Measuring Shipping Connectivity and performance
Making more data available

Argyris Stasinakis
Executive Partner
6.5 million monthly unique visitors

500 thousand daily visits

1+ million registered users
Big data – AIS tracking
180k vessels recorded daily
(8,000 vessel positions per second)
Archive since 2009
Global coverage

AIS terrestrial
(2500+ active stations + partner networks)

AIS satellite
(ORBCOMM)
**Voyage**

**ABYO OPRAH**

Bulk Carrier,
From Baltimore (US)
To Paradip (IN)

**ATD:** 15 April 23:18
**Reported ETA:** 5 June 08:00
**Calculated ETA:** 4 June 01:50

**Laden**
- **Reported draught:** 14.0m
- **Max Draught:** 14.6m
- **Draught ratio:** 96%

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**Vessel track history**
Vessel voyage and ETA forecasting

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From Baltimore (US) To Paradip (IN)

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Laden
Reported draught: 14.0m
Max Draught: 14.6m
Draught ratio: 96%
Events: passage crossings

<table>
<thead>
<tr>
<th>Vessel Name</th>
<th>Time (UTC)</th>
<th>Event</th>
<th>Area</th>
<th>Port</th>
<th>Speed (kn)</th>
<th>Course (°)</th>
<th>Latitude (*)</th>
<th>Longitude (*)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABYO OPRAH</td>
<td>2016-05-14 08:43</td>
<td>Noon position</td>
<td>South Africa</td>
<td></td>
<td>11.1</td>
<td>112</td>
<td>-34.62384</td>
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<td>ABYO OPRAH</td>
<td>2016-05-14 13:05</td>
<td>In Range</td>
<td>South Africa</td>
<td></td>
<td>10.7</td>
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<td>ABYO OPRAH</td>
<td>2016-05-14 15:04</td>
<td>Crossed Strait or Passage</td>
<td>South Africa</td>
<td></td>
<td>10.5</td>
<td>79</td>
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<td>2016-05-14 22:28</td>
<td>In Range</td>
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<td></td>
<td>11.1</td>
<td>75</td>
<td>-34.55052</td>
<td>21.64219</td>
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</table>
Ports and Port Calls

- Boundaries
- UNLocodes
- Time zones and DST (Daylight Saving Time)
- Designation as Port, Anchorage, Marine, Offshore facility
- arrivals and departures are monitored in real time

Monitoring more than 6,700 ports!

port of Piraeus GRPIR

| port call | vessel ID | port ID | Time and type (arrival or departure) | draught (real time) |
Events: proximity measured

BUNKERING IN SINGAPORE

Proximity alert to bunkering tanker "Lukoil Marine" (IMO: 9754968)
START: 2017-01-02 15:42
END: 2017-01-02 19:31

DREAM POWER (9515175)

PILOT ON BOARD

Proximity alert to Pilot Boat "Madina" (IMO: 9391775)
START: 2017-01-19 23:11
quick Case study: Port Hedland – berth PH4

Berths are geo-fenced and arrivals and departures are recorded in real-time
Ports operational statistics: restrictions at berth

- **Vessel draught**
- **Vessel length**
Port Operational statistics: Time at berth

- benchmarking
- ETD forecasts

27 ± 3 hours

30 ± 3 hours
Big Data: investing in the value chain

Interaction: hubs & marketplaces
Enable stakeholder collaboration

Integration: platforms
Integration of reports with work tools

Actionable intelligence
configurable reports from multiple data sources

Intelligence
reports

Processed data
events

Raw data
vessel positions
The maritime ecosystem (r)evolution

Shipping serves the broader supply chain

Port 1

Port 2

Shipping as part of a global freight marketplace?

multiple marketplaces in Shipping

port/ terminal operations
freight - chartering
suppliers
services
intermodal operations
Disruption at multiple levels: digital
Going forward

Thought Leadership

Initiatives and action
Thank you!

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