

**May 2009**

**Discussion Paper for submission to the IPC Swimming Summit**

**1. General:**

We wish to see ourselves as, and **be seen as**, a top, high performance sport, which is operated ethically and is based on the values of fairness and equity.

One area of significant concern is diminishing opportunities at the Paralympic Games level for swimmers from the lower classes, and for women (example S11 women).

- Why is this?
- What can be done to reverse the trend?

**2. Priorities:**

- Rules should parallel FINA, or be as similar to FINA as possible, with the only exceptions being those necessary according to the swimmer's disability (or classification). Swimmers who are blind or visually impaired are not physically limited in their ability to perform strokes, starts, turns, etc in accordance with FINA rules. Lack of vision and lack of depth perception can limit the swimmer's ability to align themselves and to judge distances, this is currently accommodated for in the IPC rules.
- A "code compliant" classification system for swimmers who are blind or visually impaired

**3. Towards Compliance with the IPC Classification Code**

(Functional Classification for Swimmers who are Visually Impaired)

**The Vision System:**

- The **eye** has numerous receptors, which pick up information from light rays. The eyeball is supported by a series of bones and is moved by a series of muscles. The eyeball has an outer, middle, and inner layer.
- The **optic nerve** carries the sensory information from the receptors in the eyeball to the brain.
- The **visual cortex** of the brain in the occipital lobe interprets the information received. The ability to interpret the information is learned incidentally and is dependant upon the message reaching the brain.

**Vision Impairment** arises from a variety of conditions and can occur during the prenatal period, the birth period, or develop later as a result of disease or trauma. Some conditions are inherited. Vision impairment occurs when there is damage to one or more of the components of the vision system.

**Visual Function:** (ICF) describes how well the eye and vision system work. This is measured by a medical professional e.g. ophthalmologist. The two most typical functions tested are visual acuity and visual fields. These are the two tested under the current VI Classification system.

**Functional Vision:** (ICF) describes how well the person functions in vision-related activities. A **Functional Vision Assessment** is an assessment performed by a vision professional (for example a vision teacher, orientation and mobility specialist, physical activity instructor of students who are visually impaired).

### **Swimming Classification Implications:**

Under the IPC Classification Code we are required to determine:

1. The presence of a certain level of disability (visual function)
2. The impact this has on performance on the sport (functional vision).

It is proposed that a functional vision assessment protocol be developed which could determine eligibility for swimming under the second criteria, paired with information from the first criteria.

### **Factors for Consideration in developing Functional Vision Assessment Parameters:**

- Environment: pool or open water
  - Pool deck, indoor or outdoor environment (lighting)
  - Pool wall, backstroke flags (colour sensitivity)
  - What can be controlled and what can not?
- Individual reaction to light, light sensitivity
- Colour discrimination, pool wall, backstroke flags
- Use of tapper, under which circumstances, which strokes?
- Observation in 3 settings (classification room, pool deck, pool)
- Adaptation to depth of water (line on bottom of pool)

- Peripheral vision, is it important?
- Assessment of movement patterns in swimming to ensure they are consistent with medical findings.

**Fluctuation and Change in Vision:** Even normal vision fluctuates. This needs to be accommodated for in testing. Fatigue can influence vision impairment, as can a variety of other factors. It is important to remove these factors as much as possible in classification, while ensuring that individuals who have a permanent disability fit into the system. Classification can also change due to medical intervention, and the fact that many vision conditions progressively get worse.

### **Regarding Swimmers who are Totally Blind**

For swimmers who are totally blind (or functionally totally blind), assessment should include consideration of:

- Time of onset of vision impairment, total blindness
- For swimmers who are congenitally totally blind, they will understand the world in a completely different way and will also have some unique characteristics to their movement patterns

The ophthalmologists can tell us if someone is totally blind (S11), we should revisit the need for opaque goggles. Is there a functional reason for opaque goggles, is this still necessary?

### **Concerns about Cheating in VI Classification**

We need to be able to assure swimmers, and other stakeholders, that the system is fair. This would involve education about VI classification, as well as standardized procedures and practices for VI classification, which are code compliant.

### **4. The Summit:**

Thank you for the opportunity to provide a discussion paper. I look forward to attending the summit and working together to “Create the Wave and Build the Sport”

With sincere gratitude to the swimmers, coaches, ophthalmologists, and others; (as well as the participants in the Swimming Session at the IBSA Technical Seminar (April 2009)); without whose input this discussion paper would not have been possible.

Respectfully Submitted,

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