

PAME

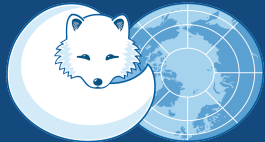
Protection of the Arctic Marine Environment

TOURISM VESSELS IN THE ARCTIC *ASTD PRESENTATION*

Arctic Marine Tourism Project workshop – 3. February 2020 – Oslo, Norway

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PAME Project Manager



ARCTIC COUNCIL

PAME
Protection of the Arctic Marine Environment

About ASTD

- PAME's ASTD Project is in response to a growing need within PAME and the Arctic Council, to collect and distribute accurate, reliable, and up-to-date information on shipping activities in the Arctic
- It has been an approved project within the PAME Work Plan since 2015 and is led by USA and Norway.
- ASTD is the first comprehensive Arctic shipping activity database

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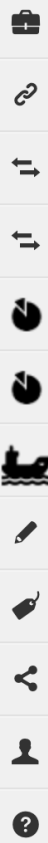


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Layer Manager

ALL LAYERS | **VISIBLE LAYERS**



- Bulk carriers
- General cargo ships
- Container ships
- Ro-Ro cargo ships
- Refrigerated cargo ships
- Offshore supply ships
- Other service offshore vessels
- Other activities
- Fishing vessels
- Crude oil tankers
- Oil product tankers
- Passenger ships
- Cruise ships

▶ IHS Fairplay ship types

Timeline navigation: 2012 2013 2014 2015 2016 2017 2018 2019 2020

Monthly navigation: SHOW ALL Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec

Filter: All vessel sizes



Map © ArcticConnect, Data © OpenStreetMap contributors

Arctic Ship Traffic Data (ASTD)

- Detailed statistics on multiple aspects, including:
 - Emission by ships
 - Number of ships in the Arctic
 - Types of vessels in the Arctic
 - Fuel use and consumption of fuel
 - Traffic in specific areas in the Arctic
 - Number of ships in Arctic Ports
- ***Download of data for detailed analysis is a crucial aspect***



Arctic Ship Traffic Data (ASTD)

Purpose:

Collect historical information about shipping activity in the Arctic from the Arctic States to use for trend analysis and related purposes under the auspices of the Arctic Council.

Outcome:

User-friendly maritime traffic analyses of Arctic shipping data that benefits the Arctic States, the Arctic Council, its working groups and subsidiary bodies.



ASTD: Main Goals

- Provide reliable data for different analyses performed under the realm of the Arctic Council
 - For its Member States
 - Permanent Participants
 - Working Groups
 - Observers
 - Recognized research Institutes
 - Academic institutions
- Promote Arctic research and development by offering high quality data

Access to the ASTD System

Free access

Arctic State
Approved
Government
Agencies and
Ministries

Arctic
Council
Permanent
Participants

Arctic
Council
Working
Groups and
Task Forces

Fee for access

Professional Institutions
that have a
demonstrated public
commitment related to the
protection, conservation,
and sustainable use of the
Arctic marine environment.

