Small Ships Special Interest Group

Annual meeting | Seawork 2026

Welcome

- Chair - Tom Keeling CMarEng MIMarEST
- Small committee that meet quarterly.
- Core interests:
  - Small commercial vessels
  - Leisure vessels
  - Regulatory matters
  - Standards work
  - Current and emerging vessel technologies

Membership

- The SIG has worldwide membership, but is generally reactive or passive to members, reflecting a growing trend for being “busy” and remote!

- We meet once annually in person to discuss matters pending; thanks to Seawork for providing this room, new for 2026 and hopefully a good fit for us moving forward.

Equivalence is trending

Are ISO standards being unfairly leaned on,
to replace established working practices?

An explosive topic...

- Example: a vessel with an LPG (gas) system aboard can be built to ISO 10239, which is harmonised to the Recreational Craft Regulations.

- This means ISO 10239 is considered to be adequate to meet the legal requirements of the legislation.

- But ISO 10239 does not include a full test of the gas system, even to the point that gas does not have to be in the system!

A balanced approach...

- Example: the Hire Boat Code gives four ways* to meet stability requirements, including:

- ISO 12217-1 (Non-sailing boats of hull length greater than or equal to 6 m)

- Inland Waterways Small Passenger Boat Code stability assessment

*(to be completed by a competent person: Humans 1, AI Nil)

Good v Bad

- Gain standardisation worldwide, lose local relevance
- Group effort, but a wide-ranging set of needs
- Multi-directional in input and output, could compromise focus and specific need
- Best practice, but not legislative so can be ignored
- Published and available, however the expense means lack of adoption

From the floor…

What do **you** think?

MCA Sport or Pleasure Vessel Code 2025

A Few Pointers

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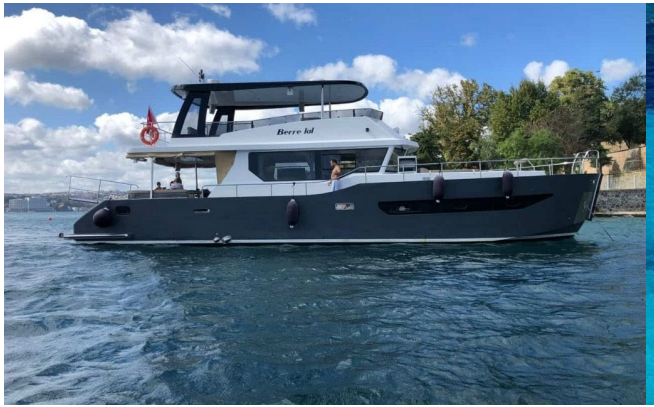
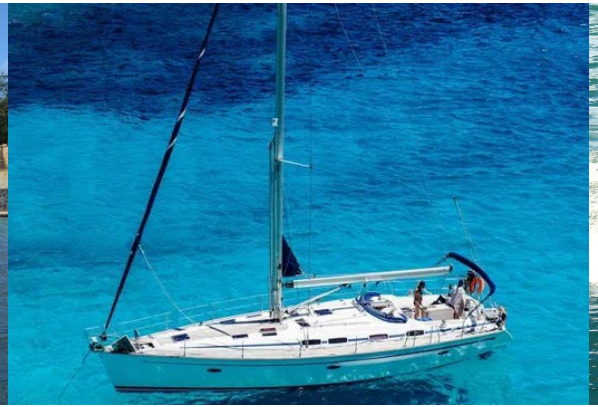
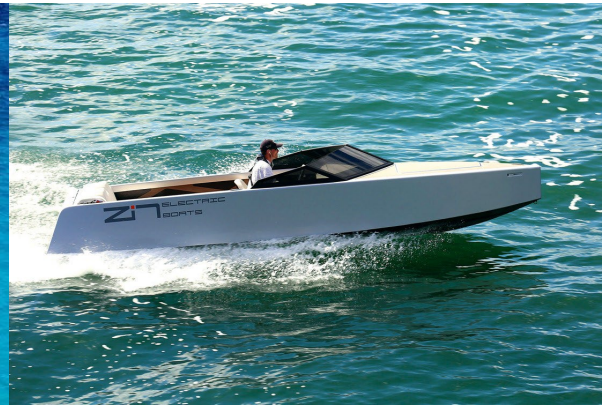
MCA Sport or Pleasure Vessel Code 2025 (SoP Code)

- Introduced: 12 December 2025;
- Replaces: 1992 Yellow, Blue and Red Codes and also MGN 280(M);
- SoP Code has its own Regulatory Law: Statutory Instrument SI 2025 No. 1195. and Standards Requirements: MIN 724(M).
- New vessels coming into Code must comply with SoP Code.
- Existing Certified vessels have three years (December 2028) to transfer in under SoP Code.

