call/ SCF steering group for SCF project applications (10<sup>th</sup> call) / H. Drück</b></p> <p><b>M26.D3 Proposal for Decision:</b></p> <p><i>"The SCF applications recommend by the Solar Certification Fund Steering Group for funding as described in document "SCF_N0023R2"/"SKN_N0435R0-SCF10-Recommendations", are accepted and the corresponding activities will be funded."</i></p> <p style="text-align: right;"><b>Document:</b> <a href="#">SKN_N0435R0-SCF10-Recommendations</a></p> <p><b>Voting result:</b></p> <ul style="list-style-type: none"> <li>PG-A: 8 Yes 0 No 0 Abstentions (100%)</li> <li>PG-B: 12 Yes 0 No 0 Abstention (100%)</li> <li>PG-C: 7 Yes 0 No 0 Abstention (100%)</li> <li>Total: 27 Yes 0 No 0 Abstention (100%)</li> </ul> <p>All voting requirements for decisions are fulfilled: The decision is approved by the SKN.</p>
9	<p><b>New Solar Keymark Scheme Rules /A. Bohren</b></p> <p><b>M26.R1 Proposal for Resolution:</b> The SK Scheme Rules (incl. the Annexes) with document identifiers "SKN_N0444R0_SK SchemeRules" replace as a complete set the currently valid set of Scheme Rules (incl. Annexes) with document identifiers "SKN_N0106R31-SKNSchemeRules"</p> <p style="text-align: right;"><b>Document:</b> <a href="#">SKN_N0466_AB New Scheme Rules</a>  <a href="#">SKN_N0444R1_SK_Scheme Rules</a>  <a href="#">Annexes for SKN_N0444R1 SK SchemeRules (zip file)</a></p> <p>Notes:</p> <ul style="list-style-type: none"> <li>- The Scheme Rules need approval by the KMO before entering into force. If approved by the KMO the SKN will be informed by email and the new Scheme Rules will enter into force at this date of publication.</li> <li>- The Scheme Rules include a fall back clause to make sure that in case of any overlooked error or inconsistency the previous version of the Scheme Rules and Annexes can be applied (i.e. the set of documents that is valid today).</li> <li>- A 2/3 majority of all voters is required.</li> <li>- If the Scheme Rules are approved, all new/modified documents following resolutions from today are included as proposed and approved in the new SK Scheme Rules, but probably under a different title/Annex. Eventual inconsistencies are checked after this meeting and will be cleared (i.e. by making proposals for resolutions) latest until the next SKN meeting in October. For minor inconsistencies by decisions by circular.</li> </ul>

	<p>– There is still (as up to now) double content in the Scheme Rules and in the Internal Regulations about the SKN Fees. This will be analysed and harmonized (by AB/VD/KMO/PD) to make a proposal to the SKN at the 27th meeting to modify Internal Regulations and/or Scheme Rules.</p> <p><b>Voting result:</b>  PG-A: 7 Yes 0 No 0 Abstentions (100%)  PG-B: 11 Yes 0 No 0 Abstention (100%)  PG-C: 7 Yes 0 No 0 Abstention (100%)  Total: 25 Yes 0 No 0 Abstention (100%)</p> <p>All voting requirements for resolutions are fulfilled: The resolution is approved by the SKN, <b>valid in force from 1<sup>st</sup> June 2019.</b></p>
10	<p><b>Annex E revision / A. Bohren</b>  It is proposed to established a WG for the revision of Annex E in the framework of the New Scheme Rules  The Current Annex E ("Factory Production Control" should be revised and integrated into Product Specific Annexes (PSA). Furthermore FPC should be described in the standard (at least for collectors)  <b>M26.D4 Proposal for Decision:</b> A WG is established to revise the current Annex E and to propose revised text that can be integrated in the PSAs.</p> <p><b>Voting result:</b>  PG-A: 7 Yes 0 No 0 Abstentions (100%)  PG-B: 11 Yes 0 No 0 Abstention (100%)  PG-C: 7 Yes 0 No 0 Abstention (100%)  Total: 25 Yes 0 No 0 Abstention (100%)</p> <p>All voting requirements for decisions are fulfilled: The decision is approved by the SKN  <b>Members of WG:</b> AB (Head), Stephan Fischer, Ulrich Fritzsche, Ina Förster, Alberto Garcia de Jalón, Daniele Bernacchioni, Maria del Val Varas Garcia, Henry Rosik.</p>
11	<p><b>Update on SKN task Force on taxation matters (M22.D10) / P. Dias</b>  Related to:  <i>"Decision M22.D10: A small task-force (TF) will be created in order to further assess the legal requirements in Belgium with regard to the SKN activities. The TF shall request legal advice to discuss options and propose options at the next SKN meeting.  The TF members are: Pedro Dias (Chair), Andreas Bohren (AB); Harald Drück (HD). For the purpose of this work, the TF is allowed to use up to EUR 10k of SKN reserves. Solar Heat Europe/ESTIF will be allowed to use EUR 3k from SKN funds to cover the costs of the performed study."</i></p> <p>This item is on-going.</p>
12	<p><b>Update on energy labelling topics / P. Dias</b></p> <ul style="list-style-type: none"> <li>- EC product database (EPREL) –</li> <li>- Follow up on Labelpack A+ project</li> <li>- Report from SCF project 9C07.1 OnlineToolPaclage_SHE</li> </ul> <p style="text-align: right;"><b>Document:</b> <a href="#">SKN_N0458RO_SKN26-Labeling-HARP-EPREL-r1</a></p>
13	<p><b>Data sheet SKM; "unglazed collectors" should be WISC / K. Kramer</b>  Minor modifications of the Scenocalc datasheet required. Patrik Ollas will take care about this.</p>

