Olympic Equipment Updates to LA2028

Building Specification Changes, Class Rule Changes and Decisions by Email

1. Background

1.1 WS Regulation 11 highlights the processes and timelines to change or evolve Olympic Equipment.

1.2 WS Policy D.5 describes the process WS Classes shall follow to request changes to manufacturing/building specifications and sets further requirements for the Olympic Classes.

2. 2024 Annual Conference and Previous Approved Changes

2.0 WS Policy D.11 was formally approved at the 2024 Annual Conference which details the cases where the Office may consider Building Specification Changes of Olympic Equipment outside Regulation 11 requirements and inside the 5 years before the Olympic Games from when the equipment is selected.

2.1 The following **49er and 49er FX** Equipment Updates were approved with some pending information to be confirmed with the Office:

(a) A change of the mould to add a flat area of 90mm long under gunwale. The Equipment Committee approved the change.

(b) Bowsprit Tack Line Hole Position. The Equipment Committee approved the change pending the following confirmation from the Class and or the Builders:

(i) approved changes to be implemented to existing bowsprit as a service to the sailors

(ii) only bowsprits with updated location of the tack line hole to be considered class legal

(iii) Diameter and position of the hole to be added to the WS approved Builders Construction Manual

(c) Deck and Wings Grip different options: deck and wings supplied with Gelcoat non-skid or a smooth surface to take glued on non-skid. The Equipment Committee approved the change pending the Builders sharing the following with the Office:

(i) Non-skid building specification (dimensions, positioning and weight) to be added to the WS approved Builders Construction Manual

(ii) Non-skid kit cost

(d) Addition of 1 extra layer of 165g cloth to underside of wings. The Equipment Committee approved the change pending the following confirmation from the Class and or the Builders:

(i) Updated wings building specifications to be to be added to the WS approved Builders Construction Manual

(ii) Only wings complying with the updated specification to be allowed in LA2028.

2.2 The Office presented the 3D scanner work, and the differences found between the **Nacra17** DNAs and Element6 Daggerboards were presented. The Equipment Committee decided to allow only Element6 Daggerboards in LA2028.

2.3 The Athletes Weight Issue in the **Formula Kite Class** was discussed and the Equipment Committee recommended to Council to appoint a Working Group to look at the issue and find a solution.

2.4 The approval by email of the **iQFOiL** class rule change and permission to use the 8.0 m2 sail for the Men division and the 7.3 m2 sail for the Women division was formally noted.

3. Updates since 2024 Annual Conference

3.1 49er & 49erFX

(a) For items listed in 2.1: Mould, Bowsprit, Hull, Wing Grip: The Office is still liaising with the manufacturer, right holders and class to confirm the conditions set by the Equipment Committee at the 2024 Annual Conference.

(b) Regarding the FX Gennaker; the Office has received a detailed report from the builder but is yet to receive the report from the Class following their review of the prototypes.

3.2 Nacra 17:

(a) Element 6 daggerboards (see 2.2). The Class Rules have been updated to reflect the Equipment Committee decision.

(b) The Equipment Committee approved a change to the Nacra 17 Mainsail Reinforcements pending:

(i) receiving feedback and approval on the review of the prototypes

(ii) receiving updated building specification to be added to the WS approved Builders Construction Manual

The Office received the full set of updated building specifications from the Builder

The Office received the following update from the Builder:

- *Changes fully implemented at production.*
- *57 sails produced with the updated building specification.*
- *Sailors are using the updated mainsail*
- *Feedback from sailors: Sails are working just fine, not performing differently than the previous iteration, but also not slower or faster. Seems the fleet is quite content with them.*
- *Other feedback from the Manufacturer: Sail production is going smooth and there are no problems in the supply chain*

3.3 IKA - Formula Kite

(a) Kite Size Limitation (see 2.3). A temporarily Class Rules Change has been approved to limit the maximum kite size allowed, through the process permitted by RRS87, at the following events:

(i) S.A.R Princesa Sofia 28 March – 5 April 2025, (Mallorca, Spain)

(ii) Semaine Olympique Française 19 - 26 April 2025, (Hyères, France)

(iii) Formula Kite European Championships 11 – 19 May 2025, (Urla, Turkey)

The Class provided an update following the first event of the above list. The update can be found in Appendix A of this document. The ERSC has approved a process to review the longer term implementation of the rule.

