



# **2024 Men and Women Windsurfer equipment selection – Windfoil 1 tender**

July 26, 2019

<b>Executive Summary</b>	<b>4</b>
<b>1. Introduction of the tender</b>	<b>5</b>
Description of the tender and proposed equipment for the 2024 Men and Women's Windsurfing Olympic event	5
Equipment Basics	6
Equipment Transition Period	8
<b>2. Class Association</b>	<b>9</b>
Details and status of class association	9
Status of the class rules and description of required changes for Olympic competition.	10
<b>3. Equipment control</b>	<b>11</b>
Multiple One Designs – Registration Production Series / with OD Hull	11
Board	11
Sails, Foils and Rig	12
Description on how eligible equipment is limited, inspected and controlled	12
<b>4. Formats and events</b>	<b>14</b>
Description of formats that the equipment is best suited for	14
WF1 Racing Format	14
Classic	15
Marathon	15
Point to Point	16
Sprint Slalom	16
GPS Speed	16
Why so much innovation?	17
Courses	19
Suitable wind ranges and sea states	19
Race format	19
# of races	19
Wind range	19
Target race times	19
Equipment	19
Sea state	19
Regatta and Event Scoring	20
Eligible Events / Formats Used / Countries Represented 2019 / 2020	21
<b>5. Manufacturers and availability</b>	<b>22</b>
All existing manufacturers of main equipment items.	22

Weekly maximum delivery capacity	22
Example of warranty policies, claim forms and warranty history of the last two years	23
Description of current market situation, including licensing terms and applicable royalties, fees and any intellectual property ownership considerations	23
Estimated availability of each main equipment item: rig, sail, board and appendages per region	24
Group	24
Region	24
Equipment already available for purchase in region	24
Average delivery waiting time	24
Estimated current users	24
Retail prices of main equipment item: rig, sail, board and appendages	25
Example Price List	26
Component	26
Starboard/Severne	26
Neilpryde	26
Phantom	26
<b>6. Sustainability</b>	<b>27</b>
Sustainability considerations	27
<b>7 Other considerations</b>	<b>27</b>
Youth Pathway	27
Junior Sailing	27
Youth Sailing	28
Pathway beyond windsurfing / more women and youth in pro' sailing and America's Cup	28
Suitability or plans to serve as equipment for following Olympic cycles.	29
Safety considerations.	29
Personal Safety	30
Race Committee Optional Safety Procedures	30
<b>8 Identification</b>	<b>31</b>
Representatives of the tender and class association representatives	31
Main equipment item manufacturers and suppliers	31
Letters of support	31



## Executive Summary

- WF1 is a Registered Series Production Class, except for the Board which is one-design with multiple licensed builders. [1.5] - [1.12] and [5.6]
- The package is designed to be able to evolve to allow it to remain suitable for 2028, 2032 and beyond. [1.13] - [1.18]
- Package consists of 1x Board, 2x Sails, 1x Mast, 1x Boom, and 1x Foil. [1.7]
- Sail sizes are 9.5 and 8.5 for Men, 8.5 and 7.5 for Women, 7.5 for Youth. [1.9]
- Our founding industry partners are Starboard, Severne, Phantom International, and Neilpryde (\*Neilpryde however supports RS:X for 2024), but there are dozens of brands with eligible class legal equipment already on the market. [1.3] and [5.1]
- The Bic Techno remains an excellent pathway / feeder class. [7.1] - [7.3]

- The WF1 package is perfectly suited to the new format proposal we have put forward, which include Marathon, Point to Point, Slalom Sprints, Traditional Course Racing and GPS Sailing. [4.1] - [4.15]
- This submission is supported by the International Formula Windsurfing Class, as well as leading industry partners Phantom International, Starboard Windsurfing, and Severne Sails. [8.4]
- Foiling offers youth and women a pathway into professional sailing that did not previously exist. [7.7] - [7.11]

# 1. Introduction of the tender

## Description of the tender and proposed equipment for the 2024 Men and Women's Windsurfing Olympic event

- 1.1 The concept of Windfoil1 ("WF1") was to create an international windfoil racing class supported by and grown by the industry for the sailors. The primary purpose for the class is for it to be the Olympic discipline for 2024, but it is not the only purpose and the class will continue either way. The overarching goal is to simplify and unite. Currently, windfoil racing is somewhat disjointed, with two different yet similar World Championships in 2019 on varying equipment, in addition to the PWA World Tour. We would like to bring all of those together.
- 1.2 Underpinning the concept are basic guiding principles around price, universality, performance, industry backing and simplicity where possible. As such the class is proposed as a combination of one-design components and registered series production components.
- 1.3 In developing the WF1 rules, parameters and vision we have worked extensively with our founding industry partners: Phantom International, Neilpryde Windsurfing and Starboard / Severne, to whom we owe much gratitude. We are also grateful for the support from the Formula Foil Windsurfing Class, as well as the guidance from both RS:X sailors and sailors in the PWA.



- 1.4 Part of the WF1 “brain trust” are Olympic Medalists Aaron McIntosh, Dorian van Rijsselbergh, and Nick Dempsey who have provided drive and guidance. We are a Class Association by the sailors, for the sailors.