14	<p><b>Data Sheet, SAHC not represented / K. Kramer</b> Korbinian Kramer informed that he will send a relevant Annex in due time</p>
	<p><b>Scenocalc 6.0 / “EK-TSuB – Prüflaboratorien”_H. Drück</b> Background: Version Scenocalc 6.0 as well as further versions of Scenocalc calculates for the generation of the data sheets of Solar Keymark certificates values without taking into account the max. temperature difference during performance measurement + 30 K. Solution: Values not fulfilling the requirement regarding the max. temperature difference during performance measurement + 30 K shall be set to zero on page 1 in table „Power output per collector“ . Additionally the values on page 2 in table “annual collector output” shall be set to zero, if the mean fluid temperature minus the mean ambient temperature of the locations exceeds the max. temperature difference during performance measurement + 30 K.</p> <p><b>M26.R2 Proposal for resolution:</b> Scenocalc will be modified in the following way: "Values not fulfilling the requirement regarding the max. temperature difference during performance measurement + 30 K shall be set to zero on page 1 in table „Power output per collector“ . Additionally the values on page 2 in table “annual collector output” shall be set to zero, if the mean fluid temperature minus the mean ambient temperature of the locations exceeds the max. temperature difference during performance measurement + 30 K. " <b>Document:</b> <a href="#">SKN_N0443R0_Annex P4.1 Datasheet ScenoCalc v6.0 - 30K</a></p> <p><b>Voting result:</b> PG-A: 7 Yes 0 No 0 Abstentions (100%) PG-B: 11 Yes 0 No 0 Abstention (100%) PG-C: 7 Yes 0 No 0 Abstention (100%) Total: 25 Yes 0 No 0 Abstention (100%)</p> <p>All voting requirements for resolutions are fulfilled: The resolution is approved by the SKN.</p>
15	<p><b>Scenocalc 6.0 / “EK-TSuB – Prüflaboratorien”_H. Drück</b> Background: In Scenocalc version 6.0 the aperture area was introduced again. Solution: A new version of Scenocalc shall be prepared that allows for the generation of Solar Keymark data sheets without mentioning the aperture area. After some discussion the following resolution was proposed</p> <p><b>M26.R3 Proposal for resolution:</b> The aperture area shall further on be published in Scenocalc but in a way to avoid confusion with the gross area. Partik Ollas will take care and make the necessary modifications of the datasheet.</p> <p><b>Voting result:</b> PG-A: 4 Yes 0 No 2 Abstentions (100%) PG-B: 11 Yes 0 No 0 Abstention (100%) PG-C: 6 Yes 0 No 1 Abstention (100%)</p>

