

International 2.4mR Class Association, Technical Committee

$$R = (L + 2d - F + \sqrt{S}) / 2.37 = 2.4$$


2.4mR TC MEETING 25 February 2026

Present

Peter Russell (AUS)
Bruce Millar (CAN)
Rikard Bjurstrom (FIN)
Thomas Jatsch (GER)
Jon Bjorklund (NOR)

Apologies

nil

General Business

1. 2.4mR TC Committee

2026.02.25 New 2.4mR TC committee confirmed – 2.4mR IMs invited as observers – recruitment of new members as observers leading to 2.4mR TC committee renewal in 2028 required.

2.4mR TC committee for 2026-2027:

- ❖ Peter Russell AUS chairman
- ❖ Rikard Bjurstrom FIN
- ❖ Bruce Millar CAN
- ❖ Jon Bjorklund NOR
- ❖ Thomas Jatsch GER (appointed for 2025-2027)

2. 2.4mR TC Work Program 2026

2026.02.25 2.4mR TC Work Program 2026 approved for action.

3. World Sailing Inclusive Class

2026.02.25 World Sailing inclusive class program correspondence with 2.4mR EC ongoing – TC notes that 2.4mR is an *owner class* not a *manufacturer class*.

4. Vakaros Race Sense Capability

2026.02.25 Electronic navigation systems discussed as priority– system used by sailors in several fleets – requiring sailors to buy Vakaros equipment is not supported. TC noted decision making should be by sailor not computer – TC noted that boats should not receive data communication that is not available to all boats - TC noted that Vakaros does not have a race sense «off switch» - TC noted that OCS function can be used for race management - TC noted timer, compass and start line setting functions OK.

TC to check Vakaros “class setting” option parameters.

TC to consider adding SI note to class rules - “*While racing, from the first warning signal until the end of the last race of the day, except in an emergency, a boat shall not make voice or data transmissions and shall not receive voice or data communication that is not available to all boats*»

TC to review 2.4mR and 2.4 NOD class rules electronic navigation requirements.

2.4mR Class Rules

No 2.4mR class rule - use of electronic equipment unlimited.

2.4 NOD Class Rules

C.5 PORTABLE EQUIPMENT

C.5.2 OPTIONAL

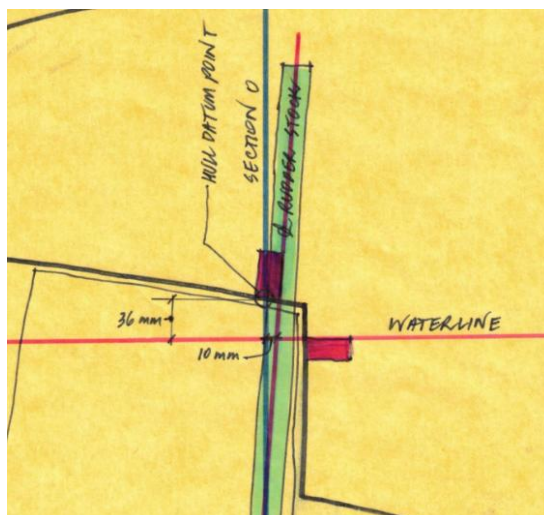
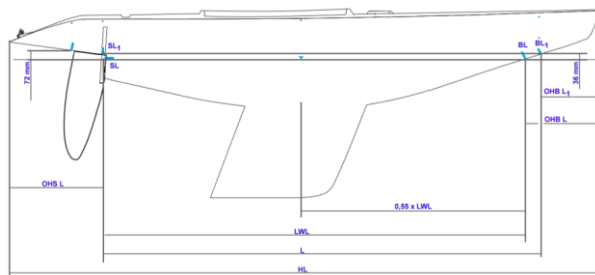
- (d) The use of electronic navigation equipment is permitted. Timing devices are permitted. Handheld communication devices (cell phones, pagers, radios, etc.) are permitted but may be prohibited or restricted in the *notice of race or sailing instructions*.

