EU RO Framework Document for the Mutual Recognition of Type Approval

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Issued by	EU RO Mutual Recognition Secretariat
Distribution	All EU RO Type Approval Departments
Purpose of Document	The document has been designed to ensure consistency in the EU RO Mutual Recognition Type Approval process. The EU RO MR Type Approval Process consists of three processes: 1. The **Design Evaluation** involving Engineering evaluation and Witnessing of manufacturing and testing processes; 2. The **Production Quality Assurance (PQA)** which aims to ensure the consistency of production with the approved design and manufacturing process; 3. The **EU RO Maintenance Process** which aims to ensure all changes to EU RO MR Documentation go through the appropriate review and approval process; consulting with industry where necessary. This document supersedes the following referenced documents and annexes within the 'Mutual Recognition within ship classification' First Report to the European Commission and the Member States, Oct 2012: • 12.2 EU Recognised Organisations (EU ROs); • 12.5 EU RO Mutual Recognition for Type Approval Terms and Conditions; • 12.6 EU RO Mutual Recognition Procedure for Type Approval (inc. annexes). -End -

Document Administration

1. Content

The EU RO MR Secretariat is responsible for maintaining the content of this procedure. Members of the EU RO MR group are responsible for reviewing the content;

2. Changes

Anyone wishing to propose changes to this document should contact their EU RO MR Advisory Board or Technical Committee representative. Significant changes will be reviewed by the EU RO MR Advisory Board. Review and approval of document change Requests shall follow the EU RO MR Change Request Process detailed in this document (see annex VIII);

3. Controlled Issue

This document and related annexes are subject to controlled issue.

4. Revision History:

Document Date	Revision Number	Details of Change	Date Issued
2014-01-31	1.0	Document issued	2014-01-31

5. Document Owner

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- End -

Contents

	Page
Terms and Conditions	4
General Information	7
Appendix I EU RO MR Type Approval Certificate Information	10
Appendix II Flow chart technical and procedural conditions for EU RO Mutual Recognition of Type Approval Certificates	11
Appendix III List of Products included in EU RO MR	12
Appendix IV List of EU Recognised Organisations (EU ROs)	13
Appendix V EU RO Design Evaluation Scheme	15
Appendix VI EU RO Production Quality Assurance (PQA)	16
Appendix VII Link to Agreed Technical Requirements	17
Appendix VIII EU RO Maintenance Process	18

Terms and Conditions

Note: These terms and conditions form an integral part of the agreement to be established between the certifying EU RO and its client for the provision of mutual recognition type approval services. The terms and conditions are required to enable the uniform application and acceptance of products that are subject to mutual recognition certification and to allow EU ROs access to information that would not normally be available to them where they are not in a direct contractual relationship with the manufacturer.

1. This document establishes a common set of requirements that will be applied to manufacturers of marine equipment or components (product[s]) where such products are to benefit from the Mutual Recognition of Type Approval by the European Union recognised classification societies (hereafter described as EU ROs) under EU regulations.

2. The European Union Recognised Organisation (EU RO) Mutual Recognition (MR) Type Approval Certificate (MR TAC) is issued in pursuance of Article 10 of the Regulation (EC) No 391/2009 of the European Parliament and of the Council from 23 April 2009 on Common Rules and Standards for Ship Inspection and Survey Organisations. Technical Requirements applicable to products under MR are adopted by the EU ROs pursuant to same Article 10. These Technical Requirements may be amended from time to time.

3. The MR TAC is intended to enable Mutual Recognition (MR) of certain type-approved products, through the uniform application of Technical Requirements, to enable those products to be installed on board ships for which MR TACs are issued by one or more of the EU ROs.