	<p>Total: 21 Yes 0 No 3 Abstention (100%)</p> <p>All voting requirements for decisions are fulfilled: The decision is approved by the SKN.</p> <p><b>Note:</b> For this Item a first vote was initiated but was stopped in the middle and restarted just after. A discussion took place between the first opening of the vote and the actual vote. The voting result represents the outcome of the final vote.</p>
16	<p><b>Report from SK Database WG on Database and IT infrastructure / G.v. Amerongen, P. Dias</b></p> <p style="text-align: right;"><b>Document:</b> <a href="#">SKN N0451R0 Item 16 Revised SK database 01 03 2019</a></p> <p>G.v. Amerongen informed that, an Excel app will be distributed, with which current version datasheets can be uploaded. He is asking the SKN to agree with following: The certification bodies are responsible for the correctness of the data in the database. The certification bodies upload new / revised datasheets and maintain the status of certificates in the database, using the tools made available by the database manager</p> <p>SKN members are invited to check the database at <a href="http://www.duurzaamloket.nl/SK3/">http://www.duurzaamloket.nl/SK3/</a> and comment. Deadline for comments is <b>31<sup>st</sup> of July 2019</b>.</p>
17	<p><b>ScenoCalc v6.0_fixing bugs / P. Ollas</b></p> <p>Background:</p> <p>After the voting, approval and release of the new ScenoCalc software (v6.0) there were some bugs identified that need to be corrected,</p> <ul style="list-style-type: none"> <li>- User choice of tracking mode for evaluation option "A" were not registered by ScenoCalc</li> <li>- Unrealistic output levels occurring due to faults in irradiance levels</li> </ul> <p>Solution:</p> <p>Request to seek funding of €1 500 to update the software and related documentation.</p> <p><b>M26.D5</b> An amount of 1500€ will be paid to Patrik Ollas to modify the Scenocalc as decided in this meeting</p> <p style="text-align: right;"><b>Document:</b> <a href="#">SKN N0452R0 ScenoCalc v6.0 fixing bugs Item17 OLLAS</a></p> <p><b>Voting result:</b></p> <ul style="list-style-type: none"> <li>PG-A: 8 Yes 0 No 0 Abstentions (100%)</li> <li>PG-B: 12 Yes 0 No 0 Abstention (100%)</li> <li>PG-C: 7 Yes 0 No 0 Abstention (100%)</li> <li>Total: 27 Yes 0 No 0 Abstention (100%)</li> </ul> <p>All voting requirements for decisions are fulfilled: The decision is approved by the SKN.</p>
18	<p><b>Working group on Elaboration of a procedure for issuing collector test reports based on transferring of data from existing test reports / S. Scholz</b></p> <p><b>M26.R4</b> Proposal for resolution</p> <p>The current Annex G ("SKN N0106_AnnexG_R2 Solar KEYMARK certificates and sub-licenses for other brands, product names, and sellers") of the Solar KEYMAKR Scheme Rules is replaced by the modified Annex G (SKN N0106_Annex G_R3).</p> <p>(Remark: As the general new structure of the Solar Keymark Scheme Rules was approved by the SKN, the proposed Annex G is integrated in the Solar Keymark Scheme Rules as chapter 7 without further modification)</p> <p style="text-align: right;"><b>Document:</b> <a href="#">SKN N0106 AnnexG R3</a></p> <p><b>Voting result:</b></p> <ul style="list-style-type: none"> <li>PG-A: 5 Yes 0 No 2 Abstentions (100%)</li> </ul>

