



# Seasteads Compliant with International Maritime Conventions

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## Table of Contents

### [Summary](#)

#### [1.0 Introduction](#)

#### [2.0 Detailed Analysis of Conventions](#)

- [2.1. SOLAS 74/88](#)
- [2.2. MARPOL 73/78](#)
- [2.3. LL 66/88](#)
- [2.4. STCW 78](#)
- [2.5. ILO MLC](#)
- [2.6. CLC/Fund 92](#)

#### [3.0 Conclusion](#)

## Summary

International maritime conventions regulate the conditions under which sovereigns issue flags to maritime vessels. This document analyzes whether and to what degree the six most widely adopted such conventions apply to seasteads. It finds that seasteads can remain outside the scope of most international maritime conventions if they stay fixed in place, remain below 24 meters long at the waterline, and do not enter foreign ports. Seasteads win further exemptions if they stay in or close to sheltered waters and remain smaller than 12 meters long, 400 gross tonnage, and 15-person capacity. Though voyaging or larger seasteads fall within the scope of additional conventions, they might qualify for exemptions from many of their requirements.

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## 1.0 Introduction

When terrestrial sovereigns issue flags to maritime vessels, they do so under the constraints of international law. Flags issued to seasteads thus have to satisfy those constraints, too. This document analyzes whether and to what degree the six most widely adopted international maritime conventions apply to seasteads. It addresses the following conventions, in order:

- [SOLAS 74/88](#) - International Convention for the Safety of Life at Sea, 1974, as amended, including 1988 Protocol
- [MARPOL 73/78](#) - International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978
- [LL 66/88](#) - International Convention on Load Lines, 1966, including 1988 Protocol
- [STCW 78](#): International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978, as amended and including [2010 amendments](#)
- [ILO MLC](#): ILO Maritime Labour Convention, 2006
- [CLC/Fund 92](#): International Convention on Civil Liability for Oil Pollution Damage, 1992, and the International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage, 1992, including 1992 Protocols

These conventions define the scope of their coverage by reference to the size, structure, and use of covered maritime vessels. This document therefore follows suit, distinguishing between seasteads based on their length, gross tonnage, and passenger capacity. The conventions sometimes allow exemptions based on various vessel characteristics. To assess their treatment under those terms, this document assumes that seasteads can convincingly claim to have novel features, continuing research and development of which application of existing regulations might hinder, and that seasteads do not engage in shipping, exploitation of mineral resources, or other traditional maritime services subject to special regulation. The present analysis also distinguishes between seasteads anchored or otherwise fixed to the earth and those that voyage, whether by controllably drifting on ocean currents or by remaining in place by means of mechanical propulsion, as dynamic positioning systems allow.

Only the first three of the six conventions under review here would, if applicable to seasteads, mandate that the vessels incorporate certain features, such as lifeboats or load lines. The other three conventions set standards, such as for certification of seafarers, keeping of records, or maintenance of liability insurance. Table 1 summarizes, using green, yellow, and red highlighting to signify outcomes for seasteading that rank good, moderate, and bad, respectively--terms that here speak not to ethical values but regulatory burdens.

Convention (and subject)	Application to Seateads
<b>SOLAS 74/88</b> (safety of internationally voyaging ships)	Inapplicable to fixed seateads; internationally voyaging ones likely to get broad exemptions.
<b>MARPOL 73/78 - Annex I</b> (oil pollution)	Applicable, but seateads would likely qualify for an exemption.
<b>MARPOL 73/78 - Annex II</b> (noxious bulk liquids)	Inapplicable to seateads.
<b>MARPOL 73/78 - Annex III</b> (packaged harmful substances)	Unlikely to apply to seateads.
<b>MARPOL 73/78 - Annex IV</b> (sewage pollution)	Inapplicable--except to internationally voyaging seateads at least 400 gross tonnage or certified to carry at least 15 persons.
<b>MARPOL 73/78 - Annex V</b> (garbage pollution)	Applicable to all seateads, but those less than 12 m long, 400 gross tonnage, and 15 person-certified have no administrative obligations.
<b>MARPOL 73/78 - Annex VI</b> (air pollution)	Applicable, requiring survey, though non-emitting seateads should pass easily.
<b>LL 66/88</b> (load lines)	Inapplicable to seateads under 24 meters long; larger ones would likely qualify for exemptions.
<b>STCW 78</b> (seafarer certification)	Inapplicable--unless seatead ventures beyond waters closely adjacent to sheltered or regulated port waters. Voyaging seateads can reduce impact by taking only near-coastal voyages and not exceeding 500 gross tonnage.
<b>ILO MLC</b> (seafarer labor)	Inapplicable--unless seatead ventures beyond waters closely adjacent to sheltered or regulated port waters; exemptions possible if seatead < 200 gross tonnage.
<b>CLC/Fund 92</b> (liability for oil spills):	Inapplicable to seateads.

**Table 1: Major International Maritime Conventions' Applicability to Seateads**

Table 1 reveals that fixed seasteams below 24 meters long that do not voyage internationally escape the scope of most major international conventions. It bears emphasizing that to “voyage internationally” under the conventions means to enter a port other than one’s home port. A seasteam might thus for example be built in Panama, towed to the Bahamas, and anchored there outside any port without taking an international voyage under the applicable definition.

Even so small and sedate a seasteam would still fall within the scope of some international maritime conventions, however. MARPOL 73/78 provisions relating to oil, garbage, and air pollution would apply to a seasteam fixed outside of waters immediately adjacent sheltered or port regulated waters. That makes sense, policy-wise, given that an anchored vessel could wreak considerable environmental havoc outside of areas within the ready control of local terrestrial sovereigns. Seasteamers will doubtless embrace MARPOL’s aims because, unlike conventional mariners, they cannot flee from their pollution. If MARPOL’s red tape proves too burdensome, though, seasteamers could probably win an exemption from the provisions on oil pollution.

