

GUIDELINES

- NO. 9

ADVISORY SERVICE CONDITION SURVEY PROGRAMME

JULY 1993

FOREWORD

Det Norske Veritas is an independent Foundation with the objective of safeguarding life, property and the environment at sea and ashore.

Classification, certification and quality assurance of ships, offshore installations and industrial plants, as well as testing and certification of materials and components, are main activities.

Det Norske Veritas possesses technological capability in a wide range of fields, backed by extensive research and development efforts. The organization is represented worldwide in more than 100 countries.

Guidelines are publications which give information and advice on technical and formal matters related to the design, building, operating, maintenance and repair of vessels and other objects as well as the services rendered by the Society in this connection. Aspects concerning classification may be included in the publication.

An updated list of Guidelines available is given in the latest edition of the Introduction-booklets to the «Rules for Classification of Ships», the «Rules for Classification of Mobile Offshore Units» and the «Rules for Classification of High Speed and Light Craft».

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1. General

1.1 Scope

Condition survey (CS) is an independent verification of the condition of a vessel or part(s) thereof including:

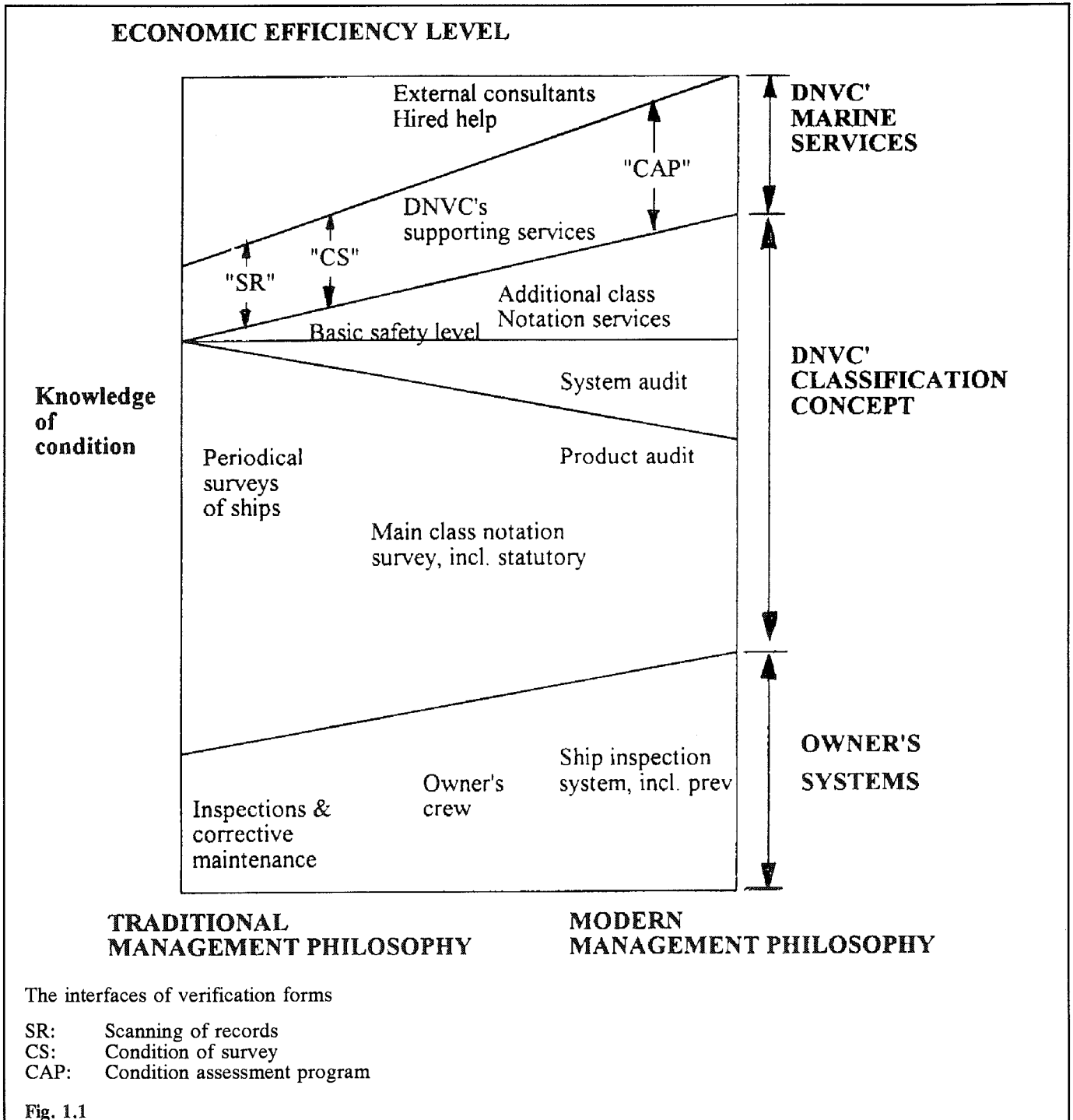
- Examination of the class records
- Survey of the vessel, where accessible
- Spot checks of structural members
- Function tests of machinery and systems where deemed necessary and where such machinery or systems are available for testing.

The Condition Survey is rendered according to a Short Form Agreement with the Client. If the Client is not the Owner, the Owner's written consent has to be obtained.

A Condition Survey is independent of classification, but is a supplement to class.

A Condition Survey can be rendered to vessels whether they are classed with DNV or not.

A Condition survey does not give any advice on how to up-grade the vessel. This may however be discussed with the Client, if requested.



1.2 Interfaces of different types of verification

Fig.1.1 illustrates the interfaces between different types of verification for vessels. The interface between classification and CS shows how CS (and other services like «Examination of Records» and «CAP») are supplements to class.

