

Monitoring of implementation of Sulphur Directive in EU MS - how is it going?

SECA today - challenges of tomorrow

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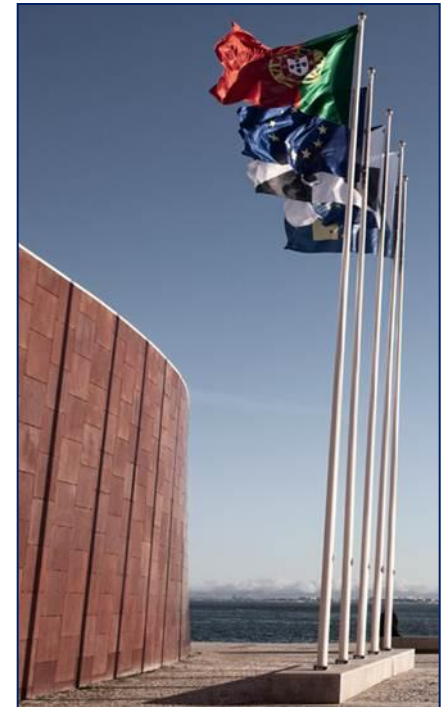


European Maritime Safety Agency



EMSA provides **Commission** and **Member States** with technical and scientific assistance on **sustainable and quality shipping** in order to help them:

- **Develop** legislation, and
- **Apply** properly,
- **Monitor** its implementation, and
- **Evaluate the effectiveness** of the EU measures in place



Sulphur Directive - EMSA's role

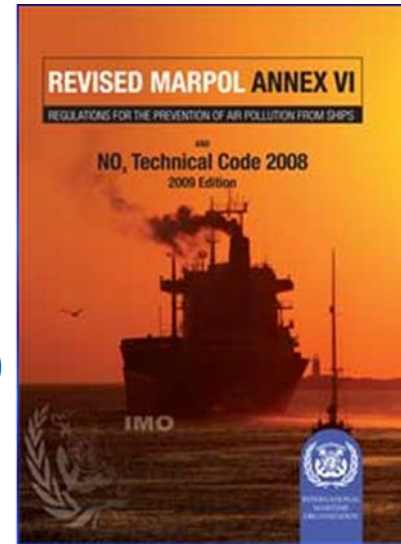
- **Assist the EC in the implementation of the Sulphur Directive**
(i.e. Action plan, Sulphur Inspection Guidance, Sulphur inspectors trainings)
- **Support the EC preparation of the Implementing Acts**
(i.e. frequency of inspections and sampling, sampling method/points)
- **Facilitate harmonised implementation and enforcement (selection of ships for inspection – reporting)**
*(e.g.: Union Information System: **THETIS-S + URTM**)*
- **Act as Technical Secretariat in the ‘European Sustainable Shipping Forum’**
(i.e. Sub-groups 'Air Emission from Ships Sub-group', LNG, Scrubbers, etc)
- **Organise Ad-Hoc Expert Groups with industry and Member States**
(i.e. workshops on implementation, emission abatement methods, etc)
- **Annual review of MS' reports on compliance with the sulphur standards**



MARPOL Annex VI



- **Adopted in 1997, entry into force in 2005**
- **Aiming at minimizing airborne emissions from ships**
(SO_x, NO_x, ODS, VOC, CO₂)
- **Revised Annex VI in October 2008, entry into force in July 2010**
(with significant tighter emissions limits)
- **86 IMO Parties have so far ratified Annex VI**
(95.34% of world merchant shipping tonnage)
- **Regulation 4 “Equivalents” - use of alternative compliance methods**
(at least as effective in terms of emission reductions as required)



EU 'Sulphur Directive' (1999/32/EC)



- **Sulphur content** in heavy fuels and gas oil regulated in the EU since 2000 (including marine gas and diesel oil)
- Directives **2005/33/EC & 2012/33/EU** brought EU legislation in line with MARPOL (1997 and 2008 changes)
- Integral part of **EU policy on Air Quality control**:
 - *reduce SO_x (and PM) shipping emissions due to combustion of marine fuel with high sulphur content through cost-effective measures*
 - *prevent their contribution to air pollution -which harm human health and the environment becomes higher than the one from land-based sources*
- Inspections and Sampling frequency: **Commission Decision (EU) 2015/253**

EU Sulphur Directive – Sulphur Limits

(Articles 4a and 4b)

