

Rules of Certification of Navigation Instruments and Equipment

Zasady certyfikacji urządzeń nawigacyjnych i wyposażenia

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Abstract: The European Union is committed to European integration. Poland has been a member of the EU since 2004 under the Treaty of Accession, which was signed in 2003 in Athens. Joining the European Union is associated with developing a modern legal system. Each product is subject to certification, the process by which a notified legal body provides a written report about the results of the studies of a product. The legal body that provided a uniform framework for the use of marine equipment testing standards is the European Council Directive 96/98 EC of 20 December 1996. The Directive MED was established for the safety of marine transport. The compliance of navigation devices with the Directive MED was confirmed by the "Wheelmark" ("Steering Wheel"). In Poland, the requirements for certification of marine equipment under Directive MED, were implemented after the act regulating the provisions of EU law; these requirements are not widely known among practitioners. This certification system of marine equipment is a coherent system executory throughout the European Union.

Keywords: certification, navigation instruments

Streszczenie: Unia Europejska dąży do integracji europejskiej. Polska jest członkiem UE od 2004 roku na mocy tzw. Traktatu akcesyjnego, który został podpisany w 2003 roku w Atenach. Wejście do Unii Europejskiej wiąże się z przygotowaniem nowoczesnego systemu prawa. Każdy wyrób podlega certyfikacji, czyli procesowi, w wyniku którego jednostka notyfikowana udziela pisemnego sprawozdania sporządzonego na temat wyników przeprowadzonych badań produktu. Prawnym instrumentem, która tworzy jednolite ramy stosowania norm badania wyposażenia morskiego jest Dyrektywa Rady 96/98WE z dnia 20 grudnia 1996 r. Dyrektywa MED została ustanowiona dla bezpieczeństwa transportu morskiego. Zgodność urządzeń nawigacyjnych z Dyrektywą MED jest potwierdzana znakiem „Wheelmark” – „koło sterowe”. W Polsce wymagania dotyczące certyfikacji wyposażenia morskiego zgodnie z Dyrektywą MED, zostały wdrożone po przez ustawę, jako akt regulujący postanowienia prawa UE, należy mieć na uwadze, że wymagania te nie są powszechnie znane wśród praktyków. System certyfikacji wyposażenia morskiego jest spójnym systemem obowiązującym w całej Unii Europejskiej.

Słowa kluczowe: certyfikacja, urządzenia nawigacyjne

Introduction.

The subject of this article results from changes in the Polish legislation, concerning the quality of products, and, more specifically, marine equipment. These changes were made to adapt Polish law to the standards of European Union law. Poland's access to the EU was associated with developing a modern legal system. The Polish government made all its activities, concerning EU integration, a priority on all levels of administration. Poland's participation in the common shipping policy of the EU determines the acceptance of legal obligations between those

EU countries that also have their business based on maritime trade. Developing trade has caused more traffic on the waterways of the world, and technological advances made it possible to build ships with greater capacity and modern marine equipment. Faced with these changes, it was necessary to submit a detailed regulation of maritime activities with administrative regulations, technical standards, and quality standards.

In the EU's modern market economy, due to the processes of globalization and harmonization, the concept of certification is becoming more important. EU politics and activities led to

making, applying, and observing the laws of EU integration.

The aim of the article is to assess the implementation of EU law on Polish soil and to attempt to systematize information on validation, standardization, and certification of marine equipment.

Main objectives of the European Union.

According to Article 3 of the Treaty on the European Union, the most important goal of the EU is to ensure peace and prosperity of its peoples, and economic and social progress through the creation of an area without internal borders. The European Union has the task of promoting progress in the social and economic sphere. The free movement of products is the foundation principle of the EU. Products legally manufactured or introduced in one country have essentially the guaranteed freedom of movement throughout the EU, if these products meet the level of security imposed on them by the Member State exporting the products, and/or if they are marked on the territory of the exporting country. The European Union aims to liberalize world trade, unify the economic structure of Member States, and equalize the regional economic development, increasing the living standards of EU citizens.