5. Norway Official Measurer Training Video

2026.02.25 2.4mR Official Measurer training video production under consideration - separate setup with Official Measurer and videographer required.

6. 2.4mR Measurement Manual Update

2026.02.25 Norway measurement sketches reviewed for inclusion in 2.4mR Measurement Manual – 2.4mR measurement diagram to be clarified – Norway sections to be added – Norway measurement marks to be added (aft marks to be checked). 2.4mR Measurement Form line numbers to be added for reference.



7. 2.4 NOD Certificate Procedures Review

2026.02.25 2.4 NOD certificates on ICA website access and certification procedures review ongoing. Information management is key issue – 2.4mR, 2.4 NOD & boat serial number photo record required to identify boats.

8. 2.4 NOD Super 3 Update

2026.02.25 EC to followup David Heritage Racing Yachts marketing on website. Bruce Millar to check EC transfer of 2.4 NOD Accredited Builder Agreement to David Heritage Racing Yachts.

9. 2.4 NOD Ontario Yachts Update

2026.02.25 2.4 NOD Accredited Builder agreement executed by ICA and Ontario Yachts 11 February 2025. Ontario Yachts 2.4 NOD laminate design approved 16 January 2025. Ontario Yachts 2.4 NOD mold approval subject to prototype boat No. 1 measurement.

Pricing and marketing documentation underway - boats to be batch produced for sale. Boats include machined foam, watercut lead ballast and superspar rig.

Fundamental measurement carried out 15-18 January 2026 with measurement team Bruce Millar, John Finch, IM David Sprague, IM David Foscari - refer Bruce Millar report dated 27 January 2026. 2.4 NOD measurement to be completed – TC to consider recommendation for 2.4 NOD builder certification. 2.4 NOD stickers purchase to be verified.

2.4 NOD Prototype boat No. 1 Fundamental Measurement Data

- ❖ Boat weight 253.6 kg with 181kg ballast and 2kg corrector weight
- ❖ Waterline length tank test pass
- ❖ Buoyancy check pass
- ❖ Hull/keel stiffness pass
- ❖ Chain plate deflection pass
- ❖ Lifting eye load capacity pass

TC agreed 2.4 NOD mold options (subject to purchaser agreement) as follows:

- ❖ traveller track recess, headsail boom fitting, cockpit headsail sheet mountings

TC key 2.4 NOD boat build issues:

- ❖ measurement control, weight control, hull/keel stiffness control, chainplate deflection control, lifting eye weight capacity, cockpit mould front straight (not rounded), ballast lifter and keel plug fixings to be metric (not imperial).
- ❖ Front tank buoyancy improvement – front deck camber increase option to be reviewed to allow increased buoyancy foam – dimensional relationship of **mast datum point** to mast hole surround to be considered – deck appearance to be similar to reference 2.4 NOD boat.

10. Linked4sailing 2.4mR Builder Accreditation

2026.02.25 No further contact with Linked4sailing.

11. Spain 2.4mR Builder Accreditation

2026.02.25 Auxinavy application to build 2.4 NOD boats received 28 January 2026 – TC response regarding next steps approved for issue to Auxinavy, draft 2.4 NOD Accredited Builder Agreement to be attached to TC response.

12. Production Boat Buoyancy Certification

2026.02.25 TC agreed buoyancy check for 2.4 NOD production boats not required. TC to review 2.4mR buoyancy check requirements with World Sailing. TC to add buoyancy check to 2.4 NOD Builder Declaration Form.