MCA Sport or Pleasure Vessel Code 2025 (SoP Code)

- SoP Code covers commercially-operated motor, sailing and electrically-powered vessels (Annex 1);

- Incorporates lessons learned over 33 years of Code Certification – including lessons from 'CHEEKI RAFIKI' tragedy and court case.

MCA Sport or Pleasure Vessel Code 2025 (SoP Code)

- Principle Changes:
  - Section Numbering (and Annex 1) aligned to WB3;
  - Hull design, construction, approval and survey requirements strengthened;
  - RCR (ex-RCD) Standards allowed but only with full design review and survey;
  - Hull fittings and pipework in machinery spaces must be fire resistant;
  - Fuel tanks constructed to MCA approved Standard;
  - Electrical and steering systems required to meet Standards given in MIN 724 (M);
  - Bilge pumping and alarm requirements strengthened;
  - Stability & freeboard requirements allow for RCR (ex-RCD) assessment (12A only);
  - LSA requirements strengthened, including EPIRB, SART and DSC portable VHF.

MCA Sport or Pleasure Vessel Code 2025 (SoP Code)

- Principle Changes:
  - LSA Training and Operational Manual to be vessel-specific;
  - Fire protection requirements strengthened – approved insulation required for aluminium;
  - Fire & CO detection system requirements strengthened – EN54 (wired systems);
  - Fire pump requirement (>15m length);
  - Radio equipment reqts. strengthened, inc. NAVTEX for Cat 3 and Radio Survey;
  - MLC requirements applied for professional crew (> Cat 2 operations);
  - Regulations for vessels engaged in racing, race support boats and beach craft;
  - Professional manning/qualifications tightened, inc. radar and nav system training;
  - Safety Management System - within 3 years of Code coming into effect (Dec 28);
  - MGN 280(M) Fire test for GRP (Appendix 11) retained for SoP vessels (but not Workboats);
  - Annex 1 – Electrical Propulsion (Lithium-Ion Batteries) and Alternative Fuels.

MCA Sport or Pleasure Vessel Code 2025 (SoP Code)

- Note: Much use of Standards (MIN 724 (M)), in place of established marine practice;
- New vessels coming into Code must comply with SoP Code.
- Existing Certified vessels have three years (December 2028) to transfer in under SoP Code.
- Discuss with your Certifying Authority – EARLY - how best to comply!

https://assets.publishing.service.gov.uk/media/691e23cb513046b952c500df/The_sport_or_pleasure_vessel_code.pdf

Electrical Propulsion – Use of Lithium-Ion Batteries

Standards, Regulations, Rules and Guidance

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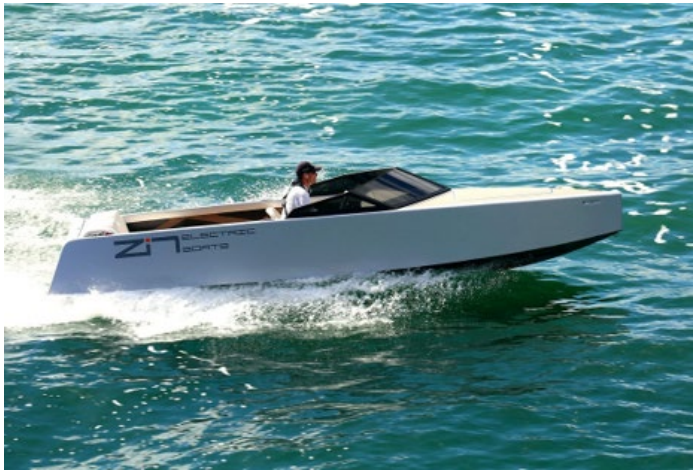
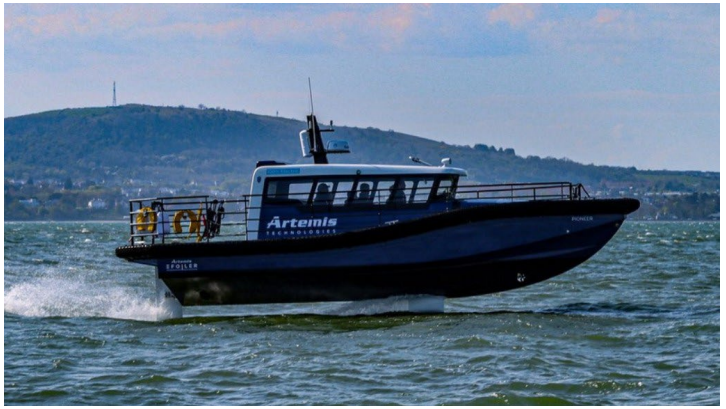
Electrical Propulsion – Use of Lithium-Ion Batteries

