

# 欧盟关于船用设备证书的要求

## The requirements of EU on marine equipment certificates

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The paper describes the requirements of EU member countries on marine equipment certificates and the equipment lists with or without detailed testing standards.

根据欧盟《船用设备指引(96/98/EC)》的要求,悬挂欧盟成员国国旗的船舶,为满足国际公约而安装的设备,必须具有EC型式认可证书,并贴有MED标志。

### 应用范围

#### 船舶范围

欧盟的船用设备指引适用于悬挂欧盟及欧洲经济区成员国国旗的船舶。欧盟成员国有:奥地利、比利时、丹麦、芬兰、法国、德国、希腊、爱尔兰、意大利、卢森堡、荷兰、葡萄牙、瑞典、英国。

欧洲经济区成员国有:挪威、冰岛、瑞士、列支敦士登。但瑞士、列支敦士登并未签署该指引,因此,这两个国家不用满足MED的要求。

#### 设备的范围

船用设备指引适用于为满足国际公约而安装的设备,如救生设备、船用防污染设备、防火及消防设备及材料、航行设备、无线电通讯设备等,具体设备见附表。

### 生效日期

欧盟要求,各成员国必须在1998年6月30日前将《船用设备指引(96/98/EC)》通过成为本国法律。

1996年12月20日前由欧盟成员国根据国际公约检验验证过的设备,可以安装在2001年前建造的船舶上。

1999年1月1日前制造,由欧盟成员国根据国际公约签发型式认可证书的设备,可以安装在2001年前建造的船舶上。

1999年1月1日后制造的设备必须有MED标志。

2001年1月1日后建造的船舶,设备上必须有EMD标志。

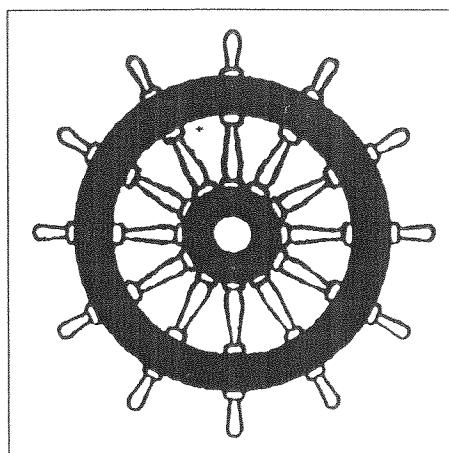
### 签发机构

除各成员国政府外,由各成员国政府授权指定的机构也可以签发EC型式认可证书及MED标志。由于《船用设备指引(96/98/EC)》成为各成员国法律,各国政府多边认可,因此,由各成员国政府或他们指定的机构根据船用设备指引签发的证书,其他政府也要认可。

根据到目前为止掌握的材料,授权指定的机构有:LR、ABS、DNV、BV、RINA。由于德国政府打算继续由他们自己签发证书,因此,德国劳氏GL不是指定的机构。

### MED标志

根据MED指引检验的设备除签发EC



型式认可证书外,还在设备上贴有MED标志,该标志如下图。

在标志上还应签发机构的识别代码。识别代码由欧盟委员会统一颁发,识别代码与签发机构一一对应。

MED标志应贴在设备或铭牌的显眼的地方,且难以擦掉。如果由于设备本身的特点无法贴在设备上时,也可以贴在设备的包装箱上。

### 对设备检验的要求

由于该指引新近才生效,对设备的检验还不是很清楚。根据我们到目前为止所掌握的资料,与现行要求差别较大的是设备取证的程序及要求。而设备在船上的首次检验,仅增加对EC型式认可证书的记录和MED标志的外观检查及验证。

对列入附表1中的设备,如果是1999年1月1日后制造的,必须满足本指引的要求,即具有EC型式认可证书,贴有MED标志。

对列入附表2中的设备,由于检验标准未定,经挂旗国政府允许,可仅持有挂旗国政府签发的型式认可证书。

附表1. 现有国际文件中已有详细试验标准的设备

序号	设备名称
<b>一、救生设备</b>	
1	救生圈
2	救生装置的位置显示灯
3	救生艇自发烟雾信号
4	救生衣
5	救生服及防爆服
6	救生衣级的救生服及防爆服
7	保温用具
8	火箭降落伞火焰信号
9	手持火焰信号
10	漂浮烟雾信号
11	抛绳设备
12	气胀式救生筏
13	刚性救生筏
14	自行扶正的救生筏
15	带顶篷两面可用的救生筏
16	自由漂浮装置中的静水压力释放器

