

Race Management Policies for World Sailing Events Fleet Racing

January 2024

(changes from April 23 revision in red)

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World Sailing RACE MANAGEMENT POLICIES for the OLYMPIC GAMES and WORLD SAILING EVENTS

FLEET RACING

Please note that these policies are guidelines to the Race Committee. These guidelines do not change the rules that apply at an event. Failure to observe these guidelines are not grounds for redress. These policies are recommended for use at all major sailing events.

1. Definitions

- 1.1 Attachment 1 outlines the respective roles of the Principal Race Officer, the World Sailing Race Officer, Course Representative and the Course Race Officer.
- 1.2 “Will” means the intentions of the race committee.

2. General Principles

- 2.1 These policies are applicable for any course and any target time.
- 2.2 A shortage of time or completed races is not a basis for a variance from these policies.

3. Timing/Changes in Schedule

- 3.1 Times will be based on GPS time. The starting sequence will begin at an exact minute -hh:mm:00.
- 3.2 Starts will not be delayed for competitors to reach the race area if they could have arrived with reasonable diligence.
- 3.3 The orange starting line flags(s) will be removed (with no sound signal) when the time limit for starting expires unless the race committee intends to make the warning signal for the next fleet to start within ten minutes of the previous start.
- 3.4 When racing back-to-back, the interval between the finish line closure and the new warning signal for that group will normally not be less than 5 minutes. This may be varied according to conditions and class.
- 3.5 If it is unlikely that racing will be possible on an upcoming day, the schedule may be changed to sail more races in a day. The number of races sailed will not become more than one race ahead of schedule and any change will be notified on the day before it is to take effect.

4. Weather Conditions for Racing

- 4.1 The race will be started at the scheduled time if the wind conditions and visibility are within the parameters outlined in these policies. Waiting for ‘better’ conditions may be unfair and will be avoided.
- 4.2 The race committee will not wait for the wind to ‘stabilize’. Competitors can compete in “shifty” conditions.
- 4.3 The start may be postponed if a major wind shift is expected based on a known pattern or other reliable information (example: sea breeze can be seen in the distance and is expected to fill in). Otherwise, the race committee will start the race. The wind shift may not occur, the course can be corrected, or the shift may occur after the race is completed.
- 4.4 Wind will be measured from drifting race committee vessels.
- 4.5 The average wind speed will be determined over a five-minute period.
- 4.6 Races will not be started in less than an average of 5 knots (6 knots for Formula Kite and iQFOiL) of wind established over the entire course area. This lower limit may be higher if there is a strong current in the racing area or for certain types of class racing.
- 4.7 Races will not be started in more than an average of 25 knots (30 knots for Formula Kite and iQFOiL). For the 49er and 49er FX classes this upper limit is approximately 2 to 5 knots less in heavy seas and/or gusty winds. These limits may also vary for all classes depending upon sea conditions, current and rapid changes in velocity.

- 4.8 Races will not be started if reduced visibility prevents the race committee from sighting the starting line and identifying boats on the course side of the starting line. The fact that the first mark cannot be seen from the starting area is not, in and of itself, a reason to postpone racing.
- 4.9 Formula Kite - The average wind may be less than 6 knots in the launching area, but the race committee in conjunction with the beach master will ensure that all competitors have a fair chance to safely launch and leave the beach. Otherwise, racing will be postponed.
- 4.10 Formula Kite - When there is a significant change in windspeed, competitors will be given the opportunity to change kites (this applies mainly when racing with only one fleet. When rotating through multiple fleets, competitors will normally have enough time to change kites before their next start). The race committee will then display AP/H (and AP ashore). AP ashore will be removed as soon as practicable.
- 4.11 iQFOiL windspeed guidelines are as follows:
- (a) Sprint Slalom – windspeed 6 knots to 15 knots.
 - (b) Course Racing & Marathon – minimum windspeed of 9 knots.

