

# IACS Information Paper on Remote Survey for Interested Stakeholders

## 1. Introduction

This brief Information Paper provides a background to the recent industry interest in Remote Survey, in the context of classification society and recognised organisation activities, and the relevant actions taken by IACS and its members in this respect. A brief review of perceived benefits, concerns and issues raised by regulators, industry associations, operators and other stakeholders is also included.

## 2. Background to Remote Survey

‘Survey’ is a process for verifying that a ship and its equipment is in compliance with relevant standards, commonly the international Conventions of IMO, specific regulatory requirements of flag Administrations and Rules of a classification society. The established manner of performing such a verification is through the actions of a duly authorised surveyor on board the ship to observe condition, witness certain tests and review/accept relevant documentation before crediting the survey as complete when found satisfactory. The survey process has evolved over time such that the use of remote inspection techniques<sup>1</sup> may be deployed to assist the surveyor in the survey process, and certain aspects of the survey process may be delegated to appropriately qualified ships’ staff, for example under approved planned maintenance arrangements where a confirmatory survey by the surveyor will verify the maintenance records.

A ‘remote survey’ is then a survey where the verification is undertaken, or partially undertaken, without attendance on board by the surveyor. For some years, IACS members have been undertaking some survey activities remotely, typically where attending on board adds no further insight than can be obtained from the remote intervention. New monitoring and communications technologies that have become available, such as livestreaming video and real-time condition telemetry, have expanded the scope of insight that can be obtained without surveyor physical attendance and this has driven an increased uptake in the practice. However, it is recognised there are many surveys that are not appropriate to be conducted fully remotely.

The COVID-19 global pandemic has challenged the maritime sector in many ways, including the completion of surveys to assure compliance and safety. This circumstance raised the profile on remote survey and some surveyor visits have been substituted with viable alternatives to assess information without the surveyors physically attending the ship or facility. However, during the period 1 January – 30 September 2020, less than 0.5% of statutory surveys (annual, intermediate, renewal surveys) were completed by IACS members entirely remotely, that is with no surveyor visit to the ship whatsoever.

## 3. IACS activity relevant to Remote Survey

Although IACS has existing recommendations for the use of remote inspection techniques, it does not yet have common requirements for remote survey.

As part of IACS’ support to IMO during the COVID-19 pandemic, IACS provided guidance to flag Administrations on principles that could be applied when considering statutory certificate extensions<sup>2</sup>. These principles did not specifically recommend remote survey. However, they did reference alternative evidence to confirm the condition of the ship while physical surveys were not possible, always in conjunction with the flag Administration as the final arbiter. Subsequent to this, the IMO Secretary General has observed that some such practices employed during the COVID-19 pandemic may well endure once the situation has returned to normal.

Recognising that the industry will expect common requirements for remote survey activity to be defined, IACS has initiated a Project Team, working under the Survey Panel and this will report its findings during 2021. Recognising also the significance of this subject, IACS Steering Committee on Strategy is considering

<sup>1</sup> IACS Recommendation No. 42 ‘Guidelines for Use of Remote Inspection Techniques for surveys - Rev.2 June 2016’, first published in 1996

<sup>2</sup> IMO Circular Letter No.4204/Add.19/Rev.2, 22 July 2020

the medium-long-term impact of an evolving remote survey regime on the maritime sector, considering all stakeholder perspectives.

Meanwhile, individual members have developed their own approaches to ensure remote survey, where applied, does not pose a risk to safety and is conducted to the satisfaction of the relevant flag State.

### 4. Potential benefits and Industry concerns around Remote Survey

Remote survey offers a number of perceived benefits, but there are also some obvious and less-obvious challenges of conducting a survey remotely such that it meets its intended purpose in terms of assurance of safety and regulatory compliance. As the generic term 'survey' refers to a broad range of classification society activities and interventions, careful consideration is required on a category-by-category basis as to whether a remote survey can meet its intended purpose effectively whilst offering a net benefit to stakeholders. Remote survey may be appropriate in some, but not all, circumstances and the following examples are a non-exhaustive list of factors influencing such considerations.