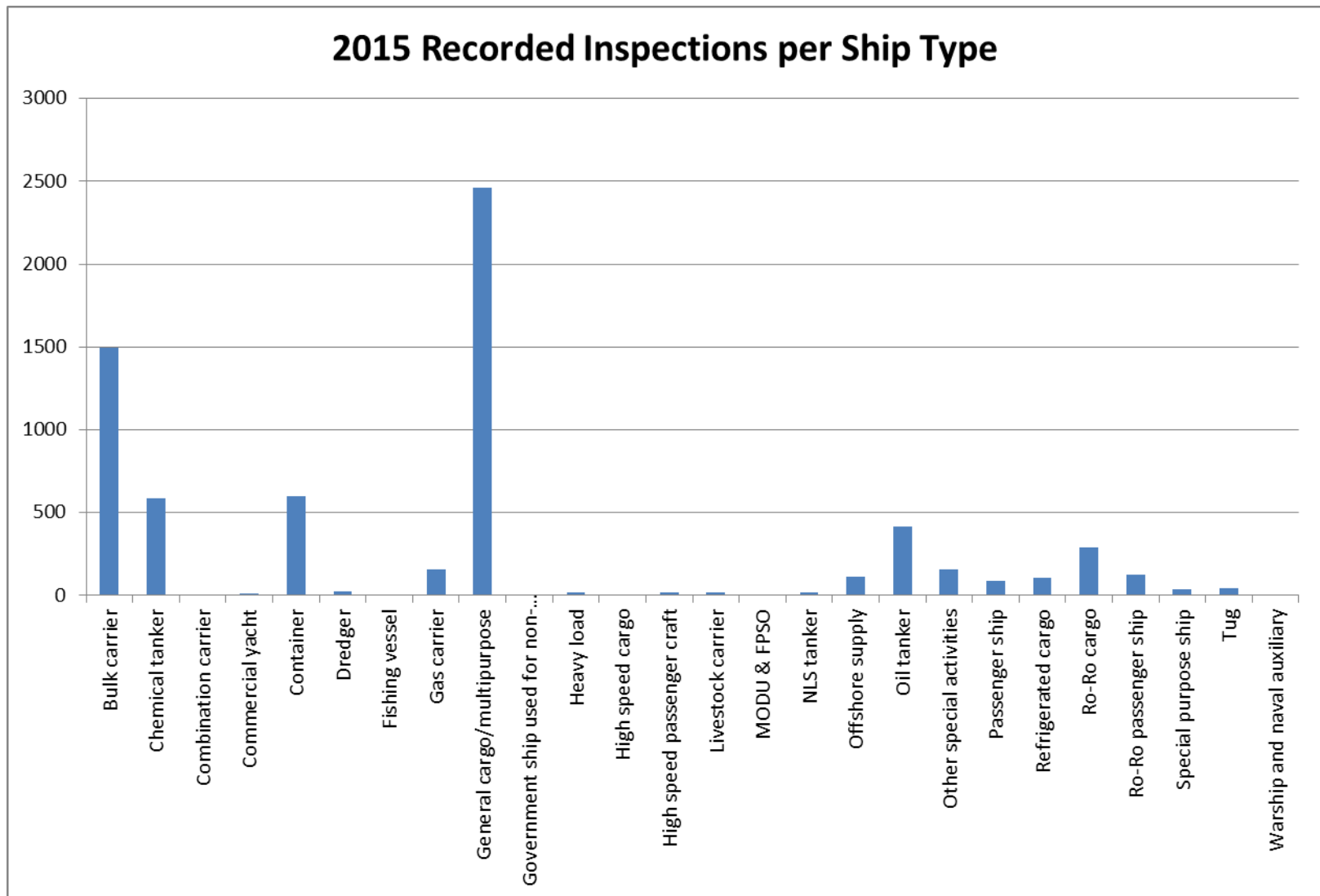


	outside EU SECAs	inside EU SECAs	Exceptions
Ships at berth in EU ports (includes at anchor)	0.10% <small>(Not if timetable < 2 hrs or engines switch off and shore-side electricity)</small>		Ships using Approved Emission Abatement Methods
Passenger ships (on regular services to/from EU ports)	From 01-01-2020 0.50%	0.10%	
Other ships/cases			