The objectives defined in the EU treaties are achieved by using different acts of law. The source of EU laws are international agreements, treaties (primary law), and legal acts, which constitute the secondary legislation. Legal acts of law are issued on the basis of authorization under the Community Treaties. These are the regulations, directives, decisions (binding acts), and the resolutions and opinions (non-binding acts).

Certification of marine equipment.

Directive MED.

The establishment of common standards ensures a higher level of safety

performance of equipment on vessels and reduces accidents. Flag States, under international conventions, are obliged to issue the relevant certificates and ensure the ship's equipment complies with specified safety requirements. For this purpose, the international standardization bodies and the International Maritime Organization developed testing standards for certain types of marine equipment. Harmonization of standards and IMO regulations for approving marine equipment of ships will provide an adequate level of safety of equipment. However, there are differences in terms of qualifications and experience between national standards and international standards. This leads to a differentiation of levels of product safety, which is why common rules aimed at bridging the gap cause the elimination of technical barriers for trade by placing the mark of conformity on the product. Council Directive 96 / 98WE, known by the acronym MED Directive, is a legal instrument that creates

a uniform and binding framework for Member States to apply the international testing standards of navigation equipment. Council Directive 96/98 / EC (MED) on marine equipment has been established to ensure the safety of shipping, prevention of pollution at sea, and ensure the free movement of equipment within the European Community (Art.1).

This Directive applies to equipment for use on board:

- ◆ a) a new European Community ship, whether or not the ship is situated within the Community at the time of construction;
- ◆ b) an existing European Community ship — where such equipment was not previously carried on board or where equipment previously carried on board the ship is replaced, except where international conventions permit otherwise, whether or not the ship is situated within the European Community when the equipment is placed on board.

This Directive will not apply to equipment that, on the date of entry into force of this Directive, has already been placed on board a ship.

Although the equipment referred to in paragraph 1 may fall within the scope of Directives, other than this Directive, for the purpose of free movement and, in particular, Council Directives: 89/336/EEC of 3-May-1989 on the approximation of the laws of the Member States relating to electromagnetic compatibility and 89/686/EEC of 21-December-1989 on the approximation of the laws of the Member States relating to personal protective equipment, equipment will be subject only to this Directive MED.

Each Member State or the organizations acting on its behalf will ensure, when issuing or renewing the relevant safety certificates, the equipment on board Community ships -for which it issues safety certificates- complies with the requirements of this Directive. They may also refuse the extension of the safety certificate for the equipment compatible with the Directive.

For a specific item of equipment, the European Community may apply to the IMO or the European standardization organizations to establish standards. The Commission will monitor the development of testing standards. If testing standards have not been adopted by international organizations, including the IMO, then they are based on the work of the European standardization organizations. If testing standards for a specific item of equipment were adopted or came into force by law, then that equipment may be transferred from Annex A.2 to Annex A.1 Directive MED.

Appendix A.1 MED Directive applies to equipment for which the international institutions have specific testing standards. Appendix A.2 applies to equipment for which the international institutions have no specific standards for research.

A new vessel applying for registration in the register of ships in one of the Member States should undergo an inspection, verifying the status of the equipment on board. Equipment for such a ship must have a safety certificate and meet the require-

ments of this Directive and have the markings, which according to the authority of that Member State, will be equivalent to the type approval under this Directive. Equipment that has no markings or does not meet the requirements of the Directive must be replaced. With equipment considered equivalent to the MED Directive, Member States will issue a certificate, which should be kept constantly with the equipment, and which allows to place the flag on the ship's equipment, and which introduces any restrictions or lays down rules for its use.

The conformity-assessment procedure in the light of Directive MED.

The conformity-assessment procedure of the Directive MED is carried out by Notified Bodies, for which the Commission gives an identification number and places on a special list. They are inspected every two years at the request of a Member State by its authorities or independent external bodies appointed by those authorities. Appendix C MED Directive sets the criteria for the notified bodies.

Compliance with international testing standards can be best demonstrated by carrying out the procedure for the assessment of conformity laid down in Council Decision 93/465 / EEC of 22-July-1993, concerning the modules for the phases of conformity assessment procedures and the rules for affixing them in the directives of the CE conformity markings used in the technical harmonization. The conformity assessment process for marine equipment is specified in Part B of Directive MED.