5. Courses

- 5.1 The race committee will attempt to set the longest possible first leg within the constraints of the course area and the target time.
- 5.2 The course length will be laid to give the first boat of each fleet the best chance of achieving the target time.
- 5.3 On Formula Kite courses, the protector mark will be laid approximately 70m straight downwind of the windward mark.
- 5.4 For trapezoid courses, the length of the reaching leg between Marks 1 and 2 will be approximately two-thirds of the length of leg 1.
- 5.5 The reaching leg angle is 100° off the wind for iQFOiL and Formula Kite, 110° off the wind for boats without spinnakers and 120° of the wind for the boats with spinnakers.
- 5.6 Gates will be approximately 10 hull lengths wide (70M for iQFOiL & Kite) and laid square to the wind.
- 5.7 Usually leeward gate Marks 4p/4s will be laid after the start (last start of the sequence in case of multiple fleets). In deep water or strong current Marks 4p/4s may be laid before the start. They will be laid approximately 0.05 NM above the starting line.

6. Starting Line

- 6.1 Windward starting lines will generally be laid square to the mean sailing wind (Formula Kite - starting line will generally be laid with 5° bias to the pin end). Current, favoured side of the course, expected wind shifts and other variables may justify variation from this guideline in order to achieve an even spread on the starting line.
- 6.2 The table below is a guide to the length of the starting line for opening series races. A larger multiplier may be used in strong winds or heavy seas.

Class	Boat Length (M)	Multiplying factor
iQFOiL Windward Start	2.2	3
iQFOiL Reaching Start	7M per competitor, minimum 60 M	
ILCA 7	4.24	1.5
ILCA 6	4.24	1.5
470	4.7	1.5
420	4.2	1.5
49er/49erFX	4.9	2
29er	4.4	2
Nacra 17	5.25	2
Nacra 15	4.7	2
Formula Kite	8-10M per competitor, minimum 150M	

Starting line length = number of boats x boat length x Multiplying factor.

- 6.3 For medal races with 10 boats, the starting line length will be approximately 100 metres for all classes except the 49er and Nacra 17 where it will be approximately 150 metres.

7. Starting procedure

- 7.1 The numerical starting system in Attachment 2 will be used for all starts at events in stadium settings with an audience or where there is live Media coverage. For all other starts, RRS Rule 26 will be used.
- 7.2 Flag U (RRS 30.3) will be used for the first attempt of the start of each race except for reaching starts, in which case black flag will be used.
- 7.3 For medal races, flag P will be used for the first attempt (Black flag for Formula Kite and iQFOiL).
- 7.4 In the event of a postponement or a general recall that has been caused by the length or angle of the starting line, the race committee will adjust the starting line and make another attempt using the same preparatory signal.
- 7.5 If the race committee is satisfied that a postponement or a general recall was not the result of the starting line, it will use the black flag for each subsequent attempt. The black flag will only be used when general recalls are caused by the boats themselves, or rapid oscillations of the wind, and not by actions of the race committee.

8. Sighting the Line

- 8.1 The race committee will sight the starting line from each end.
- 8.2 When World Sailing Course Representatives are appointed, they will sight the starting line with another member of the race committee.
- 8.3 Each line sighter will use a hand-held voice recording device and record without stopping from at least 90 seconds before the starting signal until after anything of interest after the start. A commentary of anything of interest will be recorded (such as boats getting close to the line, bunching, etc.).
- 8.4 Competitors who have been scored UFD or BFD, and their support persons, may review the recordings of the applicable start(s).

9. Postponing a race during the Starting Procedure

- 9.1 The race committee will postpone the race during the starting procedure if the mean wind shifts more than 10 degrees or in the event other influences cause boats to bunch at one end of the start line. In rapid oscillations, the race committee will endeavour to lay a starting line based on the mean oscillations expected.
- 9.2 The race committee will also consider postponing the start for any of the following reasons:
 - (a) a drifting mark,
 - (b) a significant error in the timing of signals,
 - (c) other boats interfering with the competing boats,
 - (d) inappropriate starting line length or angle,
 - (e) a reduction in visibility preventing the race committee from sighting the starting line or identifying premature starters,
 - (f) a change of the conditions for flag O,
 - (g) Formula Kites only – when more than 15% of the competitors are attempting to start on the opposite tack to the majority of the fleet,
 - (h) iQFOiL – entire fleet not foiling,
 - (i) other factors that might affect the fairness of the race.
- 9.3 If the race committee considers that adjusting the starting line is unlikely to improve the chances of fair start, then the starting procedure will be allowed to continue.
- 9.4 For a postponement that the race committee anticipates will be longer than ten minutes, the orange starting line flag(s) will be removed (with no sound signal).