### The Equipment – overview

- 1.5 The WF1 equipment package is a combination of one design (board) and series production components (sail, rig and board). The idea behind this blend is simple. We wanted to limit the cost of the equipment best we could by making some of the main components one design – the components that were relatively more costly but that we did not believe we're going to suffer from not being able to evolve.
- 1.6 On the other hand with components such as the Sail and Foils, we recognised that those areas needed to be able to keep developing, the reasons for which are threefold. The first being that what ensures the new Olympic discipline remains cutting edge is that foils and sails are up to date – that's where the performance comes from. Second, in allowing those components to develop, it keeps the industry engaged, if the industry is engaged inevitably there is more participation. More participation means everyone wins. Third and perhaps most importantly, allowing those components to develop means the class can continually evolve and still be on the cutting edge at the 2028 and 2032 Olympics and beyond, without World Sailing having to go through the lengthy and difficult process of selecting new equipment. Meanwhile the eventual two year registration periods for equipment ensure consistency, reduced budget spend and fairness.

## Equipment Basics

- 1.7 A competitor can register: one board; one mast; one foil; one boom; and two sails. Those components are made up of a mixture of registered production series and one design (multiple licensed manufacturer) as follows:
- i. One Design components: the Board;



- ii. Registered Series Production components: Sails; Foil; Mast and Boom; and
- iii. No restriction on: Extension, Universal Joint.

### Board

- 1.8 The board is a “white board concept”. This means that any manufacturer can purchase from the suppliers or build their own board and brand it with their own graphics. The design is a Starboard Windsurfing design. The width is 95 cm wide, and 220 cm long. The design can be found in **Appendix A**. It is a dedicated foiling board with superior flying performance which rivals the boards used in international racing, but can also be used with a fin. The fin is not part of the Class Rules, however is a helpful tool in the youth pathway and development.

### Sails

- 1.9 The sail sizes are
- 1.9.1. 9.5 m<sup>2</sup> and 8.5 m<sup>2</sup> for men;
  - 1.9.2. 8.5 m<sup>2</sup> and 7.5 m<sup>2</sup> for women; and
  - 1.9.3. 7.5 m<sup>2</sup> for youth.

### Foil

- 1.10 The foil consists of:
- a. one foil-mast, no longer than 100 cm in depth;
  - b. one fuselage, no longer than 120 cm in length;
  - c. one tail wing;
  - d. one front wing, no larger than:
    - i. 1000 cm<sup>2</sup> in surface area, and 100cm in span for men;
    - ii. 900 cm<sup>2</sup> in surface area, and 90cm in span for women and youth.

### Mast

- 1.11 A competitor can only register one mast. Accordingly that mast has to work in both:

- 1.11.1. the 9.5 and 8.5, for the Men; and
- 1.11.2. the 8.5 and 7.5, for the Women and Youth.

#### *Boom*

- 1.12 The boom will be no shorter than 200 cm and longer than 250 cm. It will have a minimum weight of 3kg (excluding trim systems and lines).

### **Equipment Transition Period**

- 1.13 **Transition (2020)** – The vision is that for 2020, brands can pull products off their existing line of products. For 2021 the brands will have to conform to more specific parametres mostly in terms of sizes.
- 1.14 For example, at present Neilpryde, Severne and Phantom all produce an 8.0m<sup>2</sup>, and a 9.0m<sup>2</sup>. For the 2020 season those sails will be allowed to be registered (under “transition rules”) in lieu of the 7.5m<sup>2</sup>, 8.5m<sup>2</sup> and 9.5m<sup>2</sup> stipulated in the standard class rules.
- 1.15 The transition rule will read “...a sail no bigger than 9.5m<sup>2</sup>; ...a sail no bigger than 8.5m<sup>2</sup>; ...a sail no bigger than 7.5m<sup>2</sup>”.
- 1.16 **Phase 2 (Jan 2021)** – However, for the 2021 registration of sails the brands will have to comply with standard class rules.
- 1.17 **Phase 3 (2022)** – From August 2022 parameters and designs for the series production components will be locked and all equipment will have to be registered for the 2024 Olympic Games.
- 1.18 **Phases 4 (2024 to 2026) and 5 (2026 to 2028)** – For phases 4 and 5 the registration date will be on the 1st January every two years. This provides the advantages, listed above, included as mentioned the ability to evolve the equipment between Olympic Games'.