4. The EU ROs currently are:

    - American Bureau of Shipping (ABS)
    - Bureau Veritas (BV)
    - China Classification Society (CCS)
    - DNV GL
    - Korean Register of Shipping (KRS or KR)
    - Lloyd's Register (LR)
    - Nippon Kaiji Kyokai (NK or ClassNK)
    - Polish Register of Shipping (PRS)
    - Registro Italiano Navale (RINA)
    - Registro Internacional Naval (Rinave)
    - Russian Maritime Register of Shipping (RS)

5. The MR TAC applies to products to be installed aboard EU RO-classed ships as defined in Article 2 (a) of the Regulation (EC) No 391/2009. For those products intended to be installed on board a ship that do not fall within the scope of the above definitions, the individual EU RO requirements will apply.

6. The manufacturer will be required to sign a contract with the EU RO providing the MR TAC service and certificate; such contract will include terms, whereby the manufacturer accepts expressly that:

   a. When a product is intended to be installed on board as an element or sub-element of a piece of equipment, part or system of the ship, the EU RO classing the ship that is not the issuer of the MR TAC of the product may ask for information in addition to that provided in the MR TAC;

   b. The manufacturer shall provide immediately, when so requested, information, documentation and/or evidence required by the EU RO classing the ship;

   c. Where a product that has a valid MR TAC is rejected because the product is not found in compliance with the published classification rules and regulations or applicable statutory requirements applied by the EU RO classing the ship or otherwise, the EU RO which has noted or ascertained the non-compliance shall promptly inform the other EU ROs, stating the reasons for rejecting the product;

   d. The MR TAC may be suspended or withdrawn by the EU RO issuing it (see 10d below); and

   e. Flag national authorities may have their own requirements for the approval of products to be installed aboard ships flying their flag. Both the requirements of national authorities and those of the classification Rules must be complied with by the manufacturers of the products to be installed aboard such ships.

7. The manufacturer must ensure and certify that the product(s) supplied for an individual ship under a MR TAC is (are) marked with suitable identification to ensure traceability.

8. The manufacturer is required to operate and maintain a quality management system certified by an accredited certifying body to the ISO 9001 standard or equivalent and that this certification relates to the products for which MR TAC is sought.

9. The manufacturer will be required to agree that it will fulfil the obligations arising out of its quality assurance scheme as approved during production. The manufacturer certifies it has kept the accredited certification body and the EU RO that issued the MR TAC is duly informed of any intended design changes or updating of the production quality assurance scheme for its consideration with regard to the validity of the MR TAC. The manufacturer will apply annually for periodical assessment by the EU RO to show that the production under the MR TAC and the quality assurance scheme are being satisfactory maintained.

10. The MR TAC of an existing product remains valid until:

a. Its expiry date; or

b. Such time as any material modification of the design or construction is made; or

c. Such time as the manufacturer has not fulfilled its obligations of annual assessment; or

d. Such time as the MR TAC is suspended or withdrawn by the EU RO; or

e. Such time as the EU RO Mutual Recognition Technical Committee considers it necessary to change the Technical Requirements on which the MR TAC was based.

Validity may be extended in case of b, c, or e above case following further review by the EU RO providing the MR TAC.

11. The manufacturer of a MR TAC product, its heirs and designee are responsible for the archiving and retention of all records of the design and construction approved by the EU RO, the records of type testing, and the quality records of the production under the MR TAC for seven years after the validity of the relevant MR TAC expires.

-End-

General Information

1. The purpose of this Agreed Procedure is to provide a framework document setting out the minimum steps necessary to enable mutual recognition (MR) of certain type approved products, through the uniform application of agreed technical requirements relating to equipment listed in Appendix III to be placed on board ships for which MR Type Approval Certificates are issued by one or more of the EU Recognised Organizations (EU ROs) listed in Appendix IV.

