

# AUTOSHIPMAN: Creating a New Standard Form Agreement

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**PRACTICES** Ship Sale and Purchase, Autonomous Transportation, Ship Construction and Conversion, Shipping

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Later this year, the Yara Birkeland is due to commence commercial operation in Norwegian waters. This autonomous container feeder vessel will be managed by Massterly, a ship management company offering services to the autonomous shipping market. The terms of the ship management agreement between the owners, Yara, and Massterly will need to address its operation, initially as a crewed vessel but subsequently, as an autonomous vessel.

In November 2020, BIMCO took the positive step to start work on adapting its SHIPMAN contract to make it suitable for autonomous vessels. SHIPMAN is a standard ship management agreement entered into between an owner and a ship management team for the provision of crew, technical and commercial management and insurance arrangements. Having first been produced in 1988, it is currently in its third edition, SHIPMAN 2009, and is widely used for the management of conventional vessels.

With the working name AUTOSHIPMAN, this will be the first standard agreement specifically produced for the growing autonomous market. It follows a request to BIMCO from the ship manager, Wilhelmsen, who together with Kongsberg, own Massterly. As well as providing ship management services for the Yara Birkeland, Massterly are working with the Norwegian grocery distributor, ASKO, who have two autonomous ro-ro vessels under construction in India and Samskip, Europe's largest multimodal operator, who currently have emission-free, autonomous container vessels under construction in Norway. In addition to traditional management services for these vessels, it is reported that Massterly will provide a specialist land based remote control centre ("RCC") and staff to operate the vessels.

We understand that the first version of AUTOSHIPMAN will be available this year. With the commercial adoption of autonomous vessels still in its nascency (and accordingly there being little in the way of direct practical experience of the challenges for third party autonomous ship management arrangements), BIMCO have said they will rely on "assumptions and expectations" and expect the agreement to be amended in the future once there is practical experience to draw on. However, with the Yara Birkeland currently undergoing testing and other vessels under construction, it will not be long before these ship management services are called upon (particularly as a number of the vessels currently on order have been ordered by entities with little or no prior ship ownership experience). What issues will need to be considered in drafting AUTOSHIPMAN and how will it differ from existing ship management agreements?

## Crew

In this first version of AUTOSHIPMAN, we expect that changes will be made to address the changing role of and/or the lack of crew onboard the vessel. At first, these autonomous vessels will operate with limited crew on board when they are launched, nonetheless it would be sensible for

the agreement to allow for this as well as when the vessel will be fully autonomous and operated remotely from the RCC.

One issue that will need to be grappled with is “*who are the crew?*”. While it may not be necessary to change the definition of crew from that currently in the standard form, an annex distinguishing between personnel who will be on board the vessel and those that will be based at and the location of the RCC may be required. This would help to address which crew members need to comply with the STCW (International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978, as amended in 1995), which currently only applies to seafarers onboard, and the specific qualifications and experience of management and personnel that will be based at the RCC.

Consideration will also need to be given to certain provisions within Clause 5 of Part II which deals with Crew Management and Crew Insurances.

Clause 5(a)(viii) requires the managers to ensure “*the Crew, on joining the Vessel, are given proper familiarisation with their duties in relation to the Vessel’s [Safety Management System]*”. To the extent that the crew are based at an RCC, this clause will need to be amended to reflect that the crew will not be joining the vessel in the conventional sense and could also be seen to be leaving the vessel at the end of their shift. In context of the RCC shift arrangements, a literal approach requiring daily familiarisation would be unnecessary and it may be more appropriate for such training and familiarisation to be provided in a similar manner to airline pilots, who undergo simulation training and are subject to currency requirements in order to pilot an aircraft. Like aircraft, the continuity requirements for those operating the vessel remotely may differ between vessels, RCC software and the operations completed remotely.

Clause 5(a)(x)(1) provides that “*that no person connected to the provision and the performance of the crew management services shall proceed to sea on the board the Vessel without the prior consent of the Owners*”. Again, this will depend on when a person is deemed to board the vessel when they are working from an RCC. Would this be when they log onto the remote-control system for a vessel? Will it matter that others will either be in or able to access the room where the operator is based or the system they are using from another terminal? To take account of these changes in control and operation of the vessel, this clause will need to be modified to include limiting access to any system(s) used to remotely control the vessel as well as the vessel itself.

