

Automatic Identification Systems (AIS) Licence Application form (OfW450)

Please use this application form for AIS only.

If you provide false or insufficient information you may invalidate your application and any licence issued may subsequently be revoked.

If you have any questions about your application please contact: The Amateur and Maritime Team on 020 7981 3131.

- Remember to sign the Declaration
- Keep a copy of the completed application form
- Allow up to 60 days, at least, for the issue of your licence
- Failure to complete the form fully or provide any additional information requested may result in the form having to be returned which will delay the processing of your application

Wireless Telegraphy Act

The Office of Communications (Ofcom) is responsible for the use of the civil radio spectrum in the United Kingdom. Regulation is necessary so that all those who wish to use radio can do so without their transmissions being subjected to interference.

The regulations governing maritime radio are, in general, derived from the International Telecommunication Union (ITU) Radio Regulations, the relevant EU Directives and the Wireless Telegraphy Act 2006, The Wireless Telegraphy Act makes it an offence to install or use radio transmission equipment without a valid licence.

Merchant Shipping Act

Where the equipment involved is to be used as an Aid to Navigation the Merchant Shipping Act 1995 (Part VIII) and the General Lighthouse Authorities (Beacons: Automatic Identification System) Order 2006 apply.

Frequencies

The use of frequencies allocated to AIS services is agreed on a world-wide basis by the International Telecommunication Union (ITU) of which the UK is a member.

The channels allocated for AIS are: AIS 1 (161.975MHz), AIS 2 (162.025MHz), and VHF channel 70 (156.525MHz).

Automatic Identification System (AIS)

The Automatic Identification System (AIS) is a broadcast transponder system operating in the VHF maritime mobile band. AIS transponder equipment is used on ships and aids to navigation (AtoNs), by Vessel Traffic Services (VTS) and by Maritime Competent Authorities.

Apart from the Class A transponder equipment, which allows fitted vessels to automatically broadcast positional and other navigational information to other ships and to shore, there are a number of different AIS transponder equipment types, which include:

- Base Stations: This transponder equipment is used in shore-side infrastructure by Vessel Traffic Services and Maritime Competent Authorities, and allows them to monitor AIS-fitted vessel movements, to communicate with all AIS transponder equipment types, and if suitably authorised, to perform management functions upon the AIS VHF Data Link (VDL).
- Aids to Navigation (AtoNs): This transponder equipment can be located on shore, such as in a lighthouse, or on the water, such as on platforms or buoys. It allows the transmission of aids to navigation positions to ships and to shore, as well as certain additional information such as the nature and status of the AtoN.

This licence application form only covers applications for installations of AIS Base Station and AIS Aids to Navigation (AtoN) equipment only.

AIS as an Aid to Navigation

Whilst the physical transponder equipment referred to above can be classed as a "Real AtoN", the ability to broadcast navigation aid positions has also created the concepts of "Synthetic AtoNs" and "Virtual AtoNs":

The term "Synthetic AtoN" relates to an AIS transmission which describes the position of a physical marker (such as a buoy), but the signal itself originates from transponder equipment located elsewhere (such as an AIS base station). For example, a base station might broadcast the position of ten floating channel markers, each of which is too small to contain their own transponder equipment.

The term "Virtual AtoN" relates to AIS transmissions that indicate a marker which does not exist, or a concern which is not visible (i.e. submerged rocks, or a wrecked ship). Again, these transmissions would originate from transponder equipment located elsewhere. Although such virtual aids would only be visible to AIS equipped ships, the low cost of maintaining them could lead to their usage when physical markers are unavailable.

Applicants are to be advised that upon the successful granting of a licence for an AIS AtoN, that they may also be required to provide periodic reports to the UK GLA's on the working availability of the aid to navigation.

Types of AIS Service

There are a number of permutations of AIS service that may be considered within the terms of this licence application form. These are:

- Base Station, transmitting own position: Application for the operation of a base station transponder.
- Base Station, transmitting AtoN for own position ("Real AtoN"): Application for the operation of a base station transponder, which is also to act as an aid to navigation.
- Base Station, transmitting AtoN for another position ("Synthetic AtoN"): Application for the operation of a base station transponder, which is also to transmit aid to navigation information relating to other physical marker(s).
- Base Station, transmitting AtoN for another position ("Virtual AtoN"): Application for the operation of a base station transponder, which is also to transmit aid to navigation information relating to marker(s) which do not exist physically.
- Base Station, reserving timeslots for AtoNs: Application for the operation
 of a base station transponder, which is also to reserve timeslots for real aid(s)
 to navigation.
- **Real AtoN, transmitting own position:** Application for the operation of an aid to navigation transponder.
- Real AtoN, transmitting AtoN for another position ("Synthetic AtoN"): Application for the operation of an aid to navigation transponder, which is also to transmit aid to navigation information relating to other physical marker(s).
- Real AtoN, transmitting AtoN for another position ("Virtual AtoN"): Application for the operation of an aid to navigation transponder, which is also to transmit aid to navigation information relating to marker(s) which do not exist physically.
- **Synthetic AtoN:** Application for the addition of a synthetic aid to navigation to an existing licence.
- **Virtual AtoN:** Application for the addition of a virtual aid to navigation to an existing licence.