2. For the purpose of this Agreed Procedure the following definitions shall apply:

   a) **Agreed Technical Requirements** - a mutually agreed document or documents that prescribe technical requirements to be fulfilled by a design, product, process or service (see appendix VII);

   b) **Assessment** - is the process of evaluating a design, product service or process. It involves generating and collecting evidence of the design, product service or process and judging that evidence against defined standards;

   c) **Certification** - a procedure whereby a design, product, service or process is assessed for compliance with agreed technical requirements;

   d) **Classification** - that specific type of certification, for which the technical requirements are the Rules of the relevant Classification Society;

   e) **Design Evaluation** – Two-step process involving Engineering evaluation and Witnessing the manufacturing and testing processes;

   f) **Engineering evaluation** - Evaluation of a design of a type of the product to determine compliance with the agreed technical requirements;

   g) **Installed on Board a Ship** - the assembling and final placement of components, equipment and subsystems to permit operation of the system on board of the ship;

   h) **Manufacturer** - a company producing and/or assembling final products and is responsible for such products;

   i) **Parties** – see IMO definition;

   j) **Product** – is material, equipment and component (ME & C);

k) **Testing Process** - a technical operation to determine if one or more characteristic(s) or performance of a product or process satisfies agreed technical requirements;

l) **Type Approval** - see IMO Circular MSC.1/Circ.1221 Here;

m) **Witness** - to be physically present at a test in accordance with the agreed technical requirements and be able to give evidence about its outcome;

n) Witnessing the manufacturing and testing processes - witnessing manufacture as applicable and testing of a type of the product to determine compliance with the agreed technical requirements.

3. This Agreed Procedure shall apply to ships as defined in Article 2 of the Regulation (EC) No 391/2009 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 23 April 2009 on common rules and standards for ship inspection and survey organisations:

   a. 'ship' means a ship falling within the scope of the international conventions;

   b. 'international conventions' means the International Convention for the Safety of Life at Sea of 1 November 1974 (SOLAS 74) with the exception of chapter XI-2 of the Annex thereto, the International Convention on Load Lines of 5 April 1966 and the International Convention for the Prevention of Pollution from Ships of 2 November 1973 (MARPOL), together with the protocols and amendments thereto, and the related codes of mandatory status in all Member States, in their up-to-date version;

4. The conformity-assessment procedure for products listed under the EU RO Agreed Procedure for Mutual Recognition of Type Approval, details of which are listed in Appendix II, shall be subject to:

   a. EU RO Design Evaluation (DE) (see Annex V) and;

   b. Production Quality Assurance (PQA) Assessment (see Annex VI).

For those products that do not fall within the scope of the EU RO Agreed Procedure for Mutual Recognition of Type Approval the individual EU RO Requirements will apply.

A flow chart of the conformity assessment procedures provided for EU RO Mutual Recognition and individual EU RO requirements is provided at appendix II.

5. The EU MR Type Approval Certificate shall contain as a minimum the information as specified in Appendix I.

6. Each EU RO shall maintain an up-to-date list of EU RO MR type approval certificates that have been issued by that EU RO.

7. Individual ROs are responsible for:

a. giving detailed reasons to a manufacturer when an MR Type Certificate is refused

b. Making available information when an MR Type Certificate is withdrawn.

8. Manufacturer's responsibility

a. Where a manufacturer reapplies for type-approval for products for which an MR Type Certificate has been refused, his submission to the EU RO must include all relevant documentation, including the original test reports, the detailed reasons for the previous refusal and details of all modifications made to the product or manufacturing process;

b. The manufacturer shall provide other ROs, on request, with relevant information on Design Evaluation documentation that has been amended or superseded.

9. In case the EU RO classing the ship refuses a material, equipment or component , issued with a EU MR Type Approval Certificate, the EU RO classing this ship is to inform, without delay, the EU RO Advisory Board Chairman and Members. Such information is to include, in writing:

- the type of product;
- the references of the EU MR Type Approval Certificate;
- the reasons for refusal.

The EU RO MR Advisory Board Chairman informs in turn accordingly the EU RO MR Technical Committee Chairman and Technical Committee Members.

10.The EU RO Mutual Recognition Technical Committee shall meet on an annual basis or as required to review the Agreed Technical Requirements of existing products identified in Appendix III and to consider new products for inclusion in the Appendix as required.