Arctic
Council
Observer
States

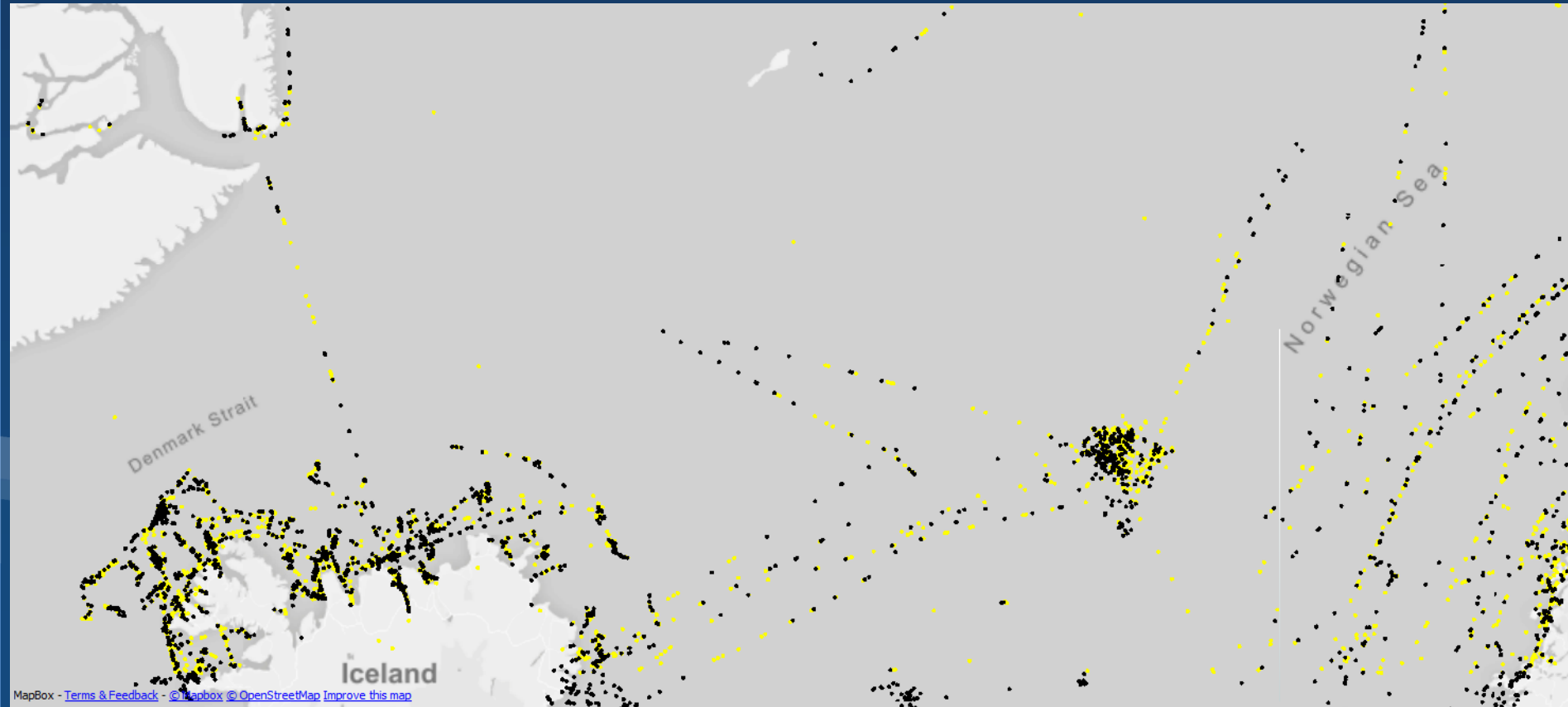
Arctic Council
Observer
Organizations

Data

- Data comes from Norway and USA
 - **Over 20 satellites and 50 base-stations**



High data quality and accuracy



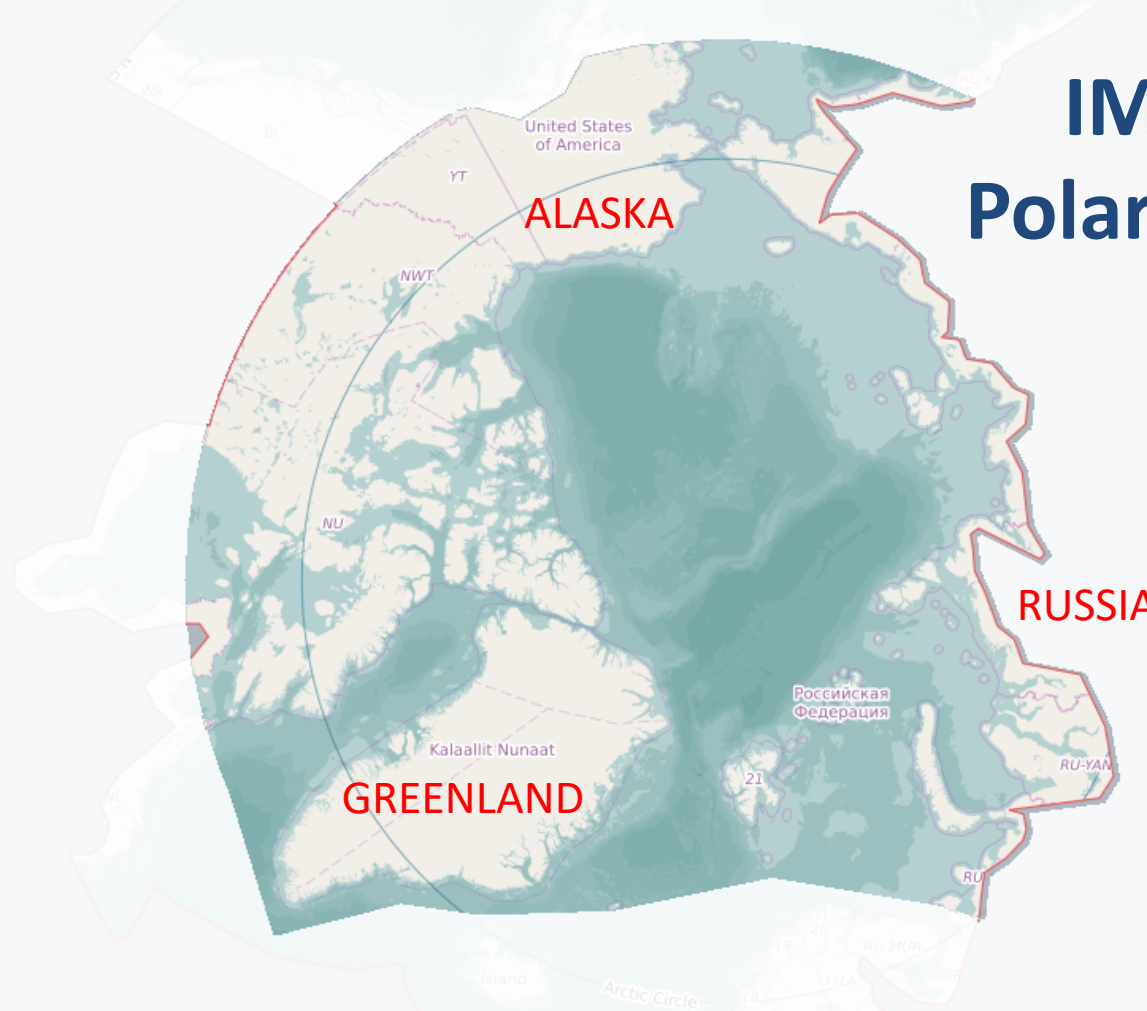


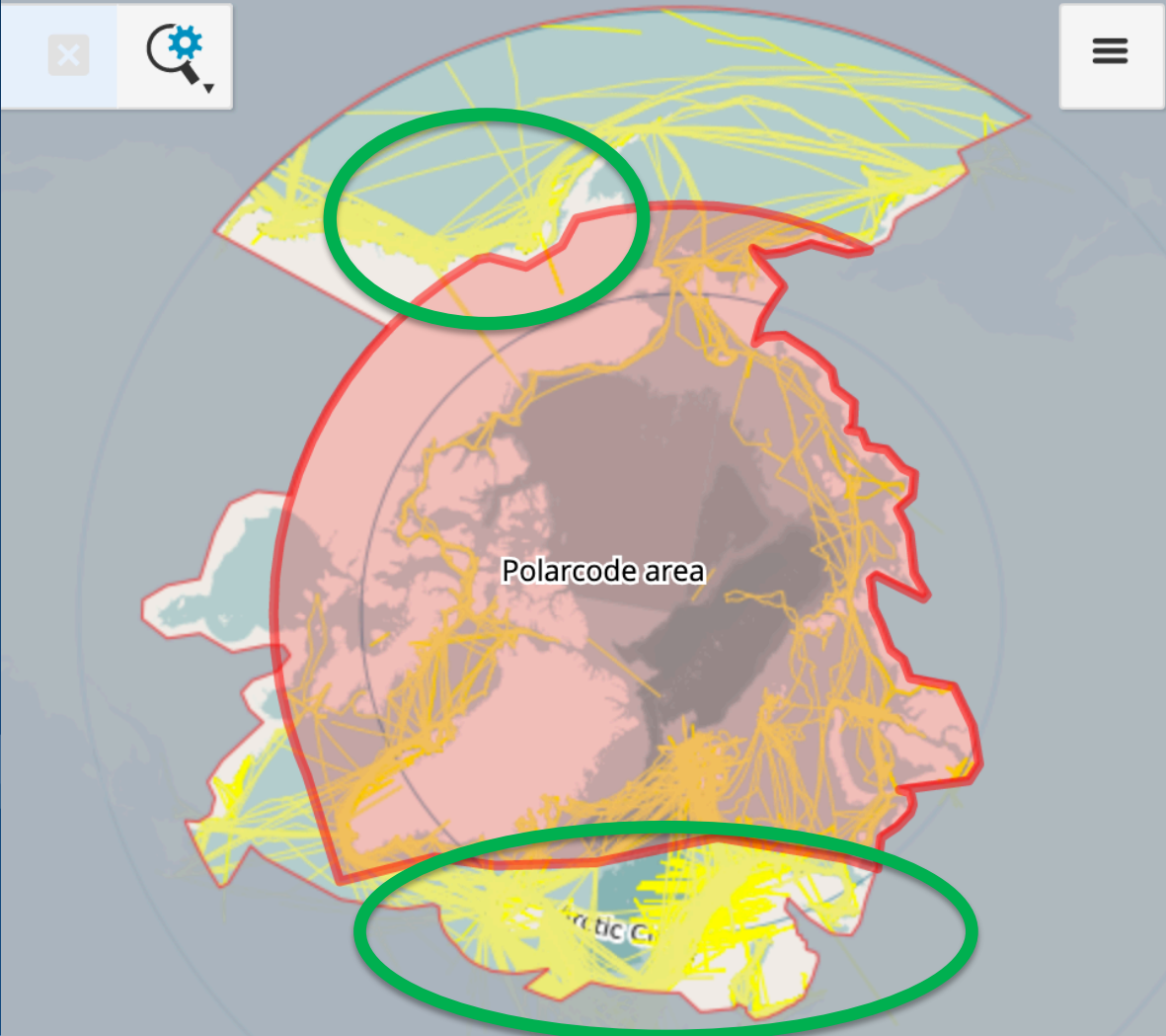
TOURISM VESSELS – DEMO ANALYSIS

Ship Types

	ASTD Ship Types	IHS Fairplay – Level 3	IHS Fairplay – Level 5
1	Cruise ships	Passenger. Dry	Passenger/Cruise
2	Cruise ships	Dry Cargo/Passenger	Cruise ship, Inland Waterways
3	Passenger ships	Passenger /Ro-Ro Cargo	Passenger/Ro-Ro ship (Vehicles)
4	Passenger ships	Passenger	Passenger/landing Craft
5	Passenger ship	Passenger	Passenger Ship

IMO Arctic Polar Code Area





Data © OpenStreetMap contributors

Arctic area traf

i Displays traff
IHS Fairplay c

Select area of inte

- EEZ
- Polar code

Select your region

Polarcode area

Main ship type:
 ASTD types

Select vessel types

Cruise ships, Pass

Statistics type:

Number of uniqu

Select period:

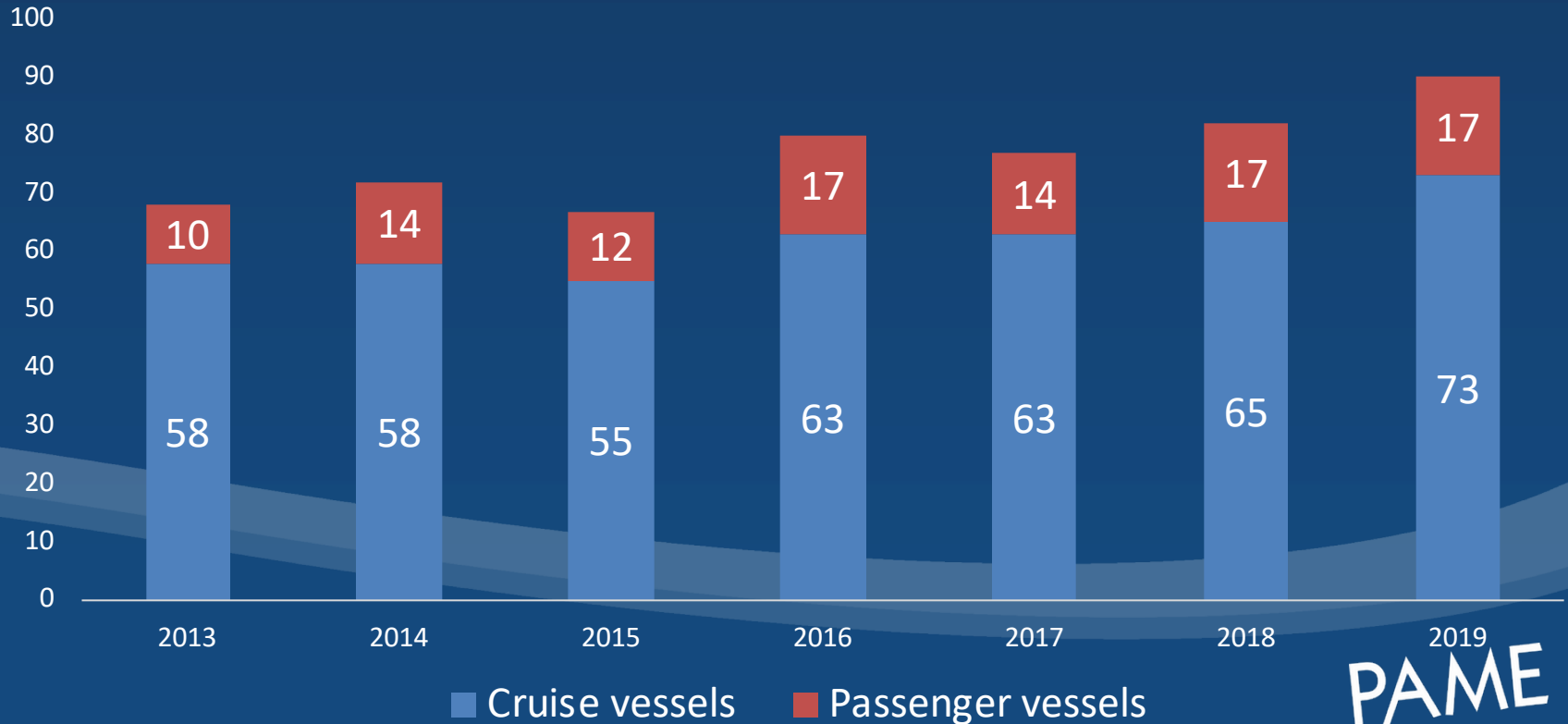
2012 - 09 - 2014

Unique Ships

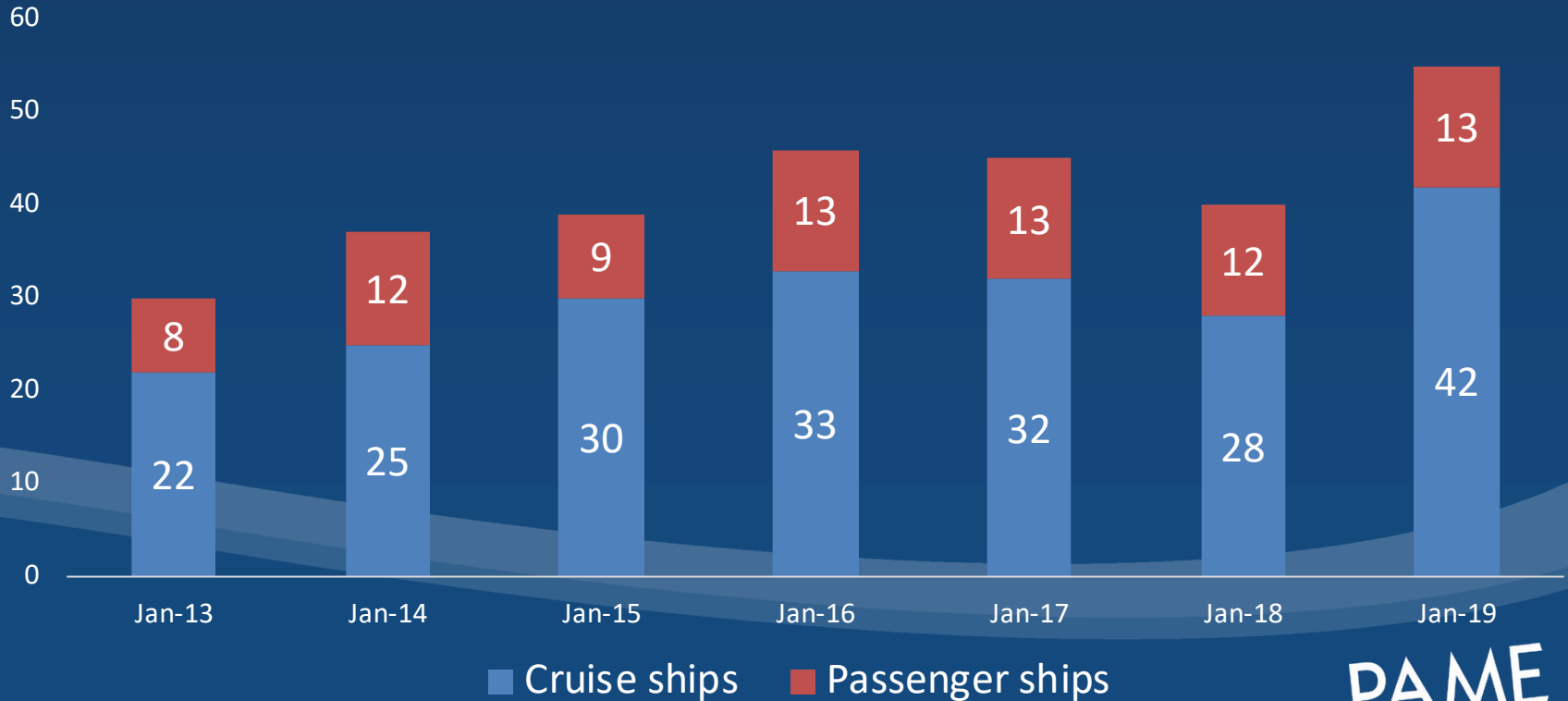
Unique ships refers to counting ships that enter a certain geographic area in a given time. Each ship in that given time is only counted once, hence: Unique ships.

Unique Ships – Arctic Polar Code area 2013-2019

Cruise and Passenger vessels



Unique Ships – Arctic Polar Code area 2013-2019 in September: Cruise and Passenger vessels