## 2. Class Association

### Details and status of class association

2. The Class Association is called Windfoil 1. It is in the process of being set up as an incorporated society in Great Britain. Its executive members are the proposed Directors and Shareholders.
- 2.1 Once WF1 is duly incorporated as a properly constituted society, an application will be made to World Sailing in May of 2020 for the Class to become a WS ratified Class Association, the outcome of which will be decided at the WS Conference in November 2020.
- 2.2 In the interim “transition period” between selection as the 2024 Olympic Windsurfing Class and ratification, WF1 will be supported by the International Formula Windsurfing Class (“IFWC”) whereby:
  - 2.2.1. WF1 will use the IFWC Rules, and the RRS as amended by a WF1 Addendum around Courses, Scoring and Equipment Limitation;
  - 2.2.2. WF1 will be a division of the IFWC during the transition before ratification as its own separate entity;
  - 2.2.3. WF1 will be entirely governed by a sub-committee of the IFWC. That sub-committee will the same people who are deemed to be on the WF1 Executive.
  - 2.2.4. The founding Executive members have been set out below and can be amended by the Chairperson of WF1 from time to time as required.
  - 2.2.5. WF1 will be allocated two World Championship titles under the IFWC rules. Those titles will be awarded to WF1 Men and WF1 Women for 2020.
  - 2.2.6. From 2021 WF1 will be a ratified WS Class Association, at which point it will be able to offer 4 World Titles.

2.3 The Executive of the Class consists of:

- 2.3.1. Antonio Cozzolino (NZL) – Chairperson, current RS:X and PWA sailor.
- 2.3.2. Dorian van Rijsselberghe (NED) – Olympic Gold Medalist 2012 and 2016.
- 2.3.3. Nick Dempsey (GBR) – Olympic Bronze Medalist 2004, Silver Medalist 2012 and 2016.
- 2.3.4. Aaron McIntosh (NZL) – Olympic Bronze Medalist 2000.
- 2.3.5. Glenn Ashby (AUS) – America's Cup Winner 2017, multiple World Champion and Olympic Silver Medalist.
- 2.3.6. Elliot Carney (GBR) – GBR RS:X Representative.

2.4 In addition to those the following persons will be invited to be non-voting members in the following capacities:

- 2.4.1. Emmanuel Messiaen (FRA) – WF1 Marketing Manager, and Phantom International representative (non-voting).
- 2.4.2. Svein Rasmussen (NOR) – Starboard Windsurfing representative (non-voting).
- 2.4.3. A nominated person – Neilpryde Windsurfing representative (non-voting).

**Status of the class rules and description of required changes for Olympic competition.**

- 2.4.4. The WF1 Class Rules have been drafted and can be produced upon request.
- 2.4.5. In the transition period WF1 will use the IFWC rules with Addendums for limitation of equipment, formats and courses, as per the descriptions outlined in this document.

### 3. Equipment control

#### Multiple One Designs – Registration Production Series / with OD Hull

- 3. The WF1 Class is mostly a "multiple one designs – Registered Production Series Class".
- 3.1 The only exception is the board which is a "single one design – multiple licensed manufacturers" components. The idea behind this being that it will help keep prices for full packages competitive. WF1 is also open to consider alternative systems.

#### Board

- 3.2 Proprietary manufacturer branding on the hulls is both permitted and encouraged.
- 3.3 The board will be built by approved WF1 manufacturers under license to Starboard Windsurfing parent company (Tiki Corp Limited) or related entity.
- 3.4 Each board produced will have a quality control sticker indicating weight (+/- 200 grams), swing point and balance point. Measurement certificate issued on purchase.



## Sails, Foils and Rig

- 3.5 The rest of the components will operate on a Registered Series Production system. From 2021 brands willing to register their equipment to be eligible to race will have to obtain a WF1 Series Production certificate.
- 3.6 The minimum production run of components will be 50 per year for each individual component. Those must be available for public purchase. The registration system will require the WF1 Class measurer to approve the designs before a certificate is issued.
- 3.7 The full Series Production registration system will take effect from 1 January 2021. The series production components need to be registered by the 1st January 2021, for use in 2021 and 2022.
- 3.8 From August 2022 brands must register their final designs for the 2024 Olympic Games, which will be locked until the day after the end of the Olympic Regatta.
- 3.9 For equipment to be used within the class before 1 January 2021, WF1 will issue a list of equipment publicly available on the market which meets the Class's transition Rules. That list will be deemed the registered series production list for 2020.

### Description on how eligible equipment is limited, inspected and controlled

- 3.10 Regatta equipment inspection is a simple process, every board sail and foil has a WF1 Series production barcode and serial number.
- 3.11 Eventually a basic regatta app will be developed whereby a scan of each of the barcodes registers the competitors equipment against their profile. Obviously in initial stages these details will need to be registered manually.
- 3.12 A Regatta measurer will be on site to spot check equipment.

- 3.13 A "sail card" and "foil card" will also be introduced. This system is designed to limit the amount of equipment that a sailor may use in sanctioned events each year. The exact numbers are to be confirmed but this process will be managed by WF1.

#### **Permitted number of main equipment items per sailor at an event**

- 3.14 At an event a sailor will register: one Board, one Foil, two Sails, one Mast and one Boom.



## 4. Formats and events

### Description of formats that the equipment is best suited for

4. Around 18 months ago, the WF1 team came to the realisation that windfoiling would be Olympic ready for 2024. Since then, we have worked tirelessly to define the equipment that should be used, the format that should be raced, and the courses that should be used. In doing so we have created the perfect blend of racing for all levels of ability from youth pathway and weekend warrior to elite and Olympic. We have worked on the belief that “if we can foil, we can race” and have proven that we in fact can race in 5 - 30 knots.
- 4.1 We know that windfoil racing is not possible on one course configuration in all conditions and so have created a format package to deliver engaging racing for all windsurfers as well as creating the ultimate test for athletes to perform on the Olympic stage.

