

s-AIS API market research  
+  
product description draft

# AIS market assessment

<b>project description</b>	study market structure of AIS systems, identify potential partners, customers and opportunities
<b>goals</b>	finalize specification of the product by estimating access modes, potential traffic, priority of the tasks
<b>deliverables</b>	pdf with description of user profile, market size, product description, revenue model for each API product.

# AIS data access types

API for mobile apps

API for data providers

API for searching vessels in Landsat data

UI for web/general purpose

# AIS for mobile traffic

<b>Name of the product</b>	AIS for mobile apps
<b>Value proposition</b>	Shows vessels are surrounding me
<b>Limitations</b>	By area. In 100 km <sup>2</sup> square
<b>Access modes</b>	1 request per minute giving all vessels in current area
<b>Payment model, price</b>	\$1 per customer (out of \$7 average check)
<b>Max number of customers</b>	4 lead apps * 300K downloads * 5% payed accounts = 60K
<b>TAM</b>	\$60K (potentially can grow up to \$100K)

# Mobile apps stats



	<b><u>Ship Finder</u></b>	<b><u>Vessel Finder</u></b>	<b><u>FleetMon Mobile</u></b>	<b><u>FindShip</u></b>
<b>Modifications</b>	Free, Full, AR (labeled vessels on a webcam)	Free and Paid. iOS and Android	iOS since 2009	Free, Full, Pro
<b>Features</b>	Vessel monitoring, search by name	Realtime monitoring, historical tracking, ship search by name, MMSI and IMO	Maps with vessels	AIS data + DWT, ship/port search, satellite map
<b>Rank among navigation apps (iOS)</b>	Free - 56 Paid - 30	Free - 380 Paid - 350	250	Free - 200 Full - 59
<b># downloads (Android)</b>		Free: 20K+ Pro: 500 +	Free: 100K+	Free: 100K+
<b>Revenue model</b>	3.99 - Full 2.99 - AR	\$9.99 for Pro version	Temporary free	\$2.99 - Full
<b>Problems</b>	Low accuracy	Low quality of the app	incomplete data	Outdated information

# AIS for data providers

<b>Name of the product</b>	AIS for data providers
<b>Value proposition</b>	Provide customers AIS data from remote locations with Perseus-M satellite
<b>Limitations</b>	All data in the database ordered by MMSI and/or Date
<b>Access modes</b>	Current mode - unique MMSIs for 1 day: 1 request per minute Historical mode - all database: 1 request per hour
<b>Payment model, price</b>	Subscription model, year contract 1 provider -> 2k forum followers -> 10k users * \$300 year contract * 50% COGS * 10% Astro Digital share My price approx = \$150k/year
<b>Potential customers</b>	ExactEarth, MarineTraffic, Obercom, Fleetmon, iHS, VTExplorer, CLS SAT-AIS, VesselTracker
<b>TAM</b>	\$1.2M

# Who uses AIS data on the web?






<b>Organic Search</b>	61.2K	14.7K	2.7K	6.4K
<b>Paid Search</b>	0	658	0	0
<b>Backlinks</b>	720K	13K	14.5K	83K
<b>World Ranking</b>	6K	37K	503K	113K
<b>Daily time on site</b>	4:57	2:38	2:29	2:15
<b>Visitors from</b>	US - 9.5% Greece - 8.8% UK - 8.5% Germany - 7.3%	US - 14.3% UK - 8% Spain - 4.8% Indonesia - 4.3%	US - 47.3% UK - 16.2%	US - 18.2% Germany - 8.6% UK - 7% Japan - 6%
<b>Keywords</b>	ais - 13.73% marine traffic - 8.46% marinetraffic - 8.37% norman atlantic - 1.86% ais traffic - 1.56%	marine traffic - 19.92% marinetraffic - 14.78% vesselfinder - 9.99% vessel finder - 3.03% shiptracker - 3.02%	ship finder - 26.92% ship tracker - 7.92% vessel finder - 7.69% ship radar - 6.14% marine traffic - 3.97%	vessel tracker - 31.34% vesseltracker - 5.6% ship tracker - 4.12% vessel tracing - 3.17% ship tracking - 2.19%
<b>Business types</b>	API, embedded map, satellite data	Mobile apps, B2B, Crewing	Mobile apps	API, direct sales