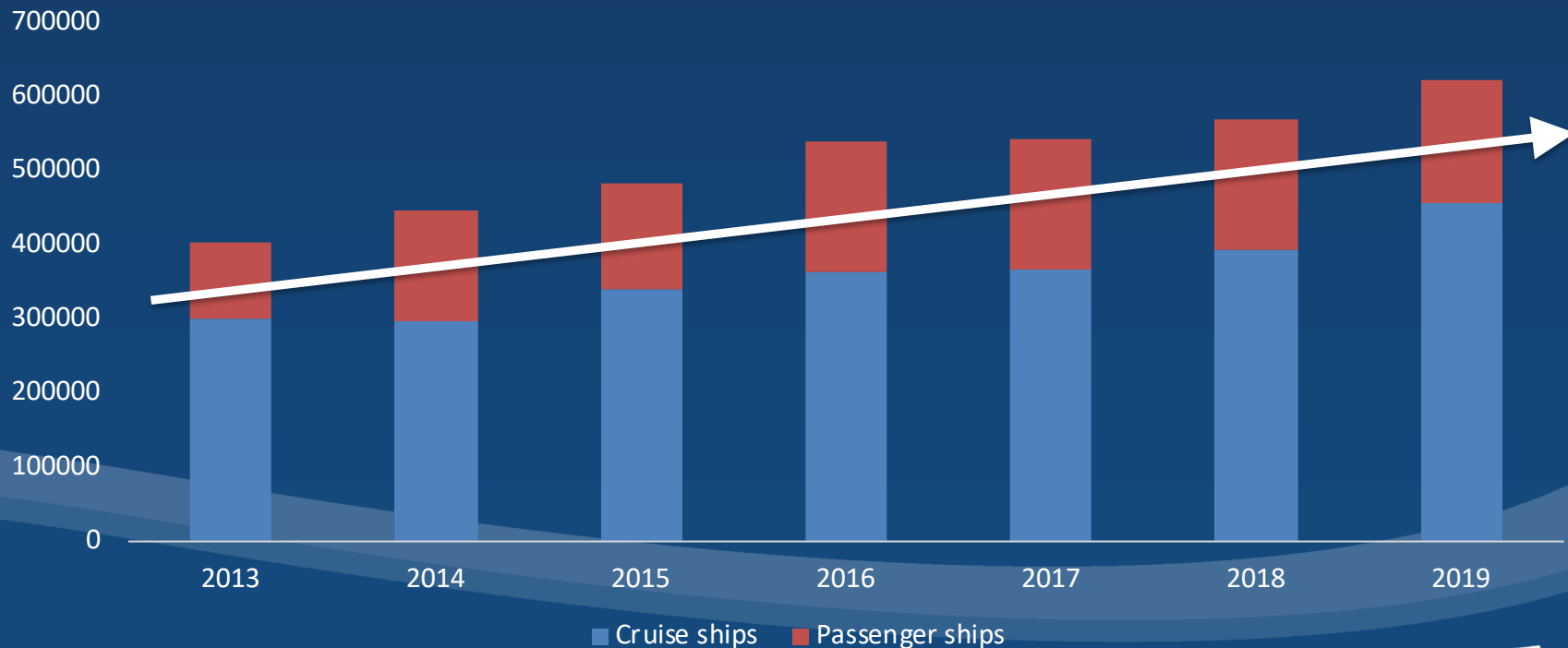


Distance Sailed

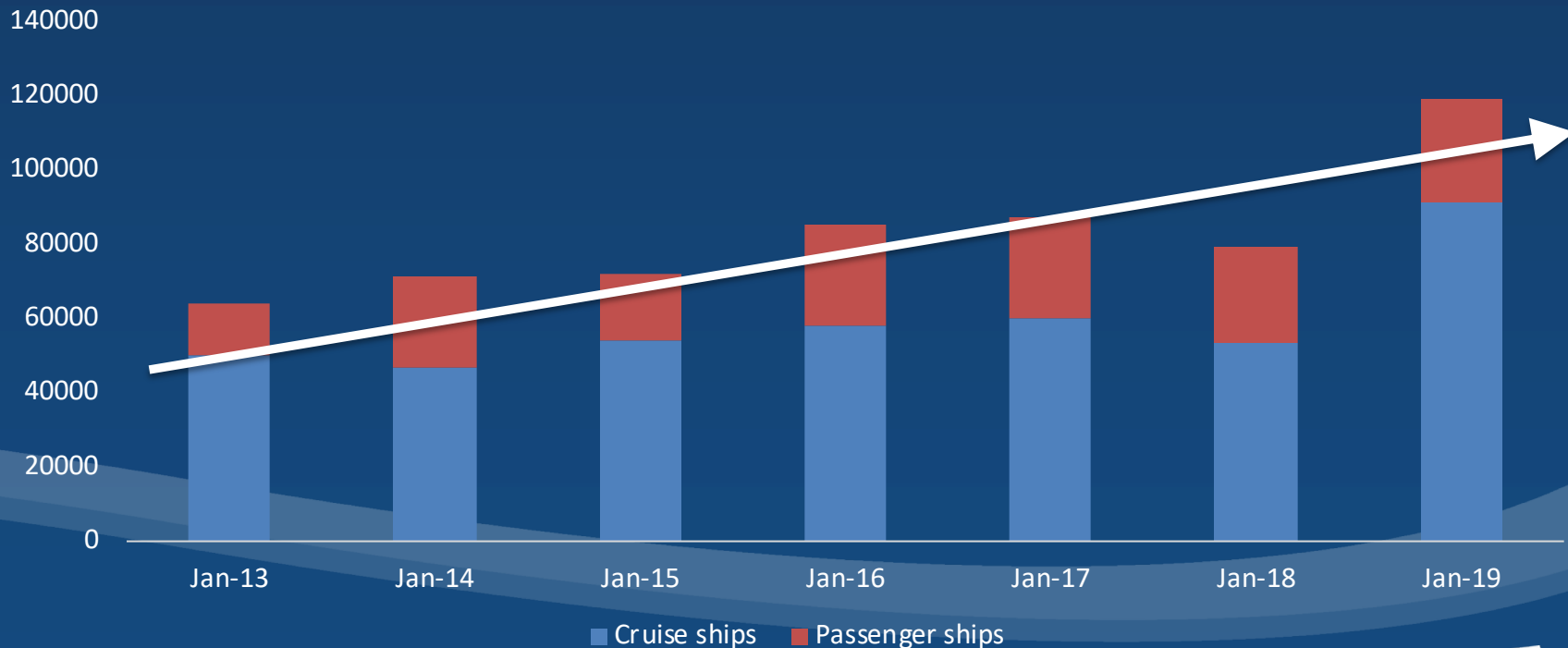
Distance sailed is the aggregated nautical miles vessels traveled in a certain period of time in a certain area.