13. 2.4mR World Championship 2026 Sneek

2025.07.11 Peter Russell issued NOR advice and associated documents to 2.4mR World Championship 2026 Organising Authority – The Royal Water Sports Association: Koninklijke Watersport Vereniging Sneek (KWS), Klaas Weissenbach, Frank Havik,

- ❖ 2.4mR WORLD CHAMPIONSHIP SNEEK 2026 TC NOR ADVICE v. 03
- ❖ 2.4mR World & Continental Championship Management Manual 2024 (v. 11)
- ❖ 2.4mR WORLD CHAMPIONSHIP INSPECTION PLAN 2024
- ❖ 2.4mR WORLD CHAMPIONSHIP NETHERLANDS 2017 NOR
- ❖ 2.4mR WORLD CHAMPIONSHIP FINLAND 2023 NOR
- ❖ 2.4mR WORLD CHAMPIONSHIP ITALY 2025 NOR

2025.12.10 The 2.4mR TC worked with the 2.4mR World Championship 2026 Organising Authority to finalise the NOR and recommended the EC approve NOR WK 2.4mR final3.

2025.12.16 Updated SI template issued to 2.4mR World Championship 2026 Organising Authority.

2026.02.25 TC to follow up Sailing Instruction and registration status with Organising Authority.

14. 2.4mR World Championship 2027 Tonsberg

2026.02.25 TC to prepare NOR information package for Norway Organising Authority - Jon Bjorklund to confirm email contact. 2.4mR World Championship Management Manual class rules RRS 31 to be checked.

15. Measurer Accreditation

2026.02.25 International Measurer - Thomas Jatsch providing ongoing assistance for World Sailing events in 2.4mR, Hansa and RS Venture classes – IM exam can be taken within 3 years of IM accreditation – Thomas Jatsch to follow-up accreditation status with World Sailing.

16. Safety Advice

2026.02.25 Thomas Jatsch draft safety training advice issued for review – Thomas to source missing photos and include race support training notes.

17. 2.4 NOD Boat Beam Dimensions Review

2025.12.25 Bruce Millar advised 13 2.4 NOD boats measured April 2025 – beam discrepancies of boats manufactured 1999-2007 with 2.4 NOD section J.1 Dimensions tolerances scheduled as follows. Bruce Millar to check discrepancies - TC to consider endorsement as 2.4 NOD boats with discrepancies noted on **certificate**.

Boat #	Year	Builder	Section 0	Section 2	Section 4	Notes
266	1999	Metre Boats	OK	+7mm	+14mm	AUS boat, To be rechecked
326	2001	Bjorndahl	-4mm	OK	OK	To be rechecked
329	2001	Bjorndahl	OK	OK	OK	OK
442	2003	Gavia	-2mm	-10mm	OK	To be rechecked
488	2006	Gavia	OK	-4mm	OK	To be rechecked
497	2006	Gavia	-9mm	-4mm	+4mm	To be rechecked
552	2007	Charger C.	-3mm	OK	OK	To be rechecked
554	2007	Charger C.	OK	OK	OK	OK
715	2010	Charger C.	OK	OK	OK	OK
728	2011	Charger T.	OK	OK	OK	OK
765	2011	Charger T.	OK	OK	OK	OK
959	2016	Charger T.	OK	OK	OK	OK
979	2017	Charger T.	OK	OK	OK	OK
1027	2020	Charger T.	OK	OK	OK	OK

18. 2.4mR TC AGM 2026

2026.02.25 2.4mR ICA AGM TC proposals approved by World Council – TC to prepare CRCs for World Sailing approval:

- ❖ 2.4mR & 2.4 NOD BALLAST ADVICE PROPOSAL eAGM 2026
- ❖ 2.4mR & 2.4 NOD MATERIALS PROPOSAL eAGM 2026
- ❖ 2.4mR & 2.4 NOD TOWING FITTING PROPOSAL eAGM 2026
- ❖ 2.4mR A.13.1 (d) CORRECTION PROPOSAL eAGM 2026
- ❖ 2.4mR NORWAY SUBMISSION TC RESPONSE eAGM 2026

2.4mR & 2.4 NOD COMPARTMENT OPENING PROPOSAL eAGM 2026 withheld subject to review of grandfathering option.