2015 Inspections vs Obligation



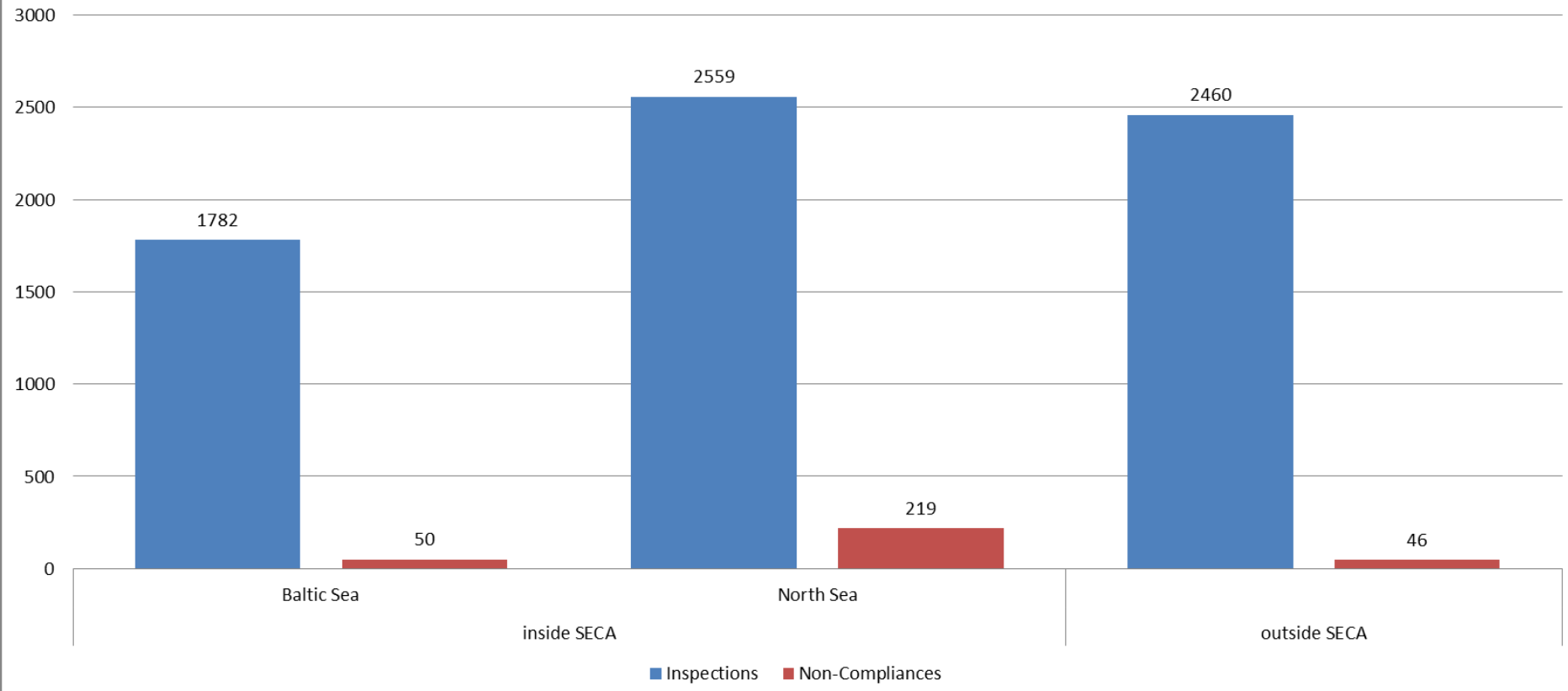
Inspections per Ship Type



Inspections versus Non Compliances

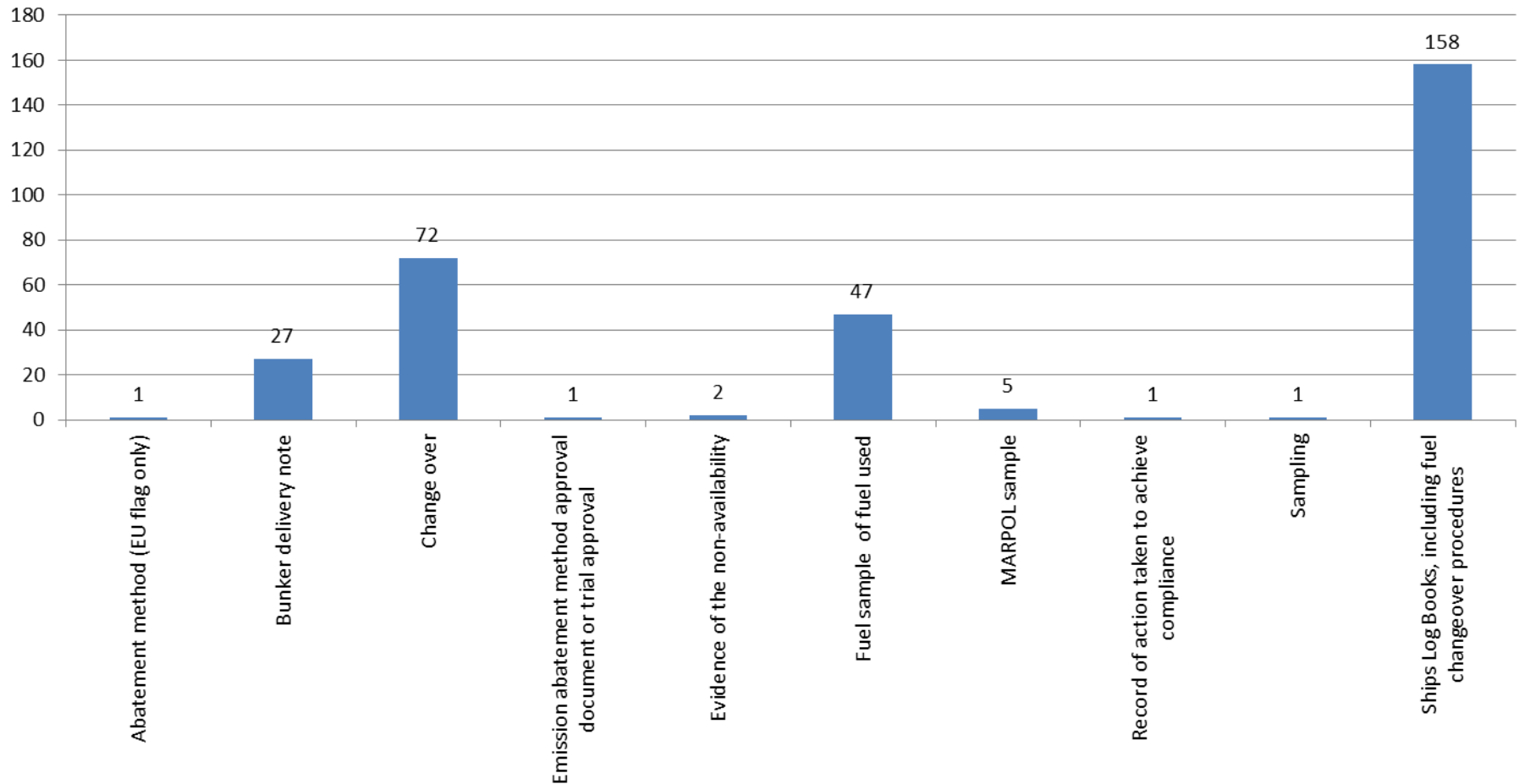