The conformity-assessment procedure (details are listed in Annex B) will be: EC type-examination (module B) before equipment is placed on the market and according to the choice made by the manufacturer or his authorized representative, established within the Community (apart from the possibilities stated in Annex A.I). All equipment will be subject to:

- ◆ the EC declaration of conformity to type (module C),
- ◆ the EC declaration of conformity to type (production-quality assurance) (module D),
- ◆ the EC declaration of conformity to type (product-quality assurance) (module E),
- ◆ the EC declaration of conformity to type (product verification) (module F), or
- ◆ EC full-quality assurance (module H).

The conformity assessment procedures applicable to individual items of equipment are laid out in the Annex A.1 to Directive 96/98 / EC. Procedures are provided by modules: B + D, B + E, B + F and G for each item of equipment not previously foreseen for the possibility of using the procedures, according to modules B + C and H. In all modules (except module C), there will be a notified body involved in the design phase and production phase. The declaration of conformity to type will be in writing and contain information specified in Annex B.

Products produced individually or in small quantities may be subject to individual scrutiny of the EC during the procedure for the

conformity assessment. The European Commission will keep an updated list of approved equipment and for applications withdrawn or rejected and, at the same time, provide such a list.

Marine equipment, which has been produced under the Directive MED Annex A.1 and relevant international instruments should be marked with „Wheelmark” („Steering wheel”). This mark applies only for marine equipment. It is placed on the product by the manufacturer or his authorized representative, established within the European Community, to demonstrate compliance with the Directive 96 / 98 WE. A manufacturer putting the „Wheelmark” on sea equipment must observe the proportions of this sign and the size of this mark may not be less than 5mm. For small devices, you can withdraw from this dimension. Annex D describes and shows the mark of conformity „Wheelmark” - its form, proportions, and size. The components of the mark must have substantially the same vertical dimension, which may not be less than 5 mm. That minimum dimension may be waived for small devices.

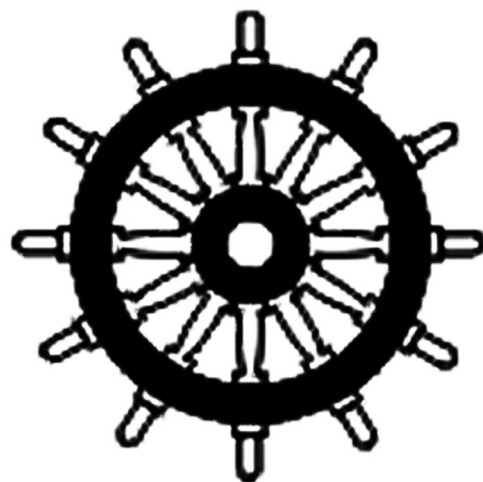


Fig 1. The European conformity mark, the so-called. „Steering wheel” („Wheelmark”).

Source: <http://www.prs.pl/certyfikacja-wyrobow/certyfikacja-wyposazenia-morskiego-dyrektywa-96-98-we.html>

Picture 1. The European conformity mark, the so-called. „Steering wheel” („Wheelmark”).

Source: <http://www.prs.pl/certyfikacja-wyrobow/certyfikacja-wyposazenia-morskiego-dyrektywa-96-98-we.html>

The identification number of the notified body that carried out the procedure in conformity assessment and the last two digits of the year in which the mark has been affixed is placed on the product. In the final stages of production, the marking number and the identification number of the notified body are placed on the product or on the data plate, or if this is not possible, on the packaging or leaflet, in a clear, visible, and durable manner. You cannot place signs or drawings with the appearance or markings that would look like they were

in accordance with this Directive, or could cause confusion and suggest they complied with this Directive. This sign of conformity assessment will be affixed in the final stages of production.

Sometimes, Member States may take provisional measures to limit or prohibit the use of equipment bearing the mark of conformity. Using equipment bearing the mark of conformity may be allowed in exceptional circumstances.