In addition, clause 5 states that the crew management services to be provided by the manager include “*arranging transportation of the Crew, including repatriation*” (see clause 5(a)(v)). This will be unnecessary for land-based crew and the form may be amended to reflect this.

Clause 5(b) addresses Crew Insurances and requires managers to insure against liabilities in respect of crew risks and to arrange this “*in accordance with the best practice of prudent managers of vessels of a similar type to the Vessel*”. There are two issues with this clause as currently drafted for autonomous vessels. Firstly, at least initially, there will be no comparable vessels that can be used to judge “best practice”. Secondly, the definition of Crew Insurance will need to be refined to reflect onboard crew and those based at the RCC and appropriate coverage. For example, land-based crew would not need insurance for shipwreck and repatriation and insurers may class them as employees rather than crew. As a result, we expect, at least initially, that AUTOSHIPMAN may require insurance to be obtained that satisfies the minimum requirements of the owner’s insurers, the relevant Flag State and national authorities (all of which it would reasonable to expect any potential owner of an autonomous vessel to have engaged in discussions with long before the vessel enters operation and usually as a precursor to deciding to acquire/construct an autonomous vessel) and for these requirements to be recorded in an annex.

## Technical Management

Technical management covers a couple of potential issues including cyber security which is crucial for autonomous vessels due to the important role of software and connectivity when autonomous vessels are being controlled from an RCC or fully autonomous. Technical management provisions within SHIPMAN require compliance with the ISM and ISPS Codes, which cover safety and security management including cyber security and system updates. It is, however, presently unclear how these codes will apply to autonomous vessels as they currently apply to those onboard the vessel. The MASS UK Industry Conduct Principles and Code of Practice version 3 suggests that reducing the risk of third party cyber interception of MASS communications is necessary to meet the provisions of the ISPS Code. While that may be correct, if the Codes are not updated to apply to autonomous vessels in the short term, it might be necessary for AUTOSHIPMAN to address this. These issues of technical management will also be addressed in the vessel's insurance, in meeting the Flag State or other relevant national authorities' requirements or any equivalency requirements that the vessel is subject to, so the source of compliance or equivalency could be recorded in Part 1 of AUTOSHIPMAN.

SHIPMAN also requires in clause 4 the provision of "competent personnel to supervise the maintenance and general efficiency of the Vessel". No change is likely to be required here as maintenance and repairs are commonly performed with the supervision given by personnel who are not onboard but instead for example available via video link.

## Location

A ship manager is required under clause 8 of SHIPMAN to comply with the requirements of the vessel's Flag State when managing the vessel. For an autonomous vessel, the ship manager will need to consider further jurisdictions; the location of the RCC and where the vessel is permitted to operate. While the commercial operation of autonomous vessels remains in its infancy and until international legislation is updated or created for autonomous vessels, such vessels are likely to be permitted to operate in one state or between two states if a bilateral agreement is reached, and/or subject to equivalency, rather than firm rules. For example, in the case of the Yara Birkeland and ASKO vessels, it is intended that these vessels will operate in Norway only. Clause 14 of SHIPMAN provides for the owner and manager to agree on trading restrictions for the vessel. The provision specifically addresses crew but could be amended to reflect these other restrictions in operation that exist for such vessels. For the purpose of the standard form, the relevant clause will need to be widely drafted but giving the parties the option to include any necessary restrictions.

## Comment

When AUTOSHIPMAN is published, it will be interesting to see whether these various issues are addressed, including how it is drafted to allow for use in different jurisdictions. It is encouraging that those who are involved in this process alongside BIMCO include traditional ship managers, as well as large fleet shipowners, who will bring not just the theoretical suggestions of how an autonomous ship management agreement should operate and legal review of the current provisions of SHIPMAN, but practical experience. Some of the companies involved are already active in the autonomous market and therefore will understand how issues such as insurance and equivalency are currently being addressed (at least in certain countries). It will also be interesting to see how this standard form develops over time as more autonomous vessels enter into operation, however this first standard form agreement for the autonomous vessel market has the potential of setting the course in terms of approach for the years ahead.