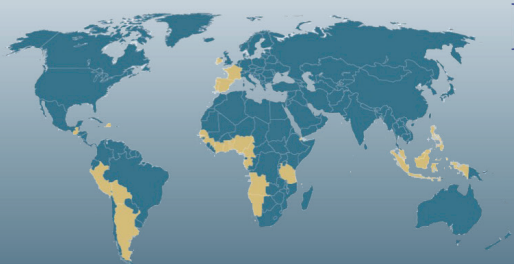


# TRAINFORTRADE PORT PERFORMANCE SCORECARD 2018

## PPS4



## Geneva Port Performance Conference, April 11th to 13th 2018

The 4<sup>th</sup> Port Performance Conference for the Port Management Programme network of ports was held in Geneva, Switzerland at the Palais de Nations, in April 2018. This was a significant event, building on the technical achievements of the earlier conferences (Manila 2014, Ciawi 2015, Valencia 2016) leading to active consideration of the data outcomes and presentations by port leaders from across the network describing their practical experiences of measuring performance in ports.

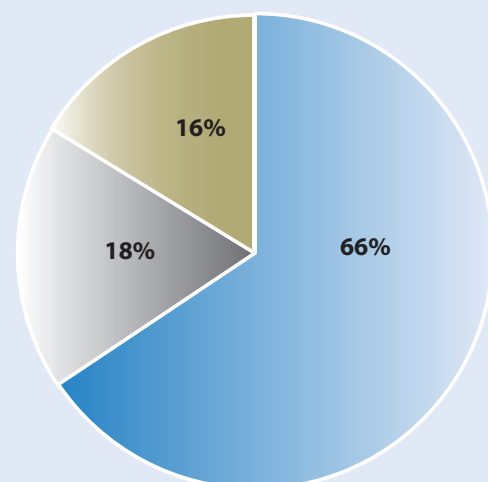
The conference was part of a broader gathering for a Port Management Week that included the 20<sup>th</sup> Coordination meeting of the French-speaking network and the signing of a new Memorandum of Understanding by the main ports on the island of Ireland and Irish Aid, the development arm of the Irish Government.

The framework for the annual comparisons of indicators remains founded on the Balanced Scorecard concept. The six main categories are: Finance, Human Resources, Gender, Vessel Operations, Cargo Operations, Environment.

Environment and Gender balance indicators are new features of the Scorecard. The objective is to provide Network member ports with valuable performance comparisons within region and class of port for each of the Scorecard Dimensions.

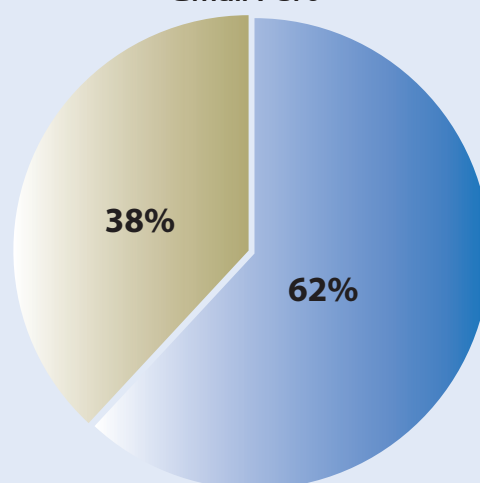
The results and graphics presented are reflecting the data provided by the reporting countries/Port Entities of the Network only and are not to be interpreted as the results for all ports in the 4 Regions defined under this scheme. The time frame considered is 2010-2017 with averages. Benchmarking has been developed based on 4 Regions; Asia, Africa, Europe and Latin America as simplified "blocks" to group the reporting Port Entities. Finally, the global average is provided for

### Port Size Based On Annual Throughput



- Small ports < 10m tonnes
- Medium ports > 10m tonnes and > 20 m tonnes
- Large ports > 20m tonnes

### Small Port



- Small ports < 5m tonnes
- Small ports > 5m tonnes < 10m tonnes



Delegates from the port communities of Africa, Asia, Latin America, Caribbean and Europe in the Palais des Nations Geneva, Switzerland.