10. Recalls

- 10.1 The race committee will signal a general recall if it believes that unidentified boats were on the course side of the line.

- 10.2 When using U flag, if a general recall is going to be necessary due to unidentified boats on the course side of the starting line early in the minute prior to the starting signal, a postponement will be signalled immediately. If the race committee is satisfied that the starting line was fair, then the next start will use black flag.
- 10.3 Except after a black flag general recall (when the requirements of RRS 30.4 will be met), the sail numbers of boats recorded UFD or BFD will be posted on the start-vessel after boats have started, or in the case of more than one fleet on the same course, after the last fleet of that sequence of starts has started.
- 10.4 If a race management error is discovered after the starting signal (e.g., timing), the race committee may abandon the race (by using flag N). In these circumstances, the race committee will not signal a general recall.
- 10.5 When using P flag (medal race), if the race committee is satisfied that all boats on the course side of the line have been identified, an individual recall will be signalled. In no circumstances will an individual recall be signalled later than 5 seconds after the starting signal.

11. Abandonment

- 11.1 On the first half of the first leg, the race committee may abandon in the event of a persistent wind shift of more than 25 degrees. After that, the race committee will let the race continue if it is able to adjust the course to the changed conditions.
- 11.2 Visibility: The race committee will consider abandoning a race if it is satisfied that a reduction in visibility affects its ability to safely manage racing. The fact that boats cannot see the next mark from the prior mark is not, in and of itself, a reason to abandon the race.
- 11.3 Collapse of wind: The race committee may abandon the race when it is unlikely that the leading boat will complete the course within the overall time limit given the wind conditions at that point in time.
- 11.4 Once a race has been started, the race committee will not abandon the race simply because the average wind speed increases beyond the stated limits. The race committee will consider abandoning the race if it is unable to safely manage racing.
- 11.5 The race committee may abandon the race when a new wind has caused the fleet to invert.
- 11.6 The race committee will make every effort to ensure that other vessels do not interfere with racing. The race committee will consider abandoning the race if it determines that an outside influence has made the race unfair.
- 11.7 During races, when redress is not available, the race committee will abandon the race if it is satisfied that the actions of the race committee or the organising authority have affected the fairness of the race.
- 11.8 iQFOiL Abandonment Policy Differences:
 - a. When the whole fleet is not foiling for more than 20 seconds, the race will be abandoned.
 - b. Furthermore, in case of low wind readings in Sprint Slalom and Medal series, the race will be abandoned:
 - (i) When 5 boards or a third of the heat, whichever is smaller, do not pass mark 1 within **ninety seconds (90s)** after the starting signal.
 - (ii) When 5 boards or third of the heat, whichever is smaller, do not finish within the time limit (**7 minutes for Sprint Slalom and medal race MR2 and 9 minutes for medal race MR1**)
 - c. The race may be abandoned when:
 - (i) Wind speed is below **6** knots in Sprint Slalom **and medal race MR2**.
 - (ii) Wind speed is below 7 knots in Course Racing/Marathon/Medal Race MR1 and boards still have to go upwind.
 - d. The race may be abandoned for any other reason that makes the race unfair (for example wind shift makes it impossible to fetch the mark, wind shift causes the fleet to invert etc) or unsafe.

12. Adjusting The Course to a New Wind Speed or Direction

- 12.1 Change in wind direction:

- (a) With a persistent wind shift of 10° or less the course will not be changed unless necessary to adjust for current or to provide a true downwind leg.
- (b) Between 10° and 15° consideration will be given to adjusting the course to the new wind provided that the race committee is confident that the shift is likely to persist.
- (c) With a persistent wind shift of more than 15°, the race committee will attempt to change the course to the new wind.
- (d) With a persistent wind shift of more than 45° after the first leg, the race committee will consider its influence on the race. Under these circumstances, the race committee may either change the course or abandon the race.
- (e) Frequent and violent oscillations: Under these circumstances, the race committee may not be able to adjust the course sufficiently or quickly enough to maintain the fairness of the race. In this case, the race may be abandoned.
- (f) Changes in current or a difference in the angle of the current relative to the wind may justify variations from these guidelines.