The compliance of equipment with the requirements of international conventions and resolutions and the circular logo sign of the International Maritime Organization (IMO) is recognized only when the testing standards and procedures, referring to assessing compliance with these requirements, is met. In regard to all the items in Annex A.1, using alternative testing standards applies: IEC (International Electro-Technical Commission, International Electro-Technical Commission) or ETSI (European Telecommunications Standards Institute, European Telecommunications Standards Institute), and a manufacturer or his authorized representative having its headquarters within the European Community may determine which testing standards apply.

At the expense of the Member States, it is also possible to carry out sample checks of the placed markings of equipment available on the market, but not yet installed on the vessel, to ensure compliance with the Directive MED. Such checks are not provided for in the modules for conformity assessment in Annex B. Equipment placed on the ship may be subject to inspection, carried out by the flag State, for compliance with the requirements of Directive 96/98/EC, if the onboard performance tests provided are required by international instruments for safety and/or pollution-prevention purposes, provided they do not duplicate procedures already carried out on the conformity assessment. A piece of equipment listed in Annex A.1, and holding approval signs, and which is properly installed and used on a ship, but is a threat to life and health, the safety of crew and passengers or other persons, or endangers the environment must be immediately dismantled or withdrawn from the market or production or prohibited to use on ships.

In exceptional circumstances, the vessel may be provided with a different device than the device having an EC type-approval. The type of approval, in other words, is the procedure for the assessment of compliance of the equipment produced under the testing standards and the issuing of the appropriate certificate. The administration of the flag State may allow the placement of equipment on board a Community ship that does not comply with the principles of the procedure for conformity assessment, if the flag State administration becomes convinced the equipment is, at least, as effective as equipment that meets the requirements of the procedure for conformity assessment. For such a device, there should be an attached document - a certificate of the flag Member State - that should be issued by a recognized organization equivalent to a notified body if, between the Community and the third country concerned, there has been concluded an international agree-

ment on the mutual recognition of such organizations, or if these requirements could not be fulfilled, then the vessel can be provided with the equipment, accompanied by a document issued by a Member State of the IMO, which certifies compliance with the requirements set by the IMO. This certificate must be on board with the equipment, at all times, and must be limited to a short period. This equipment could not be relied upon in place of equipment that meets the requirements of this Directive and must not replace such equipment, which must remain on board the Community ship in working order and ready for use. This equipment is added to Annex A.2. Administration of the flag State will be informed of the nature and characteristics of such equipment and, as soon as possible, ensure the equipment complies with the requirements of the international instruments and of this Directive.

If the equipment must be replaced in a port outside the Community and, in exceptional circumstances, when it is not possible to supply the vessel with onboard equipment having an EC type-approval, it may be provided with other equipment if:

- ◆ the equipment will be accompanied by documentation issued by a recognized organization equivalent to a notified body, where, between the Community and the third country concerned, there has been concluded an international agreement on the mutual recognition of such organizations;
- ◆ the requirements in the foregoing sub-paragraph may not be fulfilled, the ship can be provided with the equipment, accompanied by a document issued by a Member State of the IMO, which is a party to the conventions and which document certifies compliance with the requirements set by the IMO.

Administration of the flag State will be immediately informed of the nature and characteristics of such other equipment. Administration of the flag State shall, as soon as possible, ensure such equipment, with its testing documentation, complies with the requirements of the international instruments and of this Directive.

Provisions Survey of seagoing vessels.

Regardless of the Directive MED, which is European, ships are also subject to international conventions that apply to all vessels. Conventions also contain a description of the general principles of supervision of navigation devices and their inspection.

Technical supervision of seagoing vessels is exercised by a notified body. In Poland, the Polish Register of Shipping is under the authority of the Administration. The Polish Register of Shipping SA Poland is the only notified body with the competence to carry out conformity assessment procedures of the Directive MED, and it concerns all kinds of equipment specified in Annex A.1 of the Directive for which there are international standards for testing. The Polish Register of Shipping SA is the Notified Body No. 1463, which has the competence and many years of experi-

ence evaluating this compliance. The authority to conduct conformity assessment procedures with the EU directives is based on the accreditation of the Polish accreditation body - the Polish Centre for Accreditation. PRS SA, a certificate of accreditation No. AC 114, confirms the fulfillment of requirements of standards of PN-EN 45011: 2000 (EN 45011: 1998, IDT).

