LLOYD'S AGENCY

MARINE SURVEY BUREAU

POST-CONSTRUCTION ASSESSMENT (PCA)

In accordance with Article 8 of the Recreational Craft Directive 94-25-EC as amended by Directive 2003-44-EC (RCD) the manufacturer shall, before producing and placing his products on the market, apply the conformity assessment procedure foreseen in relation to the boat design category and hull length. However, in certain cases, it is necessary for craft and PWC with their installed engines and components to be certified, in line with Article 8.1 of the RCD, after they have been built.

These are those craft and PWC, where the manufacturer does not want or is not willing to take responsibility for placing it on an EEA market. These are not necessarily used craft or PWC, but also new ones, where imported e.g. by private persons.

All essential safety requirements are applicable for such craft and PWC. This includes design, construction, noise and exhaust. The post construction assessment report issued by the Notified Body like IMCI has to cover all these requirements. In the Directive no modules are defined for post construction assessment. Notified Bodies are urged to follow as far as practical procedures of module G of the RCD and to make use of the relevant ISO standards.

As examples, the following boats are covered by Post Construction Assessment:

- boats that were not constructed, placed on the market or put into service in the present EEA Member State territory prior to the full application date of the Directive
- boats built for own use when placed on the market within the first five years of completion
- boats intended solely for racing or experimental craft, subsequently placed on the market as recreational craft and therefore required to be CE marked in accordance with the Directive.
- Totally refitted boats (e.g. former commercial boats)

Attention is drawn to the responsibility and the legal aspects, having the owner, the importer, or the person placing the craft on the market or putting it into service in the EEA, as applicable, to assume the role of the manufacturer and being identified as the responsible person in this context (not being the authorised manufacturers representative).

Please find below the procedure to be applied for PCA in regards to:

A. Design and Construction

A.1. Boat Design Categories: Assessed by the Notified Body according to the relevant standard.

- **A.2.1. Craft identification**: The scope of the requirement is to identify each craft with some indications relevant to the manufacturer. In case such information are missing or unidentified (e.g.: the date of build or model year when the builder is unknown) it becomes the responsible person's duty to act as though he was the original builder and include such details in the CIN. Part of the CIN is the Manufacturer's Identity Code (MIC). The responsible person should contact his national authority about this issue. If the national authority can or will not give a MIC, then the Notified Body is allowed to do so.
- **A.2.2.** Builder's plate: The responsible person takes the role of the manufacturer and includes his name on the plate.
- **A.2.3. Protection from falling overboard and means of reboarding**: Assessed by the Notified Body according to the relevant standard.
- **A.2.4. Visibility from the main steering position:** Assessed by the Notified Body according to the relevant standard.
- **A.2.5.** Owner's manual: The responsible person shall ensure that the manual is provided in accordance with the relevant standard.
- A.3.1. Structure: In order to assess the strength of the structure it is recommended to obtain as much information as possible concerning hull construction and scantlings (e.g.: past acceptability by Certification Bodies or Local Authorities or declaration of conformity in accordance with the Annex III of the Directive) and any possible empirical data (e.g.: details of voyages undertaken or record relevant to adequate experience of safe operation in an area where the sea and weather condition are not less than those applicable in the Design Category). If there is insufficient documentation to assess construction of the boat or insufficient empirical data to demonstrate adequate strength compliance, then tests may also be carried out. A hull inspection should then be carried out in order to assess satisfactorily the conditions of the boat.
- **A.3.2. and A.3.3 Stability & Freeboard and Buoyancy & Flotation:** For all design categories, the Notified Body is required to have assessed this Essential Safety Requirement according to the relevant standard.

For A and B category boats, if there is insufficient documentation to assess stability and buoyancy with the harmonised stability standard, it is required to obtain as much information as possible concerning stability and buoyancy (e.g.: past acceptability by Certification Bodies or Local Authorities) or any possible historical data (e.g.: record of voyages undertaken in safe operation in an area where the sea and weather condition are not less than those applicable in the corresponding Design Category) which may permit to define the design category, the maximum number of persons and the maximum load capacity.

For C and D category boats, if there is insufficient documentation to assess stability and buoyancy, tests have to be conducted to assess stability and buoyancy and to define the design category, the maximum number of persons and the maximum load capacity.