### WF1 Racing Format

- 4.2 The WF1 Racing format consists of five different racing sub-formats. This concept is intended to be very malleable. Not every sub-format needs to be completed to constitute a regatta – but instead the format offers options for fair, challenging and attractive racing irrespective of what the weather produces.
- 4.3 In an ideal five-day Championship with favorable circumstances/conditions, the format is based around a maximum 25-race series. Each sub-format carries the same weighting, with the exception of the Marathon which is double weighted. The five racing sub-formats are: Course racing ; Marathon; Point to Point; Sprint Slalom and GPS Speed. They are described in detail further below.
- 4.4 The WF1 team have facilitated test events and regattas over the last 8 months to trial the suitability of the concept and to make refinements along the way. The testing was critical in understanding equipment limitations, body size and range,

competitor ability and racing conditions required to deliver fair and exciting competition. We can say with certainty that windfoil racing is Olympic ready.

- 4.5 This format is pitched at fleet sizes comparable to World Cup and Olympic Games Regattas. The versatility of the format means that other regattas, ones below elite level and all the way down to club level regattas, can pick and choose the disciplines as circumstances allow (whether that be conditions, staffing or sailor ability).
- 4.6 Sub-formats can be removed, or some may be combined. Objective guidelines should be in place for an optimal and fair selection of sub-formats at a regatta, depending the conditions (wind, waves, etc.).

## Classic

- 4.7 The Classic racing sub-format is the current trapezoid or windward/leeward racing format. Under the WF1 concept, Classic races have a target time of 15 minutes to enable a greater number of races to be completed per day, up to a maximum of five. This classic component is a nod to tradition and yachting as we know it.

## Marathon

- 4.8 The Marathon distance style races are long races up to 3 hours. The race starts in a given location, makes its way around given geographical features and out to particular well-known landmarks before returning to the original starting point.
- 4.9 Some such landmarks could be for example Statue of Liberty, New York; the Sydney Harbour Bridge and Opera House, Sydney; the Burj Al Arab and the World, Dubai; the Golden Gate Bridge and Alcatraz, San Francisco; the Chateau D'If, Marseilles; the island of Venice; inner harbour Hong Kong; Downtown Miami, Rangitoto Island, Auckland etc.



- 4.10 The Marathon sub-format incorporates some elements usually limited to offshore racing, but more importantly shows off our wonderful sport in fantastic venues. Inspired by the gripping images shown during cycling's Tour de France, the media images generated from this style of racing are of immense benefit to both the sport and the regions which hold its events.

## Point to Point

- 4.11 Point to Point consists of two separate medium length races (about 30 to 50 minutes each). This constitutes of first, an upwind race, out to a finish line some distance away. Then a following a rest period, the next race is the downwind return (or vice versa). The races are to be scored separately. This sub-format is easy to follow and rewards the more specific aspects of sailing on and off the wind. Much like the Marathon, this can also make use of the often beautiful surroundings found at regatta venues, and is very media/spectator friendly.

## Sprint Slalom

- 4.12 Slalom Sprint races are short slalom style races with either one or three gybes. The aim is for races to last around three minutes. High visual impact and high stakes, it is exciting to watch and easy to follow, it rewards perfect sailing and punishes small mistakes. In larger fleets, Sprint can be broken down into fleets for safety.

## GPS Speed

- 4.13 This sub-format incorporates SAP Sailing Analytics and the technology that we now use out sailing every day (GPS devices), and what is a popular comparison tool between weekend sailors and professionals alike. During a half hour window, competitors have as many opportunities to attempt there top 10 second averages. SAP Sailing Analytics then produces the rankings and points for the