The Polish Register of Shipping, under the authority of the Maritime Administration, supervises conventional (technical) designs, production, installation, and the operation of equipping conventional ships, and it issues, renews, and confirms the vessel's documents, certificates, and attestations.

Inspections and technical tests of navigation devices are carried out by a surveyor, and a specialized service company, recognized by the PRS, which verifies the functional and technical parameters of the devices. These tests of devices should be carried out every five years, except for the UDR and AIS, which surveys are done every year. On ships not subject to the SOLAS Convention, the approval tests of navigation devices should be carried out every 5 years.

During the supervision of the production of navigation devices, products are subjected to testing and inspection in factories, laboratories, or research stations previously agreed with the PRS. The convention of produced equipment under Directive 96/98/EC (MED) specified in Annex A.1, placed on a ship flying the flag of Poland or another EU Member State, should have certificates of compliance with the MED. The survey of manufacturing of products complying with the MED is not required, unless the PRS, as a notified body, has been chosen by the manufacturer or his authorized representative to carry out this supervision on conformity of the products with the MED.

There should be the technical documentation of equipment convention on the vessel. For navigation devices, this documentation is as follows:

- ◆ a list of navigation devices specifying their types and their manufacturers,
- ◆ the diagram of connections and power sources indicating the types of cables used,
- ◆ the identification of the ways of grounding electrical devices,
- ◆ the arrangement plan of navigation equipment on the bridge,
- ◆ deployment plan of antennas - common for radio and navigation,
- ◆ technical drawings showing the distribution of visibility from the bridge in two crops (top and side), showing the sectors obscuring the superstructure, cranes, etc., and showing the visibility in front of the bow of the ship.

Research stations, laboratories, companies, services, repair, and maintenance facilities, if they are competent in carrying out certain services, are considered legitimate by the PRS. In confirmation of this, the PRS issues a „Certificate of Approval”, with a validity period of 3 years. The PRS may carry out inspections of recognized entities in the middle of the validity period of the

certificate. In Publication No. 51 / P – Procedural Requirements for Service and Publication No. 14 / I – there are rules and procedures for their recognition, given by the PRS, on the recognition of research stations and repair and maintenance facilities.

With irregularities in the operation of such a company, the PRS may limit, suspend, or revoke the rights granted to a recognized entity.

The survey of the field of navigation equipment.

The survey of navigation equipment is described in Part V of the Rules Survey of seagoing vessels. Its content follows the technical requirements in the SOLAS Convention and the applicable amendments thereto and includes technical requirements applicable with the IMO Resolution. The provisions of Part V apply to:

- ◆ all passenger ships and cargo ships allocated to Poland, engaged in international voyages, which navigation devices are subject to technical supervision of the PRS,
- ◆ passenger vessels with a length of 24 meters and upwards engaged in domestic voyages and built before 1-July-1998,
- ◆ passenger ships engaged in domestic voyages and built on 1-July-1998 or after that date, regardless of their length,
- ◆ all high-speed passenger craft engaged on domestic voyages, regardless of their length and date of construction,
- ◆ specialized vessels, for which the requirements are contained in the Code of ship safety specialist (Code of Safety for Special Purpose Ships); the scope of delivered equipment of such vessels in navigation devices should comply with the requirements of Chapter V of SOLAS 74,

The provisions of this section may be used for ships flying flags other than the Polish flag, over which ships the PRS has conventional supervision as a set of recommendations and guidelines, unless the Administration of Flag States Control gives it another status of regulations to implement. Navigation equipment on convention vessels flying the Polish flag or the flag of another EU Member State should be certified to comply with the Directive MED. Marine equipment on convention vessels flying the flag of a non-member of the EU should be type approved by the PRS or should comply with the requirements of the Directive MED.

Navigation instruments not listed in Annex A.1.