Fixed seasteams below 24 meters long that voyage internationally fall within the scope of other conventions: SOLAS 74/78, for maritime safety; MARPOL’s Annex IV, for sewage pollution; and the two labor-related conventions, STCW 78 and ILO MLC. Exemptions might be had for SOLAS, should it prove a poor fit for seasteams, and the MARPOL sewage provisions do not reach vessels below 400 tonnage and capacity for 15 passengers, allowing relatively small seasteams to escape the convention’s sweep. Avoiding or mitigating the impact of the labor-related conventions poses a more complicated puzzle. On that and other counts, details follow below.

Note that while Table 1 covers the six major international maritime conventions, there remain still other agreements and laws that might affect the flagging of seasteams by a given country. Note also that not every country has agreed to every one of these six conventions. Table 3, below, lists the many that have declined to ratify MARPOL 73/78 - Annexes V & VI and ILO MLC. Smart seasteamers will want to compare many various different flagging regimes, the details of which vary widely from country to country. In making these comparisons, seasteamers should worry most about the anti-pollution regulations in MARPOL 73/78, Annexes V & VI in particular, and the labor regulations in ILO MLC. As revealed in the following analysis, and summarized in the conclusion, those conventions most risk impeding the free development of seasteams.

To repeat a point too easily overlooked: This study of the application of international conventions to seasteaming should not be taken to suggest that seasteamers should or would violate the spirit and intent of international conventions designed to save lives, protect the environment, and treat workers well. This document does not address the substantive virtues of the conventions, whether as idealized in theory or as enforced in practice. It instead merely aims to chart the most direct passage from the here and now to the future where seasteamers want to go.

## 2.0 Detailed Analysis of Conventions

### 2.1. [SOLAS 74/88](#)

#### **International Convention for the Safety of Life at Sea, 1974, as amended, including 1988 Protocol**

What is the scope of SOLAS 74/78? Chapter I, regulation 1(a) says, “Unless expressly provided otherwise, the present regulations apply only to ships engaged on international voyages.” Ch. I, reg. 2(d) adds, “International voyage means a voyage from a country to which the present Convention applies to a port outside such country, or conversely.” SOLAS 74/88 thus does not apply to ships that sail only from one port. Whether they return or thereafter remain afloat does not matter provided that they do not voyage to a foreign port. Seasteads anchored, moored, berthed, or otherwise fixed to a point of earth will thus presumably fall outside the scope of SOLAS 74/88, because they will not be “engaged in international voyages.”

The analysis cannot stop there, however. When seasteads begin to controllably float in open water, such as they might in mid-ocean gyres or on migratory currents, they might again fall within the scope of the convention. Less plausibly, seasteads dynamically held in place in international waters might qualify as “on international voyages.” In either case, the seasteads could remain outside the scope of SOLAS 74/88 by taking care to not voyage to or from a Convention port from or to a foreign one. For example, a controllably drifting seastead might leave a Convention port and spend the rest of its days in a mid-ocean gyre, or a dynamically positioned seastead might sail from a Convention port to station itself just outside the country’s territorial waters for an extended periods, returning regularly to the same port for occasional refitting and repairs.

Nonetheless, some seasteads might end up traveling between Convention ports. Also, the caveat, “Unless expressly provided otherwise,” counsels against assuming that ch. I, reg. 1(a) renders the convention inapplicable to seasteads. The analysis thus continues.

Ch. I, reg. 3(a) provides, “The present regulations, unless expressly provided otherwise, do not apply to ... (iii). Ships not propelled by mechanical means.” Both seasteads fixed to the subsea earth or those drifting controllably thus generally fall outside the scope of the act. Seasteads kept in one location by dynamic positioning probably fall within it, though, as they would be “propelled” (through the moving water) “by mechanical means.” A vessel equipped with mechanical propulsion could presumably not escape the reach of the convention simply by turning off its motors. To enjoy an exclusion from SOLAS 74/88, passively drifting seasteads would have to get their motor propulsion only from separately-flagged vessels, such as tugs. (They might still control their routes by calculated exploitation of wind, wave, and current forces, however.)

Taken together, ch. I, reg. 1(a) and reg. 3(a) put both fixed and not-mechanically-propelled seasteads outside the scope of SOLAS 74/88. Dynamically positioned seasteads should likewise remain outside the convention’s scope if they do not voyage internationally as defined in ch. I, reg. 2(d). In any such case, a seastead might fall back within the scope of the

convention if “expressly provided otherwise,” ch. I, reg. 1(a). As discussed below, ch. V does just that for all voyaging ships.

It bears noting in passing that ch. I, reg. 3(v) also puts outside the scope of the convention, “Pleasure yachts not engaged in trade.” The convention does not further define those terms, making their application to seasteads uncertain. Given that yachts are typically characterized by their relatively small size and expense compared to other ships, and that the immobility of seasteads makes them less dangerous than yachts, seasteaders could certainly argue that they merit the same treatment for policy reasons, and because no other extant classification fits better. Against that, they would face claims that seasteads do not resemble yachts.

Seasteaders would also have to argue that “trade” in ch. I, reg. 3(v) refers to maritime transport—or at most transport, fishing, or mineral extraction—but not enterprises, such as working remotely as a computer programmer, unaffected by the maritime environment. That would seem the most logical way to distinguish between the sorts of specialist workers the labor-related conventions aimed to protect and the sort of generic workers that will populate seasteads.