- Electrical propulsion is becoming more popular for Sport or Pleasure and Recreational vessels, and Workboats.
- Benefits include ‘Zero Carbon Footprint’, ‘clean energy’ and ‘environmental protection’.
- UK Government move towards ‘Carbon Neutral’ by 2050 includes ‘ZEVI’ Funding for marine projects.



Electrical Propulsion – Use of Lithium-Ion Batteries

- Many vessels brought into operation, both for recreational and commercial purposes, particularly using Lithium-Ion batteries for the energy storage system.
- However, the disadvantages include:
  - Limited range and power (Diesel Fuel: Best Li-Ion batteries: 17:1 by mass);
  - Significant hazards and risks associated with Li-Ion batteries;
  - Tight regulatory and Standards control require substantial and comprehensive HAZID / Risk Assessment and COMPLIANT design and construction.



Electrical Propulsion – Use of Lithium-Ion Batteries

What is available to help the designer, builder or operator:

- Standards;
- Regulations;
- Rules;
- Guidance.

Electrical Propulsion – Use of Lithium-Ion Batteries

STANDARDS	DESCRIPTION
ISO 23625: 2025	International Standards Organisation Standard for design, construction and use of Lithium-Ion batteries in Small Craft. This Standard is used by UK and other Notified / Approved Bodies for consideration of vessels' RCD / RCD Certification. This Standard is available from BSI and other sources for ISOs.
IEC 62619:2022	The latest version of the International Electrotechnical Commission's Standard for design, construction and safety testing of Lithium-Ion batteries and their associated battery management systems (BMSs) for use in portable industrial applications, which includes all maritime application. This Standard includes impact and acceleration force testing, and is invoked in ISO 23625.
IEC 62620: 2014 and Amendment 2023	The latest version of the International Electrotechnical Commission's Standard for design, construction and electrical testing of Lithium-Ion batteries' charging and discharging performance, and the marking of the batteries. This Standard is invoked in ISO 23625.
IEC 62133-2:2017	The latest version of the International Electrotechnical Commission's Standard for design, construction and electrical testing of individual Lithium-Ion cells that may make up a battery pack. This Standard is invoked in IECs 62619, IEC 62620 and ISO 23625.
UN Standard 38.3	Transportation Testing for Lithium Batteries and Cells (See Regulations UN3480 and UN3581 below).

Electrical Propulsion – Use of Lithium-Ion Batteries

CLASS RULES	DESCRIPTION
BV Type Approval Rules	Bureau Veritas Rules for the Type Approval of Lithium-Ion batteries, for use in ships. The tests involved for certification include those required in IEC 62619:2022, IEC 62620: 2014 and IEC 62133:2017.
DNV-CP-0418 Type Approval Rules	Det Norse Veritas Rules for the Type Approval of Lithium-Ion batteries, for use in ships. The tests involved for certification include those required in IEC 62619:2022, IEC 62620: 2014 and IEC 62133:2017.
LR Type Approval Rules	Lloyd's Register Rules for the Type Approval of Lithium-Ion batteries, for use in ships. The tests involved for certification include those required in IEC 62619:2022, IEC 62620: 2014 and IEC 62133:2017.
RINA Type Approval Rules	Registro Italiano Navale Rules for the Type Approval of Lithium-Ion batteries, for use in ships. The tests involved for certification include those required in IEC 62619:2022, IEC 62620: 2014 and IEC 62133:2017.
Class NK Rules for Survey of Steel Ships Part H Article 2.11.1.2 and Annex 2.11.1-2	Class NK Rules for the use of Lithium-Ion batteries in ships. The tests involved for certification include those required in IEC 62619:2022, IEC 62620: 2014 and IEC 62133:2017 (or Japanese JIC 8715-1 Standards that are a transcript).
ABS Requirements for Hybrid and All-Electric Power Systems for Marine and Offshore Applications - 2024	American Bureau of Shipping requirements for system design and requiring ABS Type Approval of Lithium-Ion batteries, for use in ships and offshore marine installations. The tests involved for Type Approval certification include those required in IEC 62619:2022, IEC 62620: 2014 and IEC 62133:2017.

