
United States Coast Guard

Office of Navigation Systems



We Help Mariners Get There

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U.S. Coast Guard Headquarters
Washington, DC

**Radio Technical Commission for
Maritime Services Conference**
September 24th, 2012
Orlando, FL

Navigation Regulations....

- ✓ AIS Regulations
- ✓ SOLAS Chp. V Regulations
- ✓ ECDIS/ECS Regulations
- ✓ Inland Navigation Rules

AIS Rulemaking [Changes in **Bold-type**]

- ✓ 10/23/03 - current AIS requirement (33 CFR 164.46)
- ✓ 07/01/03 - 01/09/04 - AIS expansion comment
- ✓ 10/31/05 - Notice expansion of AIS to **all** waters
 - Commercial self-propelled vessels of ≥ 65 feet
 - **No exclusions, all waters**
 - Towing vessels ≥ 26 feet and > 600 hp
 - Vessels with ≥ 50 passengers (vice 150 for hire)
 - **Hi-Speed vessels with ≥ 12 passengers for hire**
 - **Certain dredges & floating plants, &**
 - **Vessel moving certain dangerous cargoes**
- ✓ 12/16/08 – NPRM, 04/15/09 comment deadline
 - ✓ 80+ submitters, 300+ comments re: AIS

| Estimated Expanded AIS Population | |
|--|---------------|
| Ships $\geq 65ft$ | 2,973 |
| Freight Ship | 298 |
| Industrial Ship | 748 |
| MODU | 210 |
| OSV | 553 |
| Research Vessel | 97 |
| School Ship | 19 |
| Tank Ship | 122 |
| Unclassified | 385 |
| Unknown | 541 |
| Fishing $\geq 65ft$ | 5,520 |
| Documented | 4,571 |
| Undocumented (est.) | 949 |
| Towing $\geq 26ft$ & $\geq 600hp$ | 4,560 |
| Passenger | 3,235 |
| $\geq 65ft$ | 2,167 |
| $<65'$ but ≥ 50 pax | 1,062 |
| $>30kts$ & >12 pax for hire | 6 |
| Dredges | 35 |
| Total (U.S.) | 16,323 |
| Foreign Flag $\geq 65ft$ | 1,119 |
| Total (All) | 17,442 |

AIS Comments

- **Undue economic burden**
- **Don't need it...Impractical...I have VMS**
- **Will not help security...all vessel needed**
- **Not here...not needed...exempt my waterway**
- **Exempt tows <1200hp, assist towers, pax <150**
- **Waivers indefinite or >1 year**
- **Extend implementation period >7months**
- **Class B yes...on hi-speed vessels no**

Docket Folder Summary

[E-mail Alerts](#) | [Export](#) BETA

Vessel Requirements for Notices of Arrival and Departure, and Automatic Identification System

Docket ID: USCG-2005-21869 **Agency:** USCG **RIN:** Not Assigned

[+ Show Details](#)

Search Within The Docket Folder

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Document Type

Public Submission (129) Other Supporting & Related Material Notice Rule Proposed Rule

26 Items in the Docket Folder

[View all documents](#) | Results Per Page:

| Title | Document Type | Submitter Name | Organization | ID | Posted Date | View As |
|--|-------------------------------|----------------|--------------|------------------------|-------------|-----------------------|
| Public Meeting--Washington, DC-- Link to Audio Recording, List of Attendees, and Opening Overview Presentation | Supporting & Related Material | | | USCG-2005-21869-0019.1 | 03/16/2009 | PDF |
| January 6, 2006 Letter from Representatives of the U.S.-Flag Maritime Industry Re: Proposed NOAD AIS Regulatory Action | Supporting & Related Material | | | USCG-2005-21869-0023 | 03/17/2009 | CRTXT |



View Rule

[Printer-Friendly Version](#) [Download RIN Data in XML](#)

DHS/USCG

RIN: 1625-AA99

Publication ID: Spring 2011

Title: Vessel Requirements for Notices of Arrival and Departure, and Automatic Identification System

Abstract: This rulemaking proposes to expand the applicability for Notice of Arrival and Departure (NOAD) and Automatic Identification System (AIS) requirements. These expanded requirements would better enable the Coast Guard to correlate vessel AIS data with NOAD data, enhance our ability to identify and track vessels, detect anomalies, improve navigation safety, and heighten our overall maritime domain awareness. The NOAD portion of this rulemaking could expand the applicability of the NOAD regulations by changing the minimum size of vessels covered below the current 300 gross tons, require a notice of departure when a vessel is departing for a foreign port or place, and mandate electronic submission of NOAD notices to the National Vessel Movement Center. The AIS portion of this rulemaking proposes to expand current AIS carriage requirements for the population identified in the Marine Transportation Security Act (MTSA) of 2002.