Distance Sailed – Arctic Polar Code area 2013-2019

Cruise and Passenger vessels

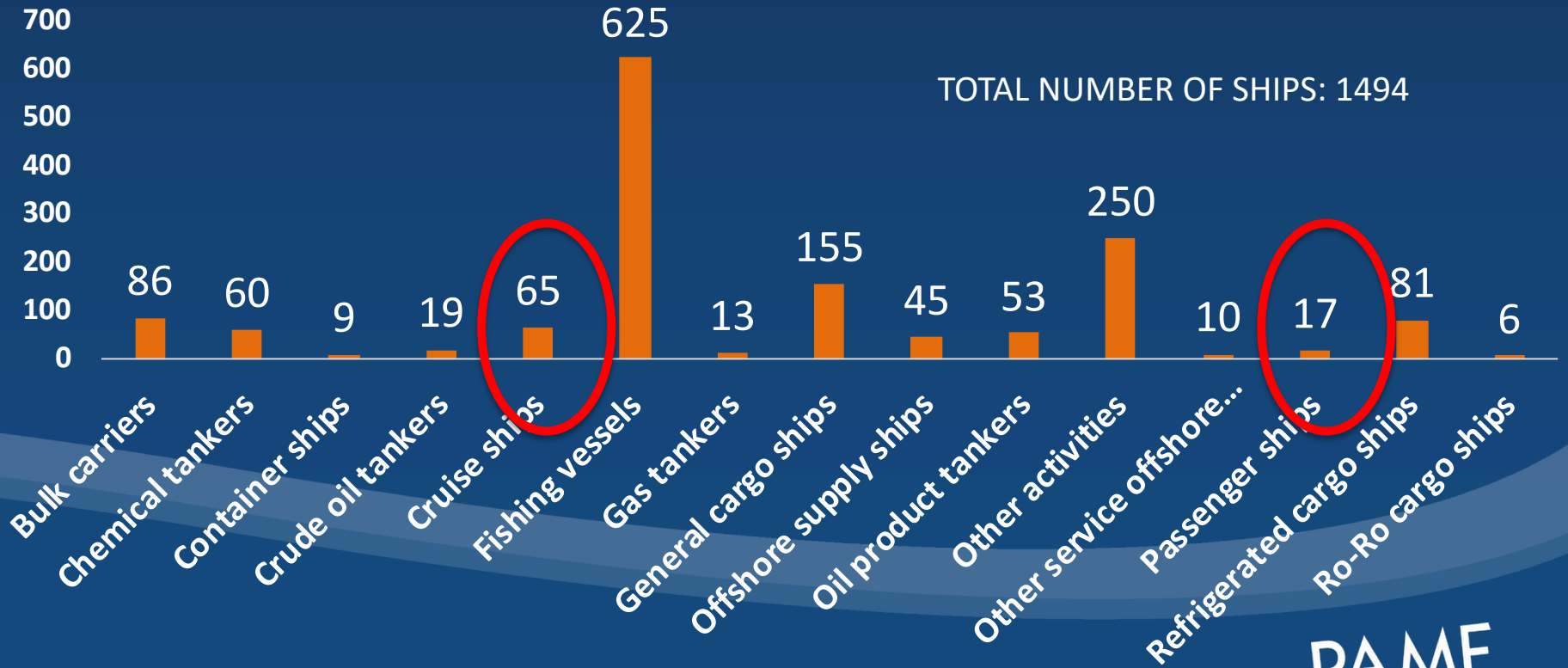


Distance Sailed – Arctic Polar Code area 2013-2019 in September: Cruise and Passenger vessels



