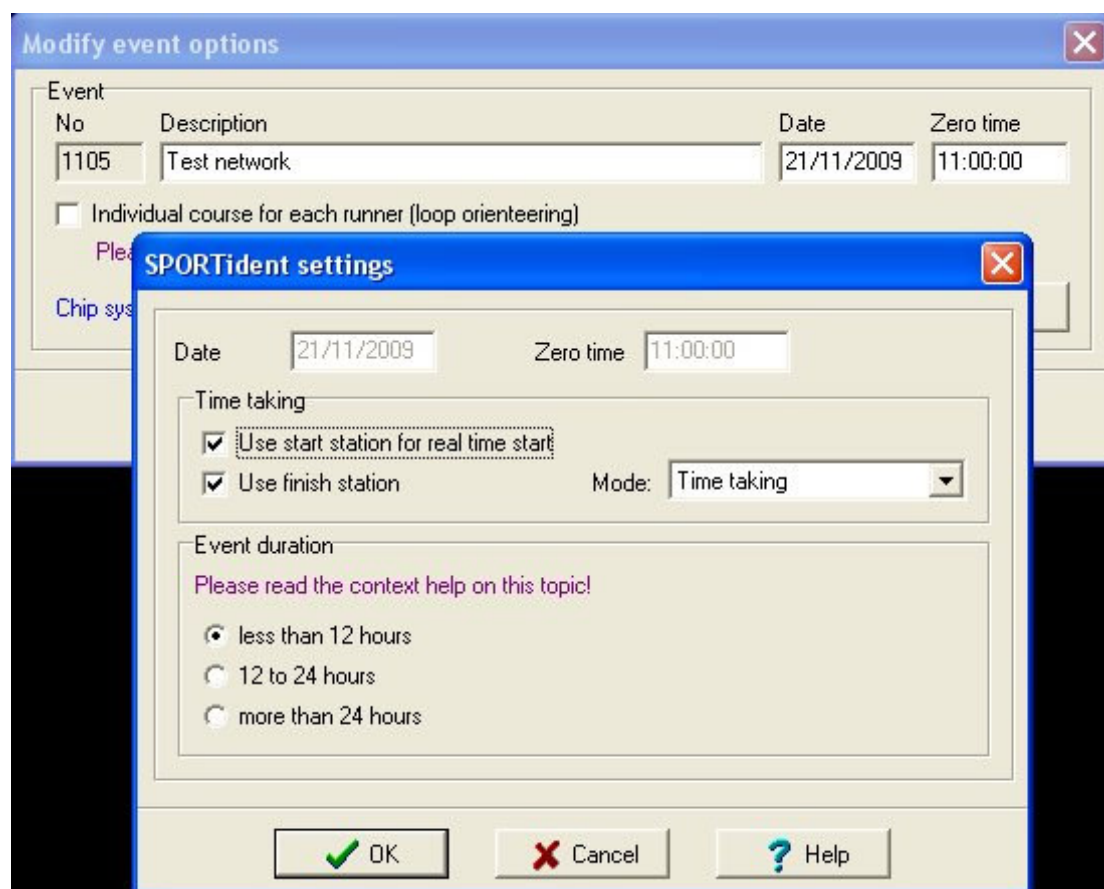


## How OE/MT Handles Time Taking

During the setup of an OE or MT event there is an option to define the way that the start procedure will be handled for an event that uses an SI finish station:



1. Use Start station for real time starts, or
2. Do not use a Start station for real time starts

As well as that option, during the setup in OE/MT a zero time must be entered; that time is generally entered as being 1 or 2 hours before the first expected start. **All times programmed into OE/MT are held internally as a time relative to that zero time. If the zero time is changed, any manually entered time will also change. It is imperative that this be remembered, as it can have severe repercussions.**

Option 1 is normally used for small events where entrants can start at any time. Entrants have to insert their SI chip into the SI start unit as they start their course That is the option that OACT uses for most of its events.

Option 2 is used for large events, where the many start chutes, or several start areas, make the f a punching start restrictive. In this case entrants are given a start time at which they are required to start.