	<p>PG-B: 12 Yes 0 No 2 Abstention (100%)  PG-C: 7 Yes 0 No 0 Abstention (100%)  Total: 24 Yes 0 No 4 Abstention (100%)</p> <p>All voting requirements for resolutions are fulfilled: The resolution is approved by the SKN.</p>
19	<p><b>Improvement of the SCF working rules / Pedro Dias , Harald Drück</b></p> <p style="text-align: right;"><b>Document:</b> <a href="#">SKN_N0438R1_SCF_N0001R16WorkingRules</a></p> <p><b>M26.D6 Proposal for Decision</b></p> <p>The SKN accepts the improved version of the SCF working rules as described in document "SKN_N0438R1_SCF_N0001R16WorkingRules"</p> <p><b>Voting result:</b></p> <p>PG-A: 8 Yes 0 No 0 Abstentions (100%)  PG-B: 12 Yes 0 No 0 Abstention (100%)  PG-C: 7 Yes 0 No 0 Abstention (100%)  Total: 27 Yes 0 No 0 Abstention (100%)</p> <p>All voting requirements for decisions are fulfilled: The decision is approved by the SKN.  Harald Drück will present a new version of the document for the working rules and a revised template for the SCF agreements in the next SKN meeting.</p>
20	<p><b>Status of the PVT Working Group / U. Fritzsche</b></p> <p>Topics to be discussed/ Members of PVT WG</p> <p>No progress has been made in this working group so far. It was unanimously agreed by the meeting participants to re-activate the WG with members: Ulrich Fritzsche (Head), Emmanuel Leger, Harald Poscharnig, Oscar Mogro, María del Val Varas García Alberto García de Jalón, Christos Travasaros, Korbinian Kramer, Ina Förster, Carsten Lampe, Christos Nikolaidis, Shawn Martin.</p>
21	<p><b>PVT protocol: Status and new USA approach / Ch. Nikolaidis - FEGEN SOLAR LLC</b></p> <p style="text-align: right;"><b>Documents:</b> <a href="#">SKN_N0453R0_Presentation_FEGEN</a>  <a href="#">SKN_N0454R0_AB_Announcement_PVT_Webinar</a></p> <p>It was announced by AB that a webinar on PVT Certification - lessons learnt when certifying PVT products, is organised for the 9<sup>th</sup> of April 2019 (15:00 – 16:00 CEST). The webinar is organised by SHC Task60 Subtask D and it is open to all PVT stakeholders / FOC.  For registration an e-mail should be sent to the Subtask D managers <a href="mailto:andreas.haeberle@spf.ch">andreas.haeberle@spf.ch</a> and <a href="mailto:daniel.zenhaeusern@spf.ch">daniel.zenhaeusern@spf.ch</a>.</p>
22	<p><b>WG-In-Situ-Certification / S. Mehnert_K. Kramer</b></p> <p><b>M26.R5 Proposal for Resolution</b></p> <p><b>Supervised manufacturers testing / Testing at the manufacturers' premises</b></p> <p>Section 7 of the "Specific CEN Keymark Scheme Rules for Solar Thermal Products - Version 31 - March 2018" currently states, that „Procedures such as "supervised manufacturers' type testing" and/or "type testing at manufacturers' premises" are not included in these Scheme Rules.</p> <p><b>The Solar Keymark Network decides, to amend the above mentioned sentence as follows:</b></p> <p>Procedures for “supervised manufacturers’ type testing” are not included in these Scheme Rules. Type testing at the “manufactures’ premises” may be possible if all requirements</p>

of Annex O are fulfilled.

A “manufacturers’ premises” is herein understood as either the place of production or the operational facility.

**Documents:** [SKN\\_N0440R0\\_AnnexO\\_RO\\_StM\\_20190211\\_StM](#)  
[SKN\\_N0436R0\\_AnnexO\\_RO\\_StM\\_20190110](#)

**Voting result:**

PG-A: 4 Yes 0 No 2 Abstentions (100%)  
PG-B: 8 Yes 0 No 3 Abstention (100%)  
PG-C: 5 Yes 0 No 2 Abstention (100%)  
Total: 17 Yes 0 No 7 Abstention (100%)

All voting requirements for resolutions are fulfilled: The resolution is approved by the SKN.

Remark: As the new Solar Scheme Ruls were approved, M26.R5 was implemented in the following way:

- *Section 7 of the "Specific CEN Keymark Scheme Rules for Solar Thermal Products - Version 31 - March 2018" which was stating that Procedures such as "supervised manufacturers' type testing" and/or "type testing at manufacturers' premises" are not included in the Scheme Rules* was not copied into the new Solar Keymark Scheme rules.
- The Annex O as presented by ise was adopted as received as Annex P5.5 of the new Solar Keymark Scheme Rules. The “manufacturers’ premises” are defined in this document.

**M26.R6 Proposal for Resolution**

**The Solar Keymark Network decides, that in case of in-situ measurements the following rules apply:**

Case 1: in-situ-tests/-measurements are planned prior the installation of the collector field. Sampling procedure is applicable. The testing laboratory shall randomly select those collectors which are going to be tested within the field and shall define its positions within the field.