Ch. I, reg. 4(a) allows a flagging state to exempt from SOLAS seagoing vessels making just one special trip:

A ship which is not normally engaged on international voyages but which, in exceptional circumstances, is required to undertake a single international voyage may be exempted by the Administration from any of the requirements of the present regulations provided that it complies with safety requirements which are adequate in the opinion of the Administration for the voyage which is to be undertaken by the ship.

The exemption might for instance apply to a vessel especially flagged for one last voyage to the shipbreakers. More pertinently to seasteads, the exemption would also apply to structures designed to be towed from where they were created to where they will permanently remain. For example, ch. I, reg. 4(a) would allow an administrating registry to exempt a floating village built in Panama and towed to the Bahamas for tourist use from the requirements of SOLAS 74/88.

SOLAS 74/88 offers another exemption in ch. I, reg. 4(b):

The Administration may exempt any ship which embodies features of a novel kind from any of the provisions of chapters II-1, II-2, III and IV of these regulations the application of which might seriously impede research into the development of such features and their incorporation in ships engaged on international voyages.

Seasteads will certainly embody “features of a novel kind,” research and development of which application of the cited SOLAS 74/88 provisions might seriously impede. Any doubt on that measure can be assuaged by reviewing the detailed regulations, evidently written with conventional vessels in mind, in the cited provisions: chapter II-1, “Construction - Structure, subdivision and stability, machinery and electrical installations”; chapter II-2, “Construction - Fire

protection, fire detection and fire extinction”; chapter III, “Life-saving appliances and arrangements”; or chapter IV, “Radiocommunications.”<sup>2</sup>

Notably, ch. I, reg. 4(b) does *not* exempt novel R&D ships from the *other* chapters of the convention. Of those other chapters, two merit special note: Chapter V, on safety of navigation, and Chapter VIII, concerning nuclear ships. Though one can foresee the possibility of nuclear seasteads, the special problems they would create can wait for that hypothetical day. Chapter V, “Safety of Navigation,” specifies in Regulation 1 that it applies to “all ships on all voyages,” minus some exceptions not applicable to seasteads. Whether or not a seastead, once in place and in use, qualifies as on a voyage cannot be answered by reference to SOLAS 74/88, which does not define the crucial term.

A seastead anchored to the earth or similarly fixed in place could not plausibly qualify as a ship on a voyage. Seasteads controllably drifting in gyres or on currents, in contrast, might very well qualify as “ships on [] voyages” for purposes of SOLAS 74/88 ch. V. A seastead fixed in place by dynamic positioning raises a nicer question. Again, these remain legal conjectures, bereft of real world testing. A voyaging seastead would at all events, absent an exemption, face many more regulatory requirements than a non-voyaging one.

Ch. V, reg. 3 potentially offers one such exemption; it provides:

2. The Administration may grant to individual ships exemptions or equivalents of a partial or conditional nature, when any such ship is engaged on a voyage where the maximum distance of the ship from the shore, the length and nature of the voyage, the absence of general navigational hazards, and other conditions affecting safety are such as to render the full application of this chapter unreasonable or unnecessary, provided that the Administration has taken into account the effect such exemptions and equivalents may have upon the safety of all other ships.

Seasteads on the open ocean, either staying in one safe location or controllably drifting, are not likely to run into rocks or other ships. They might thus have a fair chance of winning an exemption from the full force of Chapter V’s navigational safety regulations. (Those drifting should however expect to be required to have a separate powered tug or tow vessel at the ready to ensure controllability.)

Ch. I, reg. 4(b) continues, “Any such ship shall, however, comply with safety requirements which, in the opinion of that Administration, are adequate for the service for which it is intended and are such as to ensure the overall safety of the ship and which are acceptable to the Governments of the States to be visited by the ship.” Exactly what safety requirements an administering state will regard as adequate for the seasteads’ intended service, as such to ensure the overall safety of the ship, and as acceptable to hosts of the vessels remains to be seen. TSI should aim to help develop standards on that count.

In conclusion:

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<sup>2</sup> Exemption from ch. IV of SOLAS 74/88 also exempts a ship from the requirements of STCW 78 ch. IV for radiocommunication personnel per *id.*, Regulation IV/2(3).

- **Seasteads fixed to a location fall outside the scope of SOLAS 74/88**, *per* ch. I, reg. 1(a), 3(a).
- **Seasteads that voyage internationally might win an exemption from SOLAS 74/88** if they make only one such voyage, *per* ch. I reg. 4(a).
- **Seasteads that voyage but not internationally**, *per* ch. I, reg. 2(d), (and that do not go nuclear) **fall outside all of SOLAS 74/88 except for the navigation safety requirements** of ch. V.
- **A seasteed also can win an exemption from all but ch. V. on grounds it qualifies as a ship with novel features still under research and development** that full application would impede, ch. I, reg. 4(b).
- **A seasteed might win an exemption from some navigation safety regulations on grounds that conditions render full application of them “unreasonable or unnecessary,”** ch. V, reg. 3.2.

Given the static nature of the seasteed’s putative “voyage[]” under ch. I, reg. 1(a), that last sounds like a plausible claim. If the claim failed however, and no other exemption applied, a voyaging seasteed would find itself subject to the full force of SOLAS 74/88.