**This documents attempts to describe how the OE/MT system handles both options under various conditions.**

The SI start, check and finish units have a time programmed into them that should match the time that is in the computer system. Also, all SI field control units should also have the same time. When a time from any SI unit is recorded on a SI chip it is done so as absolute time, i.e. the time of day.

If option 2 is chosen when the event is setup, entrants must have a pre-defined start time and they should start at that time. They must punch a finish SI unit to record their finish time. Their course time will be calculated from the finish time, taken from their SI chip, minus the time that the computer thinks that they started. **If they happened to punch a SI start unit when they started that time will be ignored.** This has some disadvantages:

- If an entrant starts after their nominated start time their elapsed time will still be calculated from their finish time and the time that they should have started. To correct their elapsed time the computer operator may re-enter their start time manually. Whether that gets done or not is probably at the discretion of the organizers after they consider the reasons why the entrant started late.
- If the event has “helpers” who may have been given a normal start time but whom the organisers want to start early, or late, then their actual start time will need to be recorded accurately and their start times adjusted by the computer operator.
- If, for some reason there is a problem at the start and the organisers decide to delay the start for say 10 minutes, all programmed start times will have to be adjusted, although that is an easy procedure (dealt with later).

If option 1 is chosen, several things can happen dependent on whether the entrant punched the start SI unit or not, and whether they have a predefined start time or not. (It is assumed here that entrants must punch the finish SI unit.):

- a) Start time predefined and start SI unit NOT punched – elapsed time is calculated from the finish time minus the predefined start time.
- b) Start time predefined and start SI unit punched – elapsed time is calculated from the finish time minus the punched start time.
- c) Start time NOT predefined and start unit NOT punched – elapsed time is calculated from the finish time minus the zero time in the computer
- d) Start time NOT predefined and start unit punched – elapsed time is calculated from the finish time minus the punched start time.

Thus, it can be seen that options a) and b) can be used at the same event; i.e. all runners may be given a predefined start, but some runners may also use a punch start. As long as no changes are made to the zero time or to any non-punched start time, then elapsed time will be calculated correctly. This means that “helpers” can be given

a start time within the general bulk of runners but may start at any time provided they punch a start unit. The same could apply to “late” starters, but, as their reasons for lateness, and the rules, may need to be assessed before their elapsed times are accepted, a decision should be made by the organisers as whether allowing late starters to use a punching start is acceptable.

From the above it can be seen that, if the start SI unit is punched (and the finish unit) then, as both start and finish times are in absolute time, the elapsed times are independent of the time in the computer. Any changes made to the OE/MT zero time will have no effect on the runners’ finish times.

However, if the start SI unit is not being used, any changes made to the zero time will cause a change in the calculated elapsed time.

### **Problems at the Start**

If the start officials have a problem and need to change the start times to a later time, the behavior of OE/MT will depend on how the start is being handled.

- If a punching start is being used, nothing need be done; elapsed times will be calculated from the absolute times obtained from the start and finish SI units
- If no punching start is being used then any adjustment to the start times will require a commensurate change being made to the runners’ start times in the computers. As all predefined start times within the computers are held relative to the zero time then all start times can be adjusted by simply changing the zero time. *However, it is not advisable to change the zero time after any runner has already started, bearing in mind that changing the zero time will have no effect on those runners that may have used a punching start.* Of course, if the start times are moved back and the computers’ zero times are adjusted, the start officials will have to work out some method that lets runners think they are still maintaining their normal start time, probably by resetting the start clocks backwards by the amount that they have delayed the start. It would seem imperative that someone have a master clock or watch that is set accurately to the computers’ times.

### **Conclusion**

If an event is being run where it is impractical to use SI punching starts but the organisers would like to be able to start “helpers”, etc., at times that do not match their predefined start times then the computer should be setup as though a punching start will be used (Option 1). That will mean that most runners will have their times calculated from their predefined start time and finish time whereas “helpers”, etc., will have their elapsed times calculated from their punched start time and finish time.

Also, for Enter-On-the-Day (EOD) runners, who obviously do not have a predefined start time it may be advisable to give some thought to having those runners use a punching start as that will mean that the computer operators will not have to insert their start times into the system.