Agency: Department of Homeland Security(DHS)

Priority: Other Significant

RIN Status: Previously published in the Unified Agenda

Agenda Stage of Rulemaking: Final Rule Stage

Major: No

Unfunded Mandates: No

CFR Citation: [33 CFR 160](#); [33 CFR 161](#); [33 CFR 164](#); [33 CFR 165](#)

Legal Authority: [33 USC 1223](#); [33 USC 1225](#); [33 USC 1231](#); [46 USC 3716](#); [46 USC 8502 and ch 701](#); sec 102 of PL 107-295; EO 1223; ...

Legal Deadline: None

Timetable:

| Action | Date | FR Cite |
|--|------------|-----------------------------|
| NPRM | 12/16/2008 | 73 FR 76295 |
| Notice of Public Meeting | 01/21/2009 | 74 FR 3534 |
| Notice of Second Public Meeting | 03/02/2009 | 74 FR 9071 |
| NPRM Comment Period End | 04/15/2009 | |
| Notice of Second Public Meeting Comment Period End | 04/15/2009 | |
| Final Rule | 12/00/2011 | |

Additional Information: We have indicated in past notices and rulemaking documents, and it remains the case, that we have worked to coordinate implementation of AIS MTSA requirements with the development of our ability to take advantage of AIS data (68 FR 39355-56 and 39370, July 1, 2003). The docket number for this rulemaking is USCG-2005-21869. The docket can be found at www.regulations.gov.

Regulatory Flexibility Analysis Required: Undetermined

Government Levels Affected: None

Small Entities Affected: Businesses

Federalism: No





Office of Information and Regulatory Affairs (OIRA)
Executive Order Submissions Under Review
November 29, 2011

Department of Homeland Security

AGENCY: DHS-OS
TITLE: Guidance for Protecting Responders' Health During the First Week Following a Wide-Area Anthrax Attack.
STAGE: Notice
RECEIVED DATE: [03/08/2011](#)
RIN: [1601-ZA10](#)
ECONOMICALLY SIGNIFICANT: No
LEGAL DEADLINE: None

AGENCY: DHS-USCIS
TITLE: Waiver Processing
STAGE: Notice
RECEIVED DATE: [11/17/2011](#)
RIN: [1615-ZB10](#)
ECONOMICALLY SIGNIFICANT: No
LEGAL DEADLINE: None

AGENCY: DHS-USCG
TITLE: Revision to Transportation Worker Identification Credential (TWIC) Requirements for Mariners
STAGE: Prerule
RECEIVED DATE: [10/14/2011](#)
RIN: [1625-AB80](#)
ECONOMICALLY SIGNIFICANT: No
LEGAL DEADLINE: None

AGENCY: DHS-USCG
TITLE: Standards for Living Organisms in Ships' Ballast Water Discharged in U.S. Waters
STAGE: Interim Final Rule
RECEIVED DATE: [11/11/2011](#)
RIN: [1625-AA32](#)
ECONOMICALLY SIGNIFICANT: Yes
LEGAL DEADLINE: None

- Rules must be reviewed by OMB/OIRA before publication
- AIS rule has yet to be reviewed
- Review usually takes less < 90 days





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AIS

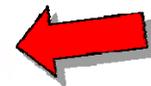
- AIS Overview - What is AIS?
- How AIS Works
- What AIS Broadcasts
- AIS Messages
- Types of AIS
- AIS Carriage Requirements
- AIS References
- AIS Notices
- AIS Frequently Asked Questions
- Ask a Question or Report an AIS Problem

Primary Mission Areas:

- Global Positioning System
- Differential GPS
- Nationwide DGPS
- LORAN C
- Inland River Vessel Movement Center
- Civil GPS Service Interface Committee
- Automatic Identification System