European Radio Equipment and Telecommunications Terminal Equipment (R&TTE) Directive (99/5/EC)

Since 8 April 2000, all new marine radio and radar equipment that does not bear the Wheel Mark (i.e. equipment subject to the Marine Equipment Directive MED (96/98/EC) as amended) has had to comply with the R&TTE Directive before being placed on the market. Such equipment may be licensed for use in the UK, as long as it meets the relevant UK Radio Interface Requirement (IR).

Such equipment must bear the CE mark, the identification number of a notified body (where one has been consulted by the manufacturer as part of the conformity assessment procedure), and where appropriate, the "Alert Symbol" (which signifies that there may be restrictions or that this equipment may not necessarily be put into service in all EU states).

Antenna Siting

Shared masts with multiple antennas are commonly used. However, this may cause inter-modulation interference problems between different users of the mast.

In the event of such a problem we will not accept responsibility for such interference nor for costs incurred in vacating a mast. Please bear this in mind when deciding on your antenna location. Erection of an antenna may require planning permission. Contact your local Council.

Write clearly in black ink, using CAPITAL LETTERS

SECTION A: SYSTEM DETAILS					
1. Wh	1. What type of AIS service is required?				
				(Please tick one box only)	
Base S	Station	(Ans	swer Question 2 only)		
Real Aid to Navigation (AtoN)		(Answer Question 3 only)			
Synthetic Aid to Navigation (AtoN)		(Ans	swer Question 4 only)		
Virtual	Aid to Navigation (AtoN)	(Ans	swer Question 5 only)		
The sof) th	ve details of the Base Station service can be one of (or a combination of the Base Station). Base Station, transmitting own position		(Please tick b	poxes as appropriate)	
(c)	Base Station, transmitting AtoN for own position ("Real AtoN") Base Station, transmitting AtoN for another position ("Synthetic AtoN")				
(d) (e)	Base Station, transmitting AtoN for another position ("Virtual AtoN" Base Station, reserving timeslots for AtoN's)			
	(Please now go to Section B)				

3. Gi	ve details of the Real Aids to								
Navigation (AtoN) service									
The service can be one of (or a combination of) the following:		(Please tick boxes as appropriate)							
(a)	Real AtoN, transmitting own position								
(b)	Real AtoN, transmitting AtoN for another position ("Synthetic AtoN")						_		
(c)	Real AtoN, transmitting AtoN for another position ("Virtual AtoN")						 		
	(Please now go to Section B)								
4. Synthetic Aids to Navigation (AtoN) service									
exist	a) to (c) below, give details of the ing AIS service which will be transmitting ew service:								
(a)	MMSI			M		D			
(b)	Ofcom Licence Number]
(c)	Name / Location							 	
(d)	Other Information							 	
	(Please now go to Section B)							 	
5. Vir	tual Aids to Navigation (AtoN) service								
exist	a) to (c) below, give details of the ing AIS service which will be transmitting ew service:								
(a)	MMSI			M		D]
(b)	Ofcom Licence Number]
(c)	Name / Location							 	
(d)	Other Information							 	
	(Please now go to Section B)							 	

SECTION B: LICENSEE DETAILS				
6. Is the licence to be issued to:				
		(Please tick one box only)		
An individual?	(Go to Question 7)			
A partnership?	(Go to Question 7)			
A limited company?	(Go to Question 8)			
Any other organisation?	(Go to Question 8)			
7. Give your full name		Surname		
For a partnership, give the partner (this partner must a declaration), and supply a full names of all other partnership.	ulso sign the separate list of the	Forename(s)		
8. Give the registered company name or full title of the organisation and the registered company number				
9. What is the trading nan business which will opera				
For a large operation, give operating division	the name of the			
10. Give the address of the individual / partnership / registered company to which				
the licence is to be issued				
11. Give the name and telephone number of the person in your organisation who is responsible for your radio service(s)		Name		
		Telephone		
		Fax		
		Email		

12. Give the address to which	
correspondence is to be sent	
13. Give the name and address to which requests for payment are to be sent.	
(If different from 12)	
14. Describe the nature of your business	
SECTION C: LICENCE STATUS	
15. Are you using the application form to app	ly:
	(Please tick one box only)
For a new service?	
To take over an existing service from another lice	ensee?
16. Takeover of an existing service:	
Please give the licence number shown on the present licence	
What is the present licensee's name?	
(Please enclose a letter of consent from the present licensee agreeing to the takeover)	