(b) Recall of Levitaz hydrofoils:

From February 2025 a recall was initiated due to an equipment issue that led to damage and, in some cases, total failure of the Foil Masts. The equipment items under scrutiny were initially only the Foil Masts R6 V2 which was then expanded to the Frontwing R6 V1, Foil Mast R6 V1. The manufacturer was able to identify the root cause of the equipment failure and the remediation actions were presented to World Sailing Technical & Offshore Department and the IKA Formula Kite Class during an online meeting. The remediation presented by the manufacturer is not considered a change of Building Specifications as they still produce within the approved tolerances.

3.4 iQFOiL

(a) Following consultation with the Equipment Rules Sub-Committee, the Office published a Class Rule Change allowing sailors to cut old 530 Masts to fit new smaller sails, and use them at 2025 events.

(b) iQFOiL new Sails (see 2.4). The Class provided an update which can be found on Appendix B of this document.

Appendix A – IKA Formula Kite Report

A short report about the experiences with the 3-kite-quiver class rule change in Palma.

For background, the class has approved a class rule change (subject to World Sailing acceptance) to reduce the number of kites from 4 kites to 3 kites at certain events. Men are dropping the smallest kite (9m for most), women are dropping the biggest kite (19m).

The reason for this class rule change is that the equipment for men and women is currently in principle the same, with 21m as biggest kite for men and 19 as biggest kite for women. This resulted in ideally similar body physiques for men and women. Women have been struggling with achieving the required weight to be competitive, both physically as mentally. Reports and discussion about this issue took place at the last annual conference in Singapore.
A secondary benefit of the proposed change is that the number of kites required is reduced from 4 to 3, which especially for the women's fleet (dropping the biggest and most expensive kite) makes a significant difference.

For Palma 2025, the class rule change was imposed through RRS 87, for both men and women.

Findings and feedback:

- *100% of the fleet (both men and women) voluntarily opted for the 3-kite quiver.*
  The 3-kite quiver was required to qualify for gold fleet (men) and to the medal series (men and women – women was one fleet), however ALL sailors chose to compete on 3 kites (and/or did not even bring the additional kite size)
- *All teams have trained throughout the winter already on a 3-kite quiver in anticipation of the class rule change.*
- *The weight of the majority of women has dropped by 10-15 kg (now in the 60-65kg range) compared to the Paris Games.*
- *There is no effect on the men's fleet in terms of body physique (other than by the reduction from max 25/23m for Paris to now 21m). However, there is financial benefit by dropping the 9m kite in the long term.*
- *Although Palma was a relatively windy regatta, there were a number of days were the women's fleet would have chosen the 19m kite and therefore sailed "underpowered" on those days.*
- *There were no issues with launching and/or racing at any moment, even on the offshore days were the wind in the launching area was very light.*
  - *Smaller kites are more stable and easier to control*
  - *Racing partly took place in underpowered conditions, benefitting lighter sailors*
- *On the upper end of the wind range, there was no negative impact for the men's fleet by dropping the smallest (9m) kite. Even young sailors (15 years and light) had no problems in 20 knots and wavy conditions (sailing on their 11m kite).*
- *The feedback from all teams is extremely positive, both for the development of the weight in the women's fleet and the subsequent cost savings by going from 4 kites to 3 kites*
- *A full test in borderline light conditions has not been done in major competition, however the teams have reported that they have been sailing in very light conditions (6 knots and less) during winter training without issues.*

- *Teams are reporting that some sailors might need transition time. So far sailors have been used to always being overpowered, while now with a smaller kite skills become more important than body physique (in the case of the women's fleet)*

In summary, the findings from Palma and the general feedback from the teams are extremely positive. No one wants to go back to 4 kites, and subsequently, should the class rule change request being approved, we expect that the vast majority of competitions will happen with a 3-kite quiver and only open/beginner level competitions may allow a 4th kite to help newcomers to the sport with an easier start.

There are some concerns from some of the industry that I also would like to address:

- *Ozone claims an effect on their business model. However, Ozone has a "build to order" system, and if no one orders a 19m kite then there should be no effect.*
- *Flysurfer claims development costs, however during the registration audit Flysurfer (as well as Ozone) has stated that the 21m and 19m kite are identical in design, just scaled to size. As the 21m for men remains the most bought kite, we cannot see an effect on development costs here.*

A small number of 19m kites has been sold since their approval in May 2024. Most of these kites have been already used for training/competition leading up to the proposed class rule change in January or are handed down to youth male sailors (for which the 21m is too big). Since the class rule change discussion started in autumn 2024 (before the annual conference), no teams have bought new 19m kites anymore. We therefore do not see a significant financial impact by the proposed class rule change on MNAs, especially compared with the savings over the remainder of the quad with one kite less per quiver.