Draft TC 2.4mR thwart (cleatboard) submission to agree wording to exclude the thwart from the ERS **hull** definition under CR D.3.1.(a) approved for issue to World Sailing.

19. 2.4mR boat measurement France 2026
2026.02.25 Thomas Jatsch – 4 days of 2.4mR boat measurement (12 boats) in France programmed for March 2026 – Loic Eonnet to confirm measurement arrangements.
20. 2.4mR Measurement Records
2026.02.25 Thomas Jatsch noted he holds measurement records for over 400 boats from 6 countries. Bruce Millar to advise regarding dropbox system for records management. – file name format agreement required – access control required.
Thomas Jatsch noted file name
21. Headsail Clew Point
2026.02.25 2.4mR TC has reviewed the applicable class rules, ERS and World Sailing measurement manual and understands that the headsail clew point is determined as follows.
Headsail clew points are determined with the use of short battens to bridge the rounded corner ignoring the straight middle part of the headsail. The headsail foot sail edge shape is controlled by the foot median definition. 2.4mR headsail clew point understanding issued to IM Barry Johnson.
22. 2.4mR Counter Extension
2026.02.25 2.4mR TC has reviewed a proposal to extend a 2.4mR boat counter by 300mm – David Beck advised that the counter extension may affect length **L** and influence the rating - re-measurement and re-certification is required - sail area compensation may be required.
23. 2.4mR Builder Advice
2026.02.25 2.4mR TC advised Loic Eonnet regarding current builder status as follows:
- 2.4mR class
- ❖ 2.4mR boats are a development class that is measurement controlled by open class rules administered by World Sailing.
 - ❖ There is no 2.4mR ICA accreditation required for 2.4mR boat builders.
 - ❖ All 2.4mR boats are required to be measured by a 2.4mR official measurer with rating certificates issued by Member National Authorities or National Class Associations.
- 2.4mR builders
- ❖ Super 3 (England) subject to transfer to David Heritage Racing Yachts (England)
 - ❖ Ontario Yachts (Canada)
 - ❖ Malmsten Boats (Sweden)
- Other projects
- ❖ Fauroux (France)
 - ❖ Auxinavy (Spain)
 - ❖ Linked4sailing (Argentina)
 - ❖ Swarbrick (Australia)
- 2.4 NOD class
- ❖ 2.4 NOD boats are a restricted class that is builder controlled by closed class rules administered by the 2.4mR International Class Association (ICA).
 - ❖ 2.4mR ICA accreditation is required for 2.4 NOD boat builders. This process requires extensive engagement with the ICA TC to achieve full accreditation.
 - ❖ All 2.4 NOD boats are required to be measured as 2.4mR boats by a 2.4mR official measurer, prototype 2.4 NOD boats are required to be measured as 2.4 NOD boats by an International Measurer, ICA approved 2.4 NOD boats are required for be certified as 2.4 NOD boats by the accredited builder with 2.4 NOD certificates issued by the 2.4mR ICA.
- 2.4 NOD builders
- ❖ Super 3 (England) subject to transfer to David Heritage Racing Yachts (England)
 - ❖ Ontario Yachts (Canada)
- Other projects
- ❖ Auxinavy (Spain)
 - ❖ Linked4sailing (Argentina)

24. 2.4mR Mast Measurement Advice

2026.02.25 2.4mR TC advised Loic Eonnet regarding suggested amendments to France mast measurement guide and mast set-up as follows:

GUIDE TO MAST SETUP USING MAXIMUM 2.4 NOD CLASS RULE VALUES

The I dimension (3750mm) is the critical starting point for mast setup. I suggest that 3750mm (not 3730mm) is used to maximise the height of the mast above the deck. The forestay rigging point is usually the bottom of the hook terminal slot - refer to ERS F.2.3 (e) MAST DIMENSIONS for other ways. As the hook terminal slot is a fixed position on the mast always use this as the starting point for mast setup.