12.2 Changes in length of legs

- (a) The race committee will attempt to minimize the number of changes in leg length to achieve target times. In general, changes in length will only be made if it appears that the time for the first finisher will be more than 20% outside the target time.
- (b) Changes in leg lengths will not be made to reduce a leg to less than 50% or increase a leg to more than 150% of the original leg length.
- (c) Changes in current may justify variations from these guidelines.

13. RRS 42 – ‘Off’ and ‘Restored’

- 13.1 The wind speed limits will be as stated in the relevant class rules.
- 13.2 To avoid constantly turning off and restoring RRS 42 the race committee will make a change (or display flag O at the start), only if it is satisfied that the wind speed is likely to remain over or under the specified wind speed over the entire course area.
- 13.3 The race committee will advise the jury team on the course well before a signal is displayed. If the race committee is unable to advise the jury, it will make no change.

14. Finishing Line/Finishing Procedures

- 14.1 For trapezoid courses, the finishing line will be set 0.15 NM from the mark 3 gate.
- 14.2 For LG and LR races the distance of finishing line for the mark 4 gate will be as in the table.

Wind Strength	Below 12 knots	12 knots plus
Dinghy Classes	0.05 NM	0.1 NM
Skiffs	0.1 NM	0.15 NM
Boards & Formula Kite	0.3 NM	

- 14.3 The finishing line will be laid before the first boat begins the final leg.
- 14.4 The blue flag on the finish-vessel(s) will be displayed (with no sound signal) as the first boat rounds:
 - (a) Mark 2 for the final time in the case of trapezoid courses; or
 - (b) Mark 1 for windward-leeward courses; or
 - (c) Mark 4p/4s gate for windward finishes.
- 14.5 In the case of a late course change for the final leg, the blue flag will be displayed as soon as possible after the finishing line has been laid.
- 14.6 The finishing line will be approximately:
 - (a) 50 metres in length for the ILCA & 7 and 470,

- (b) 75 metres in length for 49er, 49erFX and Nacra 17,
- (c) 30 metres in length for the iQFOiL and
- (d) 20 metres in length for the Formula Kite

set square to the direction from the last mark for reaching finishes (square to the sailing wind for upwind or downwind finishes).

14.7 The blue flag on the finish-vessel(s) will be removed (with no sound signal) upon the earlier of:

- (i) expiration of the time limit, or
- (ii) immediately after the last boat finishes.

14.8 There will be two line sighters on each finish-vessel. Whenever practical, at least one of the line sighters on the finish-vessel(s) will be a World Sailing Race Officer.

14.9 Each line sighter will use a hand-held recording device to record the order of finish.

14.10 Each day's recording will be saved and indexed for easy retrieval.

14.11 A written record of the finishing order will also be maintained by each finish-vessel.

14.12 Competitors and support persons may listen to the voice recording(s) and review the written records of their finishes.

15. Requests for Redress

15.1 If the race committee believes it may have made an error affecting the outcome of the race for which redress may be available, it will request redress for the potentially affected boat(s).

16. Race Committee Protests

16.1 Since the primary responsibility for protesting breaches of the rules rests with competitors, the race committee will not normally protest a boat.

16.2 The race committee may protest a boat in the following circumstances:

- (a) A breach of a sailing instruction that may not be protested by another boat;
- (b) An apparent breach of good sportsmanship (RRS 2);
- (c) Failing to take a penalty after knowingly touching a mark, but not protesting another boat.

17. GPS – refer to RMM Section H5 and Appendix 1, Paragraph 5

18. Heat Mitigation and Rest Periods

The Wet Bulb Globe Temperature (WBGT) is a type of apparent temperature, a measure of the heat stress in direct sunlight, which takes into account: temperature, humidity, wind speed, sun angle and cloud cover (solar radiation). Where excessive heat may be an issue the following guidelines will be followed.

WBGT measurements will be taken every 20 minutes on the race committee signal vessel, in a position 2m clear of reflective surfaces (deck, mast, structures, water surface, etc), exposed to the true wind and uninterrupted by shade, whenever heat is considered to be an issue.

