W35
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(Rev.1
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(Rev.3
Oct 2026)

Requirements for external NDT Service Suppliers and internal NDT Services

1. General

1.1 Scope

(i) ~~Firms~~ Entities providing Non-Destructive Testing (NDT) and Advanced Non-Destructive Testing (ANDT[1]) Services on the new construction of ships and offshore structures subject to classification, need to fulfil the requirements set out in this UR. ~~In this document, such firms will be referred to as the NDT Service Supplier.~~

Note 1 – for the remainder of this UR, wherever there is a reference to NDT, it also includes ANDT

(ii) This UR gives the requirements for external NDT service suppliers and internal NDT services.

~~(ii) This UR applies to~~

- ~~Independent NDT companies, and;~~
- ~~Internal departments of fabricators, e.g. shipyards, hull block/section fabricators performing NDT~~

(iii) The NDT activities ~~service specified in~~ covered by this UR ~~covers~~ apply to NDT ~~the service application to~~ carried out in accordance with Classification Society requirements on the following hull structure and associated items at the fabrication stage during new construction:

- The welding of components that are integrated into the ship or offshore structure
- The fabrication of independent fuel or cargo tanks (including those intended for low flashpoint fuels, e.g. type A, B and C independent tanks as described in IMO IGC and IGF Codes).
- Items listed within the definition of hull structure, as defined in UR Z23 section 2.1
- Rudders of welded construction

~~(iii) NDT Service Suppliers in the context of this UR are not included as part of the scope of UR Z17.The Classification Society shall verify the NDT Service Supplier in order to determine compliance with the requirements of this UR. The method of verification is to be decided by each Classification Society.~~

Notes:

1. This UR is to be uniformly implemented by IACS Societies on or after 1 July 2020.
2. Rev.1 of this UR is to be uniformly implemented by IACS Societies on or after 1 January 2025.
3. Rev.2 of this UR is to be uniformly implemented by IACS Societies on or after 1 January 2027.

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4. Rev.3 of this UR is to be uniformly implemented by IACS Societies on or after 01 January 2028.

1.2 Objective

The objective of this UR is to ensure that the external NDT Service Supplier or the internal NDT service is using appropriate procedures, has qualified and certified personnel and has implemented written procedures for training, experience, education, examination, certification, performance, application, control, verification and reporting of NDT. In addition, the external NDT ~~S~~service ~~S~~suppliers or the internal NDT services shall furnish appropriate equipment and facilities commensurate with providing ~~a~~ professional NDT ~~S~~services.

1.3 Terms and definitions

The following terms and definitions apply for this document.

NDT	Non-destructive testing-the development and application of technical methods to examine materials or components in ways that do not impair their future usefulness and Serviceability, in order to measure geometrical characteristics and to detect, locate, measure and evaluate flaws. NDT is also known as non-destructive examination (NDE), non-destructive inspection (NDI) and non-destructive evaluation (NDE). Comprising, but not limited to the following methods and techniques: MT, PT, RT, VT, UT, and ET.
ANDT	The above definition of NDT applies, however ANDT includes advanced methods such as RT-D, PAUT, TOFD and AUT.
External NDT ~~S~~service ~~S~~supplier	~~Independent NDT company or NDT department/section that forms a part of a company providing NDT Services on the new construction of ships and offshore structures, as applicable to the bodies performing NDT on the items as listed in paragraph 1.1 (ii) of this UR.~~ Organizations or firms providing non-destructive testing (NDT) services to a manufacturer or shipyard or fabricator as a third-party service provider for activities subject to Classification Society requirements.
Internal NDT service	An organizational unit of a manufacturer, shipyard or fabricator performing non-destructive testing (NDT) as part of its internal operations for activities subject to Classification Society requirements. This covers all NDT services not performed by an External NDT Service Supplier as defined above. See also Section 2.2 for applicable quality system and Type B or C inspection body requirements in accordance with ISO/IEC 17020:2012.
Society	The Classification Society
MT	Magnetic Particle Testing
PT	Penetrant Testing
RT	Radiographic Testing

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RT-D	Digital Radiography (Several techniques within the method RT, e.g. Computed Radiography or Direct Radiography).
UT	Ultrasonic Testing
PAUT	Phased Array Ultrasonic Testing (Technique within the method UT).
TOFD	Time of Flight Diffraction (Technique within the method UT).
AUT	Automated Ultrasonic Testing. A technique by which an object is tested by ultrasound using probes operating under mechanical control and where ultrasonic data is collected automatically.
ET	Electromagnetic Testing (i.e. Eddy Current Testing and/or Alternating Current Field Measurements [ACFM])
VT	Visual Testing. Direct unaided visual tests and visual tests carried out during the application of another NDT method are excluded.
Industrial sector	Section of industry or technology where specialised NDT practices are used, requiring specific product-related knowledge, skill, equipment and/or training.
Product sector	A category of component that may be defined by type of manufacturing, fabrication, and/or shape, which may have unique, and/or general manufacturing/fabrication defect characteristics. Product sector examples include (but not limited to): castings, wrought products (forgings), rolled products, extruded products, and welds. NDT personnel may hold certification in a method which is related to a product sector.