## 2.2. [MARPOL 73/78](#)

**International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 (MARPOL 73/78), including mandatory Annexes I (oil) and II (bulk chemicals), and remaining Annexes III (dangerous packaged goods), IV (sewage), V (garbage) and VI (atmospheric pollution)**

Article 2(4) defines “ship” for purposes of the convention as “a vessel of any type whatsoever operating in the marine environment and includes ... floating craft and fixed or floating platforms.” That reaches broadly enough to include seasteads of all types. (Notably, unlike SOLAS 74/88, LL 66/88, and STCW 78, the convention makes no exception for pleasure yachts.) The various annexes of MARPOL 73/78 thus might apply to seasteades; analysis of each follows.

**Annex I regulates “Pollution by Oil.”** Regulation 2 of this Annex makes it applicable to seasteads but provides a potential loophole. Reg. 2(1) says, “Unless expressly provided otherwise, the provisions of this Annex shall apply to all ships.” Reg. 2(a) provides:

Any ... new type of vessel ... whose constructional features are such as to render the application of any of the provisions of chapters II and III of this Annex relating to construction and equipment unreasonable or impracticable may be exempted by the Administration from such provisions, provided that the construction and equipment of that ship provides equivalent protection against pollution by oil, having regard to the service for which it is intended.

Additional provisions in regulation 2(b) and (c) dictate the form and communication of such an exemption. A seasteed qualifies as a new type of vessel with features not anticipated by the existing regulations, making them unreasonable and impracticable, and thus meriting an

exemption. Seasteads would still have to take reasonable safeguards against oil pollution, of course. The exemption would merely free seasteads to find equivalent protections more suited to their particular circumstances than those more appropriate for conventional vessels.

Many of the provisions in Annex I speak to oil tankers and large vessels. Annex 1, reg. 14(1) says of such vessels that “no ballast water shall be carried in any oil fuel tank.” Reg. 14(3) extends that provision to smaller vessels, saying “All other ships shall comply with the requirements of paragraph (1) of this regulation as far as is reasonable and practicable.” That constitutes another loophole of sorts, though one of uncertain scope. Seasteads would presumably comply with designs that do not allow mixing oil and ballast water.

**Annex II addresses “Pollution by Noxious Liquid Substances in Bulk.”** This Annex will not likely apply to seasteads because its regulation 2 stipulates, “Unless expressly provided otherwise the provisions of this Annex shall apply to all ships carrying noxious liquid substances in bulk.” Seasteads will not likely carry noxious liquid substances in bulk, nor do any express provisions of Annex II look likely to bring seasteads within its scope.

**Annex III addresses “Harmful Substances Carried by Sea in Packaged Form.”** This Annex’s provisions could conceivably apply to seasteads, because reg. 1(1) provides, “Unless expressly provided otherwise, the regulations of this Annex apply to all ships carrying harmful substances in packaged form.” Reg. 1(2) flatly states, “The carriage of harmful substances is prohibited, except in accordance with the provisions of this Annex.” It is not likely seasteads will routinely fall within the scope of Annex III, however, as they will not be engaged in transport and per reg. 1(5), “The requirements of this Annex do not apply to ships’ stores and equipment.” At all events, the regulations go to practices rather than vessel design, and so should not unduly constrain seasteaders simply seeking registration and flagging of their vessels.

**Annex IV sets forth “Regulations for the Prevention of Pollution by Sewage from Ships.”** It applies only to ships “engaged in international voyages,” as per Annex IV, reg. 2(1). *Id.*, reg. 1(6) defines “international voyage” as “a voyage from a country to which the present Convention applies to a port outside such country, or conversely.” Annex IV thus does not apply to seasteads that leave port to thereafter float in international waters or in non-port waters of foreign countries.

Suppose however a seastead undoubtedly does undertake an “international voyage” sufficient to put it in the possible scope of Annex IV. This might happen if, for instance, a seastead launched in Panama moored in San Francisco Bay. In that event, the seastead would still escape the reach of Annex IV if it had a gross tonnage below 400 and was not certified to carry more than 15 persons. *Id.* reg. 2(2).

**Annex V sets forth “Regulations for the Prevention of Pollution by Garbage from Ships.”** Annex V, reg. 2 provides, “Unless expressly provided otherwise, the provisions of this Annex shall apply to all ships.” The Annex’s provisions speak to practices rather than design features. The notification, planning, and record-keeping mandates of Annex V, reg. 9, apply only to ships “12 metres or more in length overall,” reg. 9(1)(a), ships with at least 400 gross tonnage, *id.* (2), or ships certified to carry at least 15 passengers, *ibid.* Smaller seasteads would escape those burdens. In theory, though, the Annex applies to all seasteads, and those who disregard their obligations under it might suffer countermeasures by flagging, port state, or other authorities.

**Annex VI concerns, “Regulations for the Prevention of Air Pollution from Ships.”** Reg. 1 makes Annex VI’s provisions applicable “to all ships, except where expressly provided otherwise” in various particular regulations of the Annex. Unfortunately for seasteads, and in contrast to references elsewhere in MARPOL that limit consideration of floating platforms to those involved in mineral exploration or extraction, Annex VI, reg. 5(1) says, “Every ship of 400 gross tonnage or above and every fixed and floating drilling rig and other platforms shall be subject to the surveys” mandated by the regulation. That is likely an accident of drafting, given that the authors of Annex VI probably did not foresee “other platforms” smaller than 400 gross tonnage and not involved in mineral exploration or extraction. Nonetheless, the plain language of Annex VI, reg. 5(1) will be hard for seasteads to dodge.

The simplest solution: Do not include on the seastead any incinerators or motors capable of generating disqualifying air pollution. In that event, it should not be very difficult for seasteads to pass surveys and win certifications. If they have no way to generate offending pollution, after all, seasteads cannot violate Annex VI. Seasteads with the potential to generate offending air pollution would have to satisfy the annex’s regulatory burdens. Those seasteads might appear soon enough, as on a floating platform housing a business and running a diesel-powered electrical generator. It seems that such seasteads will face the full force of Annex VI. Perhaps that will encourage seasteads to rely on solar and wind power.