- When measurements are below 29° - refer to Paragraph 3.4 of these policies.
- For WBGT measurements between 29° and 32° the rest period will be increased to approximately 20 minutes, with a minimum of 10 minutes recommended.
- For WBGT measurements 32° or above racing should be suspended and sailors most likely sent ashore unless, from observations (building sea breeze, expected cloud cover etc) an imminent decline in the temperature is expected.

Attachment 1 – The Definitions and Roles of World Sailing Race Officers

1 Race Committee

The Principal Race Officer, World Sailing Race Officers, Course Race Officers and all on-the-water personnel responsible for managing racing.

2 Principal Race Officer

The Principal Race Officer shall serve as the lead World Sailing Race Officer and is responsible for racing on all course areas.

3 World Sailing Race Officer

World Sailing Race Officers are International Race Officers approved or appointed by World Sailing to carry out specific roles at a regatta.

4 World Sailing Course Representative

The World Sailing Course Representative is a World Sailing Race Officer appointed by World Sailing responsible for the conduct of racing on a course area. World Sailing Course Representatives will work closely with the Course Race Officers appointed by the Organizing Authority. The World Sailing Course Representative will normally represent the race committee in hearings.

5 Course Race Officer

The Course Race Officer is a race officer appointed by the Organizing Authority. The Course Race Officers are responsible for managing their race committees for an assigned course area.

The Course Race Officers are responsible for the management of all safety procedures.

A Course Race Officer will not take action in relation to any of the following matters (whether or not altered by the Sailing Instructions) without the approval of the World Sailing Course Representative for that course area:

- (a) Postponement (RRS 27.3);
- (b) Course selection, location, configuration and race duration;
- (c) Whether a starting line is to be moved or adjusted (RRS 27.2);
- (d) Starting line decisions (OCS and recalls (RRS 29), starting penalties (Black Flag - RRS 30));
- (e) Changing Course/moving marks - adjusting the course to a new wind strength or direction (RRS 33);
- (f) Position of the finishing line;
- (g) Abandoning (RRS 27.3, 32 and 35);
- (h) RRS 42 "turning off" and "restoring". (Item 13);
- (i) Determination of finishing position (Item 14);
- (j) Corrections due to scoring errors (RRS 90.3(c);
- (k) Requesting redress on behalf of a boat (Item 15);
- (l) Protesting a boat (Item 16).
- (m) Imposing a penalty (RRS 90.3, A5);
- (n) Amending the Sailing Instructions or Notice of Race;
- (o) Racing areas to be used; and
- (p) Schedule.

Attachment 2 – Numerical starting system**1. Starting system for opening series races except iQFOiL and Formula Kite:**

Minutes before starting signal	Visual signal displayed	Visual signal removed	Sound Signal	Means
7+	Orange starting line flag		one	Attention signal race will start soon
6	Class flag P or starting penalty if required (U, or Black) Rule 42 (flag O/R if applicable)		No sound	Class to start and applicable rules
5	White flag with the number 5		One	Warning signal
4	Blue flag with the number 4	White flag	One	Preparatory Signal
3	Pink flag with number 3	Blue flag	One	Three minutes
2	Red flag with number 2	Pink flag	One	Two minutes
1	Yellow flag with number 1	Red flag	One long sound	One minute
0	Green flag	Yellow flag	One	Start signal
+1		Green flag and Class Flag, P, U or Black and O/R)	No sound	

2 Starting system for iQFOiL, Formula Kite and medal races:

Minutes before starting signal	Visual signal displayed	Visual signal removed	Sound Signal	Means
5+	Orange starting line flag		one	Attention signal race will start soon
4	Class flag P or starting penalty if required (U, or Black) RRS 42 (flag O/R if applicable)			Class to start and applicable rules
3	Pink flag with number 3		One	Warning Signal
2	Red flag with number 2	Pink flag	One	Preparatory Signal
1	Yellow flag with number 1	Red flag	One long sound	One minute
0	Green flag	Yellow flag	One	Start signal
+1		Green flag and Class Flag, P, or U or Black and O/R)	No sound	

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Attachment 3 - Digital Technology policies for World Sailing sanctioned events

For future use.

www.sailing.org

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