2015 Total Recorded Inspections and Non-compliances (inc. fuel related) per Region



Non Compliances per Type

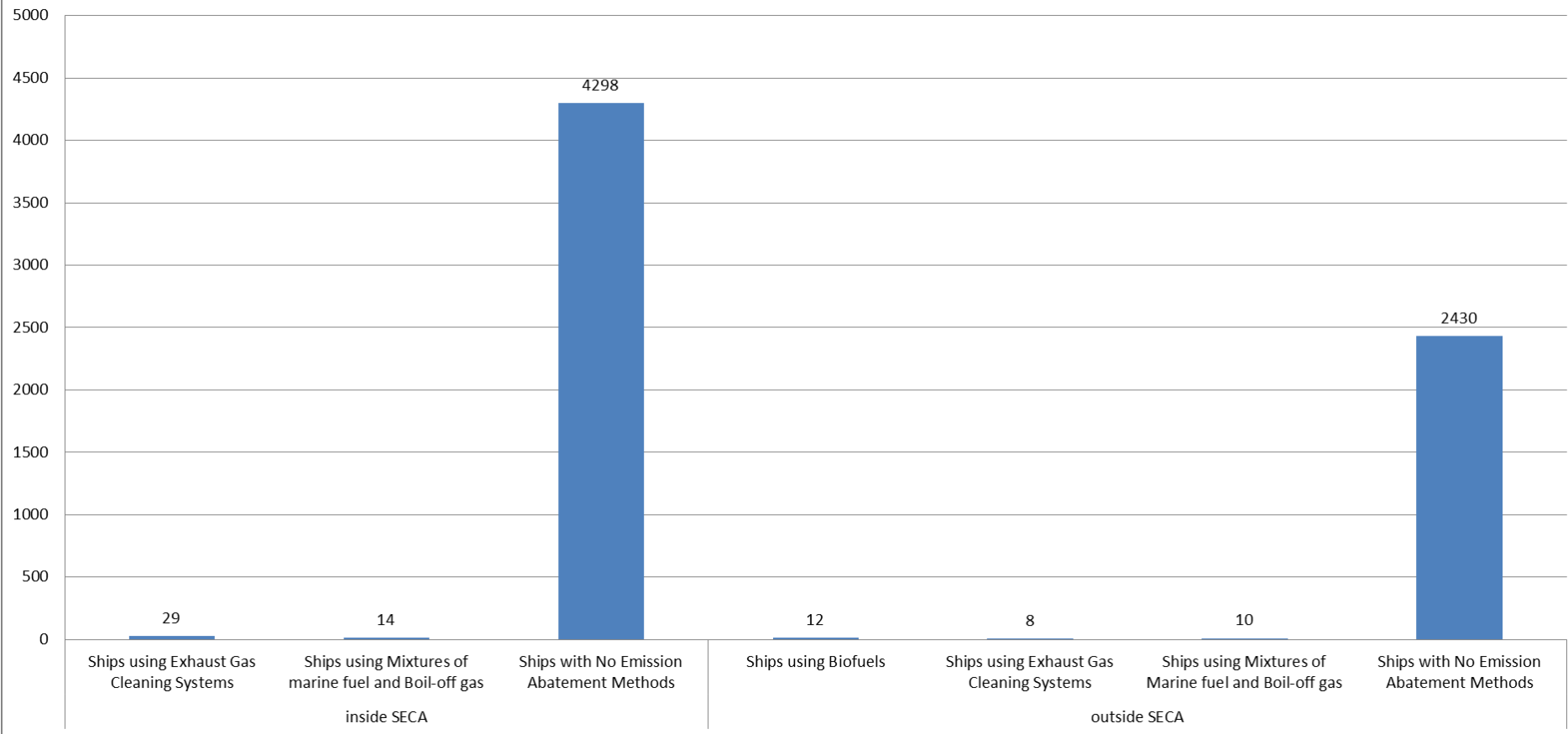
2015 Distribution of Non-compliances per Type