1.4 References

The following referenced documents are to be used for the application of this document as appropriate. For updated references, the latest edition of the referenced document (including any amendments) applies.

- ISO 9712:–2021; Non-destructive Testing - Qualification and certification of NDT personnel
- ISO/IEC 17020:2012; Conformity Assessment - Requirements for the operation of various types of bodies performing inspection
- ISO/IEC 17024:2012; Conformity Assessment - General requirements for bodies operating certification of persons
- ISO 9001:2015; Quality Management Systems - Requirements
- SNT-TC-1A: 2020; Personnel Qualification and Certification in Non-destructive Testing
- ANSI/ASNT CP-189:2020; ASNT Standard for Qualification and Certification of Non-destructive Testing Personnel

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Other national adoptions of the standards listed above are accepted as compliant and hence are accepted for use together with this document.

2. Requirements for the external NDT Service Suppliers or the internal NDT Services

(i) Reference is made to UR Z17 for approval scheme applicable to external NDT service supplier.

(ii) For internal NDT services, compliance with the applicable requirements of this UR shall be verified by the Classification Society. The verification process is left to each Classification Society.

(iii) The external NDT ~~S~~service ~~S~~suppliers or the internal NDT services shall document, as required in 2.1~~2~~ to 2.~~9~~7, 3, 4 and 5, that it has the competence and control needed to perform the specified NDT Services.

2.1 Requirements for document

The following documents shall be available for the Society upon request:

- ~~a~~An outline of ~~NDT Service Supplier's~~ the organisation and management structure, including any subsidiaries.
- ~~i~~Information on the structure of the ~~NDT Service Supplier's~~ Quality Management System.
- ~~q~~Quality manual and documented procedures covering the requirements given in item 2.2.
- ~~for companies with in-house certification of personnel scheme; a written practice developed in accordance with a recognised standard or recommended practice (i.e. ASNT's SNT-TC-1A, 2020, ANSI/ASNT CP-189, 2020 or similar).~~
- ~~o~~Operational work procedures for each NDT method including selection of the NDT technique.
- Training and follow-up programmes for NDT operators including practical training on various ship and offshore products.
- A written statement issued by the employer, based upon the scope of certification, authorising the operator and supervisor to carry out specified tasks.
- Pprocedure for the employer to authorise NDT operators.
- ~~e~~Experience ~~of the NDT Service Supplier~~ in the specific NDT Service area.~~,~~
- Personnel certificates, including those obtained from third party certification schemes, or issued via an employer based scheme ~~for companies which obtain certification from an accredited certification body; a list of documented training and experience for NDT operators within the relevant NDT Service area, including qualifications and third party certification per ISO 9712:2021 based certification schemes~~.
- ~~d~~Description of equipment(s) used for the NDT Services ~~performed by the NDT Service Supplier~~.

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- ~~a~~ A guide for NDT operators to use equipment mentioned above.
- ~~r~~Record formats for recording results of the NDT Services referred to in item 2.~~9~~6.
- ~~i~~Information on other activities which may present a Conflict of interest, if applicable.
- ~~r~~Record of customer claims and corrective actions, where applicable.
- ~~any legal proceedings against the company in the past/currently in the courts of law, where applicable~~

2.2 Quality management system

The ~~NDT Service Supplier shall have a documented~~ quality management system shall be documented and, cover~~ing~~ at least:

- ~~w~~Work procedures for all tasks and operations, including the various NDT methods and NDT techniques used ~~for which the NDT Service Supplier is involved~~.
- ~~p~~Preparation, issuance, maintenance and control of documents.
- ~~m~~Maintenance and calibration of the equipment.
- ~~t~~Training programs for the NDT operators and the supervisors.
- ~~m~~Maintenance of records for NDT operators' and the supervisors' training, qualification and certification.
- ~~c~~Certification of NDT operators and supervisors including re-validation and recertification.
- ~~t~~Training and competency assessment programs where operators are designated for visual testing (VT).
- ~~p~~Procedure for test of operators' visual acuity.
- ~~s~~Supervision and verification of operation to ensure compliance with the NDT procedures.
- ~~q~~Quality management of subsidiaries.
- ~~j~~Job preparation.
- ~~o~~Order reference system where each engagement is traceable to when, who and where the test was carried out.
- ~~r~~Recording and reporting of information, including retention time of records.
- ~~c~~Code of conduct for the NDT ~~Service Supplier's~~ activities~~; especially the NDT activities~~.
- ~~p~~Periodic review of work process procedures.
- ~~c~~Corrective and preventive action.

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- ~~f~~Feedback and continuous improvement.
- ~~i~~Internal audits
- ~~t~~The provision of accessibility to required codes, standards and procedures to assist NDT operators.

A documented quality system complying with ISO/IEC 17020:2012 and including the above would be considered acceptable. ~~The NDT Service Supplier should satisfy the requirements of Type A or~~

The external NDT service suppliers should satisfy the requirements of Type A inspection body, as described in ISO/IEC 17020:2012

The internal NDT services should satisfy the requirements of Type B or Type C inspection body, as described in ISO/IEC 17020:2012. In all cases, personnel involved in production, repair, or fabrication of the item being examined shall not perform NDT, interpret, review, or approve the test results on that same item in the case of Type C inspection body.

2.3 ~~Qualification and certification of NDT personnel~~

~~The NDT Service Supplier is responsible for the qualification[1] and preferably 3rd party certification of its supervisors and operators to a recognised certification scheme based on ISO 9712: 2021.~~

~~*Note 1: VT personnel may be exempted from the formal qualification/certification requirements defined in this section, however, such designated personnel shall undergo internal or external training and competency assessment, which shall be documented within the quality management system, as per section 2.2 of this UR.*~~

~~Personnel qualification to an employer based qualification scheme as e.g. SNT-TC-1A, 2020 or ANSI/ASNT CP-189, 2020 may be accepted if the NDT Service Supplier's written practice is reviewed and found acceptable by the Society. The NDT Service Supplier's written practice shall as a minimum, except for the impartiality requirements of a certification body and/or authorised body, generally comply with the requirements of ISO 9712: 2021.~~

~~For NDT operators holding certificates issued via an employer based scheme, the employer's certification shall be deemed revoked when employment is terminated by either party.~~

~~The supervisors' and operators' certificates and competence shall comprise all industrial and product sectors and techniques being applied by the NDT Service Supplier.~~

~~Level 3 personnel shall be certified by one of the following means:~~

~~(i) obtain certification from an accredited certification body.~~

~~(ii) obtain certification from an employer based scheme via the examination method, as detailed in the written practice. It is not permissible to directly appoint a level 3 without examination if the intended certification route is from an employer based scheme.~~

~~2.4Supervisor~~

~~The NDT Service Supplier shall have a supervisor or supervisors, responsible for the following:~~

~~validate NDT instructions and procedures established and reviewed by level 3 personnel;~~

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~~review of NDT reporting;~~

~~supervise all tasks and NDT operations at all levels;~~

~~inspection of NDT equipment, tools and calibration;~~

~~e) re-evaluate the qualification of the operators annually on behalf of the NDT Service Supplier.~~

~~Normally, the NDT Service Supplier shall employ (on a full-time basis) a level 3 supervisor, certified to level 3 in the applicable method(s) as per the requirements of this UR.~~

~~It is recognised that an NDT Service Supplier may not directly employ a Level 3 in all the stated methods practiced. In such cases, it is permissible to employ an external Level 3 who is certified by an accredited certification body in those methods not held by the full-time Level 3(s) of the NDT Service Supplier.~~

~~Alternatively, and by agreement with the Society, the NDT Service Supplier may appoint an internal (full-time employed) supervisor of NDT activities, who does not hold level 3 certification. In this case, the supervisor shall be certified to a minimum of level 2. For NDT Service Suppliers operating this alternative approach, the NDT Service Supplier shall comply with all other requirements of this UR and shall employ (either part time or on a contract basis) Level 3 NDT Services (to carry out functions such as procedure development, procedure approval, consultancy, review etc.) from outside the NDT Service Supplier organisation. The appointed external level 3 shall be certified by an accredited certification body in all the applicable methods appropriate to the scope of the NDT operations.~~

~~2.5Operator~~

~~The operator carrying out the NDT and interpreting indications, shall as a minimum, be qualified and certified to Level 2 in the NDT method(s) concerned and as described in item 2.3.~~
~~However, operators only undertaking the gathering of data using any NDT method and not performing data interpretation or data analysis may be qualified and certified as appropriate, at level 1.~~

~~The operator shall have adequate knowledge of materials, weld, structures or components, NDT equipment and limitations that are sufficient to apply the relevant NDT method for each application appropriately~~.

