



**FEDERATION INTERNATIONALE DE SKI**  
**INTERNATIONAL SKI FEDERATION**  
**INTERNATIONALER SKI VERBAND**



**WIRELESS TIMING SYSTEM PRECISIONS (nov. 2002)**

In response to some questions and immediate issues arising from the use of "wireless" timing technologies now "approved" for use at FIS events, please note the following points that may help you consider set-up scenarios and equipment choices:

- **No timing system manufacturer in the world can claim that their "wireless timing systems are certified for use by the FIS". The FIS has not approved ANY "wireless" timing technology for use in FIS skiing events. The FIS only certifies timing equipment that passes our classic time-base accuracy tests and does not test timing system's wireless capability in all conditions.**
- The use of the term "wireless" in the FIS Timing rules version 2.0 refers to a time-of-day technique using separate synchronized certified timers that are deployed to the start and finish respectively. The "no-wires" aspect of this technique comes from how the time-of-day start times and the time-of-day finish times are derived from the separate timing devices through synchronized use.
- The only acceptable "wireless" timing technique at FIS level events (Level 3 and 4) is to use a minimum of four (4) FIS homologated timers operating in synchronized time-of-day. Two are placed at the start, two are placed at the finish.
- Once these four FIS homologated timers (with printers) are in place, ANY additional wireless solution from ANY manufacturer may be used.
- "Wireless times used in results from the event will only be considered valid when the time-of-day data from the four homologated timers are each individually checked against the results derived from the wireless solution used. All hard-copy tapes from the four timers for each run must be shown to match the time-of-day data from the wireless solution used. In all cases where no-wire solutions are used the timing tapes must be sent with the results to the FIS. Techniques that demonstrate how the calibration issues between the 4 time bases are dealt with over runs since synchronization could be an essential element to this evidence.
- It is the responsibility of the Race Organizer to provide the proof that in every case the wireless solution they have used provides accurate results when compared to the four homologated time-of-day timers. Races that do not provide this evidence may not be considered for FIS points.
- In all cases where wireless equipment will be used, it is highly recommended that Race Organizers or assigned FIS Technical Delegates check with a member of the FIS Timing Working Group in advance of the competition to describe the intended wireless equipment set-up and to verify test data.
- We have already noted examples early in 2002-2003 where inappropriate use of wireless equipment has jeopardized the possible validity of race results as insufficient technical evidence has not been provided to substantiate the data. Be careful. If you're not sure what you are doing, make sure you are in compliance. Check with the manufacturer and with the FIS Timing Working Group if you are uncertain.
- This wireless technique MAY NOT be used for Level 0, 1 or 2 events (Not for Continental Cup or Higher)
- There is a wealth of practical evidence has been collected on wireless technologies used and tested since 1993 at World Cup, World Championships and Olympic Winter Games, as well as at FIS events around the world. This data DOES NOT support ANY timing manufacturer's claims that current or emerging wireless technologies equal the dependability of wired timing systems. Impulse, Data and GPS wireless systems are not tested by the FIS nor are they allowed for use by the FIS without the four required FIS homologated timers that ensure the validity of the time data produced.