17. Is the licence application for an AIS Base Station, co-located with other transmitting equipment operated by you which has an existing MMSI number?	Yes No
If the answer is Yes, please state it, as the existing MMSI number must be used for the AIS Base Station. If the answer is No, an MMSI number will be issued with your licence.	M I D
SECTION D: BASE STATION DETAI	LS
Note: For applicants intending to operate more the complete questions 18-31 on a separate application.	han one Base Station for the same service please tion form for each Base Station.
18. Please give:	
(a) The Address of the Base Station (Include the Postcode)	
(b) The name/identification of the Base Station	
(c) The National Grid Reference (Taken from the current 1:50,000 Ordnance Survey Map)	GB or Irish National Grid Reference (Please tick as appropriate)
	TQ 3 0 0 8 0 0 (2 Letters; 3-figure Easting; 3-figure Northing)
	OR
(d) The Latitude and Longitude The application will be delayed if this information is not given or proves to be	(circle E or W as appropriate)
inaccurate	23°N 58' 39"
(e) The Name of the Manufacturer	
(f) The Make and Model Number of the Base Station equipment	

Please answer 19(a) or 19(b)	
19.	
(a) Indicate the proposed maximum Effective Radiated Power (ERP) in dBW	dBW
(b) Indicate the proposed maximum effective isotropically Radiated Power (EIRP) in dBW	dBW
20. Indicate the type of antenna to be used	
21. What is the gain of the antenna relative to a half-wave dipole?	dBd
	dBi
22. Please give the Address of the Antenna	
(If applicable)	
23. Please give:	
(a) The National Grid Reference of the Antenna	GB or Irish National Grid Reference (Please tick as appropriate)
(If applicable)	TQ 300 800 (2 Letters; 3-figure Easting; 3-figure Northing)
	OR
(b) The Latitude and Longitude (If applicable)	23°E/W 58' 39"
	(circle E or W as appropriate) 2 3 ° N 5 8 ' 3 9 "
24. Give the height of the top of the Antenna above mean ground level	metres

25. Give the height of the base of the Antenna above mean sea level	metres
26. If the Antenna beam is fixed, please give the direction of maximum radiation in:	
Azimuth degrees East of True North	
Elevation degrees from Horizontal (state also whether above or below horizontal)	
27. Is a shared mast being used?	Yes No
If the answer is Yes, please give names of other users:	
28. Do you wish to use Fixed Access Time Division Multiple Access (FATDMA) for local transmission purposes? If the answer is Yes, specific timeslots for transmission purposes will be allocated to you.	Yes No
29. Do you wish to use Fixed Access Time Division Multiple Access (FATDMA) for remote reservation purposes? If the answer is Yes, for (a) to (c) below please specify the remote station(s) this base station will be reserving for. Please include:	Yes No
(a) MMSI	
(b) Ofcom Licence Number	
(c) Name / Location	
(d) Other Information	

30. Do you wish to transmit any other AIS Message Types other than Message 4 and Message 20 ("Base Station Report" and "Data Link Management Message" respectively)?	Yes No
If the answer is Yes, you must outline each AIS Message Type, and justification for use: The application will be delayed if this information is not given or proves to be inaccurate.	
31. Any Other Relevant Information If applicable, please provide any further relevant information, here:	
SECTION E: REAL AtoN DETAILS Note: For applicants intending to operate more the complete questions 32-41 on a separate application.	•
Note: For applicants intending to operate more the	•
Note: For applicants intending to operate more the complete questions 32-41 on a separate application.	•
Note: For applicants intending to operate more the complete questions 32-41 on a separate application. 32. Please give:	•

(e) Station Monitoring Procedures(Eg: Remotely / Electronically, User Reporting)(f) Failure Notification Arrangements	
33. Please give:	
(a) The Name of the Manufacturer	
(b) The Make and Model Number of the AtoN Station equipment	
(c) Classification Type of AIS AtoN Equipment	
(Type I / Type II / Type III)	
Please answer 34(a) or 34(b)	
34.	
(a) Indicate the proposed maximum Effective Radiated Power (ERP) in dBW	dBW
(b) Indicate the proposed maximum effective isotropically Radiated Power (EIRP) in dBW	dBW
35. Indicate the type of antenna to be used	
36. Type of electronic position fixing device (please indicate one or more with a tick)	Undefined
37. What is the gain of the antenna relative to a half-wave dipole?	dBd

38. Give the dimensions of the AtoN	
(a) height	metres
(b) Width	metres
(c) Length	metres
39. Do you wish to use Fixed Access Time Division Multiple Access (FATDMA) for transmission purposes? If the answer is Yes, specific timeslots for transmission purposes will be allocated to you.	Yes No
40. Do you wish to transmit any other AIS Message Types other than Message 21 ("Aids-to-Navigation Report")?	Yes No
If the answer is Yes, you must outline each AIS Message Type and justification for use:	
The application will be delayed if this information is not given or proves to be inaccurate.	
41. FATDMA Transmissions For (a) to (c) below, give details of the existing AIS service which will be transmitting FATDMA Reservations for this service:	
(a) MMSI	M I D
(b) Ofcom Licence Number	
(c) Name / Location	
(d) Other Information	
(Applicable if using Type I, II or III AtoN equipment in FATDMA mode. Only Type III AtoN equipment can also operate in RATDMA transmission mode.)	