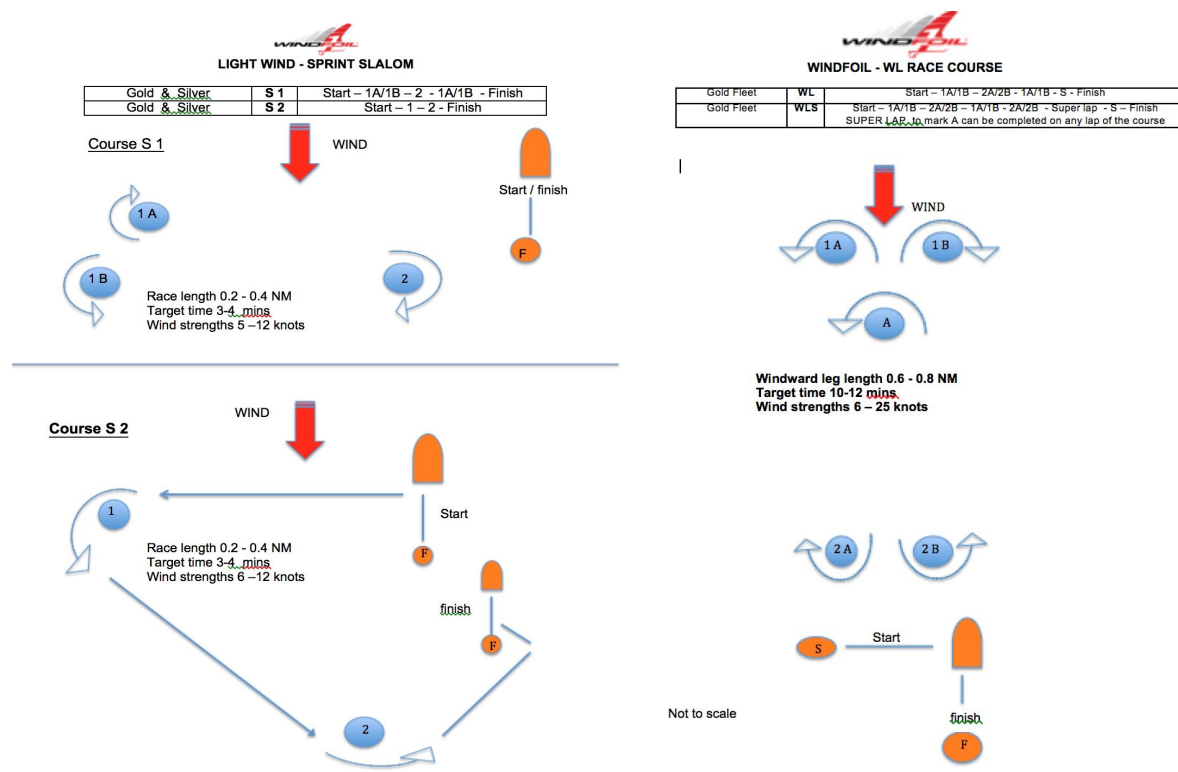
day. Live leaderboard keeps the audience and racers engaged. The concept with GPS speed is to have results from conditions where a race committee may struggle to set a fair race course, extreme shifty light winds and extreme strong winds.

## Why so much innovation?

- 4.14 The justification behind the WF1 Racing format is that it represents a broader cross-section of what windsurfing is today. It is intended to promote interest, excitement and engagement in the sport. It caters not just to Olympic level sailors but to a broad array of participants – in particular it is intended to appeal to the Youth.
- 4.15 Each sub-format serves its purpose and highlights a fundamental aspect of the sport. The Marathon will promote venues, produce great media images, and are enticing and easy to understand for spectators. The Point to Point races are spectator friendly, and highlight the differing skills required for up and downwind sailing. The Sprint Slalom allows for a greater number of races to be completed in a short space of time, reward perfect execution of racing elements, and provide exciting viewing. The GPS Speed component incorporates SAP Sailing Analytics and modern technology in an easy to understand yet exciting way. Finally, the Course Racing component anchors this whole format to a traditional racing style, ensuring that while we are pushing the development and evolution of our sport that we are also grounded in familiarity.



# Courses



## Suitable wind ranges and sea states

- 4.16 The complete WF1 racing package has been designed to deliver racing in winds from 5-30 knots. The format guidelines take into account weather conditions, sailor ability and body weight, while the WF1 equipment has been selected for racing all formats. The combination of those two factors in the table below allows us to define the best format of racing for the day's conditions.

Race format	# of races	Wind range	Target race times	Equipment	Sea state
Course Racing	10	7- 30 knots	12- 14 mins	Windfoil 1 Package	Flat to moderate

Slalom Sprints	5	5- 10 knots	3- 4 minutes	Windfoil 1 Package	Flat to moderate
Marathon	1	7-20 knots	2- 3 hours	Windfoil 1 Package	All
Point to Point	2	6- 20 knots	30 - 40 mins	Windfoil 1 Package	All
GPS Speed	2 per day	5 - 30 knots	2 hour window	Windfoil 1 Package	Flat water

## Regatta and Event Scoring

4.17 After significant testing we have refined a scoring system which we have determined as the most fair, and have devised the optimum regatta schedule to best carry out the format proposal. They are as follows:

- 5 days for WF1 World Championship;
- 5 days for WF1 European Championships;
- 4 days for World Series Events;
- 3 days for WF1 National Championships;
- 2 days for WF1 Special Events.

Event Scoring Breakdown			
	Max # of Races	Points per race	Max Fleet size
Course Racing	12	x 1	64 per race
Sprint Slalom	6	x 1	16 per heat
Point to Point	2	x 1	64 per race
Marathon	1	x 2	128 per race
GPS Speed	4 = (top 10 second average speed)	x 1	32 per 30min window

4.18 A few points to note on scoring:

- A total of 25 races could be raced in a full perfect wind regatta.