Emission Abatement Methods



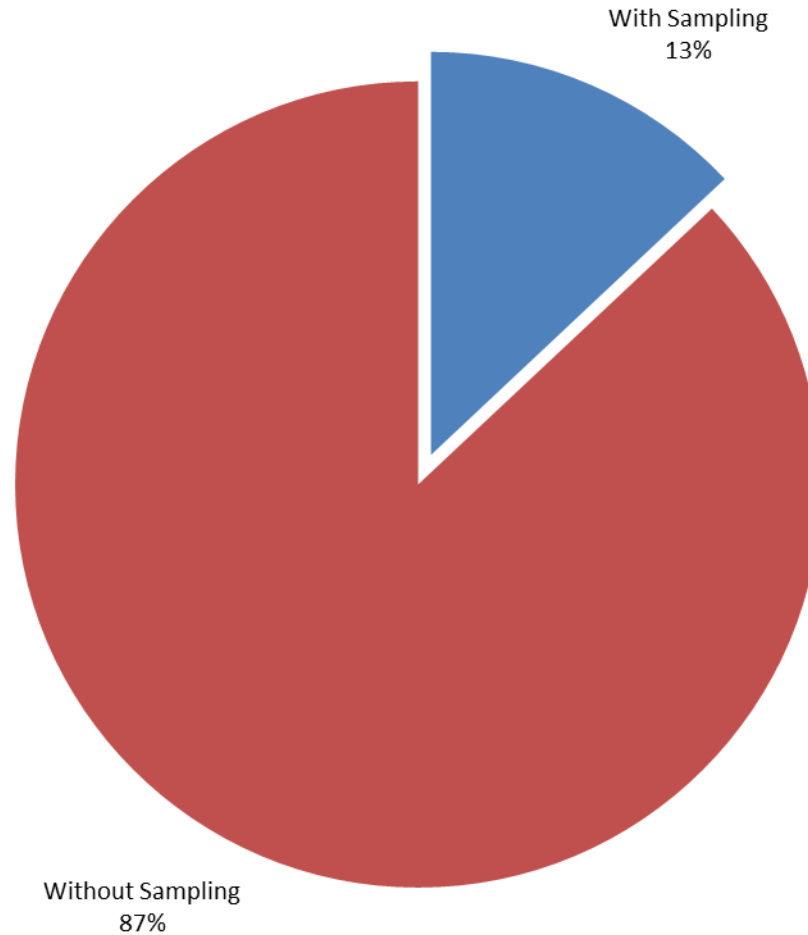
2015 Inspections per Type (ships with/without Emission Abatement Methods) per region



Sampling during Inspections



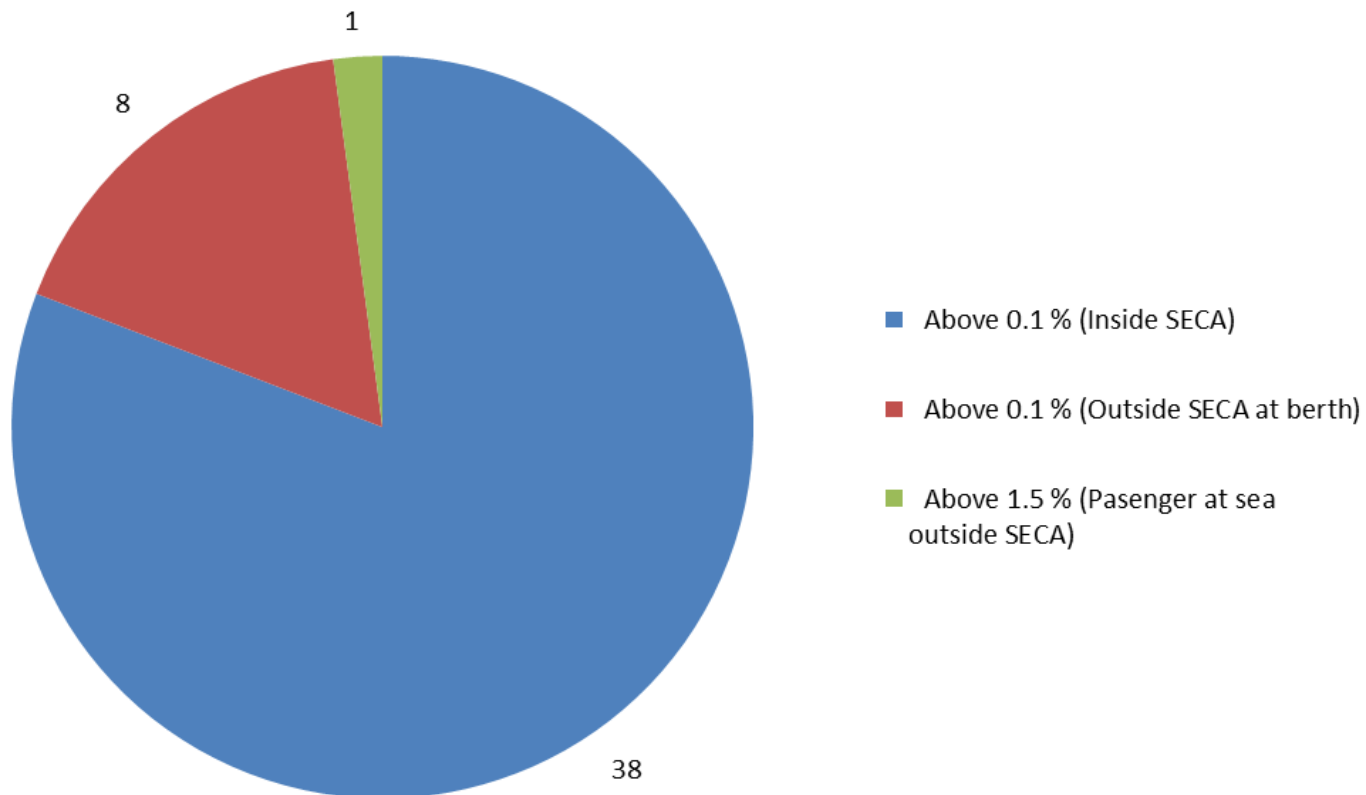
2015 Percentage of Inspections With and Without Sampling



