

## **PART B**

### **CHAPTER 2**

#### **SURVEY SYSTEMS**

##### **2.1 General**

**2.1.1** There are a number of survey systems in existence:

###### **2.1.1.1** Ad hoc or occasional survey system.

In this system surveys are carried out at intermittent intervals, whenever certification is required for the ship to carry out a particular task e.g. a survey for an exemption for a single voyage or limited period.

###### **2.1.1.2** Routine survey system

This is the traditional system of surveys where continuous certification is required. The expiry date of the certificate determines the due dates or date ranges for regular surveys during the certificates validity. The expiry date is set at the time of initial or renewal survey and is only restricted by the maximum validity of the certificate. e.g. Small Commercial Vessel Certificate.

###### **2.1.1.3** Harmonised System of Survey and Certification (HSSC)

This system entered into effect in February 2000 as a result of amendments to SOLAS, Load Line and MARPOL convention protocols. The transition period having ended this has become the standard system for SOLAS, Load Line and MARPOL certificates. Expiry dates for certificates, and hence survey range dates, are determined by the classification renewal date (the expiry date of the Safety Construction Certificate or Load Line Certificate will normally follow the Class renewal dates); see 2.4 below and MSN 1751.

###### **2.1.1.4** Alternative Compliance Scheme (ACS)

In this system, MCA delegation of survey responsibility to the “Recognised Organisations” is extended so that the classification society can issue all ‘hardware’ certification but MCA retain oversight of all the surveys and issue a Certificate of Inspection (MSF 1114) as confirmation that authority to conduct surveys and issue statutory certification has been delegated to a Recognised Organisation for a specific vessel. Operational matters eg. Safety Management, Security, and Living and Working Conditions Certification remains the responsibility of the MCA. See 2.6 below.

In all systems type and extent of surveys will be the same.

##### **2.2 Survey Types**

There are seven types of surveys carried out as part of the survey systems above:

- **Initial Survey.** A complete examination, before the ship is put into service, of ALL ITEMS relating to the certificate to be issued, to ensure that they meet all relevant requirements, and that they are satisfactory for the ship's intended service.
- **Periodical Survey.** A complete examination of ALL ITEMS relating to a certificate to ensure that they are in a satisfactory condition, and that they are fit for the ship's intended service.
- **Renewal Survey.** A complete examination of ALL ITEMS relating to a certificate as for a periodical survey, but leading to the issue of a new certificate.
- **Intermediate Survey.** An inspection of SPECIFIED ITEMS relating to a certificate to ensure that they are in a satisfactory condition, and that they are fit for the ship's intended service.
- **Annual Survey.** A GENERAL inspection of the items relating to a certificate to ensure that they have been maintained and remain fit for the ship's intended service.
- **Inspection of the Outside of the Ships Bottom.** An inspection of the UNDERWATER part of the ship and related items to ensure that they are in a satisfactory condition and that they are fit for the ship's intended service.
- **Additional Survey.** An inspection, either GENERAL or PARTIAL according to circumstance, to be made whenever any important repairs or renewals are made.

In addition, hull and machinery items for certificates may be surveyed in two ways:

- **Special Survey.** All hull and machinery items are opened up for survey at one time, usually when a renewal survey is due; and
- **Continuous Survey.** When items are opened up for survey at the convenience of the ship, all items being surveyed during the life of the certificate. As part of this machinery may be 'surveyed' by ship's staff as part of an **Approved Planned Maintenance System** or not opened up and the condition assessed by **Condition Monitoring System**.

## 2.3 Survey Standards

The items to be surveyed and the extent to which they should be examined for IMO surveys have been set out in an IMO Resolution A.1053(27), as amended.

This resolution, entitled 'Revised Survey Guidelines under the Harmonised System of Survey and Certification' (hereinafter referred to as the HSSC Survey Guidelines), aims to provide common standards of surveys required. It is MCA policy to adopt these guidelines and they are incorporated into the survey *Aide Memoires*.

## 2.4 Harmonised System of Survey and Certification (HSSC)

### 2.4.1 Key Aspects

2.4.1.1 The primary aim of HSSC is to harmonise survey dates and their associated certificates issued under the SOLAS, LOADLINE and MARPOL Conventions. Most certificates, apart from the Passenger Ship Safety Certificate, will be valid for a period of 5 years with a survey required annually within 3 months before or after each 'anniversary date' of the certificate, but only 3 months before expiry. All 5 year certificates should be valid until the same expiry date and therefore have a common 'anniversary date'. The anniversary date remains the same throughout the life of the vessel (unless changed under the circumstances detailed below), this on the basis that it is a rolling five-year period where the theoretical<sup>1</sup> change over from one certificate to the next is at midnight on the date of expiry (i.e. a certificate is valid from 00:00 on 12 November 2013 until 23:59 on 11 November 2018, giving an anniversary date of 11 November – the next certificate would then be valid from 00:00 on 12 November 2018.)