- Time saving is an obvious perceived benefit, both in travel time for the surveyor and potential impact on a ship's itinerary and crew work schedule. But this must be balanced against the elapsed time to assemble information, conduct the survey to an equivalent degree of thoroughness and confidence by remote means. This will vary between survey types and some surveys may be overall more time consuming if conducted remotely.
- For items that are surveyed by direct visual inspection, remote survey using techniques such as live-streamed video and other image recording technologies may offer solutions. But these must be balanced against fidelity of images and, especially for non-live streamed images, the accuracy of the contextual setting. It may be expected that the technology to support this type of survey will develop over time, some owners even investing in equipment to enable high-quality live images to be available all over the ship, so what is possible in this respect will evolve over time.
- Assuming availability of an already busy ship's crew to support remote survey has been questioned by some parties including the ITF (International Transport Workers' Federation). While crew members would normally support a traditional survey in normal circumstances, more may be expected of crew members in terms of operating video equipment and providing information for the surveyor in a remote survey. A different interpersonal dynamic will exist and must be managed. There are also HSE (health, safety, and environment) considerations for crew members taking on additional and distracting tasks while working in potentially hazardous settings to be managed.
- Onboard survey attendance builds experience in both surveyors and ships' crewmembers as safety and compliance is routinely assured and issues are resolved together. As the remote survey approach further develops, consideration to the continued efficient training and development of surveyors and ships' crew will be required in this different learning environment.
- As new technologies are deployed within ships' systems, remote survey may provide accessibility to limited expertise within the marine industry in some cases, possibly in parallel to attendance by a more generalist surveyor on board a ship. As such, a hybrid model for part-remote, part-onboard survey may become appropriate in some circumstances.
- And when access to ships is challenged for whatever reason, such as in the COVID-19 pandemic, the use of remote survey to enable those aspects of a survey that could be effectively held remotely, in tandem with attendance for those aspects that cannot, has proved effective in helping the industry continue to operate safely and compliantly in difficult circumstances.

Regulators have expressed some concern over the increased use of remote survey in an unregulated manner and the need for common principles or formal procedural requirements for the conduct of remote surveys is fully understood by IACS and others. The work by the Survey Panel and Steering Committee on Strategy previously mentioned is part of IACS response.



The issue has also been raised at IMO and, for example, the Republic of Korea paper<sup>3</sup> to MSC 102 and further discussion at that meeting highlights this point. The outcome of that meeting requested interested member States and international organisations to work together to propose a new output to a future Maritime Safety Committee (probably MSC 104 to be held 4-8 October 2021). IACS representatives have already held informal discussions with various stakeholders, including flag Administrations and EU's DG MOVE, as a precursor to possibly co-sponsoring, along with other interested parties, a paper to MSC that will propose a new output on the deployment of remote survey.

### 5. Concluding remarks

Although evolution of remote survey may have been underway for some years, the COVID-19 global pandemic has brought focus to the subject and has accelerated deployment. IACS recognises that remote survey may be appropriate in some, but not all, circumstances and recognises both challenges and benefits. Work within IACS to understand the short- and longer-term implications of remote survey, and work towards common requirements for members, will support the broader industry and regulator efforts to ensure safe and effective deployment.

IACS looks forward to working together with other stakeholders to ensure clarity within the industry and the international regulatory framework around the remote survey theme.

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<sup>3</sup> MSC 102/22/11 Proposal to develop guidance on remote surveys in response to increase in their use during the COVID-19 pandemic

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#### *About IACS:*

- 1. Dedicated to safe ships and clean seas, the International Association of Classification Societies (IACS) makes a unique contribution to maritime safety and regulation through technical support, compliance verification and research and development.*
- 2. More than 90% of the world's cargo carrying tonnage is covered by the classification design, construction and through-life compliance Rules and standards set by the twelve Member Societies of IACS.*
- 3. The IACS Council, the governing body of the Association, consists of one representative from each Member Society. The Council elects a Chair, by rotation, from among its Members. The Chair acts as the Principal Officer of the Association for a period of 12 months.*
- 4. More information about IACS can be found by visiting our website: [www.iacs.org.uk](http://www.iacs.org.uk)*