Case 2: the field is already installed: Random selection shall be done out of the field by choosing a collector/collector row for installing the measurement equipment.

If neither case 1 nor case 2 are applicable for some reasons (e.g. the field consists of a too small number of collectors), a different solution shall be agreed with the certifier. For example in order to compensate the random selection, more attention can be paid to physical inspection

**Voting result:**

PG-A: 4 Yes 0 No 2 Abstentions (100%)  
PG-B: 8 Yes 0 No 3 Abstention (100%)  
PG-C: 5 Yes 0 No 2 Abstention (100%)  
Total: 17 Yes 0 No 7 Abstention (100%)

All voting requirements for resolutions are fulfilled: The resolution is approved by the SKN.

Remark: This sampling procedure is already described in the document which was adopted as Annex P5.5 in M26.R5.

**SCF6-LCA\_Calculator / H. Drück IGTE/SWT**

23 Project “*Elaboration of standardised methods for life cycle assessment of solar thermal products focusing on environmental and financial aspects*”

Presentation of “SCF6-LCA\_Calculator” for the life cycle assessment of solar thermal products concerning environmental and financial aspects

**Documents:** [SKN\\_N0455R0\\_SCF6-LCA\\_SWT\\_March19HD1R1](#)

24 **Annex D / O. Türk**

**M26.R7 Proposal for Resolution**

	<p>Annex D is replaced by the revised document "SKN_N0106_AnnexD_R7 proposal". If the new structure of the Scheme Rules is approved, the document will be integrated – as it is - in chapter 4 of the Annex Q1 (family definitions for systems) without further note.</p> <p style="text-align: right;"><b>Documents:</b> <a href="#">SKN_N0106_AnnexD_R7_proposal</a></p> <p><b>Voting result:</b></p> <p>PG-A: 4 Yes 0 No 2 Abstentions (100%)  PG-B: 8 Yes 0 No 3 Abstention (100%)  PG-C: 5 Yes 0 No 2 Abstention (100%)  Total: 17 Yes 0 No 7 Abstention (100%)</p> <p>All voting requirements for resolutions are fulfilled: The resolution is approved by the SKN.  Remark: Those parts of the proposed Annex D which were already published in the EN 12976-2:2017 were deleted from the proposal. The remaining content mainly dealing with families of ICS was included in the SKN_N0444_Annex Q1 Systems EN 12976 General R01.docx</p>
25	<p><b>Thermodynamic collectors / Follow up on Decision M24.D8 /S. Scholz</b>  <b>M26.R8 Proposal for Resolution:</b>  The "Recommendation of Working Group "Thermodynamic" Collectors" (Doc number SKN_N0393R1) are integrated as proposed in the Scheme Rules (i.e. in the product specific annex for collectors).</p> <p style="text-align: right;"><b>Documents:</b> <a href="#">SKN_N0393R1_RecFromWG-Thermodynamic</a></p> <p>This item is postponed due to non-agreement of the WG members in the document <a href="#">SKN_N0393R1_RecFromWG-Thermodynamic</a> submitted for resolution. The WG members agreed to provide a revised version for resolution consideration in due time.  The SK-Chairman will convene a webmeeting to clarify the sentence "<i>The product was tested and certified as a solar collector and is used as part of a solar thermal system with a heat pump directly integrated in the solar collector loop.</i>" for which the WG did not find a consensus.</p>
26	<p><b>Conversion of unglazed collectors to WISC / A. Bohren</b>  Background:  In Scenolcalc 5, the performance of unglazed collectors was computed using a wrong formula. If a manufacturer asks for a new datasheet it should be the new datasheet using Version 6.x. To use this version the performance data for unglazed collectors must be transferred to the new WISC format as defined in ISO 9806:2017. The formulas presented in the attached document shall be used (which will be added to the Scheme Rules).</p> <p>Solution:  To issue Solar Keymark Datasheets in the version 6.x, parameters of unglazed collectors (ISO 9806:2013 and earlier) can be converted into WISC parameters (ISO 9806:2018) using the formulas indicated in SKN_N0440R0.</p> <p style="text-align: right;"><b>Documents:</b> <a href="#">SKN_N0445R0_Conversion of Unglazed to WISC</a></p> <p>This item was omitted due to shortage of time. The decision will be taken by circular vote.</p>
27	<p><b>ValiCol (SCF) project / S. Abrecht</b>  Intermediate presentation</p>