- End -

APPENDIX I

EU RO MR Type Approval Certificate Information

The EU RO MR Type Approval Certificate shall contain as a minimum the following information:

Certificate Heading

Mutual Recognition Type Approval Certificate

Certificate number

Each EU RO MR Type Approval Certificate is to be issued with a specific number to ensure traceability

Company Information

Manufacturers Name

Street Address, City, State, Postal Code, Country

Product Information

Product

Model

Intended Service

Description

Ratings

Restrictions (limitations as outlined by the Technical requirements)

Term of Validity

Place of Issue

Issue Date

Expiration Date

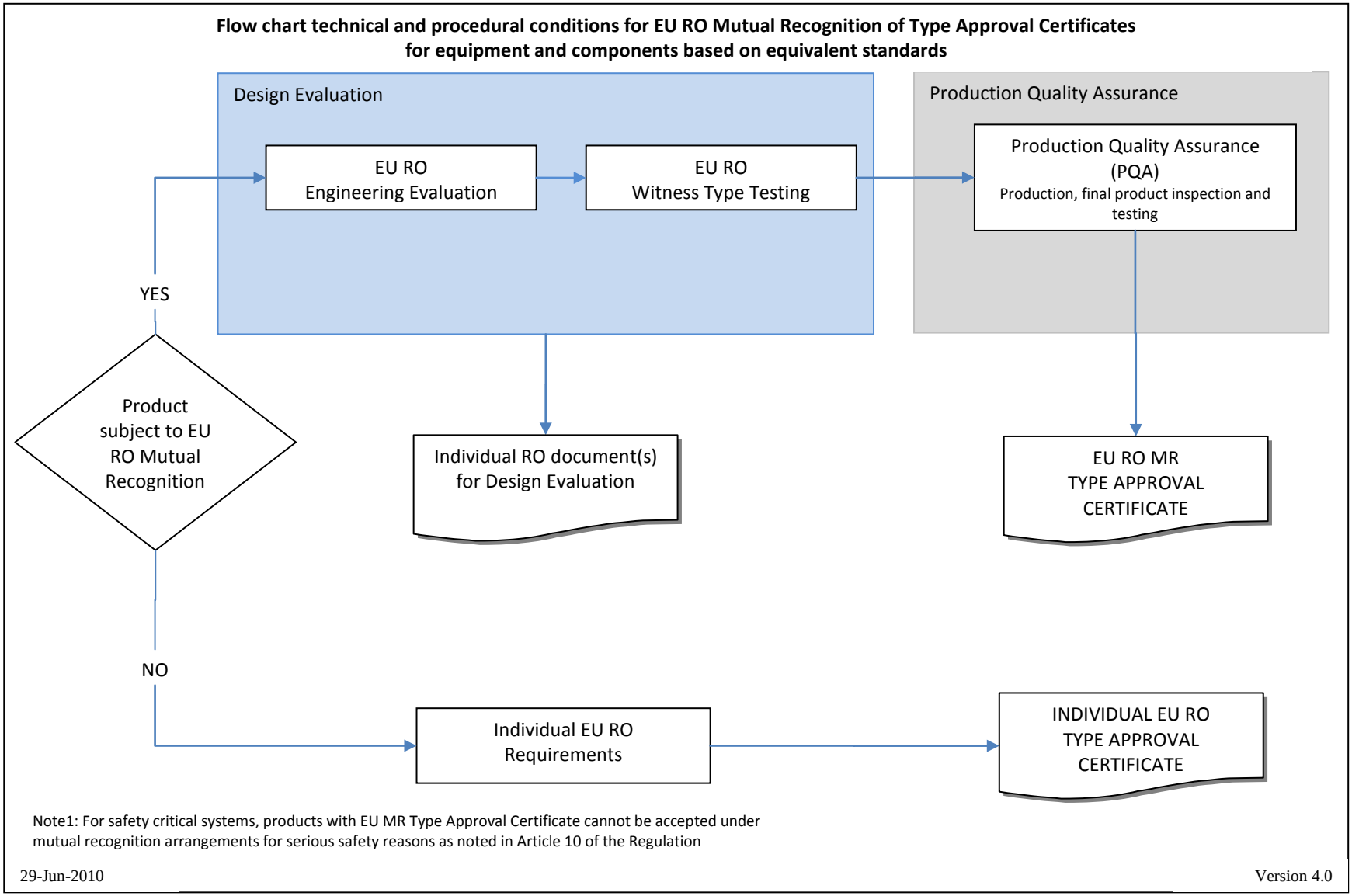
Rules & Standards

Technical requirement reference

Other standards as applicable

- End -

APPENDIX II


Flow chart technical and procedural conditions for EU RO Mutual Recognition of Type Approval Certificates
for equipment and components based on equivalent standards
Design Evaluation
Production Quality Assurance
EU RO
Engineering Evaluation
EU RO
Witness Type Testing
Production Quality Assurance
(PQA)
Production, final product inspection and testing
YES
Product
subject to EU
RO Mutual
Recognition
Individual RO document(s)
for Design Evaluation
EU RO MR
TYPE APPROVAL
CERTIFICATE
NO
Individual EU RO
Requirements
INDIVIDUAL EU RO
TYPE APPROVAL
CERTIFICATE
Note1: For safety critical systems, products with EU MR Type Approval Certificate cannot be accepted under mutual recognition arrangements for serious safety reasons as noted in Article 10 of the Regulation
29-Jun-2010
Version 4.0

APPENDIX IV

List of Products included in EU RO MR

TR1 (issued January 2013)

1. Electric Driven Motors < 20 kW
2. Circuit Breakers
3. Contactors
4. Fuses
5. Display Monitors, Video Screens, Terminals
6. LV Enclosures & Boxes
7. LV Transformers
8. Mechanical Joints
9. Resin Chocks
10. Switches
11. Sensors

TR2 (issued July 2013)

12. Accumulator Battery
13. Air Pipe Automatic Closing Device
14. Cable Ties