CS is a less comprehensive assessment of a vessel's hull condition than a CAP-survey (and consequently less expensive), and is based on surveys of selected (or accessible) areas only.

1.3 Relations to classification and other classification supporting services

CS-surveyors cannot carry out class surveys and a CS-survey simultaneously. In the «Adm.Instructions» of DNV, chapter 9.11, is a clause saying:

«Note that if a vessel is classed with DNV, possible defects found during the execution of advisory services will be reported and followed-up as a classification/statutory matter».

This clause should be included in the offer to the client if the vessel is classed with DNV.

The «AI» further say:

«Note that the execution of an advisory service like CS does not imply any formal approval by DNV as a Class Society, or of any Authority DNV is acting on behalf of, nor will the evaluations prevent DNV as a Class Society from making independent decisions/conditions of class».

1.4 The purpose of a Condition Survey

Owners may want a condition survey for different reasons, e.g.:

- To obtain an independent documentation to be used towards cargo owners in order to improve confidence when competing in the charter market,
- Assessment of own standards,
- As a preparation for a repair specification,
- As part of a sale/purchase procedure,
- As a verification in a merging situation,

1.5 Execution of Condition Survey

A Condition Survey shall be carried out by an experienced surveyor, or surveyors as the case may be, qualified for this type of job according to Veritas Qualification Scheme.

The survey may take place «en route», in a port during loading/discharging, or in connection with other stays in port, at anchor or in a «lay-up» situation.

2. Contents of a Condition Survey

2.1 CS-modules

CS consists of the following modules (Client's choice):

- Hull (Cargo Holds, Cargo tanks, Ballast tanks, Void spaces, Cofferdams, Duct Keels, etc),
- Cargo related equipment and systems
- Machinery
- Navigation Equipment and Systems
- Mooring Equipment
- Accommodation

CS may cover a single module or several. The normal extent is Hull/Machinery.

2.1.1 Hull

All available spaces shall be surveyed and survey-notes made.

Spot-checks of the material thicknesses will be done. A thorough and systematic ultrasonic scantling measurement is however not within the scope of work.

If a thorough thickness measurement is requested, specialists have to be called.

2.1.2 Cargo related equipment and systems

In an unspecified CS cargo related gear will be checked out. The cargo gear log books shall be visited.

If the cargo gear is operated when surveyed, this should be commented upon.

A more comprehensive survey may be executed if specially requested. If so, a specialist on cranes/cargo gear will join the survey.

2.1.3 Machinery/Electric installation.

In an unspecified CS the machinery will be externally surveyed without any opening up of the machinery or the electric plant.

If however some machinery parts are opened up for maintenance purpose, these parts may be surveyed as a verification of the superficial survey.

Machinery, running at the time of the survey, will be considered and included in the assessment of the machinery score.

The Planned Maintenance System, if any, and the Spare Part System will be visited in order to ascertain if they are adhered to or not.

In an exclusive survey of the machinery, the conditions for the survey will be laid prior to the survey.

2.1.4 Navigation Equipment and Systems

In an unspecified CS this equipment will be externally surveyed and, as far as possible, tested for function. Maintenance records will be consulted, if available.

In an exclusive survey of this equipment, specialists have to be consulted and the extent of inspection has to be agreed upon.

2.1.5 Mooring Equipment

In an unspecified CS the mooring equipment will be externally examined and evaluated. If the circumstances permit, the gear will be tested for function.

In an exclusive survey of the mooring equipment a more thorough survey will be carried out and all the winches etc. tested. Opening up of some of the machinery may be agreed upon.

2.1.6 Accommodation

The Radio Room, the Navigating Bridge, the Galley, the Provision store rooms including the Refrigerated store rooms, the Pantries, the Laundries etc. shall be surveyed together with samples of the different categories of cabins and bathrooms.

The general conditions of these compartments will be reported on and representative photos attached to the report.

2.2 CS service requirements

2.2.1 Planning and timing of a CS

It is imperative that the time for the performance of the CS is carefully chosen, giving the surveyor(s) access to the vessel. Ideally, the vessel should be empty or close to

empty in the final stage of discharging, where ballast tanks and cargo holds are available and machinery and cargo pumps, or other cargo gear, are running.

2.2.2 Co-operation with onboard personnel

An active co-operation with the officers and the crew is desirable to complete the survey as planned and not waste time. The personnel onboard has to arrange for access, light, cleaning or gas freeing as necessary, as well as access to log books, class reports and port state control inspection reports, if any.

3. CS Assessment Basis

3.1 CS rating system

CS does not apply a digital rating system due to the fact that a complete survey of all parts will rather be the exception than the rule.

The rating of areas and items inspected will be:

VG	Very good condition . Very well maintained, no apparent sign of damage or wear and tear influencing function or safety.
G	Good condition. Well maintained. Some corrosion/wear and tear. Function and safety maintained with margins.
AC	Acceptable condition. Complying with Rule requirements at SPS and functional needs/requirements.

PC Poor condition.
Below minimum class requirements at SPS or other relevant needs/requirements.
Maintenance/repair/upgrading needed.

The ratings set by the inspectors will not be adjusted or audited by a rating committee, however, verified according to DNV's Quality Manual.

There will not be carried any strength calculations based on the material collected during a CS.

4. CS-Report Documentation

4.1 Summary CS documentation

The elements in the CS documentation are:

- A statement of facts including particulars of the vessel, and the validity of the certificates.
- Wear and tear figures/ running hours of the main engine and the auxiliary engines, if available.
- Consumption figures, if available.
- The condition of the vessel.
- A collection of photos taken in order to clarify and verify set ratings.

All the above elements should be collected in a «Condition Survey» standard report.

A proposal to a standard report form will be distributed separately to possible users.