17	救生艇
18	刚性救助艇
19	充气式救助艇
20	快速救助艇
21	使用吊艇索和绞车的降落设备
22	救生筏自由漂浮释放设备
23	自由降落救生艇的释放设备
24	救生筏释放设备
25	快速救助艇释放设备
26	使用单根或多根吊艇索降落的救生艇、救助艇和救生筏的脱开机械装置
27	海上撤离系统
28	救助方式
29	登乘梯
30	逆向反光材料
31	救助艇筏双向 VHF 无线电话设备
32	9GHz 雷达应答器
33	救生艇和救助艇用雷达反射器
34	救生艇和救助艇用罗经
35	救生艇和救助艇用手提灭火器
36	救生艇发动机
37	救助艇发动机

## 二、防火保护

1	甲板基层敷料
2	手提灭火器
3	消防员装备: 防护服
4	消防员装备: 消防靴
5	消防员装备: 手套
6	消防员装备: 消防头盔
7	自给式压缩空气呼吸器
8	用于防烟盔或防烟面具的空气呼吸器
9	水雾系统
10	机舱固定压力水雾系统的喷嘴
11	A、B 分隔, 防火完整性
12	油船上防止火焰进入货油舱的装置
13	用于 A、B、C 级分隔的不燃材料
14	除钢以外的穿过 A 级或 B 级分隔的管子贯通材料
15	除钢以外的输送油类或燃油的材料
16	防火门
17	防火门控制系统
18	低播焰性表面材料和地板覆盖物
19	帷幔、窗帘及其他悬挂的纺织品材料
20	配有垫、套的家具
21	垫、套
22	防火风闸
23	通过 A 级分隔的风管贯通
24	通过 A 级分隔的电缆贯通
25	窗、舷窗

## 三、防污染设备

1	滤油设备 (含油量不超过 15ppm)
2	油水界面探测器
3	油份测定仪
4	现存油水分离设备的附带处理装置 (含油量不超过 15ppm)
5	油船排油监控系统
6	污水处理装置
7	船上焚烧炉

## 四、航行设备

1	磁罗经
2	电磁罗经
3	电罗经
4	雷达设备
5	雷达自动绘图仪
6	测深设备
7	速度和距离测量装置
8	舵角指示器、转速指示器、螺距指示器
9	旋回角速度指示器
10	测向仪
11	劳兰 C
12	Chayka 设备
13	台卡航行设备
14	GPS 设备
15	GLONASS 设备
16	自动舵 (向首控制系统)
17	引航员机械升降器

## 五、无线电通讯设备

1	能发送和接收 DSC 和无线电话的 VHF 无线电装置
2	VHF DSC 值班接收机
3	NAVTEX 接收机
4	EGC 接收机
5	高频海上安全信息设备 (高频 NBDP 接收器)
6	406MHz 应急无线电示位标
7	L 波段应急无线电示位标
8	2182kHz 值班接收机
9	双调报警信号发生器
10	能发送和接收 DSC 和无线电话的 MF 无线电装置
11	MF DSC 值班接收机
12	卫通 B
13	卫通 C
14	能发送和接收 DSC、NBDP 和无线电话的 MF/HF 无线电装置
15	无线电话 MH/HF DSC MF DSC 值班接收机
16	航空双向无线电话设备

附表 2. 在现有国际文件中还没有详细试验标准的设备

## 一、救生设备

1	救生筏雷达反射器
2	用于救生艇和救助艇的探照灯
3	保温服材料

## 二、防火保护

1	非手提的及可移动的灭火器
2	水雾系统 (仅限于喷嘴及自动水雾和发信号的方法)
3	特种处所固定压力水雾系统的喷嘴
4	发电机组冷态起动装置
5	消防水带
6	两用式水枪 (水雾/水柱式)
7	周期性无人机舱的固定探火和失火报警系统
8	感烟探测器
9	感温探测器
10	电安全灯
11	抗化学侵蚀的防护服
12	氧气分析和气体探测设备
13	低位照明系统

## 三、航行设备

1	高速船电罗经
2	高速船电雷达设备
3	高速船自动舵 (向首控制系统)
4	高速船电磁罗经
5	高速船白昼通信信号灯
6	高速船探照灯
7	高速船晚上可见设备
8	航迹控制系统
9	自动航迹仪
10	电子绘图仪
11	电子海图系统
12	GPS/GLONASS 组合设备
13	DGPS、DGLONASS 设备
14	航行数据记录仪
15	综合航行系统
16	综合桥楼系统

## 四、无线电通讯设备

1	VHF 应急无线电示位标
2	无线电备用电源

## 五、COLREG72 要求的设备

1	航行灯
2	声力信号装置

## 六、散货舱安全设备

1	装载仪
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DET NORSKE VERITAS

Det Norske Veritas AS

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Our ref.  
DTP304/BRAA-98/15488

Date  
17 August 1998

## EU Directive on Marine Equipment – Pre-notification, Personnel Qualifications and Marketing Information

Dear Sirs,

As you already know, the EU directive on marine equipment becomes mandatory from 1 January 1999.

