



**BUREAU
VERITAS**

MARINE & OFFSHORE

**VERS UN MODÈLE
EUROPÉEN DE PARTAGE
DES DONNÉES?**
IoT et Partage des données

Dauphine Université Paris – JUIN 2016

BUREAU VERITAS GROUP KEY FIGURES

#2 WORLD BIGGEST ACTOR ON TIC MARKET



€6.5
billion

2025

+6,5% ORGANIC GROW



84 250
employees



400,000+
clients



~1 500
offices &
laboratories

IN 140 COUNTRIES



BUREAU VERITAS GROUP CORE SERVICES & MARKETS

Testing Inspection & Certification

Our **TRUSTMAKERS** build trust at every stage of the supply chain from source to society.



LAB TEAMS



DESK TEAMS



FIELD TEAMS



EMBEDDED TEAMS

INDUSTRIALS AND COMMODITIES

INDUSTRY

Oil & gas, Power & utilities, Industrial products certification (IPC)



MARINE & OFFSHORE

COMMODITIES

Metals & Minerals, Agrifood

FUELS

URBANIZATION AND ASSURANCE

BUILDINGS & INFRASTRUCTURE

CERTIFICATION incl TRANSITION SERVICES

CYBERSECURITY SERVICES

GOVERNMENT SERVICES

CONSUMER PRODUCTS

CONSUMER PRODUCTS

TECHNOLOGY

THE LARGEST TIC BODY IN MARINE & OFFSHORE

3,000+ experts

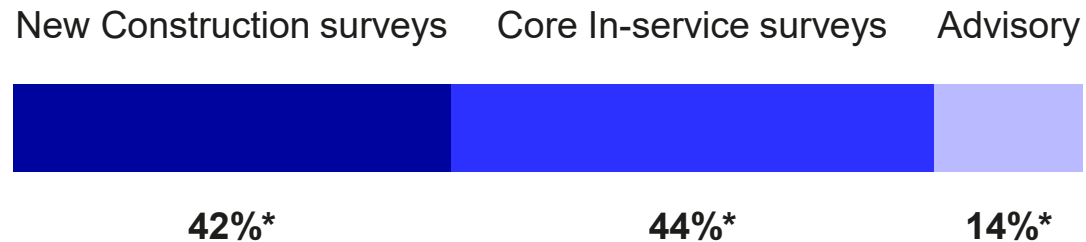
70%
engineering skills

~200 years
of experience

+100
Countries



Activity breakdown



* as a % of revenue division

Our Priorities



DECARBONIZATION

Develop alternative fuels and propulsion systems to reach net zero emissions

—

Protect the marine environment (air, water, marine life)



DIGITALIZATION

Improve cybersecurity

—

Enable development of smart and autonomous ships

—

3D Class, AI, Data Analytics



SAFETY



ENVIRONMENT



PERFORMANCE

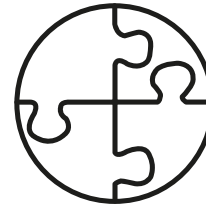
MARITIME REGULATIONS ARE SECTOR SPECIFIC AND RESULTING FROM MULTILATERAL INTERNATIONAL PROCESS

UN AGENCY



Adopts & ratify
international
conventions

FLAG AUTHORITIES



UN member states
apply regulations to
their fleet and **control**
foreign ships

CLASS SOCIETIES



Certify compliance of
ships under a scope of
delegation granted by
Flags

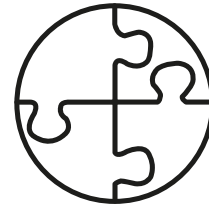
HOW DOES IT WORK FOR EU REGULATIONS?