# AIS + LandSat

<b>Name of the product</b>	satellite imagery labeled with AIS data
<b>Value proposition</b>	Give me satellite images extended with AIS data and give me all satellite images for a given vessel
<b>Limitations</b>	1 request per minute
<b>Access modes</b>	Mode 1: give me all images with a given MMSI located on the image Mode 2: give me all AIS data of all vessels than can be found on a image
<b>Payment model, price</b>	Mode 1 - price per request (\$25/request) Mode 2 - price per image \$25/image (orthorectified Landsat images- \$25/image)
<b>Max number of customers</b>	100 internet searches/month 3 projects offering such service



# Vessel detection and monitoring with satellites

Company			
Product	Ship Detection & Tracking Service	Tracking the ships layer on a map	automated detection of vessels
Technology	Radar&optical imagery + automatic image recognition	Inmarsat satellite vessel tracking	NigeriaSat 2 and UK-DMC2 imagery
Features	<ul style="list-style-type: none"> <li>• AIS data integration</li> <li>• 5 meters resolution</li> <li>• 8 hours interval</li> <li>• AIS data checking</li> <li>• monitoring and tracking</li> <li>• behavior patterns</li> </ul>	<ul style="list-style-type: none"> <li>• AIS data integration</li> <li>• Online depth map</li> </ul>	<ul style="list-style-type: none"> <li>• aircraft detection</li> <li>• vessel detection</li> <li>• </li> </ul>
More info	<a href="http://geo-airbus.com">geo-airbus.com</a>	<a href="http://OpenSeaMap">OpenSeaMap</a>	<a href="http://The Digital Ship">The Digital Ship</a>

# What SI+AIS is used for?

illegal fisheries  
illegal maritime activities  
logistical reasons  
search and rescue  
oil spills detection  
accident investigation

*by Airbus*

# Who pays for the data?

Government  
Environment organizations  
Fishery companies in a legal process  
Logistic companies  
Vessel owners

# UI Features on AIS map

1. Integration with vessel photos archive (MT)
2. Direct link to follow a ship (SF)
3. Triangle showing direction of a ship (VF)
4. Search by location, MMSI, IMO, Callsign, Dest (SF)
5. Color-coding for different types of object(SF)
6. Visible vessel's track (SF)
7. Vessel's profile (VF)
8. User's upload of AIS data (VF-AIS Hub)
9. Saved vessels and locations (VF)

## Pricing of s-AIS data by providers to end users

Company	Service	Quality	Price
MarineTraffic	500 vessels - fleet 15 vessels - nonstop monitoring	12 hours coverage	\$ 300
MarineTraffic	1 vessel potentially monitored 1 vessel nonstop monitoring	12 hours coverage	\$ 0.27 \$16
FleetMon	15 vessels - nonstop monitoring	12 hours coverage	\$ 400
ExactEarth	ShipView tool for viewing all the vessels + planning	12 hours coverage	\$20,000

# API modes beta 1:

**VesselID:** 0 / IMO / MMSI / Callsign / Dest

- 0 - no id is specified
- IMO / MMSI / Callsign / Dest - IMO, MMSI, Callsign or Destination is required

**History:** historical / newest / *specified period of time*\*\*

- historical: all records with given MMSI\*
- newest: 1 last single record in the last 24 hours\*

**Number of vessels:** single / multiple

- single - only 1 vessel's data is sent
- multiple - several vessels' data is sent

**Area:** 0 / 1

- 0 - data from the whole Earth surface is sent
- 1 - area specification is required in lat,long,area format

**Satellite imagery:** 0 / 1

- 0 - no satellite imagery searched
- 1 - find all images where a certain VesselID can be found. *Date range is required*\*\*
- 2 - find all vessels located on a certain image. *ImageID is required*\*\*

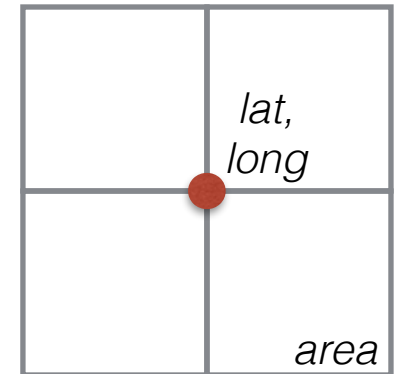
\* *If 2 records have less then 1 hour difference, only the latest is stored*

\*\* *Specifiation to be updated*

# API use cases:

## Compulsory

1. Get current positions of all vessels in a [area] region from a point
2. Get single vessel current position
3. Get single vessel track (all historical records) for a certain period
4. Get all satellite images with a specified vessel
5. Get all vessels that can be found on a specified satellite image



## Optional

6. Get vessel static data
7. Get single vessel track