Instructions to Surveyors ( IS II – 7.11 ) were published on 15 January 1998, and a marketing brochure was sent you with our letter of 4 November 1997 ( DTP304/OPT/BRAA-97/65339 ).

### 1. DNV pre-notified

The Norwegian Ministry of Trade and Industry required in a meeting 31 March 1998 that DNV needed to be accredited ( EN 45011 ) prior to becoming a Notified Body with regard to the EU Directive on Marine Equipment.

The Norwegian Accreditation Body ( NA ) completed its initial audit of DNV on 30 June 1998. Five sections dealing with different categories of equipment at DTP have been audited, as well as three survey stations.

Based on these audits, DNV through DNV Region Norway AS was pre-notified by The Norwegian Ministry of Trade and Industry on 22 July 1998, and the EFTA secretariat informed accordingly. The pre-notification concerns the following equipment categories :

- ◆ Life-saving appliances
- ◆ Marine pollution prevention
- ◆ Fire protection
- ◆ Navigation equipment

It should be noted that we have not yet applied to be pre-notified for radio-communication equipment.

DTP 300 ( Department for Technology – Materials, Systems and Structures ) will be responsible for the technical and administrative work in connection with the Marine Equipment Directive.

When the directive becomes mandatory ( 1 January 1999 ) and has been included in the EFTA agreement ( expected to be within 1 January 1999 ), DNV will automatically become Notified Body for the 4 equipment categories specified above.

The CE marking ( mark of conformity - the wheel ) may thereafter be affixed to the product by the manufacturer.

## 2. Qualification requirements to surveyors/auditors

In case Modules D and E are used ( referring to the EC Global Approach ) , the manufacturer needs to have an approved quality system.

Therefore, a quality system audit shall be performed at the manufacturer's premises.

The scope of the audit will be based on EN ISO 9002/ 9003, and will to some extent differ for :

- ◆ a customer with a certified quality system
- ◆ a customer with a quality system that is not certified

### *2.1 CUSTOMERS WITH A CERTIFIED QUALITY SYSTEM*

2.2.1 In case of a customer having an accredited quality system certificate issued by DNV or another accredited certification body, the product audit may be executed by a discipline specialist who has passed the DNV QA III course.

If the certificate is an unaccredited quality system certificate issued by DNV or if the customer's quality system is certified by another accredited certification body (not DNV), DNV shall recommend the customer to transfer the certificate into an accredited DNV certificate. The transfer audit shall be executed in accordance with the DNV International Certification Processes ICP C5-ce-3-2, point 2.5.7. The transfer audit shall be carried out by a qualified Lead Auditor and a discipline specialist.

The discipline specialist shall at least have a Record of Competence according to VQS, as follows :

- ◆ Persons having a valid Record of Competence within fields A.2.2 ( General Surveyor Newbuildings ) or A.3.1 ( General Surveyor, SiO ) will be qualified to carry out the required surveys of components included in the above 4 categories of equipment.
- ◆ Persons having Record of Competence for the following competence elements will also be qualified to carry out the surveys :

- Life-saving appliances : A2.2.14 ( SOLAS , Newbuildings ) or A3.1.5 ( Statutory, SiO ) or E2.15 ( Life-saving appliances, Certification Services )
- Marine pollution prevention : A3.1.5 ( Statutory, SiO )
- Fire protection : A2.2.14 ( SOLAS , Newbuildings ) or A2.2.7 ( Fire Safety Systems, Newbuildings ) or A3.1.5 ( Statutory , SiO ) or A3.1.3 ( Fire Safety, SiO ) or E2.14 ( Fire Technical Equipment, Certification Services )
- Navigation : A2.2.10 ( Safety of Navigation, Newbuildings ) or A3.1.4 ( Statutory , SiO ) or E2.9.8 ( Nautical safety equipment,

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Certification Services )

## 2.2 CUSTOMERS WITH A QUALITY SYSTEM THAT IS NOT CERTIFIED

In the case where the customer does not hold a valid accredited quality system certificate, a complete quality system audit shall be executed in accordance with relevant procedures in the ICP. The qualification of personnel shall be in accordance with the ICP, as well as in line with the competence requirements approved by the Notified Body.