~~2.6~~ 2.3 Equipment

The records of the ~~NDT Service Supplier shall maintain records of the NDT~~ equipment used and detail information related to maintenance, calibration and verification activities shall be maintained. If the ~~NDT Service Supplier hires~~ equipment is hired, such equipment shall have updated calibration records, and the operators shall be familiar with the specific equipment type prior to using it. Under any circumstance, ~~the NDT Service Supplier shall possess~~ sufficient equipment shall be possessed to carry out the NDT Services being a part of the NDT scope required by the Society.

Where the equipment is of unique nature, the NDT operators shall be trained by competent personnel in the operation and use of the equipment before carrying out NDT using this equipment.

~~2.7~~ 2.4 Work instructions and procedures

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~~The NDT Service Supplier shall produce w~~Written procedures shall be produced for the NDT being applied. These procedures are to be written, verified and approved by ~~the~~ NDT ~~Service Supplier's~~ Level 3 (either internal, or external, as described in section ~~2.~~4). Procedures shall define all relevant information relating to the inspection including defect evaluation against acceptance criteria in accordance with the Society Rules. All NDT procedures and instructions shall be properly documented in such a way that the performed testing can be easily retraced and/or repeated at a later stage. ~~All~~ NDT instructions and NDT procedures shall meet the requirements of UR W33 and URW34 and ~~are to~~ be acceptable to the Society.

~~2.8~~ 2.5 Sub-contractor

~~The NDT Service Supplier shall give i~~Information of agreements and arrangements if any part(s) of the NDT ~~Services~~ activities provided are subcontracted, included level 3 NDT ~~Services~~ activities (as described in section ~~2.~~4) shall be given to the Society. The external NDT ~~S~~service ~~S~~suppliers or the internal NDT services, in the following-up of subcontracts shall give emphasis to the quality management system of the subcontractor.

Subcontractors shall meet the same requirements placed on the external NDT s~~S~~ervice s~~S~~uppliers for any NDT performed.

~~Subcontracted NDT or ANDT activities within the scope of this UR shall not be performed unless the subcontractor is approved or accepted by the Society for the relevant scope. The external NDT service supplier or internal NDT service remains responsible for subcontracted work~~

~~2.9~~ 2.6 Reporting

All NDT shall be properly documented in such a way that the performed testing and examination can be easily retraced and/or repeated as a later stage. The reports shall identify the defects present in the tested area, and a conclusive statement as to whether the material, weld, component or structure satisfies the acceptance criteria or not.

The report shall include a reference to the applicable standard, NDT procedure and acceptance criteria applied in the applicable NDT method/technique. In general, the acceptance criteria shall comply with the Society Rules. Reports shall be signed by the personnel with the appropriate level of certification, and the appropriate signatory status as defined in the Quality Management System.

2.7 Practical Demonstration

2.7.1 For internal NDT services, the requirements of this section may be applied when deemed necessary by the Classification Society. The practical demonstration, when performed, is to be verified by the Classification Society, and the requirements within section 2.7.3 may also be used as a guide for such verification.

2.7.2 The practical demonstration shall be on each NDT or ANDT method that the external NDT service suppliers wish to gain approval in accordance with 2.7.3.

Notes:
(i) it is acceptable for the external NDT service suppliers or the internal NDT services to provide one (or more) NDT operators/supervisors as representative of the organisation for the purposes of practical demonstrations.

(ii) The practical demonstration is intended to show that the external NDT service suppliers or the internal NDT services, are able to apply the work instructions and inspection methodologies,

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using the company procedures and calibrated equipment. It is not the intention of this practical demonstration to replicate personnel certification scheme assessments, for operators/supervisors who are already certified in the NDT methods.

(iii) The practical demonstration for ANDT methods as stated within this UR is not to be a substitute for the procedure qualification test as required in UR W34. The procedure qualification test shall also be performed as per UR W34 requirements, as appropriate to the method and the test programme.

2.7.3 The demonstration shall be performed as follows:

(1) The demonstration shall be performed under the supervision of the person(s) certified to Level 3 (or the Level 2 supervisor as agreed with the Classification Society) in the applicable method(s) and shall be witnessed by the Class Society Surveyor.