EUROPEAN UNION



Adopts maritime
sector specific
Regulations

EU MEMBER STATES



Member states
implement in their
legislation & **accredit**
notified bodies

NOTIFIED BODIES



Certy compliance
under a scope of
accreditation granted
by EU member state

YOUR CLASSIFICATION PARTNER WITH A DIVERSE FLEET

MARKET TREND

2025



Container
Cruise
Offshore
Navy

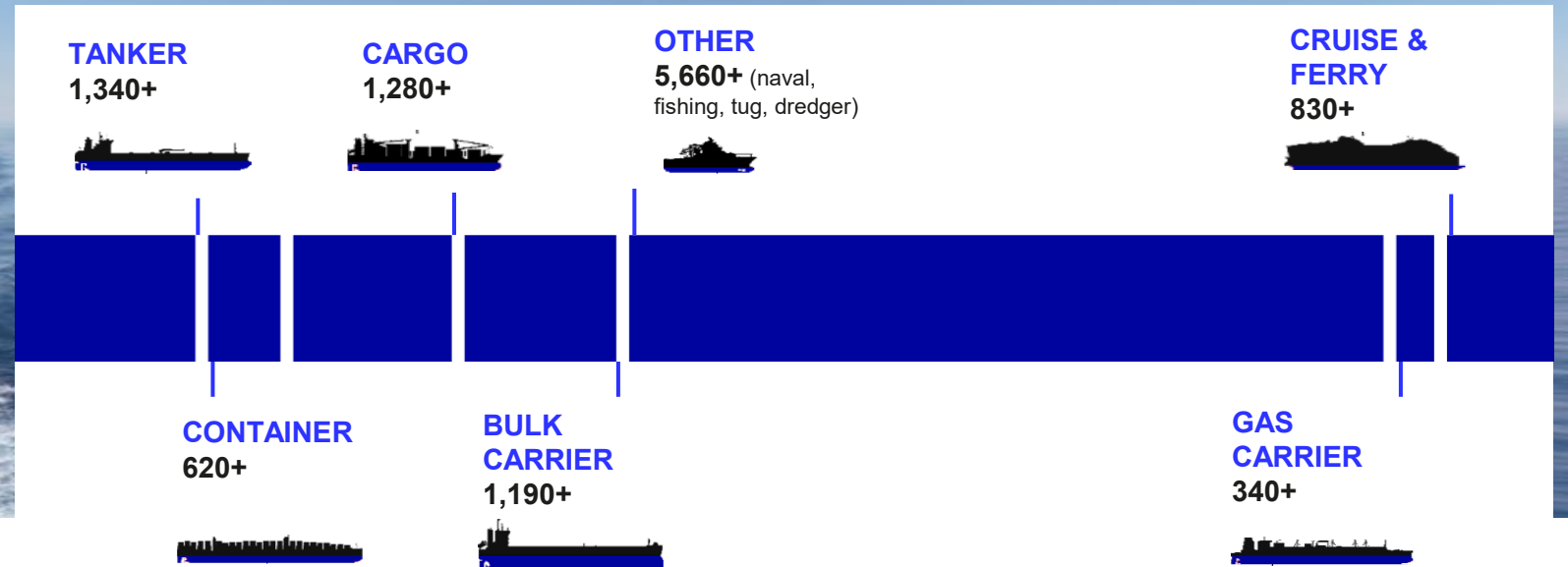


Oil Tankers
Gas Tankers
Bulk Carriers
PCTC

MORE THAN

12,200

Ships in classed fleet



UNDERSTANDING THE MARITIME SECTOR

Fragmented

Small fleets distributed through **multiple companies**

Multiple actors: owners, operators, managers, charterers linked through bi-lateral contracts

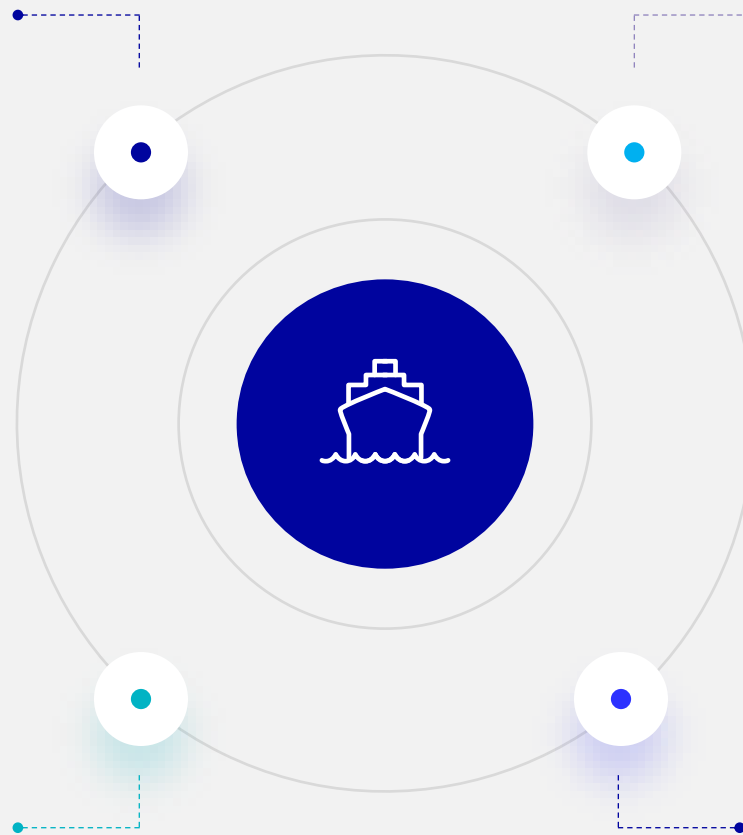
100,000 ships and as many **prototypes**