Fuel related Non Compliances



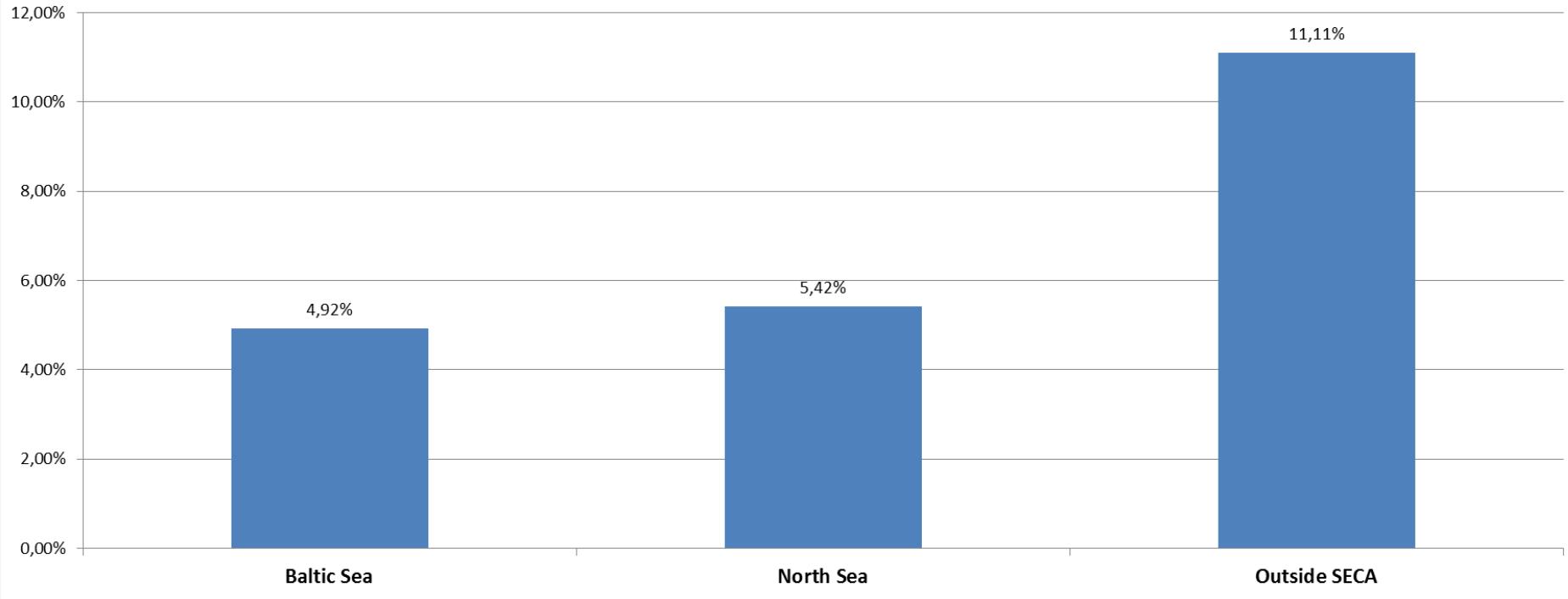
2015 Fuel Related Non-compliances Recorded