- 4 races may be discarded in a full 25 race series. The maximum number of discardable races per sub-format is as follows:
  - 2 from Course Racing;
  - 2 from Slalom;
  - 1 from Point to Point;
  - 1 from GPS speed; and
  - Half of the marathon result.
- The following discards will apply in a reduced series:
  - 3 in 21 race series
  - 2 in 14 race series
  - 1 in 7 race series

### Eligible Events / Formats Used / Countries Represented 2019 / 2020

- 4.19 The main events where the equipment was tested / eligible to race and the countries represented in those events in 2019 were:
- New Zealand Windfoil Racing Series 2018/2019, consisting of 4 full length regattas (New Zealand, Australia, Great Britain, France, The Netherlands, and Spain);
  - Medemblik Regatta 2019 (Russia, New Zealand, Great Britain, The Netherlands, France, Ukraine, and Portugal)
  - Texel Waves Invitation GP 2019 (New Zealand, The Netherlands, and France)
  - Formula Foil World Championships and the IFCA Foil World Championships 2019 (with the exception of the board which at the time was not yet registered).
- 4.20 With the exception of the Formula Foil World Championships where only Course Racing was used, and the IFCA Foil World Championship which are yet to take place, the other 6 regattas used all of the sub-formats outlined in this section.
- 4.21 The main events where the equipment will be eligible to race in 2020 are:
- Formula Foil World Championships 2020;
  - Formula Foil European Championships 2020;
  - New Zealand Windfoil Racing Series 2019/2020;

- Medemblik Regatta 2020;
- Texel Waves Festival 2020;
- Australian Nationals 2020.

## 5. Manufacturers and availability

### All existing manufacturers of main equipment items.

5. As indicated earlier in this document our foundation industry partners are Starboard, Severne, Neilpryde\* and Phantom International. We selected those brands because we believe that currently they are the leading brands in the foiling windsurfing market both in terms of performance and production.

\*Neilpryde supports the RS:X for 2024, but supports WF1 for 2028.

- 5.1 However, we are aware that there are a great number of other brands with products on the market which fit both into the 2020 transition regulations as well as within the standard class rules which will apply from 2021 onwards. We strongly encourage all the brands participate in the WF1 Project and will be reaching out to many in the lead up to the sea-trials and the November WS Conference to ensure they are ready to join the program. Here is a list we have identified of manufacturers who produce components on the market today:

- 5.1.1. Sails – Duotone; GA; Point 7; Challenger Sails; Gun Sails; Loft Sails; Avanti Sails; Naish Sails;
- 5.1.2. Foils – Loki Foils; Exploder; Z Foils; AFS; Select Foils; F4; and
- 5.1.3. Board manufacturers (to produce branded one design board): Naish; JP; RRD; F2; Tabou; Fanatic; Patrik; Future Fly; Exocet; Goya.

### Weekly maximum delivery capacity

- 5.2 Starboard: 400 per month for all components;
- 5.3 Phantom International: 500 per month for sails, 100 per month for foil;



5.4 Neilpryde\*: TBC.

\*Neilpryde supports the RS:X for 2024, but supports WF1 for 2028.

### **Example of warranty policies, claim forms and warranty history of the last two years**

5.5 Please see the Starboard iFoil tender document Appendix for an example of warranty policies etc.

### **Description of current market situation, including licensing terms and applicable royalties, fees and any intellectual property ownership considerations**

5.6 The proposed licensing terms on the WF1 board are a royalty fee to Starboard Windsurfing's parent company (Tiki Corp) or affiliated entity of 5% on the MSRP of the board.

5.7 Current market situation – the equipment or equipment near-identical to the WF1 rules is currently manufactured by our three main industry partners, as well as the manufacturers listed at para [4.23].

5.8 The equipment is distributed worldwide to the market through their respective distribution networks. In the case of Starboard Windsurfing, that is through its sales network of 75 distribution partners, to the end-user and windsurfing associations directly from the distributor or via retail shops.

5.9 As set out above, any manufacturer who is willing can apply to WF1 to become a licensed manufacturer of the WF1 board.

5.10 Any manufacturer can apply to register their foil, sail and rig components on the WF1 series production list.



### Estimated availability of each main equipment item: rig, sail, board and appendages per region

Group	Region	Equipment already available for purchase in region	Average delivery waiting time	Estimated current users
Group A:	Ireland / United Kingdom	Yes	Starboard :120 days Phantom: 30 days Neilpryde: TBC	Starboard (board): 12
Group B:	Central Europe	Yes	Starboard:120 days Severne: 120 days Phantom: 30 days Neilpryde: TBC	Starboard: 63
Group C:	East Europe	Yes	Starboard :120 days Severne: 120 days Phantom: 30 days Neilpryde: TBC	Starboard: 1
Group D:	South Europe	Yes	Starboard :120 days Severne: 120 days Phantom: 30 days Neilpryde: TBC	Starboard: 50
Group E:	Iberian Peninsula	Yes	Starboard :120 days Severne: 120 days Phantom: 30 days Neilpryde: TBC	Starboard: 0
Group F:	Low Countries	Yes	Starboard :120 days Severne: 120 days Phantom: 30 days Neilpryde: TBC	Starboard: 9
Group G:	North Europe	Yes	Starboard :120 days Severne: 120 days Phantom: 30 days Neilpryde: TBC	Starboard: 16
Group H:	Euro-Asian	Yes	Starboard :120 days Severne: 120 days Phantom: 30 days Neilpryde: TBC	Starboard: 0
Group I:	Middle East and West Asia	Yes	Starboard :120 days Severne: 120 days Phantom: 30 days Neilpryde: TBC	Starboard: 2
Group J:	East Asia	Yes	Starboard :120 days	Starboard: 44