2.4.1.2 HSSC should be introduced for a vessel's surveys and certificates as soon as possible and most ships SOLAS and MARPOL certificates should now be harmonised.

#### 2.4.2 *Special Circumstances*

2.4.2.1 The expression 'special circumstances' mentioned in SOLAS ChI-14(g) in the context of certificate validity is undefined. Surveyors should consult with Survey Operations Branch regarding any ship to which special circumstances may apply.

Examples of legitimate reasons for permitting change of anniversary date may be;

2.4.2.2 Vessels that have been laid up for an extended period where certificates and surveys have lapsed but vessels have been suitably maintained during the laid up period (paint, cathodic protection, dehumidifiers, etc. in accordance with Class requirements). In such cases, renewal surveys may be carried out when vessels are re-activated and new certificates issued from the new dates for a maximum period of 5 years validity.

2.4.2.3 The owner wishes to move the anniversary date, to a new more convenient date. An example of this might be a passenger ferry which is completed in the summer, but the owner wishes to have all refit and survey work completed in the winter months. In such cases the anniversary date may be changed under certain limitations specified below.

#### 2.4.3 *Limitations to a change of anniversary date:*

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<sup>1</sup> Under HSSC a new certificate can be issued following completion of the renewal survey and immediately be valid, which may be up to 3 months prior to the expiry of the existing certificate. The dates/times given here are for illustration of the maintenance of anniversary date.

2.4.3.1 Written confirmation from the owner of the reasons for the request, that this is a one-off request and the new anniversary date will remain fixed. Normally the renewal surveys should be carried out before they are due.

2.4.3.2 Normally to change the anniversary date additional surveys will be required.

2.4.3.3 In **an** exceptional case, depending upon the individual circumstances, the harmonised date may be changed if the new date is within 3 months of the original harmonised date; this will only be permitted as a one off change.

2.4.3.4 If the date is beyond the 3 month survey window then an additional survey will be required. The scope and extent of survey will depend on the period of extension. Where more than 6 months is required a full survey will be required.

#### 2.4.4 *Restoration of lapsed certificates*

2.4.4.1 Resolution A 1053(27) para 5.6 states:

*“ A certificate ceases to be valid if the periodical, intermediate or annual survey, as appropriate, or the inspection of the outside of the ship’s bottom is not completed within the periods specified in the relevant regulation or article. The validity of the certificate should be restored by carrying out the appropriate survey which, in such circumstances, should consist of the requirements of the survey that was not carried out, but its thoroughness and stringency should have regard to the time this survey was allowed to lapse. The Administration concerned should then ascertain why the survey was allowed to lapse and consider further action”*

The above statement outlines the procedure to reinstate a lapsed certificate. Once the required annual or periodical survey has been satisfactorily carried out, in order to avoid any potential PSC issue, it is advisable to endorse the relevant certificate with remarks that the validity of certificate has been restored in accordance with IMO Res. A 1053(27) section 5.6 as amended.

2.4.4.2 Where surveys have been requested more than 1 month after the required period surveyors should refer to HQ for advice on the enhanced level of survey required. In cases where the ship has ISM certification the raising of a major non conformity may be appropriate.

#### 2.4.5 *Inspection of the outside of the ships bottom*

2.4.5.1 Surveyors should note that in the requirement for there to be two bottom inspections in any five year period, under the HSSC (A.1053(27)) the definition of 'any five year period' is the five-year period of validity of the Safety Construction Certificate - i.e. it is not a rolling five-year period. An example of how the period between bottom inspections might pan out is shown at Annex 1, taking into account that the HSSC also allows for the

bottom inspection in conjunction with the renewal survey to be conducted on or after the fourth annual survey.

2.4.5.2 The maximum period allowed between bottom inspections is 36 months. The 36 month period in effect has an extension period built in as the requirement for inspection of the ships bottom is twice in a five year period, so approximately every 30 months. There is therefore already 6 months of leeway to get the survey organised in good time and with allowance for any unforeseen problems. Neither the UK regulations nor SOLAS make an allowance for extension of the 36 month period. Refer also to Part B Chapter 3 regarding extension of certificates.

#### *2.4.6 Extension of survey period*

The Harmonised System of Survey and Certification provides adequate flexibility for owners to carry out surveys at times convenient to them without losing any period of validity of their certificate and requests for further extensions are not usually appropriate, except as outlined in SOLAS I/14.