15. Class III Pipe Fittings
16. Computers and PLCs
17. Electrical/Electronic Relays
18. Electric Heating Cables
19. Expansion Joints
20. Flameproof Luminaire Lighting Fixtures
21. Plastic Piping Systems (components)
22. Spark Arrestors

- End -

APPENDIX IV

List of EU Recognised Organisations (EU ROs):

American Bureau of Shipping (ABS) - www.eagle.org

Bureau Veritas (BV) - www.bureauveritas.com

China Classification Society (CCS) - http://www.ccs.org.cn/ccswzen/

DNV GL – www.dnvgl.com

Korean Register of Shipping (KRS or KR) - www.krs.co.kr

Lloyds Register (LR) - www.lr.org

Nippon Kaiji Kyokai (NK or ClassNK) - www.classnk.or.jp

Polish Register of Shipping (PRS) - www.prs.pl

Registro Italiano Navale (RINA) - www.rina.org/en

Registro Internacional Naval (RINAVE) -www.rinave.org

Russian Maritime Register of Shipping (RS) - www.rs-class.org/en

- End -

APPENDIX V

EU RO Design Evaluation Scheme

Procedure:

1. An application for the Design Evaluation must be submitted by the manufacturer or product designer to the EU Recognized Organization(s) and must include:

   a) the name and address of the manufacturer or product designer

   b) the technical documentation as described in point 2.

2. The technical documentation must make it possible to assess the product's compliance with the agreed technical requirements.

3. The EU RO will review the submitted technical documentation to confirm compliance with the agreed technical requirements

4. Verifies where required, that the product to be tested has been manufactured in accordance with the technical documentation

5. Where required, agree with the applicant the location where the examinations and necessary tests will be carried out

6. The extent of witnessing is specified in each applicable Technical Requirement. In case the tests are conducted at a Nationally Accredited Laboratory[1], the presence of the RO's surveyor may be omitted, provided the option is expressively noted in the applicable Technical Requirement.