			Severne: 120 days Phantom: 30 days Neilpryde: TBC	
Group K:	South and Central Asia	Yes	Starboard :120 days Severne: 120 days Phantom: 30 days Neilpryde: TBC	Starboard: 1
Group L:	South West Pacific	Yes	Starboard :120 days Severne: 120 days Phantom: 30 days Neilpryde: TBC	Starboard: 19
Group M:	South & West South America	Yes	Starboard :120 days Severne: 120 days Phantom: 30 days Neilpryde: TBC	Starboard: 2
Group N:	Central & South America	Yes	Starboard :120 days Severne: 120 days Phantom: 30 days Neilpryde: TBC	Starboard: 5
Group O:	North South America, Central America and Caribbean	Yes	Starboard :120 days Severne: 120 days Phantom: 30 days Neilpryde: TBC	Starboard: 0
Group P:	North America	Yes	Starboard :120 days Severne: 120 days Phantom: 30 days Neilpryde: TBC	Starboard: 36
Group Q:	Africa	Yes	Starboard :120 days Severne: 120 days Phantom: 30 days Neilpryde: TBC	Starboard: 0
<b>Total</b>				Starboard: 260

### Retail prices of main equipment item: rig, sail, board and appendages

- 5.11 As set out above, any manufacturer who is willing can apply to WF1 to become a licensed manufacturer of the WF1 board.
- 5.12 Below is a selection of prices from our industry prices. These are public full retail prices.

- 5.13 From our experience and anecdotal evidence that we have collected from discussions from a broad cross section of windsurfers at all levels we have gleaned that in a registered series production model, there are large opportunities for sponsorship on local, national and international level which does not currently exist. This is a really big positive for the sport and is unique to the registered series production equipment. It offers opportunities which are simply not available in a one-design model.
- 5.14 The average price of the leading brands at full retail price is approx €9563 for a Men's Package including 2x Sails.
- 5.15 An important point to take into consideration is the second hand market. Because of the nature of the class and the development transitions roughly every two years, as well as the broader participation in this discipline, and the equipment already available on the market that is legal with our Class Rules – there will be a thriving second market where sailors new to the class will easily be able to purchase high quality equipment for very good value. Again, this is not something present in a purely one-design structure.

Example Price List			
Component	Starboard/Severne	Neilpryde	Phantom
Sail	€1,099	€1,124.17	€909
Sail	€1,149	€1,140.83	€957
Sail	€1,199	€1,165.83	€1,005
Foil	€2,399	€2,957.50	€2,856
Board		€2,082.50	€2,199
Boom	€1,328	€1,249.17	
Mast	€811	€915.83	
Mast	€777	€874.17	
Extension	€109	€154.17	
UJ / Base	€69	€70.83	

Package (2 Sails, Men) Ex VAT	€9,728.00	€9,736.67	€9,225
Package (2 Sails, Women) Ex VAT	€9129.00	€10,569 (2 masts)	€8847

## 6. Sustainability

### Sustainability considerations

- Please see the Starboard iFoil Tender Appendix for the expansive and thorough sustainability policies. Of particular note are the Flax Balsa construction of the boards, recyclable packaging, and the bio-resin.

## 7 Other considerations

### Youth Pathway

- In considering the selection of new Olympic equipment it is crucially important to consider the pathway to get there, and to ensure that there is an existing infrastructure to feed through that pathway.

## Junior Sailing

- The Bic Techno is arguably the most successful junior sailing class in the world. Last year alone, over 400 junior sailors competed at the Bic Techno World Championships. The Techno caters for and is accessible to junior sailors as young as 8 years old, and allows them to compete right up until they are 17 years old. While its not very high performance, this is a very strong and important springboard which absolutely must remain.
- The equipment is affordable, durable, easy to use, and provides children with the necessary fundamental windsurfing skills which they require to progress through the ranks to Youth and beyond. Most junior sailors move off the Techno early

(depending on size and ability), and graduate to the Youth Class (currently the RS:X W package) at around 14 to 15 years old.

- 7.3 Under this tender for new Olympic equipment, it is strongly recommended that Techno continues to be fully supported, as it is an excellent junior board. The Bic Techno should be seen as comparable to the Optimist, in dinghy terms.

## Youth Sailing

- 7.4 In selecting Olympic equipment in line with this tender, it is important that a comparable foiling youth class is chosen as well. Excellent foiling/convertible equipment suitable for youth sailing is already available on the market.
- 7.5 The parameters for this equipment should be, broadly speaking: a similar board to the Olympic equipment but in more durable construction. The sail for boys and girls should be the 7.5 m<sup>2</sup> with the accompanying mast from the Olympic package or alternatively one of the rigs from the Techno, meaning that children would only have to purchase a hull when moving from Techno to foiling. The boom and foil mast should be made from aluminium; and above all it should be very affordable.
- 7.6 Some brands currently produce equipment to these specifications and it is available through their worldwide distribution networks. The equipment is lower spec' than the proposed high performance Olympic equipment, meaning it will be safe for children to learn to race on, more affordable and more durable. The speeds will be lower, limited by slower foil designs and made from aluminium construction. To continue the metaphor from above, the youth class should be seen as comparable to the 29er, or 420.

