



Minutes of Meeting

FINA Swimwear Approval Committee Meeting with the Manufacturers

3rd December 2016 Windsor, Canada

Meeting Notes

FINA Swimwear Committee was represented by:.

Prof. Jan-Anders Manson (Swiss Federal Institute of Technology)

Prof. Bruce Mason (Australian Institute of Sport)

Prof. David Pendergast (State University of New York - Buffalo)

Prof. Shigahiro Takahashi (Chukyo University)

Mr. Jean-Pierre Morand (Kellerhals Carrard) FINA legal counsel

Agenda:

- Follow-up on issues from the last meeting
- Information and discussion on issues from 2016 submissions
- Presentation of criteria and procedure for approval of wetsuits
- Open discussion on approval procedure and rules

The meeting was lead by Prof. Jan-Anders Manson- SAC Chairman

I. Follow-up on issues from the last meeting

Discussion of various issues:

a. Permeability measurement:

- Measurement of permeability remains on stretched material (Uniform bidirectional and perpendicular stretch of 25% applied to the fabric, with the test performed by pressurised air under pressure of 20Pa) .The tests for approval will continue to be carried out as specified in Exhibit 3 of FRSA.
- Internal control measurements on unstretched material continue to be performed. The values are intent to be used only for control purpose as indicative checks.

b. Absolute results and tolerance

- It is reminded that during approval process, only absolute results of the tests are considered. The tolerance will be taken into account only during control of final product (checking the products on the market / at the competition). Tolerance applies to measurement but not at approval level, in which the limit will be applied strictly.

The tolerance for the tests as stated in the FRSA should not be considered as adjustment of allowed limits. For example, the tolerance for measurement of permeability set by the FRSA as +/- 5 %, should not provide understanding that 76 l/m2/s is effective minimum value (80 l/m2/s – 5% = 76 l/m2/s). The value as 80 l/m2/s has to be always respected.

c. Markings on caps and goggles:

- Currently the marking of the products approved by FINA are done only on the swimsuits. The marking makes easy the procedure for swimsuits check during the competitions. However verification of caps and goggles is still inconvenient. Following request from the technical officials, SAC encouraged the manufactures to come with the suggestions of cost effective solution of labelling approved caps and goggles. At the moment, still no solution.
- Discussion turns around defining specifications (including prohibition of electronic) and to drop the approval process **to be replaced by compliance control on site**: a consensus is reached on the fact that such solution should be established: **SAC to provide the specifications.**

d. New developments and trends in swimwear industry:

- Discussion on possible developments for example on the shape of caps or men's bodysuit, which could have an effect. However, this assumes a "philosophical" decision of the sport (athletes, coaches and the congress).
- SAC continuously observes development of technologies and innovations in sport. The trends and innovations are considered and consulted with the FINA standing Committees (responsible for particular sport/ discipline).

e. Submissions & Application process

- It was reminded that SAC request Technical Drawing as mandatory information to be included to all applications submitted for approval.
- SAC underlines that the information from the technical drawings is very valuable and assists testing and approval procedure.
- Technical drawings should contain indication of elements used in the construction of a product (patterns/patches/seams) as well as materials and combinations of them.

f. Date for Publication of FINA list of Approved Swimwear

- According to existing FINA Rule BL8.1 "All swimwear used at Olympic Games and FINA Events (pool and open water swimming competitions) shall be swimwear approved by FINA in accordance with the rules and procedures set forth in the FINA Requirements for Swimwear Approval (FRSA) issued by the FINA bureau and valid on the date of approval. Following an approval process conducted by the Swimwear Approval Commission, a list of approved swimwear is published by FINA (the Approved List) each year. The Approved List is published each year before December 31 and is valid starting from January 1 of the subsequent year."

- Discussion to release of approved products earlier than January 1st: According to the manufacturers this would facilitate an earlier market introduction of the product.

Main dates of concern:

Official Date of publication for FINA list of Approved Swimwear:

Currently: each year before December 31 and is valid starting from **January 1** of the subsequent year.

Proposed: each year before September 31 and is valid starting from **October 1** of the same year.

Submission dates:

Currently: each year on **February 1 and May 1**. The results are included to the list of Approved Swimwear valid starting from **January 1** of the subsequent year.

Proposed: **April 1** and **November 1** of preceding/previous year. The results to be included to the list valid starting from **October 1** of the same year.