(2) The entity providing NDT services is to:

(i) Carry out appropriate calibration and/or functionality checks of the equipment (as appropriate) for each NDT or ANDT method, on suitable calibration/reference samples, in accordance with the NDT or ANDT procedures and work instructions.

(ii) Perform the NDT or ANDT test on test specimen(s) (which is generally to be provided by the NDT entity), in accordance with the NDT or ANDT procedures and work instructions. The test specimen(s) shall contain at least one artificial or natural flaw and be accepted by the Class Society Surveyor.

(iii) Provide a written report of the test (for each NDT or ANDT method) within scope of the demonstration, making reference to the test procedures, test conditions, test specimen, and a description of the flaw with respect to a suitable data point.

(3) In the event that the above requirements cannot be met, the external NDT service supplier or the internal NDT services shall be deemed to have not been successful in the practical demonstration.

(4) Renewal of approval may be demonstrated by:

(i) a practical demonstration, or;
(ii) supporting documentation such as job history records, NDT reports, training records, and other records (as applicable), to demonstrate continuity of operations, service history, and capability in the specific NDT methods.

3 Qualification and certification of NDT personnel for external NDT Service Suppliers and internal NDT services

The external NDT Service Supplier or the internal NDT service is responsible for the qualification[1] and preferably 3rd party certification of its supervisors and operators to a recognised certification scheme based on ISO 9712:2021.

Note 1: VT personnel may be exempted from the formal qualification/certification requirements defined in this section, however, such designated personnel shall undergo internal or external training and competency assessment, which shall be documented within the quality management system, as per section 2.2 of this UR.

Personnel qualification to an employer based qualification scheme as e.g. SNT-TC-1A, 2020 or ANSI/ASNT CP-189, 2020 may be accepted if the NDT written practice is reviewed and

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found acceptable by the Society. The NDT written practice shall as a minimum, except for the impartiality requirements of a certification body and/or authorised body, generally comply with the requirements of ISO 9712:2021.

For NDT operators holding certificates issued via an employer based scheme, the employer's certification shall be deemed revoked when employment is terminated by either party.

The supervisors' and operators' certificates and competence shall comprise all industrial and product sectors and techniques being applied by the external NDT Service Supplier or the internal NDT service.

Level 3 personnel shall be certified by one of the following means:

(i) obtain certification from an accredited certification body.

(ii) obtain certification from an employer based scheme via the examination method, as detailed in the written practice. It is not permissible to directly appoint a Level 3 without examination if the intended certification route is from an employer based scheme.

4.Supervisor for external NDT Service Suppliers and internal NDT Services

The external NDT service suppliers or the internal NDT services shall have a supervisor or supervisors, responsible for the following:

a) Organisation and deployment of appropriate NDT instructions and procedures established and reviewed by Level 3 personnel;

b) Review of NDT reporting;

c) Supervise all tasks and NDT operations at all levels;

d) Re-evaluate the qualification of the operators annually on behalf of the employer.

Normally, a Level 3 supervisor shall be employed, certified to Level 3 in the applicable method(s).

It is recognised that a Level 3 may not be directly employed in all the stated methods practiced. In such cases, it is permissible to employ an external Level 3 who is certified by an accredited certification body in those methods not held by the employer's own Level 3(s).

Alternatively, and by agreement with the Society, an internal supervisor of NDT activities, who does not hold Level 3 certification may be appointed. In this case, the supervisor shall be certified to a minimum of Level 2. All other requirements of this UR shall be complied with when operating this alternative approach, and a Level 3 NDT shall be employed (to carry out functions such as procedure development, procedure approval, consultancy, review etc.) from outside the organisation.
The appointed external Level 3 NDT shall be certified by an accredited certification body in all the applicable methods appropriate to the scope of the NDT operations.

5.Operator for external NDT Service Suppliers and internal NDT Services

The operator carrying out the NDT and interpreting indications, shall as a minimum, be qualified and certified to Level 2 in the NDT method(s) concerned and as described in item 3.

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However, operators only undertaking the gathering of data using any NDT method and not performing data interpretation or data analysis may be qualified and certified as appropriate, at Level 1.

The operator shall have adequate knowledge of materials, weld, structures or components, NDT equipment and limitations that are sufficient to apply the relevant NDT method for each application appropriately. The operator shall be responsible for the inspection of NDT equipment, tools and calibration, including the proper set-up and verification of equipment settings.

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