The Directive MED on convention vessels flying the flag of any country should be recognized by the PRS. Navigation instruments installed on board a passenger ship practicing domestic navigation, flying the flag of Poland or another EU Member State, should comply with the requirements of the Directive MED. Equipment on a ship not practicing international shipping should be also recognized by the PRS.

The PRS conducts technical supervision over the design, manufacture, installation, and operation of the following naviga-

tion instruments:

- ◆ the main magnetic compasses, steering and small-scale,
- ◆ gyroscopic,
- ◆ logs,
- ◆ sonar,
- ◆ indicators of the speed of turning,
- ◆ radars,
- ◆ devices for automatic radar plotting aids (ARPA),
- ◆ devices for automatic tracking (ATA),
- ◆ devices for electronic plotting aids (EPA),
- ◆ imaging systems of the electronic chart display information system (ECDIS),
- ◆ receivers of radio navigation systems,
- ◆ automatic identification systems (AIS),
- ◆ the unit system of long-range identification and tracking of ships (LRIT),
- ◆ voyage data recorders (VDR),
- ◆ devices for determining and transmitting magnetic heading (TMHD),
- ◆ devices for the transmission rate (THD),
- ◆ daylight signaling lamps,
- ◆ systems for collecting and strengthening the sound,
- ◆ other, not listed above navigation devices, at the request of the Society or at the request of the ship owner.

All navigation equipment installed on ships should be type approved by the PRS or by another body notified organization. Type Approval Certificate is proof of recognition of the device by the PRS. Systems and equipment replaced or added to ships constructed before 1-July-2002, and additional backup equipment installed after 1-July-2002, should comply with the requirements of SOLAS V / 18. The electronic charts display and information system (ECDIS) will comply with the technical and operational requirements, not milder than those of the date of installation, and if installed before 1-January-1999 – then not less accurate than those specified in subsections 5.11.1 to 5.11.16 (SOLAS V / 18). After consideration by the PRS, navigation instruments on board vessels not engaged in international shipping may be exempted from full compliance with the requirements of technical exploitation. In the Certificate of Type Approval, there is information given about the use of devices for certain types of ships not engaged in international navigation.

Technical supervision of the design and production of ship navigation equipment includes:

- ◆ Consideration of the technical documentation for the prototype,
- ◆ Consideration of the program and methodology of factory tests of the prototype,
- ◆ Supervision of testing of the factory prototype,
- ◆ Consideration of the program and methodology of testing the prototype on board,
- ◆ Supervision of the trials of the prototype ship,
- ◆ Consideration of the technical documentation for the information series,
- ◆ Supervision of production information series,
- ◆ Consideration of the technical documentation for produc-

tion series,

- ◆ Supervision of serial production.

The prototype equipment must be produced according to the technical documentation approved by the PRS. The prototype equipment or system should be tested in the factory and then tested again on the vessel to determine the compatibility of its parameters, operational and technical requirements, according to the Rules and the technical conditions set out in the technical documentation of the device. The device must fulfill the conditions of environmental resistance specified in IEC Publication 945. After passing the tests of the prototype equipment at the manufacturer and on the vessel, the PRS should be presented with the protocols and test reports and technical description, schematics, drawings, dimensions and, if possible, photos of the new device. These materials serve as the basis for approval of the technical documentation (in triplicate) for the mass production of the device and remain with the PRS.

The recognition of the type of new and existing equipment, not manufactured under the supervision of the PRS, is carried out on the basis of an inspection of the production plant and the supervision of the type of product tests, and by examining the technical documentation of equipment (description, diagrams, test reports, etc.). The testing of new equipment should be made according to a program agreed with the manufacturer. The testing of new equipment is carried out inside the manufacturer's laboratory or at another laboratory recognized by the PRS. In a laboratory recognized by the Administration or by another classification society, where appropriate test results are achieved, despite the lack of supervision by the PRS, they may still be considered sufficient by the PRS.

PRS monitoring also includes supervision of equipping vessels under construction or reconstruction, and it is independent from the supervision over the production process of navigation equipment. Before commencing the construction of a ship (or before the phase of equipping the ship), the technical documentation of the installation of equipment covered by the requirements of this part of the Rules must be submitted to the PRS Head Office for consideration and approval (regarding the extent of adaptation/adjustment to the ship).