Additional condition:

Availability: If the publication date is moved to October 1, the availability requirement will continue to be effective as of the 1st of January. If a Product is not available on January 1 following the publication of the approval on October 1, the corresponding approval may be withdrawn from the list.

- Following the discussion it was agreed that the SAC will prepare and submit respective proposal to the FINA Bureau for further consideration. **Final decision on this matter is subject for official approval to be done by the FINA Bureau.**

VII. Information and discussion on issues from 2016 submissions

General presentation by Prof J.-A. Manson on the issues from the submissions in 2016 and clarification on criteria and procedure for approval.

VIII. Presentation of criteria and procedure for approval of wetsuits

Introduction: Following the “Investigation Into Lower Water Temperatures For Open Water Swim Racing” done by the University of Portsmouth’s Extreme Environments Laboratory (EEL) the clauses BL 8.4 and BL 8.5 of the FINA rules were amended and approved by the FINA Bureau on August 5th, 2016.

BL 8.4 For open water swimming competitions, with water temperature from 20 C, swimsuits for both men and women shall not cover the neck, nor extend past the shoulder, nor extend below the ankle. Subject to these specific shape specifications, swimsuits for open water swimming competitions shall further comply with all other requirements applicable to swimsuits for pool swimming competition.

BL 8.5 *From the 1st of January 2017, for open water swimming competitions in water with temperature below 20 C, men and women may use either swimsuits (BL 8.4) or wetsuits. When the water temperature is below 18 C, the use of wetsuits is compulsory.*

For the purpose of these rules, wetsuits are swimsuits made of material providing thermal insulation. Wetsuits for both men and women shall completely cover torso, back, shoulders and knees. They shall not extend beyond the neck, wrists and ankles.

Prof. Jan-Anders Manson presented context: medical concern about swimming in cold waters and issues from the first submission of wetsuits (submission October 1, 2016):

a. Coverage of shoulders:

- The short cover of the shoulders raises a discussion. According to BL8.4 the wetsuits should meet minimum requirements for coverage - wetsuit must completely cover torso, back, shoulders and knees, and shall not extend beyond the neck, wrists and ankles. The above criteria raise a discussion, that will be reported by SAC to respective FINA standing committee.
- Outside shaping (pads grips). With respect to established criteria, the outer surface of wetsuits shall not include outstanding shapes, such as ridges, fins etc.

b. Material thickness and construction:

- Clause 4.2.4. of FRSA reads as follow: *Thickness: According to criteria set forth by the FRSA thickness of material/s used shall be minimum 3mm and maximum 5mm. Provided the insulating functions are not prejudiced, the Applicant may apply for lowering of the minimum thickness value in limited specific areas, if such is functionally justified to allow free swimmer's movements. A decision in this respect is made at SAC's discretion and cannot be challenged."*

During evaluation of the products submitted for the approval in October 2016, was observed that thickness of materials in the articulation zones, around shoulders and under the armpits, quite often is below 3 mm. Taking into account functional reason of having low thickness material in this zone, to free movement of arms, minimal allowed thickness for this specific area will be reviewed by SAC. Appropriate clarification for material thickness and area of its application (length in vertical direction (longitude) and width in transverse direction) will be included in the FRSA.

- Low thickness material for the use around the neck, providing comfort and sealing effect. Appropriate clarification for material thickness and area of its application will be included in the FRSA.

c. Submission of wetsuits for approval in 2017.

- As a transition during the year 2017, the SAC will carry out several official submissions, and resubmissions. All the wetsuits to be approved during the year 2017 will be included to the valid list of Approved Swimwear 2017, and published immediately upon notification of approval.

d. Notice of Approval -“FINA Approved Label”

- In 2017, control of wetsuits at the Open Water Swimming competition will be done directly by the Technical Officials prior to the competition. During this first year no marking of approved wetsuits will be required.
- From the 1st of January 2018, control of the wetsuits at the Open Water swimming competitions will be done by verification of respective “FINA Approved logo” to be printed on a garment as confirmation of approval.
- SAC made a note of suggestion to allow the FINA Approved label to be printed on inner side of wetsuit.

e. Swimming Caps for OWS

- Question on swimming caps for Open Water Swimming competitions, held in cold water. Head surface cap: protection of head as a major area in which give heat loss.

The next SAC meeting with the manufacturers is planned for November/ December 2017. The exact date and place of the meeting will be communicated in due time.

Done by JM / Prepared by PM