FREQUENTLY ASKED QUESTIONS

1. What is AIS?
2. How do I program my AIS?
3. What is the AIS rule and are there alternatives to the rule for small businesses?
4. How much does an AIS cost?
5. How does AIS help to increase security?
6. When must AIS be in operation?
7. Does the installation of the AIS require additional equipment in order for the AIS to operate properly?
8. Will it be necessary to have electronic navigational charts for use with the AIS?
9. If a fishing vessel has a Vessel Monitoring System (VMS), is that an acceptable substitute for the AIS?
10. Why have some AIS units stopped broadcasting valid position reports?
11. Why am I unable to see an AIS vessels' name or other static information (dimensions, call sign, etc.)?
12. Why do I sometimes see more than one vessel with the same MMSI or vessel name (i.e. NAUT)?
13. I just purchased and installed an AIS Class B, will AIS Class A user 'see' me?
14. Do AIS Class B devices meet current USCG AIS carriage requirements?
15. Is the USCG considering expanding AIS carriage to other vessels or outside of VTS areas?
16. How can I get a copy of an AIS presentation I saw (or heard about it) that was given at...
17. Where can I get AIS data?
18. What is a MMSI and where can I get one for my AIS?



1. What is AIS? Per 47 CFR §80.5, AIS is a maritime navigation safety communications system standardized by the International Telecommunication Union (ITU) and adopted by the International Maritime Organization (IMO) that provides vessel information.



Homeland Security





Noteworthy Amendments to U.S. Automatic Identification System (AIS) Regulations

visit www.regulations.gov to view the entire proposal & comment on this rulemaking - USCG-2005-21869

| Cite | Current Requirement | Significant Changes (Source: 73 FR 78295) |
|---------------------|---|---|
| 33 CFR 164.46(a)(1) | Per SOLAS Regulation V/19.2.4, all tankers, passenger vessels >150 gross tonnage, and, other vessels >300 gross tonnage, on international voyage. | Unchanged, but, adds domestic vessels >500 gross tonnage, regardless of voyage. |
| 33 CFR 164.46(a)(1) | Self-propelled commercial vessels >65 ft on international voyage except those in innocent passage or fishing boats & small passenger vessels (<149 passengers for hire). | Unchanged |
| 33 CFR 164.46(a)(2) | The following vessels while navigating a Vessel Traffic Service areas denoted in 33 CFR 161.12(c) must have a type-certified Class A AIS: | Expanded to all U.S. navigable waters & requires a 'properly installed, operational' USCG type-approved Class A or Class B (with caveats) AIS. |
| | <ul style="list-style-type: none"> Commercial towing vessels >26 ft & >600 hp, | Unchanged |
| | <ul style="list-style-type: none"> Self-propelled commercial vessels >65 ft except fishing boats & small passenger vessels (<149 passengers), and, | Revokes the exception for fishing boats & small passenger vessels. |
| | <ul style="list-style-type: none"> Passenger vessels certified to carry >150 passengers for hire. | Expanded to commercial vessels carrying >50 passengers; or >12 passengers for hire in excess of 30 knots. |
| 33 CFR 164.46(b) | <p>Cites & makes applicable Vessel Bridge-to-Bridge Radiotelephone requirements regarding:</p> <ul style="list-style-type: none"> - use by master or pilot (33 CFR §26.05), - English communication (33 CFR §26.07), - frequencies (33 CFR §26.04(a)), and, - maintaining unit in "effective operating condition" (33 CFR §26.06); and, - includes the accurate input & upkeep of AIS data fields. | <p>Spells out that 'effective operating conditions' includes the:</p> <ul style="list-style-type: none"> - ability to reinitialize the AIS (i.e. knowledge of system password), - ability to access AIS information from conning position, - accurate broadcast of an official MMSI, - accurate input & upkeep of all AIS data fields including 'system updates', and, - continual operation of AIS & its associated devices when underway, at anchor, or moored in or near a channel/fairway; except when its use would compromise safety or security (which must be logged & reported to the USCG). <ul style="list-style-type: none"> • AIS text messaging must be conducted in English & solely to exchange or communicate navigation safety information. • AIS is primarily intended for use of the master or person directing the movement of the vessel, who must maintain a periodic watch for AIS information. • Spells out that use of AIS does not relieve the vessel of Navigation Rules duties regarding sound, lights or shapes nor Bridge-to-Bridge radiotelephone requirements. |
| 33 CFR 164.46(c) | Portable AIS are permissible, as long as only one is used for transmitting & it does not affect the proper function of on board navigation & communication equipment. | Unchanged |
| 33 CFR 164.46(d) | AIS Pilot Plug required on vessel over 1,600 gross tons, on international voyage; easily accessible at the conning position & near an AC outlet. | Expanded to include any vessel subject to pilotage (regardless of tonnage) & limits the distance between it & an AC power outlet to no more than 3 feet. |
| 33 CFR 164.55 | Owners of AIS equipped vessels may request a yearly deviation from these rules as set forth in 33 CFR 164.55. | Deviations permissible, but, only on those vessels that operate solely within a very confined area (e.g., less than a one nautical-mile radius, shipyard, fleeting area), or on short & fixed schedules (e.g., a bank-to-bank river ferry service), or that otherwise are not likely to encounter another AIS user. |