### Pathway beyond windsurfing / more women and youth in pro' sailing and America's Cup

- 7.7 The most exciting thing about windfoiling is that it is the meeting of the windsurfing generations and the meeting of the classes. Windfoiling in New Zealand has been attracting children from Optimist, Laser, 29er and the Wasp. It

is the cross pollination of classes and the generations that is leading to the rapid growth of windfoiling.

- 7.8 Traditionally it has been very difficult for windsurfers to easily cross over into the world of professional sailing. While it has happened, it is rare and challenging with no clear pathway to professional sailing like in the traditional Olympic sailing disciplines.
- 7.9 However sailing has evolved and foiling is now at the forefront of those professional sailing tours and competitions. Should foiling be selected as the new Olympic windsurfing discipline then for the first time in history, windsurfing will offer a direct pathway to the America's Cup, the GP50s, the WS Match Racing Tour and many others.
- 7.10 The skills you acquire in racing foiling windsurfers; the time on distance, the speed, altitude control, the laylines, the strategy and tactics, the sensation of flight; they all directly translate to the new era of professional sailing. Windfoiling offers a pathway to other high performance and foiling classes that was not previously there.
- 7.11 Further, given the high level of female participation in Olympic windsurfing, this would expose a much larger number of young girls and women to foiling and arm them with the requisite skills to go onto those tours – something which until now has been woefully lacking.

### **Suitability or plans to serve as equipment for following Olympic cycles.**

- 7.12 As noted at paras [1.6] and [1.18], we have incorporated planned evolution to enable the WF1 Class to remain relevant and suitable as the Olympic Class through to 2032 and beyond.

### **Safety considerations.**

- 7.13 Safety is paramount. WF1 has created the following procedures for normal and adverse racing conditions. Some rules are in a trial period now and others are already in place and part of the standard racing rules for windfoil racing.



## Personal Safety

- 7.14 A helmet to the minimum standard EN1385 or EN1077 or equivalent with at least 300 square centimeters of the exterior surface in a high visibility colour shall be worn while at all times while racing.
- 7.15 All crew shall wear buoyancy vests, impact vests, or lifejackets in good repair properly secured about their persons at all times while afloat.
- 7.16 During long distance and point to point races, sailors shall carry a flare and may also be asked to carry a tracking device and/or application associated with the sailor's mobile phone.
- 7.17 A tow line of 5 meters and a minimum of 4mm shall be carried in Long distance races.
- 7.18 A whistle shall also be attached to the sailor.

## Race Committee Optional Safety Procedures

- 7.19 In big sea states with very high wind, or with a less experience fleet, the Race Committee may feel the need to implement additional safety measures. The R Flag Protocol has been devised for this purpose. If Flag R has been displayed at the Preparatory Signal then:
  - 7.19.1. A board shall not start the race on port tack; and
  - 7.19.2. A board shall not foil in the immediate start line area during the last minute and until the start gun goes. The 'immediate start line area' is defined as an area 10 meters behind the start line and its extensions.
  - 7.19.3. The purpose of this rule is to promote the safety of competitors. This is a new rule that is being trialed.

## 8 Identification

### Representatives of the tender and class association representatives

8. The representatives of this tender are the Windfoil 1 Class Association supported Formula Class Association (in conjunction with the International Funboard Class Association).

### Main equipment item manufacturers and suppliers

- 8.1 The Starboard / Severne components are manufactured as follows:
  - 8.1.1. Board: Cobra, Thailand
  - 8.1.2. Sails: IK, China
  - 8.1.3. Masts: Italica, Italy
  - 8.1.4. Foils: Sonic, China
  - 8.1.5. Booms: Italica, China
  - 8.1.6. Extensions, mast base and Alu Race Boom 190-240: Technical Devotion, China.
- 8.2 The Phantom International components are manufactured as follows:
  - 8.2.1. Phantom foils built in China – Builder Sonic
  - 8.2.2. Phantom sails built in Sri Lanka – Builder Aquadynamic
- 8.3 The Neilpryde components are manufactured as follows: TBC.

### Letters of support

- 8.4 Please see **Appendix B** for the following letters of support:
  - 8.4.1. Phantom International;
  - 8.4.2. Starboard Windsurfing and Severne Sails;
  - 8.4.3. Formula Windsurfing Class / International Funboard Class Association;
  - 8.4.4. Glenn Ashby.

## Appendix A







- We believe you already have Starboard and Severne product brochures from the Tender submitted in May 2019.
- Please see the following links for Phantom International Products:
  - Sail SF: <https://www.phantom-international.com/iris-sf>
  - Foil R: <https://www.phantom-international.com/iris-rf-1>

## Appendix B

- Letters of support attached separately