7. Where the product meets the relevant agreed technical requirements, the EU RO will issue an Individual RO document(s) for Design Evaluation to the applicant. The document must give the name and address of the applicant, details of the product, the conclusions of the examination, the conditions of its validity and the necessary data for identification of the approved product.

8. The applicant must inform the EU RO(s) that hold the technical documentation concerning the EU RO MR Type Approval Certificate of any modification of the design, which must receive additional approval where such changes may affect compliance with the agreed technical requirements or the prescribed conditions for use of the product. Such additional approval must be given in the form of an addition to the original EU RO MR Type Approval Certificate.

9. The applicant must provide on request the Design Evaluation documents to each EU RO for which they want Mutual Recognition.

- End -

[1] The scope of accreditation must cover the relevant applicable standards.

APPENDIX VI

EU RO Production Quality Assurance (PQA)

Procedure:

1. A manufacturer who satisfies the obligations of point 2 must ensure that the product(s) concerned conform to type as described in valid EU RO Design Evaluation documents. The documents must be issued by the EU RO responsible for the whole EU RO Type Approval process (hereinafter called "the EU RO"), i.e. both Design Evaluation and Production Quality Assurance.
   The manufacturer must ensure that the product(s) supplied for an individual ship under a MR TAC is (are) marked with suitable identification to ensure traceability.

2. The manufacturer must operate a quality management system certified by an accredited certifying body as meeting the requirements of ISO 9001 or industry equivalent.
   The Production Quality Assurance scheme must be approved by the EU RO for production , final-product inspection and testing of the product(s) subject to EU RO MR Type Approval as specified in point 3 and must be subject to surveillance as specified in point 4.
   The approval shall only be valid as long as the Quality Management System certificate is valid.
   The manufacturer has to inform the EU RO if the Quality Management System certificate is suspended, withdrawn or not renewed.

3. Production Quality Assurance scheme

3.1. The manufacturer must submit an application for assessment of his Production Quality Assurance scheme according to point 2 with the EU RO. The application must include:
   a) all relevant information for the product(s) envisaged
   b) list of manufacturing/production sites other than the TA applicant site
   c) the documentation concerning the quality management system and its certification including:
      i) the quality management system certificate issued by the certifying body,
      ii) the manufacturing, quality-control and quality-assurance techniques, processes and systematic actions that will be used,
      iii) the examinations and tests that will be carried out before, during and after manufacture, and the frequency with which they will be carried out
      iv) the quality records, such as inspection reports and test data, calibration data, damage and claim records, qualification reports of the personnel concerned, etc.,
      v) the means of monitoring the achievement of the required product quality and the effective operation of the quality system.

3.2. The EU RO shall assess Production Quality Assurance scheme to determine whether it gives reasonable confidence that the concerned product(s) can be consistently produced in compliance with the type of product(s) covered by the Design Evaluation document(s). The assessment procedure must also include a review of the quality management system documentation and a visit to the manufacturer's premises and manufacturing/production sites other than the TA applicant site. A report of the audit assessment is provided to the manufacturer.

3.3. The manufacturer must undertake to fulfill the obligations arising out of the Production Quality Assurance scheme as approved and to uphold it so that it remains adequate and

efficient. The manufacturer must keep the EU RO that has evaluated the Production Quality Assurance scheme informed of any intended updating of that Production Quality Assurance scheme for its consideration with regard to the validity of the EU MR type approval certificate. The manufacturer is to apply for periodical assessment to the EU RO at an annual frequency to verify that the quality system Production Quality Assurance scheme is maintained and applied. Audit reports are to be provided to the manufacturer.

4. Periodical Assessment by the EU RO

4.1. The purpose of surveillance is to make sure that the manufacturer duly fulfils the obligations arising out of the approved Production Quality Assurance scheme.