42. Any Other Relevant Information				
If applicable, please provide any further relevant information here:				
SECTION F: SYNTHETIC AtoN DETAILS				
Note: For applicants intending to operate more the complete questions 43-44 on a separate applicate	nan one Synthetic AtoN for the same service please tion form for each Synthetic AtoN.			
43. Please give:				
(a) The Name of the AtoN				
(b) The Nature of the AtoN Structure				
(Eg: Floating, Lighthouse, Beacon, Offshore Platform, Wind Turbine, Met Mast, Wave or Tidal Device, Other)				
(c) The Latitude and Longitude	23°E/W 58' 39"			
The application will be delayed if this information is not given or proves to be inaccurate	(circle E or W as appropriate) 2 3 ° N 5 8 ' 3 9 "			
(d) Description of Position Relative to Other Geographical or Marine Features				
(e) Station Monitoring Procedures				
(Eg: Remotely / Electronically, User Reporting)				
(f) Failure Notification Arrangements				

44. Any Other Relevant Information

If applicable, please provide any further information with respect to additional synthetic AtoN services including licence number, MMSI number or additional location information, here:	
SECTION G: VIRTUAL AtoN DETAIL	.S
Note: For applicants intending to operate more the complete questions 45-46 on a separate application.	
45. Please give:	
(a) The Name of the AtoN	
(b) The Latitude and Longitude	23°E/W 58' 39"
The application will be delayed if this information is not given or proves to be inaccurate	(circle E or W as appropriate) 2 3 ° N
(c) Description of Position Relative to Other Geographical or Marine Features	
i eatures	
(d) Fallows Nestitions in Americans	
(d) Failure Notification Arrangements	
46. Any Other Relevant Information	
If applicable, please provide any further relevant information, here:	

SECTION H

NOW SIGN THE DECLARATION

DECLARATION

I declare that all details given in this application form are correct.

Ofcom is committed to protecting your privacy and to processing your personal information in a manner which meets the requirements of the Data Protection Act 1998. See Ofcom's website for our data protection statement at www.ofcom.org.uk

The information on this form is being collected by Ofcom and is to be processed for the purpose of issuing an AIS Licence. This information may be made available to the International Telecommunication Union (ITU) and the Maritime & Coastguard Agency (MCA) and organisations responsible for port operations for the purposes of application assessment, as the UK Government's National Competent Authority for AIS.

Information related to AIS aids to navigation provided within this application may also be shared with the UK General Lighthouse Authorities (GLA's), for notification purposes, under their responsibility for superintendence of aids to navigation around the UK coast. The GLA's are composed of Trinity House and the Northern Lighthouse Board, together with the Commissioners of Irish Lights in respect of Northern Ireland.

This information may also be provided by Ofcom to law enforcement agencies (such as the police and other third parties) for crime and taxation purposes and the discharging of functions relating to regulatory activities.

If you have any questions about this statement, please contact

Information Requests
Ofcom
Riverside House
2a Southwark Bridge Road
London SE1 9HA

Signature of applicant	
Partnerships must apply by one partner signing 'For self and partners'	
A director or authorised person should sign for limited companies and other organisations.	
Full name (in CAPITAL LETTERS)	
Name of organisation	
Position in organisation	
Date	

CHECKLIST

Have you signed the Declaration?

Have you kept a copy of the form?

For a partnership (see question 7) have you attached a list of all the partners?

For a takeover (see question 16) have you attached a letter of authority from the previous licensee?

RETURNING YOUR FORM

Please send this form together with the appropriate fee to:

Sales Ledger Team Finance Ofcom Riverside House 2a Southwark Bridge Road London SE1 9HA

For enquiries or further information:

Amateur and Maritime Team Ofcom Riverside House 2a Southwark Bridge Road London SE1 9HA

Tel: 020 7981 3131 Fax: 020 7981 3235

E-mail: <u>licensingcentre@ofcom.org.uk</u>

Fees per annum

For each Base Station (whether or not transmitting data in respect of Virtual AtoNs and/or	
Synthetic AtoNs)	
For each Real AtoN (whether or not transmitting data in respect of Virtual AtoNs and/or	£40
Synthetic AtoNs)	

Please note: The appropriate fee must accompany your application form. Failure to do so will delay your licence being processed.