**In conclusion, seasteads face moderate and variable exposure to the regulations set forth in MARPOL.** The scope of the exposure depends on the particular annex in question and on a seastead’s design and use. Herewith a summary:

- **Annex I (oil pollution):** Applicable, but seasteads would likely qualify for an exemption.
- **Annex II (noxious bulk liquids):** Inapplicable to seasteads.
- **Annex III (packaged harmful substances):** Unlikely to apply to seasteads.
- **Annex IV (sewage pollution):** Applicable only to internationally voyaging seasteads of at least 400 gross tonnage or certified to carry at least 15 persons.
- **Annex V (garbage pollution):** Applicable to all seasteads, but those of less than 12 m length, 400 gross tonnage, and 15 person-certified have no administrative obligations.
- **Annex VI (air pollution):** Surveys required but should be easy for unpowered or non-emitting seasteads to pass.

### 2.3. [LL 66/88](#)

**International Convention on Load Lines, 1966, including 1988 Protocol** (Note that those exist as separate documents; both must be consulted)

LL 66/68 requires member states to condition the issuance of flags on satisfaction of stated requirements for marking the sides of vessels with “load lines”—painted marks that provide a visual gauge of a vessels’ buoyancy and stability. While not unreasonable as applied to conventional vessels, the standards do not fit seasteads especially well. Happily, though,

seasteads appear beyond the Convention's reach.

Article 5(1) says, "The present Convention shall not apply to ... (b) new ships of less than 24 metres (79 feet) in length." Article 2(8) defines "length" as "96 per cent of the total length on a waterline at 85 per cent of the least moulded depth measured from the top of the keel, or the length from the fore side of the stem to the axis of the rudder stock on that waterline, if that be greater." Those specs hardly even make sense applied to Ocean Builder's spar design, but would likely result in measuring 96% of circumference of the spar. It will be a while before seasteaders start building spars 24 m in circumference, which would make them over 7.5 meters or about 25 feet wide. Art. 5(1) thus looks likely to put seasteads outside the scope of LL 66/88 for some time.

Article 5(1)(d) exempts "pleasure yachts not engaged in trade," a category in which seasteads might also fall. The Convention does not further define the relevant terms, however, leaving open the question of whether a seastead might qualify as a "yacht" and whether "trade" applies only to the evident concern of the Convention, international transport, or also to other commercial activity. The above discussion of SOLAS 74/88, ch. I, reg. 3(v), explores the arguments for and against the various interpretations.

With wording almost identical to that of SOLAS 74/88, regulation 4(b), Article 6(2) exempts innovative craft from the scope of LL 66/88:

The Administration may exempt any ship which embodies features of a novel kind from any of the provisions of this Convention the application of which might seriously impede research into the development of such features and their incorporation in ships engaged on international voyages. Any such ship shall, however, comply with safety requirements, which, in the opinion of that Administration, are adequate for the service for which it is intended and are such as to ensure the overall safety of the ship and which are acceptable to the Governments of the States to be visited by the ship.

Because seasteads embody "features of a novel kind," the research and development of which application of LL 66/88 might seriously impede, they qualify for this exemption.

Article 6(4) provides an exemption for a vessel "not normally engaged on international voyages but which, in exceptional circumstances, is required to undertake a single international voyage ... provided that it complies with safety requirements which, in the opinion of that Administration, are adequate for the voyage which is to be undertaken by the ship." Nearly identical language appears in SOLAS Reg. 4(a), discussed above. The [US Coast Guard explains](#) (p. 17-4) that the category of vessels thereby exempted from LL 66/88 includes

drydocks, piers, accommodation and detention facilities, floating restaurants and museums, and other floating structures designated as "substantially a land structure." As long as they are in this status, they are not subject to load line regulations. On occasions when they need to be moved from one port to another on a transit outside the Boundary Line, a single-voyage load line exemption certificate may be appropriate (especially if the structure is being relocated to a foreign port).

In conclusion, **seasteads will not fall within the scope of LL 66/88 if they remain under 24**

**meters long** at the waterline, *per* article 5(1)(b), **and even then would probably qualify for exemptions** available for novel features under research and development, article 6(2), or for ships making only a single international voyage, article 6(4).

## 2.4. [STCW 78](#)

**International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978, as amended and including [2010 amendments](#)** (Note that those exist as separate documents; both must be consulted)

STCW 78 defines minimum qualifications for masters, officers, and watch personnel serving on most seagoing ships. Article III limits the convention’s application “to seafarers serving on board seagoing ships” to the exclusion of “(c) pleasure yachts not engaged in trade.” For arguments about the meaning of that phrase, see the discussion of the same terms as used in SOLAS 74/88, ch. I, reg. 3(v). What is a “seagoing ship”? STCW 78 Art. II(g) defines it as “a ship other than those which navigate exclusively in inland waters or in waters within, or closely adjacent to, sheltered waters or areas where port regulations apply,” thus rendering the convention inapplicable to seasteads that stay within waters closely adjacent to sheltered waters or regulated ports. For arguments about the meaning of that phrase, see the discussion of the same terms used in ILO MLC Art. III(1)(i), below. Note that a vessel need not go on an “international voyage” under SOLAS and MARPOL to qualify as “seagoing” under the two labor-related conventions.