		<b>Documents:</b> <a href="#">SKN_N0456R0_2019-03- Presentation ValiColl-</a>
	<a href="#">Abrecht</a>	
28	<p><b>Letter to CBs and new date for SKN webinar (6<sup>th</sup> June 2019)</b></p> <p>VD referred that as it was discussed and unanimously agreed during the 25th SKN web meeting, the industrial SK certificate holders were to be motivated for actively participation in SKN and standardization, by a letter and a webinar. Indeed, a letter was distributed last year to CBs for this reason and a webinar was planned for January 2019. This effort was not as successful as it was expected, the letter didn't reach a major part of SKN industrial SK certificate holders, forcing to re-schedule the webinar for <b>6th of June 2019</b>. The document <a href="#">SKN_N0447R0_CB_Industrial Participation &amp; Webinar</a> has already been distributed to CBs (on 22<sup>nd</sup> of February 2019) in order to be sent to the respective industrial SK certificate holders. Already DIN Certco and AENOR have distribute the letter.</p>	<b>Documents:</b> <a href="#">SKN_N0447R0_CB_Industrial Participation &amp; Webinar</a>
29	<p><b>Report on Update on 10 % Rules WG /S. Fischer</b></p> <p>S.Fischer will include financial issues in the next version of the methodology presented. S. Scholz will forward a relevant leaflet with costs and financial data as it is handled in other certification schemes. S. Fischer will update and make a proposal to the SKN for a decision/resolution in due time</p>	<b>Documents:</b> <a href="#">SKN_N0427R1_SpecialTest</a>
30	<p><b>New Equivalent absorber coatings</b></p> <p>No input</p>	
31	<p><b>New Equivalent glazing</b></p> <p>No input</p>	
32	<p><b>New Equivalent insulation</b></p> <p>No input</p>	
33	<p><b>Report/update on "Inter-laboratory Comparison - ILC on Data Analysis", SCF7 Project / AB</b></p> <p>Abohren will send out a revised version of the ILC2016. It is agreed that only a few data sets shall be analysed to reduce the work load.</p>	
34	<p><b>Report Air Collectors WG / K. Kramer</b></p> <p>No update</p>	
35	<p><b>Information from CEN Keymark Management Organization / K. Vehring</b></p> <p>S. Scholz referred on the following:</p> <ul style="list-style-type: none"> <li>- New CEN KEYMARK website online <a href="http://www.keymark.eu">www.keymark.eu</a> (with general and product related information)</li> <li>- New CEN KEYMARK database under construction</li> <li>- New templates and flyers, e-mail signatures, template for conferences</li> <li>- Applied for joined KEYMARK event at EU Sustainable Energy Week (17-21 June 2019)</li> <li>- Joined KEYMARK conference on 15/16 October in Leuven</li> <li>- Security KEYMARK under construction</li> <li>- Assessment of KMO scheduled</li> </ul> <p>Moreover he encouraged the participants to:</p> <ul style="list-style-type: none"> <li>- register for the Newsletter</li> <li>- provide content for using in it. To sue the page and give feedback.</li> <li>- to use the customers feedback form</li> </ul>	