Fuel related Non Compliances



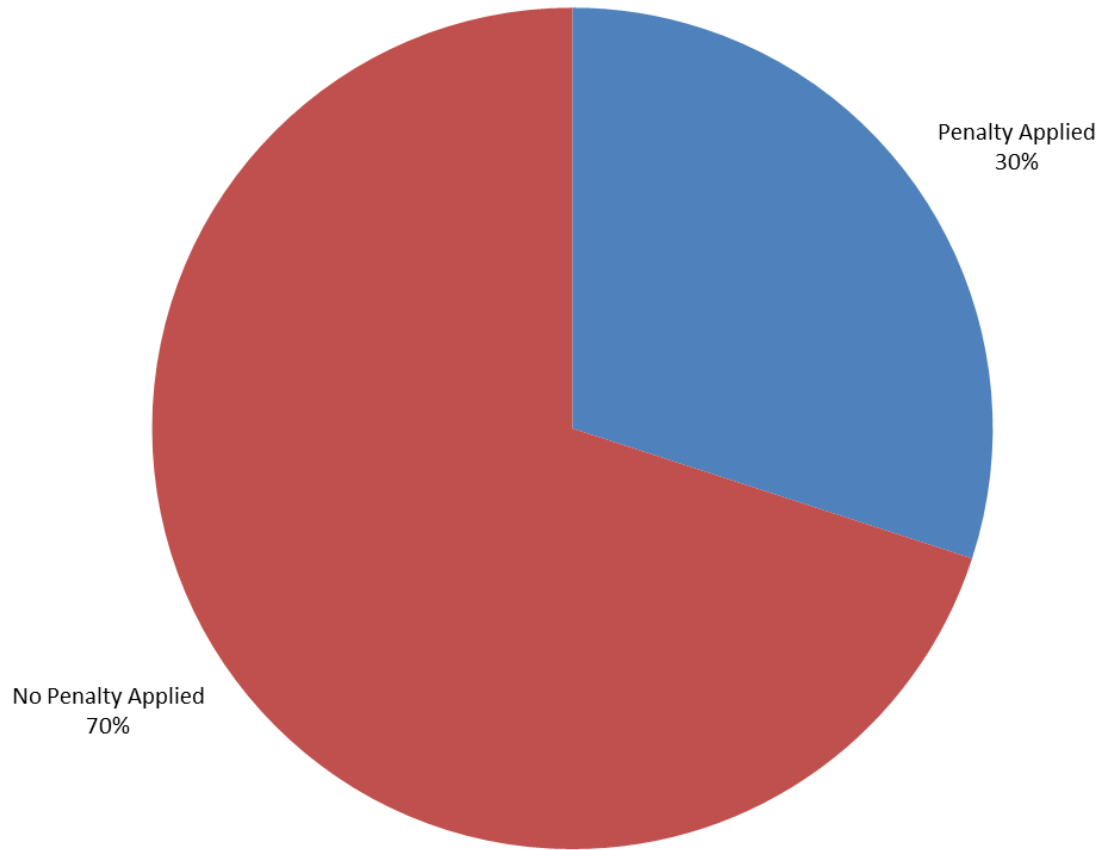
2015 percentage of analyzed samples where fuel was found non-compliant per region



Inspections with Penalties Applied



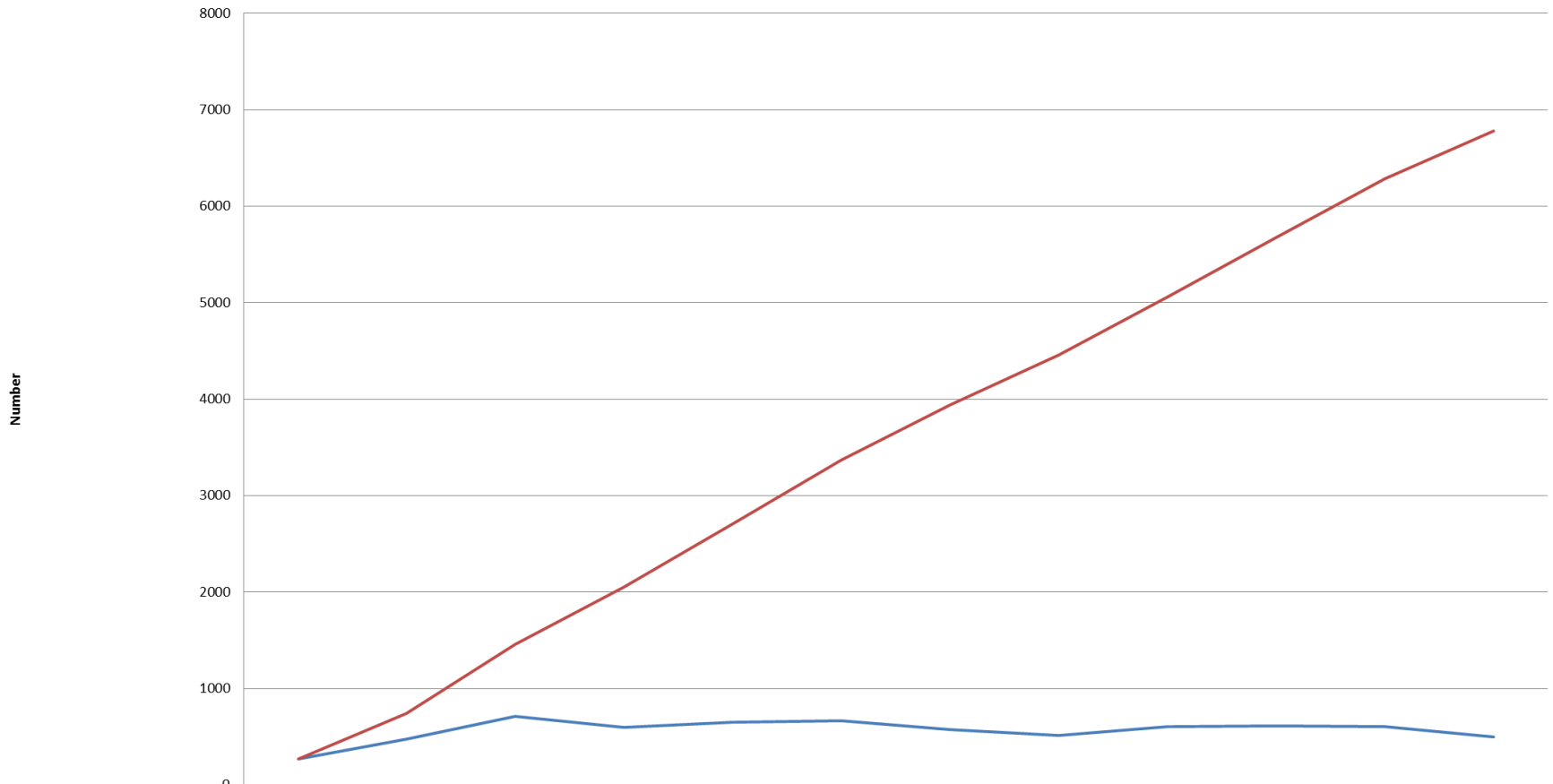
2015 Percentage of Inspections with NCs where a Penalty was Applied