SOLAS Navigation Regulations...

- **SOLAS Chp. V changes took effect 2000**
 - **Mandates AIS**
 - **Mandates that all navigation equipment be type-certified**
 - **Defines ‘nautical chart’ as a database**
 - **Makes ECDIS permissible**
 - **Rulemaking in development, economical analysis be conducted**



Electronic Charting...

- **SOLAS Chp. V changes took effect 2000**
 - **ECDIS permissible**
- **CG&MT of 2002 mandates ECS in US**
 - **Should be integrated AIS**
- **IMO mandates ECDIS**
 - **Phased implementation 2012 - 2018**

Electronic Charting Challenges...

- **Which, who, where?**
 - **What standard should we adopt?**
 - **Should it exactly mirror AIS population?**
- **Access to AIS / AIS Portrayal**
 - **IMO radar require display of AIS**
 - **RTCM radar & ECDIS/ECS don't**
- **Application Specific Messages (ASM)**
 - **Do we require their portrayal & use**
 - **Do we wait for IMO requirement/adoption?**



IEC 62376

Edition 1.0 2010-09

INTERNATIONAL STANDARD

**Maritime navigation and radiocommunication equipment and systems –
Electronic chart system (ECS) – Operational and performance requirements,
methods of testing and required test results**



**Homeland
Security**



RTCM 10900.5
RTCM Paper 163-2011-SC109-STD



RTCM STANDARD 10900.5
FOR
ELECTRONIC CHART SYSTEMS
(ECS)

DEVELOPED BY
RTCM SPECIAL COMMITTEE NO. 109

July 15, 2011

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Web Site: <http://www.rtcmm.org>

RTCM Electronic Chart System Standard (10900.5)

3 Classes:

A – SOLAS Back-up

B – ECDIS-lite

C – ECS Viewers

.5 Includes some VDR capability

.6 will address: AIS integration

-AIS Application Specific Messaging

-Remote MKD



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DEPARTMENT OF HOMELAND SECURITY

Coast Guard

33 CFR Parts 83, 84, 85, 86, 87, and 88

[Docket No. USCG–2012–0102]

RIN 1625–AB88

Changes to the Inland Navigation Rules

AGENCY: Coast Guard, DHS.

ACTION: Notice of proposed rulemaking.

SUMMARY: The Coast Guard proposes to amend the inland navigation rules and their annexes in 33 CFR parts 83 through 88 to align the regulations with amendments made by the International Maritime Organization to the Convention on the International Regulations for Preventing Collisions at Sea, to which the United States is a signatory, and to incorporate recommendations made by the Navigation Safety Advisory Council. These changes would harmonize domestic and international law by reducing and alleviating equipment requirements on vessels, addressing technological advancements, such as wing-in-ground craft, and increasing public awareness of the inland navigation rules. The changes would also make references to applicable

SUPPLEMENTARY INFORMATION section below for instructions on submitting comments.

FOR FURTHER INFORMATION CONTACT: If you have questions on this proposed rule, call or email LCDR Megan L Cull, Coast Guard; telephone 202–372–1565, email megan.l.cull@uscg.mil. If you have questions on viewing or submitting material to the docket, call Renee V. Wright, Program Manager, Docket Operations, telephone 202–366–9826.