Shipyards are less manufacturers of products but more **integrators of equipment** and systems

Ship-owners manage **as many warranty and maintenance contracts** as they have equipment onboard

Experience based

The maritime industry might be seen as “conservative”, it is actually more **pragmatic** and **resilient** as it serves 90% of the transport of goods through all geopolitical (or sanitary) crisis



Digitalisation

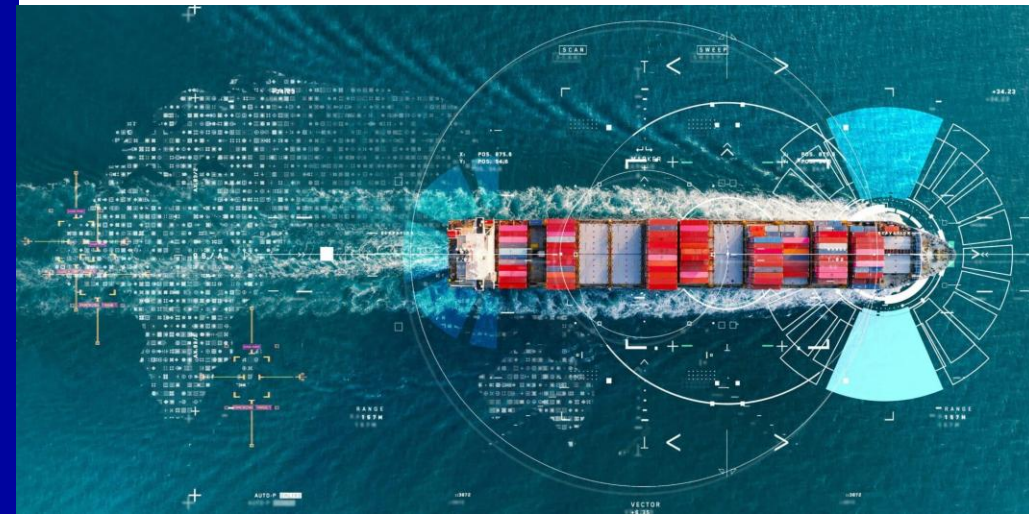
- Driven by **Energy Transition** and need for efficiency e.g. real time weather routing
- **Ship connectivity disruption** thanks to LEO constellations: Starlink, OneWeb, Guowang, ...
- Raise of **autonomous shipping**
- **IoT embedded** inside equipment of major manufacturers subscription
- Main concerns are related to **cybersecurity**

Law

Though international conventions are implemented by Flag Authorities, most of commercial contracts refers to the **arbitration court of London**

QUESTIONS RAISED FROM EU DATA ACT

Should we wait for litigations and case laws from a competent court of arbitration?



COMPLIANCE

For an effective and pro-active implementation, the maritime sector would need sector specific EC Directives and Delegated acts defining the applicability of **“placing on the market”** for an equipment onboard a ship, the enhancement and control mechanisms, accreditations and certification process.

RESPONSIBILITY

- **User**: Ship-owner? Technical manager? Crew manager? Ship-operator?
- **Data holder** and **Third party**: Shipyard vs. manufacturer vs. SaaS actors?
- Role of **EU Flags**?

POTENTIAL DISRUPTION

When applied the data act would **disrupt existing business models** ruled by multiple warranty contracts and manufacturer’s defined planned maintenance.

Access to equipment condition data would accelerate the merge of **predictive maintenance actors**.



**BUREAU
VERITAS**

Shaping a better maritime world

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