The discipline specialist shall at least have a Record of Competence as specified in 2.1.1 above.

## 2.3 MODULES F AND G

Persons carrying out surveys of the equipment in accordance with these modules shall at least have Record of Competence as specified in 2.1.1 above.

## 3. Information to shipowners, yards and manufacturers

The marketing brochure referred to above primarily gives general information to manufacturers of the equipment concerned.

We feel that some information should now also be given to shipowners and shipyards operating or building ships flying the flag of any EEA countries ( EU Member States and EFTA countries ), and any possible other interested bodies.

The enclosed Memo of 17 August 1998 has therefore been worked out, and we believe the content may be important to those shipyards and Owners being involved with DNV in the newbuilding and ships in operation phase. An oversight of the equipment that will have to comply with the EU directive, is found on the list enclosed to this Memo.

The Memo may also be used towards manufacturers.

You are kindly requested to inform the stations in your region accordingly, and we leave it to you and the stations to present the enclosed information in the way you find appropriate (direct mailing, personal visits etc ).

Yours faithfully  
for DET NORSKE VERITAS AS

Odd Tørset

Erik Bråten

Head of Department, Technology – Materials, systems & structures

MEMO TO:

Whom It May Concern



## **EU Directive on Marine Equipment – DNV pre-notified. Information of importance for shipowners, shipyards and manufacturers.**

### **1. Pre-notification**

DNV was pre-notified by the Norwegian authorities on the 22 July 1998 for the categories of marine equipment mentioned below, except with respect to radio-communication equipment. This means that DNV has been accepted as competent body to carry out necessary assessment in the design and production phase of the relevant equipment specified in Annex A 1 to the directive.

### **2. Application**

The Council of the European Union issues directives for products being placed on the EEA market ( European Economic Area ). The EEA consists of the EU Member States and the EFTA countries.

The Marine Equipment Directive 96/98/EC will be mandatory for ships flying the flag of all EEA countries, and applies to the following equipment categories :

- ◆ Life-saving appliances
- ◆ Marine pollution prevention
- ◆ Fire protection
- ◆ Navigation equipment
- ◆ Radio communication equipment

### **2. Directive mandatory**

The directive becomes mandatory from 1 January 1999, and applies to equipment for use on board new ships and replacement equipment on board existing ships (However, see item 4 for equipment manufactured before 1 January 1999 ).

### **4. Transition period**

Equipment manufactured before 1 January 1999 may be placed on board new and existing EEA ships for 2 more years ( until 31 December 2000 ).

A condition is that such equipment has been manufactured in accordance with procedures for type approval in force within the Member State on 30 June 1998.

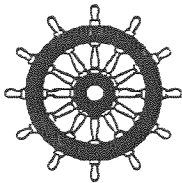
### **5. Mark of conformity**

Equipment listed in Annex A.1 ( enclosed ) to the directive and manufactured on or after 1 January 1999 will be required to have the mark of conformity prior to installation on board new EEA ships and on board existing EEA ships when the equipment is replaced.

The mark of conformity ( the wheel ) is the symbol to be affixed by the manufacturer at the end of the production phase, and shall be followed by the DNV identification number as Notified Body when DNV has been involved in the production control phase.

When the directive becomes mandatory ( 1 January 1999 ) and has been included in the EFTA agreement ( expected latest 1 January 1999 ), DNV becomes automatically a Notified Body. Thus, all necessary work related to conformity assessment of the products may be done from now on and declarations issued, so that the documents at that time can be converted into EU documents with no further examination and testing.

The CE marking ( mark of conformity – the wheel ) may thereafter be affixed to the product by the manufacturer on or after 1 January 1999, followed by the identification Number of DNV as a Notified Body.



Mark of conformity ( the wheel )

For ships registered in the EEA countries, equipment bearing the mark of conformity will normally not need any other type approval certificate, neither from national maritime authorities nor classification societies.

For DNV classed ships registered outside the EEA countries, equipment with the mark of conformity affixed will normally be accepted by DNV without any requirement to a separate type approval certificate.

## 5. Brochure

A brochure has been worked out and is available at the nearest DNV station.

## 6. Further details

Additional information may be obtained at the nearest DNV station.

Our surveyors will be pleased to assist you in this matter, thus avoiding any possible detention or delay in the EEA countries due to non – compliance with the EU directive on marine equipment.

Enclosure : Annex A.1 to the directive

DTP 304/ 98.08.17/ Braa