Electrical Propulsion – Use of Lithium-Ion Batteries

REGULATIONS	DESCRIPTION
IMO IMDG Code	IMO Dangerous Good Code. Lithium-Ion batteries are considered to be Class 9 Dangerous Goods, for transportation. Testing and certification to UN 38.3 and UN 3480 / UN 3481 are required, prior to transportation and declaration of DG provided to shippers, by consigners.
UN 3480 and UN 3481	United Nations Regulations for transportation of Lithium-Ion batteries, invoked by IMO for shipping of same, by sea. UN3480 provides for transportation of batteries on their own (or in power packs) and UN3481 provides for batteries installed within equipment or other systems (such as lap top computers, machines, etc.).
MCA Workboat Code Edition 3	UK Regulations for certification of Workboats, Pilot Boats, Police Boats, and (under a new Annex 4) Search and Rescue Craft, which came into force in 2023. Annex 1 provides regulations for design, construction, installation, examination and certification for vessels propelled by electrical or hybrid Diesel-electrical systems.
MCA Sport or Pleasure or Vessel Code, 2025	UK Regulations that came into force in December 2025 for certification of sport and pleasure vessels in commercial operation. Annex 1 provides regulations for design, construction, installation, examination and certification for vessels propelled by electrical or hybrid Diesel-electrical systems. These Regulations replaced the technical standards provided at MGN 280(M) and the 1992 'Yellow' 'Blue' and 'Red' SCV Codes.

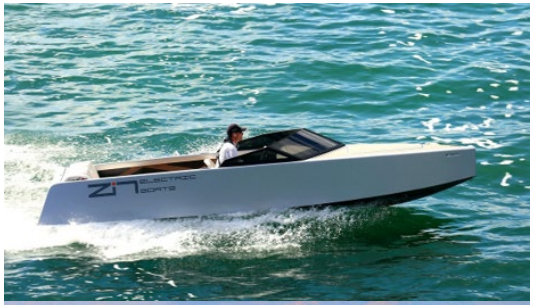
Electrical Propulsion – Use of Lithium-Ion Batteries

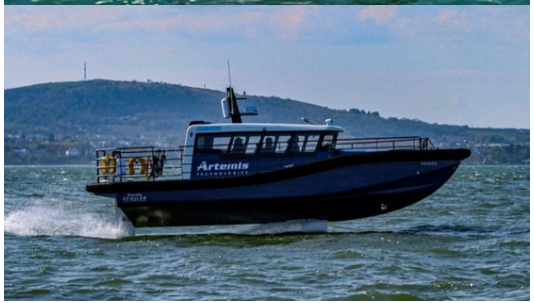
GUIDANCE	DESCRIPTION
ABS Guidance	American Bureau of Shipping Guidance: Use of Lithium Batteries in the Marine And Offshore Industries - February 2020.
LR Battery Installations – a Lloyd's Register Guidance Note	Battery Installations - Key Hazards to Consider and Lloyd's Register's Approach to Approval - Second edition, January 2016.
MCA MGN 550 (M+F) Amendment 1 January 2024	UK Maritime and Coastguard Agency Marine Guidance Note, outlining hazard identification and risk assessment approach to selection and installation of lithium-ion batteries in ships, workboats and small commercial vessels, for ship's services or propulsion purposes. This MGN is invoked in the MCA Workboat Code Edition 3 and other UK Maritime Regulations, but also applies to Li-Ion battery installations in larger and IMO Convention-sized ships.
MCA MGN 664 (M+F)	UK Maritime and Coastguard Agency Marine Guidance Note providing requirements for approach to assessment of ship's, workboat's and SCV's systems, where innovative technology is used. In the case of electrical propulsion systems, for ships and other vessels not covered by the Workboat Code Edition 3 or the Sport or Pleasure Vessel Code, the approach requires a robust and documented hazard identification and risk assessment procedure to selection and installation of lithium-ion batteries in ships, workboats and sport or pleasure vessels.

Electrical Propulsion – Use of Lithium-Ion Batteries

To Summarise (Whether your vessel is Recreational or Commercial):

- Electrical propulsion offers benefits (in addition to 'ticking the green box'), but presents considerable challenge to vessel designers, builders and operators, if the system is to be safe;
- Investigate requirements early, and ensure that you apply the appropriate Standards, Rules, Regulations and Guidance;
- Always ensure that your batteries and the electrical propulsion system are supported by COMPLIANT IEC, ISO or Type Approval Certification;
- Discuss at an early stage with an MCA-Approved Annex 1 Certifying Authority;
- Particularly if you are seeking UK Government 'ZEVI' Funding.





Thank-you

Any matters arising?