- **A.3.4.** Openings in the hull, deck and superstructure: Tightness degree test and strength assessment relevant to the installation of the appliances according to EN ISO 12216:2002 is required. This test may be omitted provided that a visual inspection is carried out satisfactorily and adequate experience in the use may be demonstrated.
- **A.3.5. Flooding:** Assessed by the Notified Body according to the relevant standard.
- **A.3.6.** Manufacturer's Recommended Maximum Load: Assessed by the Notified Body according to the relevant standard. The maximum load, crew limit and design category are strictly linked. The relationship between the three items is given in the Stability and Buoyancy Standard
- **A.3.7. Liferaft stowage:** Assessed by the Notified Body according to the relevant standard.
- A.3.8. Escape: Assessed by the Notified Body according to the relevant standard.
- **A.3.9.** Anchoring, mooring and towing: Assessed by the Notified Body according to the relevant standard.
- **A.4. Handling characteristics**: Assessed by the Notified Body according to the relevant standard.
- **A.5.1. Engine and engine spaces:** Assessed by the Notified Body according to the relevant standard. In the absence of satisfactory information insulating materials may be tested and the relevant results included in the Technical Documentation
- **A.5.2. Fuel system:** compliance of the fuel system may be assessed by mean of an inspection of the fuel system and parts of it as installed on the lines, including filling, venting and return hoses, connection to the tanks, fuel filters, any shut-off valves or auxiliary equipment. In case of petrol system, non-ignition protected components are required to be replaced in the engine compartment. Fuel tanks are to be inspected as installed to ascertain any corrosion or leaking areas, tests may be required.
- **A.5.3. Electrical system:** inspection of the installed system including batteries, generators, switches, battery chargers is to be carried out as applicable. Information is required to verify the characteristics of the electrical cables and protection systems
- **A.5.4. Steering system:** compliance with the relevant standards is to be assessed as applicable. A functional test is required.
- **A.5.5 Gas system:** a general inspection of the system including gas storage, gas cylinders, piping hoses, pressure devices and ventilation is required, tests may be required.
- **A.5.6. Fire protection**: Assessed by the Notified Body according to the relevant standard.
- **A.5.7.** Navigation lights: Assessed by the Notified Body according to the relevant standard.
- **A.5.8. Discharge prevention:** Assessed by the Notified Body according to the relevant standard.

- **A.6.** Inflatable boats and RIBs assessment procedure should be similar to craft assessment, but with additional application of the harmonised standard for RIBs as far as practical.
- **A.7. Personal Watercraft (PWC)** assessment procedure should be similar to craft assessment, but with additional application of the harmonised standard for PWC as far as practical.

B. Components listed in Annex II:

Components not CE certified in compliance with the RCD are to be inspected according to the relevant standards as applicable. In case such components are found not in compliance they are to be replaced.

C. Exhaust Emissions:

The Notified Body is fully involved in post construction certification.

It is up to the Notified Body how to prove equivalent conformity.

The Notified Body is urged to use tests and procedures according to the Directive. However, the Notified Body can be convinced of equivalent conformity by demonstrating that the engine is certified to some requirement setting limits below or equal to Directive 2003-44-EC under equal or similar test methods (compare regulations as listed below). Engines not certified in accordance with one of these regulations shall be submitted to exhaust emission testing in accordance with the harmonised standard or an equivalent method.

For PCA of used boats the Notified Body should take into account the history of the maintenance and use of the engine and should assess the condition of the craft and the engine in order to ensure compliance with the exhaust limit values.

Regulation Comparison for CI Engines

- Central Commission Navigation river Rhine (CCNR) [if >75kW]
- EU Directive 97/68/EC [stage 2 and if >37kW]
- EU Directive 97/68/EC as amended by EU Directive 2002-88-EC
- USA Environmental Protection Agency (EPA) Recreational Marine (40 CFR 94)
- USA Environmental Protection Agency (EPA) Commercial Marine (40 CFR 94)
- EU Directive 88/77/EEC as amended by 2001/27/EC
- UN Regulation ECE-R96 as amended by Series 01

Regulation Comparison for SI Engines

- Lake Constance Shipping Ordinance (BSO Bodenseeschiffahrtsordnung) [stage 2]
- EU Directive 97/68/EC as amended by 2004/26/EC
- California Air Resources Board (CARB, 13 California Code of regulation, section 2440) SD/I Rule

D. Noise Emissions: Assessed by the Notified Body according to the relevant standard.

The Notified Body is fully involved in post construction certification.

It is up to the Notified Body how to prove equivalent conformity.

The Notified Body is urged to use tests and procedures according to the Directive. However, if the Notified Body can be convinced of equivalent conformity this can be demonstrated by other means (e.g. certified reference boats).

For PCA of used boats the Notified Body should take into account the history of the maintenance and use of the engine and should assess the condition of the craft and the engine in order to ensure compliance with the noise limit values.

E. Technical documentation:

The person who places the product on the market and/or puts it into service must provide the Notified Body with any available document and technical file referring to the first placing on the market of the product in the country of origin.

The Notified Body shall examine the individual product. The list given on minimum survey activities (chapter G. VII c) "Procedures to be applied for module G") should be used.

The Notified Body shall carry out calculations and other assessment to ensure its equivalent conformity with the relevant requirements of the Directive. If the provided available document and technical file is not sufficient to carry out these assessments and calculations, additional technical documentation may need to be generated in order to allow the notified body to ensure the assessment of equivalent conformity.

F. Documents to be issued by the Notified Body

- Report of Conformity This report includes the assessment results per relevant Essential Requirement and includes information to the applicant with regard to his obligations.
- Post-Construction Certificate This certificate will be issued when the product has been found to have equivalent conformity.

Equivalent conformity is reached when the product in its current state can reasonably be expected to fulfil all relevant essential requirements of the RCD.