

Draft specification for the required communications between the starter and timekeeper at SSE artificial slope races

This document has been agreed by SSE STP (Seeding & Technical Panel) and the English TD Forum. Following any amendment, it is proposed that the document will become guidance for all races, evolving into mandated policy in due course.

Comments are requested on the draft from Club and Regional Race Organisers by 31st March 2005.

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DRAFT SPECIFICATION FOR THE REQUIRED COMMUNICATIONS BETWEEN THE STARTER AND TIMEKEEPER AT SNOWSPORT ENGLAND ARTIFICIAL SLOPE RACES

Background

With conventional timing systems, the starter has to wait for a RESET signal before starting the next racer. This is given by a light on the start gate, a “Reset” radio or telephone message, or sometimes just a flag wave. It is fail-safe. If the communications fail, the next racer does not start. During the reset period, which is often as much as 10-15 seconds per racer, the elapsed time is announced and recorded manually in the computer and on a paper record.

With the introduction of Time-of-day timing, the start and finish pulses are sent electronically to the computer, eliminating the need for a reset or for manual input of the elapsed times.

The starter can allow the next racer to start as the previous racer is passing the finish - perhaps on longer slopes allowing two racers to be on course at once - normal practice on snow and at Hillend.

Eliminating the reset period could reduce the length of a Club National race by up to two hours.

Implications

This new procedure transfers the direct control of the race from the timekeeper to the starter/start referee. The race continues unless the starter receives an instruction to STOP.

The computer operator needs to know every racer’s bib number just before they start so that the timing pulses can be allocated to the correct bib number in the computer. In addition, he needs to be able to stop the race immediately if there is a problem with the timing or the data input.

Requirement

Where a time of day timing system is in use, full duplex communication should be compulsory between the starter and timekeeper – a standard requirement on snow. This will normally be provided via a cable connection, preferably using the same pair of wires that connect the start gate to the timer. The requirement exists because non-full duplex communications do not facilitate adequate control – it may take too long to establish contact and then pass a vital message.

The communication must be full-duplex with headphones and an open microphone at each end. If a microphone switch is provided, it must be possible to leave this unattended in the on position. Voice-operated microphones are not acceptable.

(Full-Duplex refers to the transmission of data in two directions simultaneously. For example, a telephone is a full-duplex device because both parties can talk at once. In contrast, a walkie-talkie is a half-duplex device because only one party can transmit at a time).

Any type of communication with headphones and hands-free microphone, including home-made, will do as long as it works. e.g. mobile phones (expensive for all day use), full duplex radios (transmitting all day expensive on batteries), field telephones or any full duplex intercom probably using a separate cable.

Should full-duplex communications fail, or not be available, when using a Time-of-Day timing system, the organisation must revert to the "Course Clear" method for starting and receive clearance from the timer. This is so that pulses can only be attributed to the current racer.

Both ALGE and TAG Heuer supply communication systems, which will work over the same pair of wires used to connect the start gate to the timer.

ALGE SV4 Speech Amplifier & Q34 Headset – one set for each end

TAG HL 551 Voice Communication System

However, it is not the aim to mandate particular equipment. Systems provided by other manufacturers may be suitable as long as they do not interfere with the reliable transmission of start impulses to the timer.