Step 1 Measure 3750mm (I) down mast from the bottom of the forestay hook terminal slot, mark position on mast temporarily with a marker on tape (this is the **mast datum point**).

Step 2 Using a centre punch mark the **mast datum point** on the centre of the mast.

Step 3a Measure 5000mm up the mast from the **mast datum point** to fix the mast **upper point** - mark position on mast temporarily with marker on tape.

Step 3b Measure 4650mm (P) down the mast from the mast **upper point** to fix the mast **lower point** - mark position on the mast temporarily with marker on tape.

*NOTE: Check that the mast **lower point** is below the top of the boom when the boom is square to the mast - if not OK you may need to adjust boom fixing and re-check.*

Step 4 Trial fit the mast in the boat and check that the **mast datum point** is at or below the **deck measurement point** (in 15mm from the hull sheerline and up 36mm from the deck) - if below the deck measurement point OK - if above the deck measurement point then measure the distance and cut the mast butt to the correct length. If the mast is cut down reinstall the mast and re-check that the **mast datum point** is below the **deck measurement point**.

NOTE: New masts are usually supplied up to 20mm too long and mast steps vary in design, so it is not unusual to have to cut some length off the mast.

Step 5 Remove the mast from the boat and permanently mark the **lower point** and **upper point** using black vinyl tape. See rule C.9.5(a) limit mark.

Step 6 Check all other dimensions and weights on the mast to ensure compliance with the class rules.

25. 2.4mR eMeasurement Form

2026.02.26 2.4mR eMeasurement Form update incorporating line numbers and measured data entry indicated in blue reviewed - minor formatting required. 2.4mR and World Sailing website to be updated - eMeasurement Form line numbers to be incorporated into Measurement Manual.

eMeasurement Form signing by builder discussed - TC to discuss deletion of builder's signature with World Sailing - builder's signature of eMeasurement Form not current practice.

Builder Declaration Form discussed - official measurer to sign 2.4mR Builder Declaration Form as prerequisite to completing measurement - no existing document control practice.

2.4mR Class Rules

A.11 CERTIFICATION

A.11.1 For a **boat** not previously **certified**, all items required by the **certification control** form to be measured shall be measured by an **official measurer** and the details entered onto the form. The declarations on the form shall be signed by the **builder and the official measurer**.

26. 2.4mR Waterline Declaration Review

2026.02.25 2.4mR class rule on Waterline Declaration D.6.1 (c) subject to ongoing review.

TC to discuss deletion of declaration requirement (and Waterline Declaration form) with World Sailing.

❖ Consider tank and «still water» for waterline measurement.

❖ Consider no waterline verification for production boats following prototype approval - modified boats, one-off boats and boats with lost paperwork will require waterline verification.

2.4mR Class Rules

D.6.1 GENERAL

(c) The waterline shall be controlled by placing the boat in a water tank and loading it according to H.2. **The official measurer shall issue a declaration or state on the measurement form that the correct procedure was followed.**

27. 2.4mR Certification Review

2026.02.25 2.4mR class rule A11 Certification subject to ongoing discussion.

CR .11 CERTIFICATION requires a measurement form for all 2.4mR boats to obtain a **certificate**. Production 2.4mR boats built from approved molds have identical measurements so why do we pay for full measurement for all boats? TC to consider options for **certification** of production boats.

- ❖ Full measurement could apply to production boat prototypes only with random checks to future boats.
- ❖ Full measurement needs to apply to all one-off (home-built) boats, modified boats and boats with no records.
- ❖ Full measurement would be required for production boat new prototypes if the approved moulds or laminate design is changed.
- ❖ Full measurement is a time and cost barrier for new 2.4mR boat construction.