36	<b>Update on complaints and Reports on misuse of Solar Keymark / S. Scholz</b> No input	
37	<b>Report from CB Working group / S. Scholz</b>	
38	<b>Update on Action Plan working groups:</b> <ul style="list-style-type: none"> <li>- AP1 Strategy WG</li> <li>- AP2 Marketing and Communication /Pedro Dias</li> <li>- AP3 Installers WG (K. Vehring) – on hold</li> <li>- AP6 Legal Requirements (G. v Amerongen)</li> </ul> Comment Chairman: No update possible. The project should be terminated until next SKN.	
39	<b>Solar Certification Fund Projects – General Status Reports / PD</b>	<b>Documents:</b> <a href="#">SKN_N0459R0_190305 - SKN26_SCF_Project-r1</a> <a href="#">SKN_N0460R0_190305 - SKN26-Financial update-r1</a>
40	<b>Update on Global Solar Certification Network</b>	
41	<b>Update on standardisation</b> <ul style="list-style-type: none"> <li>- CEN TC 312 / ISO TC 180 (VD)</li> <li>- CEN/TC 312/WG1 and ISO/TC 180/WG4 (AB)</li> <li>- CEN/TC 312/WG2 (V. Sharma)</li> <li>- CEN/TC 312/WG3</li> </ul> Updates from Liaison officers: <ul style="list-style-type: none"> <li>- S.Fischer (IEC/TC117)</li> <li>- K.Kramer(IEC/TC128)</li> <li>- J-M. Suter (TC164)</li> <li>- G.v.Amerongen (TC 228 and TC371)</li> </ul> Status for accreditation certificates on web	<b>Documents:</b> <a href="#">SKN_N0461R0_LiasTC117 report TC180 SKNW March 2019</a> <a href="#">SKN_N0462R0_TC254-ISE_Kramer</a> <a href="#">SKN_N0448R0_Liaison TC164-WG2 - Update Feb.2019 – Suter</a> <a href="#">SKN_N0464R0_Validation of assumptions concerning Legionella - a contribution for the discussion on EN 806-2 – 181116</a> <a href="#">SKN_N0465R0_Preheating systems</a> <a href="#">SKN_N0463R0_Item 41 9C11.3 LiatsTC228-371_vAC 05 03 2019</a>
42	<b>Update on solar heating and cooling market /PD</b> P.D referred to the European solar heating and cooling market. He mentioned that there is an increase in Greece and Denmark mainly due to favourable regulation, and a decrease in Germany and Austria.	
43	<b>Any other business</b> Harald Drück referred to “Scientists4Future” initiative where active researchers and scientists related to German-speaking countries sign the statement of scientists on the protests for more climate. More information on <a href="http://eepurl.com/giu9av">http://eepurl.com/giu9av</a> .	
44	The meeting was closed on Wednesday, March 6th, 2019, 13:10. Thank you all participating in the meeting and for supporting solar thermal technologies.	

AB: Andreas Bohren, SPF, Chairman Solar Keymark Network, [Andreas.Bohren@spf.ch](mailto:Andreas.Bohren@spf.ch)

VD: Vassiliki Drosou, CRES, Manager of Solar Keymark Network, [drosou@cres.gr](mailto:drosou@cres.gr)

PD: Pedro Dias, ESTIF Secretary General, Administrative Secretary of Solar Keymark Network, [pedro.dias@estif.org](mailto:pedro.dias@estif.org)  
Categories of participants: A:CB, B:Test Lab & Inspection bodies, C: Industrial representatives

## 26<sup>th</sup> Solar Keymark Network meeting\_Stockholm, Sweden

First Name	Last Name	Company / Organization	Type of Organization	Name of nominating organization	5th March	6th March
Andreas	Bohren	SPF	SKN Chairman / Test lab		ARS	ARS
Vassiliki	Drosou	CRES/SKN	SKN Manager			
Pedro	Dias	SHE/ESTIF	SKN Secretariat			online partici
Charlotte	Ehn	RISE	Certification body		Charlotte Ehn	Ehn
Cheikh	FAYE	EUROVENT CERTITA CERTIFICATION	Certification body			
Ina	Förster	DIN CERTCO	Certification body			
IOANNIS	ALEXIOU	DQS HELLAS	Certification body			
LEFTERIS	PEKAS	TUV CYPRUS (TUV NORD)	Certification body			
Magnus	Sturesson	RISE	Certification body		Magnus	Magnus
Maria del Val	Varas Garcia	AENOR	Certification body		M. Varas	M. Varas
Mattéo	Sarfori	Kiwa Cermet Italia S.p.A	Certification body		Paolo Sarfori	Paolo Sarfori
Henry	ROSIK	ITC	Certification body		Henry Rosik	Henry Rosik
Sören	Scholz	DIN CERTCO	Certification body		Sören	Sören
Alberto	García de Jalón	CENER	Test lab		Alberto	Alberto
Cai	Zhao	TUV Rheinland (Shanghai) Co., Ltd	Test lab		Cai Zhao	Cai Zhao
Colin	Xie	Intertek Testy Service (Guangzhou)	Test lab		Colin Xie	Colin Xie
Emmanuel	LEGER	CETIAT	Test lab		Emmanuel	Emmanuel
Franck	Cheutin	CSTB	Test lab		Franck	Franck
Jean-Baptiste	BEYSSAC	University of Perpignan - CESP	Test lab		Jean-Baptiste	Jean-Baptiste
Korbinian	Kramer	Fraunhofer Institute for Solar Energy Systems ISE	Test lab		Korbinian	Korbinian