Ship types in the Arctic Polar Code Area 2018

Number of unique ships



Ship types in the Arctic Polar Code Area 2018

Number of unique ships

TOURISM VESSELS

82

ALL OTHER SHIPS

1412

Ship types in the Arctic Polar Code Area 2018

Number of unique ships

TOURISM VESSELS

5,5%

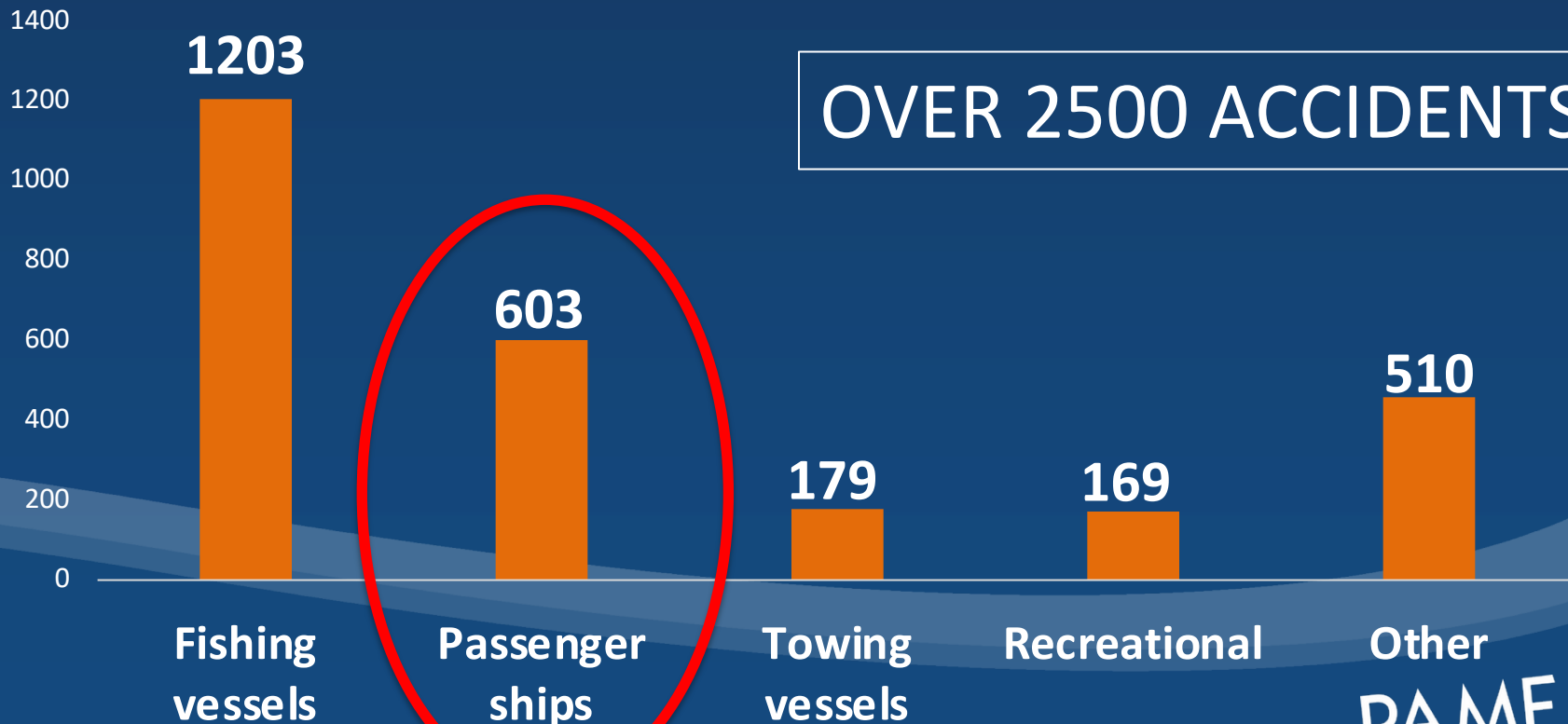
INCREASED
DISTANCE SAILED

=

INCREASED RISK

SHIP ACCIDENTS 2005-2017 – ARCTIC AREA PAME/EPPR CASA PROJECT

OVER 2500 ACCIDENTS



MORE VESSEL
ACTIVITY
=
UPWORD TRENDS
FOLLOW

Increase in:

- Fuel consumption
- CO2 and other emissions
- Shipping accidents
- **Number of seafarers**
- Marine litter

THANK YOU
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