Appendix B – iQFOiL Report

iQFOiL 7.3 Sail Production & Performance Update

16th April 2025

1. Production and Distribution Overview

1.1 Production Commencement

Following the final approval of the sails in Singapore, production for the 7.3 new design officially began in December 2024. The initial rollout focused on rapid and strategic global distribution to ensure athlete readiness ahead of early-season events.

1.2 Initial Global Distribution

A total of **400 sails** 7.3 sails were produced and distributed worldwide between January and February 2025:

- **Lanzarote Allocation (100 sails):**
  These were delivered directly to competitors preparing for the iQFOiL Games Lanzarote event.
  - **Arrival Date:** Monday, 13 January
  - **Event Start:** 28 January
  - **Preparation Time:** 15 days, deemed sufficient for adaptation and training.
- **General Global Allocation (300 sails):**
  These were shipped before Chinese New Year, with priority given to nations hosting early competitions, such as **New Zealand, Australia, and Israel**.
  Distribution was based on:
  - Urgent sail requests submitted via official Class forms.
  - Historical data on active sailors per country over the last two years.

1.3 7.3 Future Deliveries

- **Total Delivered to Date:** 600 sails
- **Expected Shipment (May 2025):** 450 sails
- **Projected Total by June 2025:** Approximately **1,500 sails**

1.4 8.0 Sail Status

The 8.0 sail, previously used in the women's fleet, was already in circulation. Therefore, adequate stock was available on the market, eliminating the need for immediate additional production in December.

2. Sailor Feedback and Event Performance

2.1 General Feedback

Feedback from sailors—both male and female—has been overwhelmingly positive. The introduction of the 7.3 sail has improved fleet balance and allowed a broader range of athletes to compete effectively across a variety of wind conditions.

2.2 Performance Across Major Events

Three key international events have been completed to date, offering insight into the sail's impact:

iQFOiL Games Lanzarote (January 2025 – Strong Wind Conditions)

- The event featured wind gusts up to **28 knots**, traditionally unfavorable for lighter sailors.
- **Notable Performances:**
    - *Women:* Olympic gold medalist **Marta Maggetti (ITA)** and **Theresa Steinlein (GER)** (both considered light sailors) secured 1st and 2nd in the windiest race.
    - *Men:* Young and lighter sailors such as **Manolo Modena (ITA)** and **Igor Lewinsky (POL)** won several races—an achievement unlikely under the previous 9.0 sail.

iQFOiL Games Cadiz (February 2025 – Extreme Conditions)

- Faced with **30–40 knot winds** and significant onshore swell.
- The men's fleet successfully completed **three races**—a scenario that would not have been feasible with the 9.0 sail.
- Good mix of results even in strong wind days.

Grand Slam Palma de Mallorca (March 2025 – Light to Moderate Conditions)

- A more typical wind range provided a clearer picture of overall performance balance.
- The **Chinese men's and women's teams** consistently placed near the front of the fleet, marking a notable improvement from previous seasons.
- A general good shift to benefit light sailors on the light wind days.
- Races being accomplished on the same light marginal wind as in the past. No loss of racing in the marginal days.

3. Physical Adaptation and Competitive Dynamics

3.1 Athlete Weight Adjustments

- Many sailors have adjusted their body weight downward by **5 to 10 kg** approximately in response to the new sail characteristics.
- While weight remains an advantage in high wind, lighter athletes now demonstrate competitive results across all conditions.

3.2 Fleet Competitiveness

- The fleet is now more **compact and competitive**.
- In previous seasons, the top 3 athletes often dominated the final leaderboard.
- With the new sail:
    - Point differences between competitors have decreased significantly.
    - Race winners now emerge from a **wider pool of athletes**, extending to **15th place and beyond**.

4. Class Growth and Development

4.1 Renewed Engagement

- High demand for both 7.3 and 8.0 sails has been recorded globally.
- A significant number of sailors who had previously left the Class (primarily due to weight challenges) are now returning.
- Increased participation is evident in several regions, particularly across **Asia**.

4.2 Youth and Junior Participation

- The upcoming **iQFOiL Games Youth & Junior event in May** (Lake Garda) currently has **185 entrants**, a strong indicator of growth at the development level.
- Attendance at youth and junior events has increased markedly, reflecting growing enthusiasm and accessibility.

5. Summary and Outlook

The transition to the 7.3 and 8.0 sails has delivered significant improvements in:

- Competitive fairness across varying body types and experience levels,
- Event feasibility under extreme wind conditions,
- Fleet engagement and youth development.

With production and distribution well on track, and early competitive results validating the design shift, the outlook for the Class remains highly positive heading into the summer season.

iQFOiL Class Manager
The International iQFOiL Class Association