## 26<sup>th</sup> Solar Keymark Network meeting\_Stockholm, Sweden

First Name	Last Name	Company / Organization	Type of Organization	Name of nominating organization	5th March	6th March
Mania João	Carvalho	LNEG	Test lab		M. J. Carvalho	M. J. Carvalho
Paraskevas	Kyriakou	AELab	Test lab		[Signature]	[Signature]
Paraskevas	Kyriakou	AELab	Test lab		[Signature]	[Signature]
Patrik	Ollas	RISE Research Institutes of Sweden	Test lab		Patrik Ollas	Patrik Ollas
Pedro	Cardoso	CTCV	Test lab		Amey	Amey
Stamatis	Babalas	Solar & Energy System Laboratory - NCSR DEMOKRITOS *	Test lab			
Stephan	Fischer	IGTE University of Stuttgart	Test lab		[Signature]	[Signature]
Harald	Drück	IGTE University of Stuttgart	Test lab / GSCN Chairman		[Signature]	[Signature]
Ulrich	Fritzsche	TÜV Rheinland Energy GmbH	Test lab		U. Fritzsche	U. Fritzsche
Carsten	Lampe	ISFH	Test lab, Inspector/inspection body		Carsten Lampe	Carsten Lampe
markus	barek	sunlumo	Inspector/inspection body		[Signature]	[Signature]
Christian	Städler	Arcon-Sunmark GmbH	Industry/manufacture	ESTESC	[Signature]	[Signature]
Christos	Travasaras	Greek Solar Association	Industry/manufacture	Greek Solar Association	[Signature]	[Signature]
Hanspeter	Weiss	Ernst Schweizer AG	Industry/manufacture	swissolar	H. Weiss	H. Weiss
Harald	Poschami	GREENoneTEC Solarindustrie GmbH	Industry/manufacture	Austria Solar	Harald Poschami	Harald Poschami
Luis	Gonzalez	Termicol Energia Solar	Industry/manufacture	ASIT	[Signature]	[Signature]
Thomas	Althaus	Ritter Energie- und Umwelttechnik GmbH & Co. KG	Industry/manufacture	Bundesverband für Solarwirtschaft (BSW)	Thomas Althaus	Thomas Althaus
Shawn	Martin	Solar Rating & Certification Corporation	Certification body / GSCN Manager		[Signature]	[Signature]
Gerard	van Amerongen Christ	vaConsult	Industry Guest/Observer	Netherlands solar	[Signature]	[Signature]
puneet	Saini	Högskolan Dalarna	Guest/Observer	Högskolan Dalarna, sweden	[Signature]	[Signature]

## 26<sup>th</sup> Solar Keymark Network meeting\_Stockholm, Sweden

First Name	Last Name	Company / Organization	Type of Organization	Name of nominating organization	5th March	8th March
Christos	Nikolaids	FEGEN SOLAR LLC	Guest/Observer			
Abdelkrim	CHENAK	CDER	Guest/Observer, Test lab, R&D on renewable energy Center			
Karim	BAKARI	IMANOR	Guest/Observer Certification body	IMANOR		
SKANDER	MASMOUDI	INNORPI	Guest/Observer Certification body	PTB		
NADIA	AKBIBOUCHE	IANOR	Guest/Observer Certification body			
Jean-Marc	Suter	Suter Consulting	Online Guest/Observer			online part
Costas	Travasaras	Greek Solar Industry Association	Online Industry/manufacturer	Greek Solar Industry Association		online part
Stefan	Abrecht	Solar-Experience GmbH	Guest/presenter			
OSCAR	MOGRO	BDR THERMEA BV	INDUSTRY/MANUF.	ASIT		
DAMIELE	BERNARDINI	ICIM	CERTIFICATION BODY	ICIM		
Stathis	Chrysoy	NC.SR DEMOKRITOU			online part	
Ozcan	Turk	SPF	Test Lab			online part