4.2. The manufacturer must allow the EU RO access for inspection purposes to the locations of manufacture, inspection and testing and storage and must provide it with all necessary information, in particular:

a. the Production Quality Assurance scheme documentation and the design evaluation documentation
b. the quality records, such as inspection reports and test data, calibration data, damage and claims records, qualification reports of the personnel concerned, etc.
c. additional testing as per the Technical Requirements may be required by the EU RO

5. Upon satisfactory completion of the Design Evaluation and Production Quality Assurance evaluation, the EU RO may issue an EU MR type approval certificate for the concerned product(s) with a maximum validity of 5 years. The document must give the name and address of the manufacturer and place of manufacture, if at a different location, conditions of its validity and the necessary data for identification of the approved product(s).

- End -

APPENDIX VII

Agreed Technical Requirements

Controlled copies of the Agreed Technical Requirements can be obtained from:

EU RO MR Secretariat
c/o Lloyd's Register
71 Fenchurch Street
London EC3M 4BS
Tel: +44 (0)20 7423 2406
Email: cassandra.kelly@euromr.org

- End -

APPENDIX VIII

EU RO MR Maintenance Process

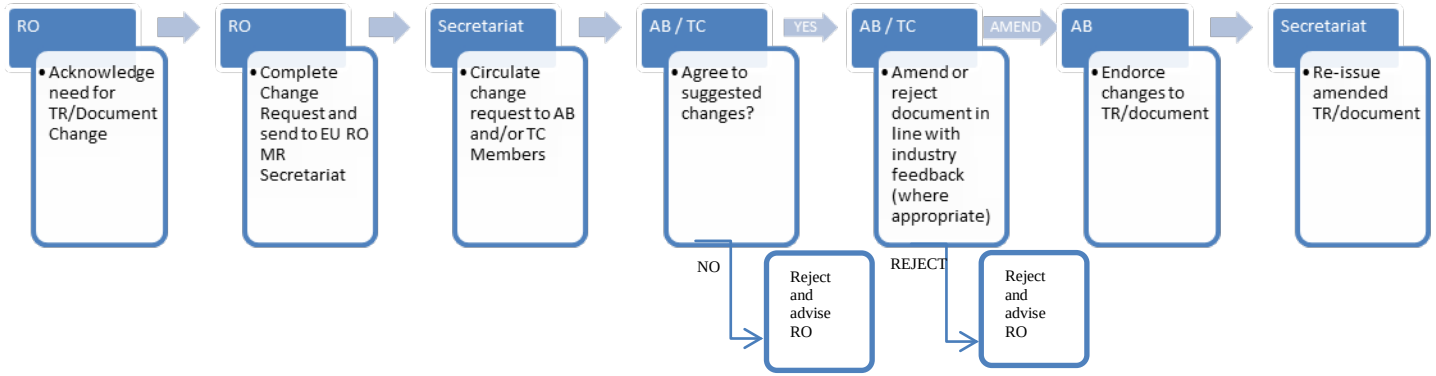
1. Change Requests and/or feedback for the Agreed Technical Requirements (appendix VII) and/or any EU RO MR Document (including procedures) shall be made in writing to the relevant EU RO (appendix IV) marked for the attention of their EU RO MR Technical Committee Representative. The EU RO MR Technical Committee and Advsisory Board follow the process in figure 1 below.

2. Change Requests include (but are not limited to) procedural updates, test requirement updates, rule changes or industry feedback and can vary in significance from a simple editorial change to a technical parameter or test change that may require industry consultation.

3. Amendments and revisions to documents including the Agreed Technical Requirements are endorsed (where appropriate) by the EU RO MR advisory Board and are re-issued on 1 July each year.②

Figure 1

EU RO MR Change Request Process



② The deadline for submissions of a change request is 1 September each year to ensure changes are considered for inclusion in the following 1 July reissue. Any change requests received after that date may not be reviewed until the year after.