So far as entirely avoiding the scope of STCW 78, therefore, seasteads will have to rely on either not qualifying as *seagoing* or as qualifying as *pleasure yachts not engaged in trade*. The former criterion, seasteaders can choose to satisfy or not; the latter criterion remains subject to argument and, ultimately, the discretion of flagging authorities. Seasteads would do well to avoid STCW 78 by one means or another, however. The exact effect that STCW 78 would have on seasteads remains uncertain, but would likely prove burdensome.

The Convention does not itself set manning levels; IMO provisions in this area are covered by SOLAS 74/88, ch. V, reg. 14, backed up by [IMO Resolution A.1047\(27\), Principles of Minimum Safe Manning](#) (2011). The regulation calls for “measures for the purpose of ensuring that, from the point of view of safety of life at sea, all ships shall be sufficiently and efficiently manned.” The resolution provides detailed factors to consider in defining those measures. As noted in the discussion of SOLAS 74/88, seasteads might well qualify for exemptions from the full force of that chapter’s rules on navigational safety, though the proper scope of those exemptions remains as yet subject to further deliberation.

Similarly, ILO MLC reg. 2.7(1) provides, “Each Member shall require that all ships that fly its flag have a sufficient number of seafarers employed on board to ensure that ships are operated safely, efficiently and with due regard to security under all conditions, taking into account concerns about seafarer fatigue and the particular nature and conditions of the voyage.” Though the reach of ILO MLC is not as easy to avoid, its manning requirements go no further than that rather general standard. In effect, if ILO MLC applies to a seastead, it will have to have some adequate number of seafarers on board, the qualifications of which STCW 78 would define.

Seasteads might win some relief from STCW 78 by taking only “near-coastal voyages” and by staying under 500 gross tonnage in size. The convention does not define the former term, saying only, “Near-coastal voyages means voyages in the vicinity of a Party as defined by that Party,” reg. II/i (1.13). Presumably, a seastead anchored in inland waters would qualify; perhaps also one anchored or dynamically positioned in territorial waters offshore. The 500 gross tonnage limitation would still allow for seasteads of considerable size; by way of reference, the sellers of [this vessel](#) assign it a gross tonnage of 496.

Both factors come into play in STCW 78 regulation II/3, which requires that any officer in charge of a navigational watch or master on a “seagoing ship of less than 500 gross tonnage engaged on near-coastal voyages shall hold an appropriate certificate,” reg. II/3 (3), (5). The flexibility suggested by “appropriate” stands in contrast to other provisions in the regulation requiring specified and presumably more stringent certifications for those serving on larger ships or those on non-near-coast voyages. Also, reg. II/3 (7) offers a separate catch-all exemption from which seasteads might benefit:

The Administration, if it considers that a ship’s size and the conditions of its voyage are such as to render the application of the full requirements of this regulation and section A-II/3 of the STCW Code unreasonable or impracticable, may to that extent exempt the master and the officer in charge of a navigational watch on such a ship or class of ships from some of the requirements, bearing in mind the safety of all ships which may be operating in the same waters.

In conclusion, **to entirely avoid the reach of STCW 78, seasteads will have to qualify under the convention as either not “seagoing ships” or as “pleasure yachts not engaged in trade.”** To the extent that STCW 78 does reach seasteads, it will require them to hire seafarers having certain qualifications and to satisfy accompanying administrative obligations. The extent to which the convention applies to seasteads remains unclear, however; that is a matter for resolution of SOLAS 74/88, ch. V, reg. 14. Because SOLAS 74/88 does not mandate *any* seafarers on fixed seasteads, it gives no grounds to invoke STCW 78 to those. However, because it provides separate grounds for requiring a certain number of seafarers, ILO MLC reg. 2.7(1) would likely require seasteads fixed in waters beyond those closely adjacent to sheltered or port-regulated waters (i.e., waters where the ILO MLC applies) to satisfy the requirements of STWC 78. Unfixed seasteads, such as those that voyage by controlled drifting or dynamic positioning, cannot resort to that out. **Seasteads can reduce their exposure to mandates of STCW 78 by taking only near-coastal voyages and not exceeding 500 gross tonnage**, but the scope of the reduction thereby afforded remains subject to further determination.

## 2.5. [ILO MLC](#)

### **ILO Maritime Labour Convention, 2006**

As its name suggests, the ILO MLC establishes a labor code for international seafarers. It reaches broadly in terms both of vessels and persons within its scope. Unlike SOLAS 74/88, LL 66/88, and STCW 78, the convention makes no exception for pleasure yachts. ILO MLC Art. III(1)(i) defines as a “ship” subject to the convention, “a ship other than one which navigates

exclusively in inland waters or waters within, or closely adjacent to, sheltered waters or areas where port regulations apply.” The same language appears in STCW 78 Art. II(g). That definition excludes from the scope of the ILO MLC seasteading vessels that do not venture beyond waters closely adjacent to sheltered or port-regulated ones. The definition of ILO MLC’s reach does not obviously exclude non-navigating maritime vessels--i.e., seasteads--floating in waters other than those within or closely adjacent to sheltered waters or areas under port regulations.

The convention does not further define those geographic limits, a gap that has occasioned some debate. The ILO’s Labour Standards Department has weighed in with [a non-binding opinion](#) in the matter, which in recognition of varying opinions and local conditions, largely defers to the good faith determination of each member state. That opinion does not appear to address the scope of “where port regulations apply” in Art. III(1)(i). Various national laws would, where applicable, presumably control the question. In their absence, the [Convention and Statute on the International Régime of Maritime Ports](#), though not especially widely adopted, would likely prove influential. It provides, “All ports which are normally frequented by sea-going vessels and used for foreign trade shall be deemed to be maritime ports,” a definition that might illuminate the scope of “where port regulations apply” in ILO MLC Art. III(1)(i).