Installation of navigation equipment on vessels and their start-up may only be performed by a service company recognized by the PRS under Publication No. 51 / P - Procedural Requirements for Service. The technical acceptance of the installation and the technical acceptance of performing equipment is done by a PRS Surveyor.

Conclusion.

Poland, as a result of the accession to the European Union, has adopted a commitment to exercise and apply the EU law, which is an autonomous and unified whole. Execution of EU law is followed by its implementation into the Polish national law, other-

wise called the process of transposition of EU law. The method of law-making in the EU also affects the process of law-making in Poland.

EU Directives are specific statutes, which under Article 288 of the Treaty of Lisbon (former Art. 249 TEC), bind EU Member States to whom they are addressed. Regarding the results to be achieved by the Member State, they are left to the national authorities as to the choice of form and legal remedies used. The Directives must, therefore, in principle, be implemented into the law of the Member States, so the legal effect is achieved. Directive 96/98 / EC (MED) defines the conformity assessment procedures applicable to the assessment of marine equipment. In Poland, as an EU member state, the transposition of the Directive MED was conducted by the **Act dated 20-April-2004** concerning marine equipment, which lays down the detailed rules of the conformity assessment system for marine equipment and the operation of the control system of marine equipment. The principal form of implementation of the directives is the statute. The Act implements the provisions of Directive 96/98 / EC of 20-December-1996 about marine equipment. It is worth noting, however, Polish accession to the European Union does not end the process of harmonization, because the legal system of the European Union is constantly evolving.

Certification of marine equipment under Directive MED is a process by which a third party (outside the manufacturer and the customer) gives a written assurance that a product, process, or service conforms to specified requirements. Supervision of this process is conducted by the state and, often, on behalf of the state; this supervision is conducted by an authorized (notified) institution, which serves as a judge between the manufacturer and the customer, so this body is commonly referred to as „third party.” The basis of certification is a written report on the results of testing and inspection by credible, impartial, objective, and competent bodies, established for conformity assessment (certification body). The result of the work of the certifying authority is the certificate - a document containing a written assurance that the product, process, or service conforms to specified requirements. The positive result of the assessment of compliance with the requirements made by the approved body is the basis for the manufacturer or his authorized representative to receive the certificate of conformity. Certification bodies, inspection bodies, and laboratories should comply with the Polish standards and to the corresponding standards of EU Member States,

and they should be established in the Member State of the European Union. The minister in the government responsible for maritime economy, at least once every two years, should conduct an inspection of the notified authorities, concerning their performance of the required criteria, their methods of performing their duties, and that individuals who work in those institutions perform their tasks in terms of the authorization granted. The signs “CE” and „Wheelmark” are like a „passport”, allowing the use of a specific product on the EU market.

Continuous development in maritime navigation, changes to the infrastructure of the coastal area, hydro-technical investments, integration of navigation systems, dispensing of paper maps and replacing them with electronic maps (ECDIS), the increase of intensity of maritime traffic, which results in the necessity of international co-operation in monitoring and surveillance, developing satellite navigation – are present day changes that forecast further and deeper changes for the future. The European maritime industry takes full advantage of activities in the field of technological development. The designing of new ships and marine equipment, to improve safety of life at sea and protecting the environment, enforces implementation of new procedures, policies, standards, and systems of navigation security. The result of technical development in the field of navigation and operation of modern navigation equipment will cause the evolution of educational systems under the STCW Convention.

The general conclusion is that the system of certification of marine equipment is a coherent system in place throughout the European Union, which creates one uniform legal framework for all producers and users and helps set a uniform level of safety, while offering “standardization”, which enables seamless connectivity into one common system for all navigation devices and equipment made by different manufacturers having their offices in different countries.

We must remember that Poland has taken and is still undertaking measures to implement the EU law. The Directive, as an act of law regulating social relations, has acquired (because of the Polish accession to the European Union) specific support in the form of directly effective regulations and directives, requiring implementation throughout the whole EU.

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