2.4mR Class Rules

A.11 CERTIFICATION

- A.11.1 For a **boat** not previously **certified**, all items required by the **certification control** form to be measured shall be measured by an **official measurer** and the details entered onto the form. The declarations on the form shall be signed by the builder and the **official measurer**.
- A.11.2 The **certification control** form and **certification** fee if required, shall be sent to the **certification authority** in the country where the **boat** is to be registered after completion of measurement.
- A.11.3 Upon receipt of a satisfactorily completed measurement form and **certification** fee if required within the time limit, the **certification authority** shall issue a **certificate**.
- A.11.4 The **certification authority** shall retain the original measurement form, which shall be transferred to the new **certification authority** upon request if the **boat** is exported.

Next Meeting (times subject to daylight saving change):

Canada	12.00pm Wednesday 25 May 2026
Norway	9.00pm Wednesday 25 May 2026
Germany	9.00pm Wednesday 25 May 2026
Finland	10.00pm Wednesday 25 May 2026
Australia	7.00am Thursday 26 May 2026

2.4mR TC WORK PROGRAM 2026

2.4mR Technical Committee

Peter Russell (AUS) Chairman
Bruce Millar (CAN)
Rikard Bjurström (FIN)
Thomas Jatsch (GER)
Jon Björklund (NOR)

ICA 2.4 NOD Certification Administrator

Louise Anstey (CAN)

ICA IMs

Keith Gordon (GBR) IM
Matti Muoniovaara (FIN)

1 World Sailing

TC to review World Sailing RRS and ERS for class rule compliance.

2 2.4mR Class

TC to review class documentation:

- ❖ Updated 2.4mR class rules issued by World Sailing 16 June 2025
- ❖ 2.4mR Measurement Manual 2020 (v. 9)
- ❖ 2.4mR eMeasurement Form (line numbers addition & data entry)
- ❖ 2.4mR Buoyancy **certificate** (v. 4)
- ❖ 2.4mR **certificate** template for NCA Certification Authorities

TC to seek World Sailing 2.4mR class rule change approval (refer eAGM 2026):

- ❖ 2.4mR Ballast Proposal
- ❖ 2.4mR Materials Proposal
- ❖ 2.4mR Towing Fitting Proposal
- ❖ 2.4mR A.13.1 (d) Correction Proposal
- ❖ 2.4mR Hull Definition Proposal – Cleat Board (Norway)

TC to review 2.4mR class rule requirements:

- ❖ 2.4mR Compartment Opening Proposal (buoyancy check & grandfathering)
- ❖ 2.4mR Waterline Declaration (consider tank test and still waters for waterline measurement)
- ❖ 2.4mR Buoyancy Check (consider buoyancy builder certification of production boats)
- ❖ 2.4mR Certification (consider measurement and builder certification of production boats)
- ❖ 2.4mR Electronic Equipment (consider use of Vakaros race sense capability)
- ❖ 2.4mR Sail Numbers (consider plaque numbers for new sails & bow numbers for events)

3 2.4 NOD Class

TC to review class documentation:

- ❖ 2.4 NOD Class Rules 2025 v.2
- ❖ 2.4 NOD Construction Manual 2023 v.2
- ❖ 2.4 NOD Drawings J1 – Measurement Section, J2 – Templates, J3 – Deck layout, J4 - Section
- ❖ 2.4 NOD Measurement Manual 2020 (v. 9)
- ❖ 2.4 NOD Measurement Report New Boats (v.5), Measurement Report – Old Boats (v. 4), Optional Measurement Report Mast & Boom (v. 5)
- ❖ 2.4 NOD **certificate** template (v. 5)
- ❖ 2.4 NOD Accredited Builder stickers starting at number 1000

TC to amend 2.4 NOD class rules (refer eAGM 2026):

- ❖ 2.4 NOD Ballast Proposal
- ❖ 2.4 NOD Materials Proposal
- ❖ 2.4 NOD Towing Fitting Proposal

TC to review 2.4 NOD class rule changes:

- ❖ 2.4 NOD Compartment Opening Proposal (buoyancy check & grandfathering)
- ❖ 2.4 NOD Waterline Declaration (consider tank test and still waters for waterline measurement)
- ❖ 2.4 NOD Buoyancy Check (consider buoyancy builder certification of production boats)
- ❖ 2.4 NOD Certification (consider measurement and builder certification of production boats)
- ❖ 2.4 NOD Electronic Equipment (consider use of Vakaros race sense capability)

TC to review 2.4 NOD certification of 2.4mR boats with beam dimension non-compliances

4 Measurement

TC to review 2.4mR and 2.4 NOD measurement manuals – measurement form line number references to be added – Norway TC measurement diagrams to be added.

TC to manage preparation of Measurement Training Video by Norway TC.

TC to review 2.4mR Official Measurer Requirements & Equipment 2023 advice.

TC to review 2.4 NOD template use and prepare 2.4 NOD template register.

5 Safety

TC to review safety advice – Thomas Jatsch to issue safety training notes and photos.

6 Buoyancy Checks

TC to review ICA Buoyancy Certifier assignments:

- ❖ Buoyancy Certifier applications need to demonstrate competency either by current or past measurement qualifications or endorsement by an Official Measurer.
- ❖ ICA Buoyancy Certifier is a Measurer role appointed by the ICA (not MNA) where the person needs to have knowledge of the Class Rules and the ERS, respect competitors and officials and be aware of conflicts of interest.

TC to maintain 2.4mR Buoyancy Certifier database.

7 2.4 NOD Accredited Builders

TC to review 2.4 NOD Accredited Builder class rule compliance:

- ❖ 2.4 NOD Accredited Builder Application Process (v. 5)
- ❖ 2.4 NOD Accredited Builder Agreement v. 4.2 (EC)
- ❖ 2.4 NOD Accredited Builder Boat Inspection Plan (v. 6)
- ❖ 2.4 NOD Accredited Builder Declaration Form (v. 3)
- ❖ 2.4 NOD scan prepared by *VmaxYachting* in high definition for 2.4 NOD Accredited Builders and low definition for general distribution (EC)
- ❖ 2.4 NOD scan data file agreement (EC)

The EC has executed 2.4 NOD Accredited Builder Agreements as follows:

- ❖ *SUPER 3 (United Kingdom) Brian Harding*
- ❖ *ONTARIO YACHTS (Canada) Andrew Macrae*

TC to advise next steps for 2.4 NOD accredited builder application from Auxinavy (Spain)

TC to manage 2.4 NOD prototype inspections and approvals

8 Official Measurer Training

TC to support 2.4mR Official Measurer training program.

- ❖ NCA obtains expression of interest in obtaining Official Measurer accreditation from interested persons and advises ICA of persons names and background.
- ❖ Interested persons attend National, Continental or World Championship events as Equipment Inspector for measurement introduction.
- ❖ Interested persons attend ICA 2.4mR measurement training program to enable interested persons to undertake 2.4mR measurement for external examiner review. 2.4mR training could be conducted on a four-year cycle subject to commitment from interested people.
- ❖ Interested persons obtain NCA support and attend MNA Official Measurer program to obtain Official Measurer accreditation.
- ❖ NCAs obtains required measurement equipment, templates etc for Official Measurer use.

TC to maintain 2.4mR Official Measurer database. All NCAs to advise Official Measurer details.

TC to support Thomas Jatsch IM accreditation application.

9 2.4mR World Championships

TC to assist 2.4mR World Championship Sneek 2026 Organizing Authority with SI documentation.

TC to assist 2.4mR World Championship Tønsberg 2027 Organizing Authority with race documentation.

10 2.4mR World and Continental Championship Management

TC to review 2.4mR World and Continental Championship Management documentation.

- ❖ 2.4mR World and Continental Championship Management Manual 2025 v. 12
- ❖ Event Form
- ❖ Inspection Plan
- ❖ Haul-out Form
- ❖ Substitution Form