SUPPLEMENTARY INFORMATION:

Table of Contents for Preamble

- I. Public Participation and Request for Comments
 - A. Submitting Comments
 - B. Viewing Comments and Documents
 - C. Privacy Act
 - D. Public Meeting
- II. Abbreviations
- III. Basis and Purpose
- IV. Background
- V. Discussion of Proposed Rule
 - A. Preemption of State and Local Law Language Added to the Application Section at 33 CFR 83.01(a)
 - B. All Provisions of 33 CFR Part 85, Annex II, and 33 CFR Part 88, Annex V, Would Be Moved Into the Main Body of 33 CFR Part 83
 - C. COLREGS Amendment Language and Terms Would Be Aligned With International Rules at 33 CFR Part 83
 - D. NAVSAC Recommended Changes
 - E. “Exhibit an All-Round White Light” Would Be Added to 33 CFR 83.25

A. Submitting Comments

If you submit a comment, please include the docket number for this rulemaking (USCG–2012–0102), indicate the specific document to which it applies, and provide a suggestion or recommendation. You may submit your comments material online or by hand delivery, but please use these means. We will include your name and address, an email address, and a telephone number in the body of the letter, so that we can contact you if we have questions regarding your submission.

To submit your comment online, go to <http://www.regulations.gov>, click on the “submit a comment” box, which will then become highlighted in blue. In the “Document Type” drop down menu select “Proposed Rule” and insert “USCG–2012–0102” in the “Keyword” box. Click “Search” then click on the balloon shape in the “Actions” column. If you submit your comments by mail or hand delivery, submit them in an unbound format, no larger than 8½ by 11 inches, suitable for copying and electronic filing. If you submit comments by mail and would like to know that they reached the Facility, please enclose a stamped, self-addressed postcard or envelope.

We will consider all comments and

Changes to Inland Navigation Rules



Contact Us via NAVCEN

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***** UPDATED 6-6-2011: Warning for Fukushima, Japan ***** In response to the situation at the Fukushima Nuclear Power Plant in Japan, the U.S. Coast Guard recommends, as a precaution, that vessels avoid transiting within 20 kilometers/10.8 nautical miles of the Fukushima Nuclear Power Plant (37°25.5'N, 141°02.0'E)...[read the entire notice.](#)

Automatic Identification System (AIS)

- What is AIS?
- How AIS Works
- Types of AIS
- AIS Messages
 - Class A Position Report
 - Class A Static & Voyage Data
 - Class B Reports
- Nationwide AIS (NAIS)
- Carriage Requirements
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- Frequently Asked Questions

Primary Mission Areas:

- Global Positioning System
- Differential GPS
- Nationwide DGPS
- Long Range Identification and Tracking
- Civil GPS Service Interface Committee
- Automatic Identification System
- Nationwide AIS (NAIS)
- Electronic Navigation & Charting
- Maritime Telecommunications
- LORAN C (archive)

Services & Reporting:

- Receive Free LNM Updates
- Receive Free GPS Status Messages

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To report a system outage, discrepancy or problem, go here: [ATON, GPS, DGPS, NAIS, LRIT](#)
For our Frequently Asked Questions (FAQs) go here: [AIS, GPS, DGPS, LRIT, NavRules](#)
For other inquires visit these external links or use the submission form that follows:

- Recreational Boating Safety (regulations, alerts, recalls, links, and more...)
- Coast Guard Academy, recruiting, lighthouses, or history
- The National Pollution Funds Center
- Other USCG Centers of Excellence: [Vessel Documentation](#), [Vessel Movement](#), [Marine Safety](#)

| | |
|-----------------|---|
| Subject * | AIS |
| Category * | Please select category ==> |
| Name * | Please select category ==> |
| Phone Number * | AIS Aids to Navigation |
| Email Address * | AIS Class A Device |
| | AIS Class B Device |
| | AIS Display |
| | AIS Pilot Plug |
| | AIS Reception/Transmission |
| | AIS Search & Rescue Transmitter |
| | Application Specific Messages |
| | Comment/suggestion - no reply requested |
| | Comment/suggestion - reply requested |
| | Enforcement |
| | Installation, Set-up or Programming |
| | Integration (to other equipment) |
| | Purchasing |
| | Standards |
| | Other |

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United States Coast Guard

Office of Navigation Systems



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