## **2.5 Non-HSSC Surveys and Certificates**

### **2.5.1 Lapsed certificates**

2.5.1.1 For domestic certificates that do not come under the HSSC (e.g. passenger, SCV), it is not explicit in the current UK regulations and guidance with regard to action to be taken if an annual or intermediate examination is not completed within the period specified. In such cases it should be considered that the certificate will cease to be valid (as per Convention ships). In the case of Small Commercial Vessels, proposed amendments have been made to the harmonised Code (MGN 280) to clarify the position.

2.5.1.2 As the certificate will become invalid if the required survey is not completed within the range dates, a new certificate must be issued with the same expiry date as the original lapsed certificate on completion of all required surveys. This will make it clear that the vessel had no valid certificate during the period where the required surveys had not been undertaken.

2.5.1.3 Where surveys have been requested more than one month after the required period, surveyors should refer to Survey Operations Branch for advice on the enhanced level of survey required. In cases where the ship has ISM or DSM certification the raising of a major non conformity might be appropriate.

## **2.6 Alternative Compliance Scheme (ACS)**

2.6.1 This scheme overlies the routine or harmonised survey and certification systems rather than being an alternative. Under it classification societies gain full authorisation to carry out all 'hardware' surveys required by ships taking part, including initial surveys, but not operational audits/surveys such as for

ISSC, ISM, or ILO, and MCA take on a monitoring and oversight role of work delegated to Class. The ship is issued with a **Certificate of Inspection** by MCA, (see chapter Part A Chapter 27) to show that MCA have attended the ship and verified that proper surveys have been carried out by Class. More information is available in Part B chapter 8.

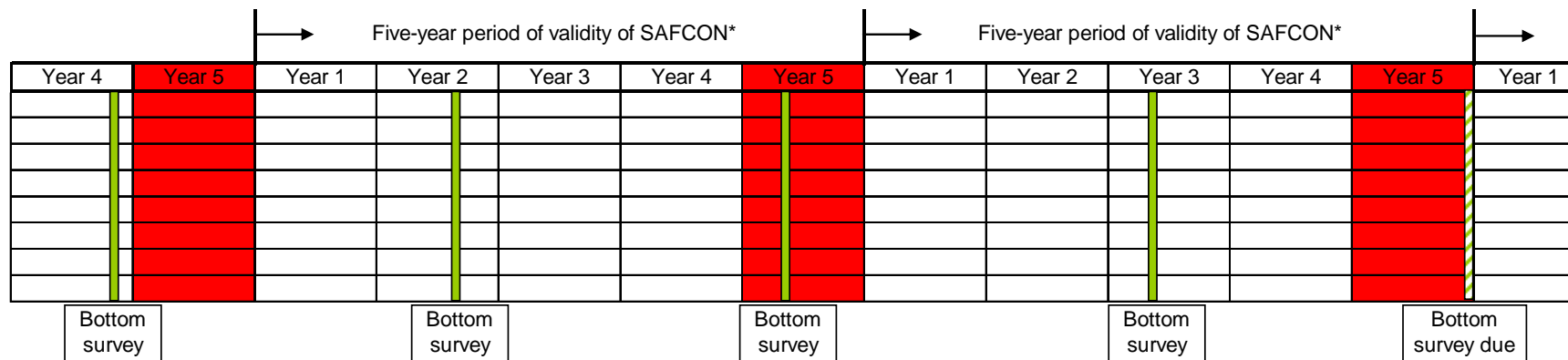
2.6.2 The Company Service Manager (CSM) is the main MCA focal point for the customer and all plans and documents must be forwarded by the customer to them.

2.6.3 An Instrument of Appointment is to be issued to the Classification Society as in the case of any flag in (including new-builds). A list of all the required Plans and Documents is to be included in the cover fax which is sent with the Instrument of Appointment.

2.6.4 Upon satisfactory inspection, and the subsequent interim ISM audit an Interim Certificate of Inspection (MSF 1114) is to be issued with the period of validity to harmonise with the Interim SMC; please refer to OAN 410. A full term Certificate of Inspection (MSF 1115) can be issued upon successful completion of the initial SMC audit. The validity of the Certificate of Inspection is subject to a satisfactory intermediate inspection (between 2 and 3 years).

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## Annex 1 – Intervals between bottom inspections



- Red columns indicate a renewal year (note that renewal surveys must be completed within 3 months prior to certificate expiry)
- Green strips indicate when the bottom inspection was conducted
- Green stripy indicates when a bottom inspection must be conducted by to meet 2-in-5

\*Note that the "five-year period of validity of the SAFCON" may in reality be more than five years, if the renewal survey is conducted before the expiry of the previous certificate and/or the certificate is extended under the provisions of SOLAS I/14(e) or (f) (though it cannot be extended if this takes the interval between bottom inspections beyond 36 months)