Other provisions of the ILO MLC continue the theme of reaching broadly and discouraging member countries from providing otherwise. Art. III(4) provides, “Except as expressly provided otherwise, this Convention applies to all ships, whether publicly or privately owned, ordinarily engaged in commercial activities,” subject to limitations inapplicable to seasteads. Art. III(5) says that in cases of doubt over whether a ship falls within the scope of convention, “the question shall be determined by the competent authority in each Member after consultation with the shipowners’ and seafarers’ organizations concerned.” Unilateral self-exemptions are evidently not allowed. Similarly, Art. III(6) provides, “Where the competent authority determines that it would not be reasonable or practicable at the present time to apply certain details of the” conventions regulations to a ship, “Such a determination may only be made in consultation with the shipowners’ and seafarers’ organizations concerned and may only be made with respect to ships of less than 200 gross tonnage not engaged in international voyages.” **Seasteads not closely adjacent to sheltered waters or waters under port regulation should thus not expect to escape the ILO MLC easily, and then only they have less than 200 gross tonnage.**

The ILO MLC also speaks broadly in terms of the parties it covers. Article III(1)(f) defines as a “seafarer” subject to the convention “any person who is employed or engaged or works in any capacity on board a ship to which this Convention applies.” That provision was evidently written on the assumption that the only parties working *on* a ship would be those working *for* it, an approach reflected in the many detailed provisions designed to ensure that safe and fair treatment of seafarers exposed to the vicissitudes of maritime labor. ILO MLC did not evidently foresee the possibility that, as on a seastead, people might work in roles indistinguishable from those they might just as well fill on land. Under Art. III(1)(f), therefore, every person “who is employed or engaged or works in any capacity on board a” seastead appears to fall within the literal scope of the ILO MLC’s labor regulations.

How much should that trouble seasteaders? The answer remains for now unclear. The ILO MLC does not appear likely to hinder the flagging of seasteads, as it does not evidently require

that they incorporate any particular design features. As soon as seasteaders start working on board their vessels, however—even if only as digital nomads who seldom leave their couches--the convention might apply. They could then avoid it only by staying close to the sheltered waters of a port or, more problematically, winning special treatment, after consultation with seafarers' organizations, for seasteads of less than 200 gross tonnage.

The ILO MLC imposes many regulations in the effort to ensure the safe and fair treatment of seafarers. Whether or not those would prove unduly burdensome to seasteaders remains to be seen. It might turn out that, in some countries, the laws regulating maritime labor prove easier to satisfy than those regulating labor generally. Assuming that the maritime labor laws preempt the otherwise applicable ones, that might have a net deregulatory effect. That remains mere speculation for the present, however, and perhaps unduly optimistic speculation at that. In conclusion, therefore, **of all the conventions here reviewed, the ILO MLC appears to impose the largest and vaguest threat to regulating seasteads.**

## 2.6. [CLC/Fund 92](#)

### **International Convention on Civil Liability for Oil Pollution Damage, 1992, and the International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage, 1992, including 1992 Protocols**

CLC/Fund 92 governs the liability of shipowners for oil pollution by compelling the purchase of liability insurance and imposing strict liability for wrongful spills. Shipowners can typically limit liability to specified amounts, varied according to ship tonnage, by complying with applicable conventions. CLC/Fund 92 also establishes a fund, contributed to by persons in member states who receive oil by sea, for paying unsatisfied damages for maritime oil pollution.

CLC/Fund92 Art. I(1) provides that “ship” for its purposes “means any sea-going vessel and seaborne craft of any type whatsoever constructed or adapted for the carriage of oil in bulk as cargo,” a definition that puts seasteads outside of its scope. Granted, one can imagine a seastead carrying oil for various purposes, but in bulk? And as cargo conveyed from point to point? No and no. **CLC/Fund92 is not applicable to seasteads.**

### 3.0 Conclusion

When a sovereign issues a flag to a maritime vessel, it does so under the limits of any international maritime conventions to which it has agreed. Five of the six most widely adopted conventions might apply to seasteads, limiting their designs and imposing delays, red tape, and other costs. Seasteaders can avoid most of those burdens by sticking to designs that do not voyage but rather stay in or close to sheltered waters, are less than 12 meters long, below 400 gross tonnage, and certified to carry less than 15 persons. Voyaging or larger seasteads, which fall within the scope of some conventions, might qualify for exemptions.

Seasteaders should worry most about the anti-pollution regulations in MARPOL 73/78, Annexes V (garbage) & VI (air), and about the labor regulations in ILO MLC, because those conventions present the most powerful combinations of applicability and likely effect. Table 2 summarizes, using green, yellow, and red highlighting to signify outcomes for seasteading that rank good, moderate, and bad, respectively (as always herein, speaking only in terms of regulatory burdens):