Inspection Effort Evolution

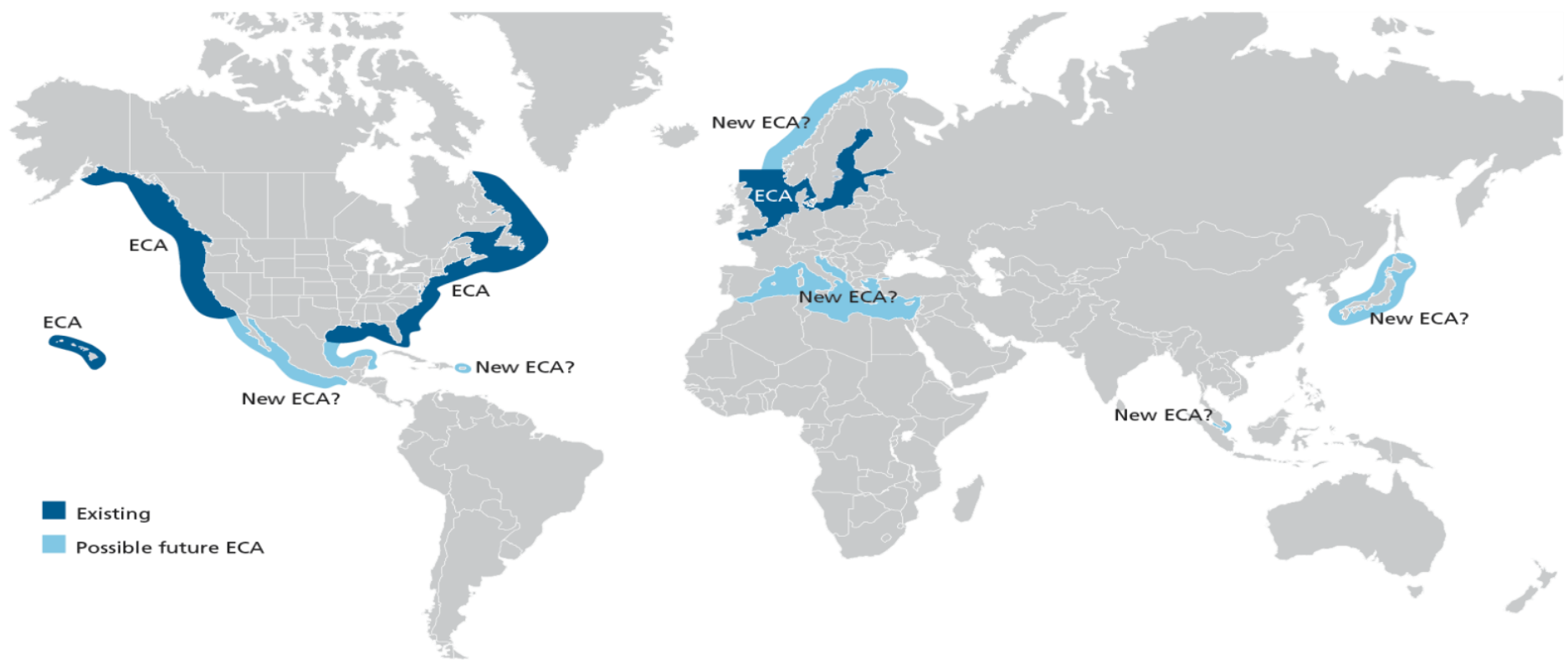


2015 Monthly Distribution of Inspections and Accumulated Effort



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Month Total Inspections	271	473	712	597	652	665	573	512	606	613	609	496
Accumulated Total Inspections	271	744	1456	2053	2705	3370	3943	4455	5061	5674	6283	6779

MARPOL – Other ECA's in the future



Conclusions & Way Ahead



- How to do better targeting of ships/URTM (i.e. alerts, sniffing, etc)
- Further harmonization and best practices (i.e. prosecution levels, etc)
- Need for further Guidance (i.e. fuel sampling, EGCSs break downs, etc)
- Long term view (i.e. 2020 new limits, continuous monitoring in stack)
- THETIS-S (i.e. extending to other countries, further developments/fuel calculator, public site, etc)
- Differences between PSC and Sulphur (inspections by same authority)

Thank you!

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