Convention (and subject)	Fixed Seastead	Drifting	Mechanically Propelled
<b>SOLAS 74/88</b> (safety of internationally voyaging ships)	Inapplicable	Inapplicable if <i>pleasure yacht not engaged in trade</i> else broad exemptions likely	Inapplicable if <i>pleasure yacht not engaged in trade</i> else broad exemptions likely
<b>MARPOL 73/78 - Annex I</b> (oil pollution)	Applicable but exemption likely	Applicable but exemption likely	Applicable but exemption likely
<b>MARPOL 73/78 - Annex II</b> (noxious bulk liquids)	Inapplicable	Inapplicable	Inapplicable
<b>MARPOL 73/78 - Annex III</b> (packaged harmful substances)	Unlikely to apply	Unlikely to apply	Unlikely to apply
<b>MARPOL 73/78 - Annex IV</b> (sewage pollution)	Inapplicable	Applicable if internationally voyaging and gross tonnage 400+ or person-certified 15+	Applicable if internationally voyaging and gross tonnage 400+ or person-certified 15+
<b>MARPOL 73/78 - Annex V</b> (garbage pollution)	Applicable; red tape if length 12m+, gross tonnage 400+, or person-certification 15+	Applicable; red tape if length 12m+, gross tonnage 400+, or person-certification 15+	Applicable; red tape if length 12m+, gross tonnage 400+, or person-certification 15+
<b>MARPOL 73/78 - Annex VI</b> (air pollution)	Applicable	Applicable	Applicable
<b>LL 66/88</b> (load lines)	Inapplicable if <i>pleasure yacht not engaged in trade</i> or <24m long, else exemptions likely	Inapplicable if <i>pleasure yacht not engaged in trade</i> or <24m long, else exemptions likely	Inapplicable if <i>pleasure yacht not engaged in trade</i> or <24m long, else exemptions likely
<b>STCW 78</b> (seafarer certification)	Inapplicable if not <i>seagoing</i> , if <i>pleasure yacht not engaged in trade</i> , or (if ILO MLC applies), if stay closely adjacent to sheltered or port-regulated waters	Inapplicable if not <i>seagoing</i> or if <i>pleasure yacht not engaged in trade</i> ; reduced burdens if take only near-coastal voyages and < 500 gross tonnage	Inapplicable if not <i>seagoing</i> or if <i>pleasure yacht not engaged in trade</i> ; reduced burdens if take only near-coastal voyages and < 500 gross tonnage
<b>ILO MLC</b> (labor code)	Inapplicable if stay closely adjacent to sheltered or port-regulated waters; exemptions possible if <200 gross tonnage	Inapplicable if stay closely adjacent to sheltered or port-regulated waters; exemptions possible if <200 gross tonnage	Inapplicable if stay closely adjacent to sheltered or port-regulated waters; exemptions possible if <200 gross tonnage
<b>CLC/Fund 92</b>	Inapplicable	Inapplicable	Inapplicable

**Table 2: Maritime Conventions' Application to and Effects on Various Seasteads**

The International Chamber of Shipping regularly surveys which countries have ratified which conventions. Its [most recent report](#) indicates which countries have not ratified MARPOL 73/78 Annex V & VI (the analysis does not break out the two Annexes) and which have not ratified ILO MLC. Table 3, below, lists those countries in two columns, adding a third to indicate which countries have not ratified either convention:

<b>Countries that have not ratified MARPOL 73/78 - Annexes V &amp; VI (pollution)</b>	<b>Countries that have not ratified ILO MLC (labor)</b>	<b>Countries that have not ratified MARPOL 73/78 - Annexes V &amp; VI or ILO MLC</b>
Albania	Bahrain	Bahrain
Algeria	Bolivia	Bolivia
Argentina	Brazil	Colombia
Bahrain	Colombia	Comoros
Bolivia	Comoros	Cook Islands
Colombia	Cook Islands	Costa Rica
Comoros	Costa Rica	Cote d'Ivoire
Cook Islands	Cote d'Ivoire	Cuba
Costa Rica	Cuba	Dem. People's Rep. Korea
Cote d'Ivoire	Dem. People's Rep. Korea	Dominica
Cuba	Dem. Rep. of the Congo	Egypt
Dem. People's Rep. Korea	Dominica	Georgia, Rep. of
Dem. Rep. of the Congo	Egypt	Iceland
Dominica	Georgia, Rep. of	Israel
Egypt	Iceland	Lebanon
Georgia, Rep. of	Israel	Libya
Iceland	Kuwait	Mexico
Israel	Lebanon	Pakistan
Lebanon	Libya	Papua New Guinea
Libya	Mexico	Qatar
Mauritius	Pakistan	Republic of Moldova
Mexico	Papua New Guinea	Tanzania
Myanmar	Qatar	United States of America
New Zealand	Republic of Moldova	Venezuela
Pakistan	Sao Tome & Principe	

Papua New Guinea	Saudi Arabia	
Qatar	Sierra Leone	
Republic of Moldova	Syrian Arab Republic	
Sri Lanka	Tanzania	
Tanzania	Tonga	
Thailand	Trinidad & Tobago	
Togo	Turkey	
United States of America	Ukraine	
Venezuela	United Arab Emirates	
	United States of America	
	Uruguay	
	Vanuatu	

**Table 3: Non-Ratifiers of MARPOL 73/78 - Annexes V & VI and ILO MLC**

Seasteaders will of course want to take other factors into account when they choose flags for their vessels. The reputation of a registry counts for something, and the international community frowns on countries that decline to join major maritime conventions. Notably, however, the United States has refused to ratify MARPOL 73/78 Annex V, MARPOL 73/78 Annex VI, and ILO MLC. It, at least, could hardly criticize seasteaders for choosing a flag that does not demand conformity to those international conventions.

Because those seeking freedom so often suffer mischaracterization by those they would leave, it bears repeating that TSI offers this research not to flout the law, but to respect it. Nobody wants safe, clean, and well-managed seasteads more than the people who will actually live on them. Seasteaders wholeheartedly embrace the same values that inspired the world's major maritime conventions. But they would not be seasteaders if they did not also question whether legacy governments are the best way to uphold those values. This document has charted the scope of the major maritime conventions, laws, and regulations to guide seasteaders on their way to new and better forms of government.