# PORT DATA PROFILE

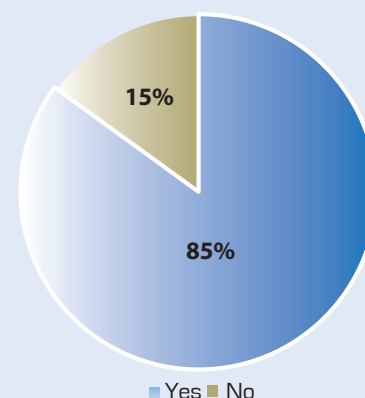
all Networks (French, English, Spanish and Portuguese-speaking), representing a total of 48 Port Entities from 24 countries.

When making comparisons in performance the standard caveat is that ports are very difficult to compare. One port is not necessarily the same as another with many context variables to consider. The Dashboard describes the data profile for the 48 reporting ports in terms of dataset metrics, port size, modal mix, plus governance, market and regulatory structures. The indicators come from a wide range of ports with 66% having annual volumes less than 10m tonnes.

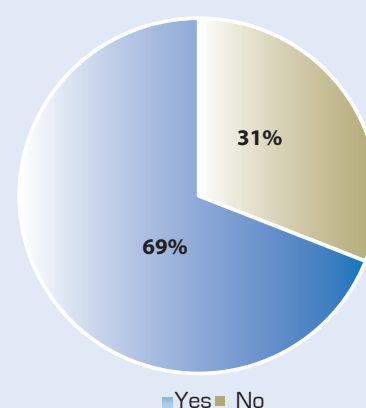
Where there is common ground in governance terms is in the proportion of countries that corporatised their ports (authorities) in some form of commercial structure. Ownership is consistently maintained by the State, even in the one case of regional government control.

A standard descriptive model of port functional configuration differentiates between the landlord, tool, and full service typology. The narrative in the returns suggest that national policy may seek to involve the private sector in service provision through concessions, otherwise known as the Landlord model. The feedback, and academic research, suggests that it is difficult to classify a port with a single label. In this latest survey the option of mixed was included and some ports changed from Landlord to mixed. While policy may indicate a strategy quite often the market responses are varied. The data suggest that port entities do adapt in this context.

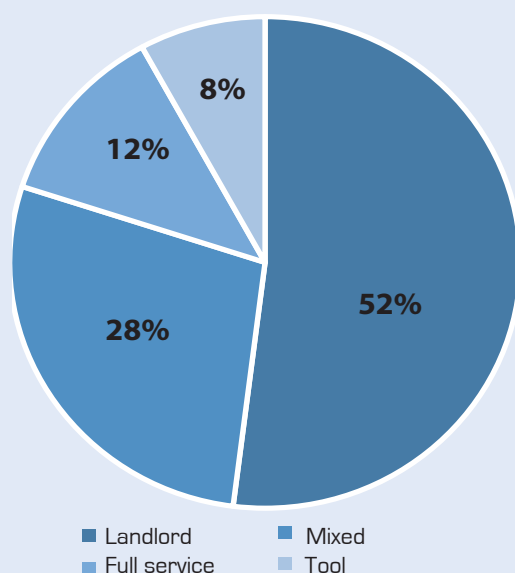
### Corporate Body



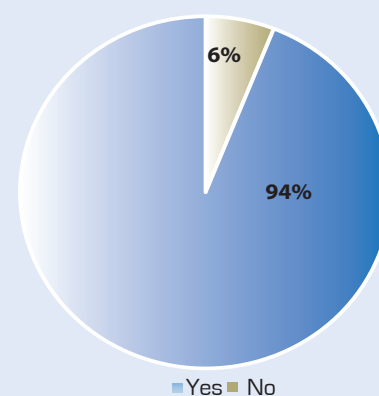
### Economic Regulator



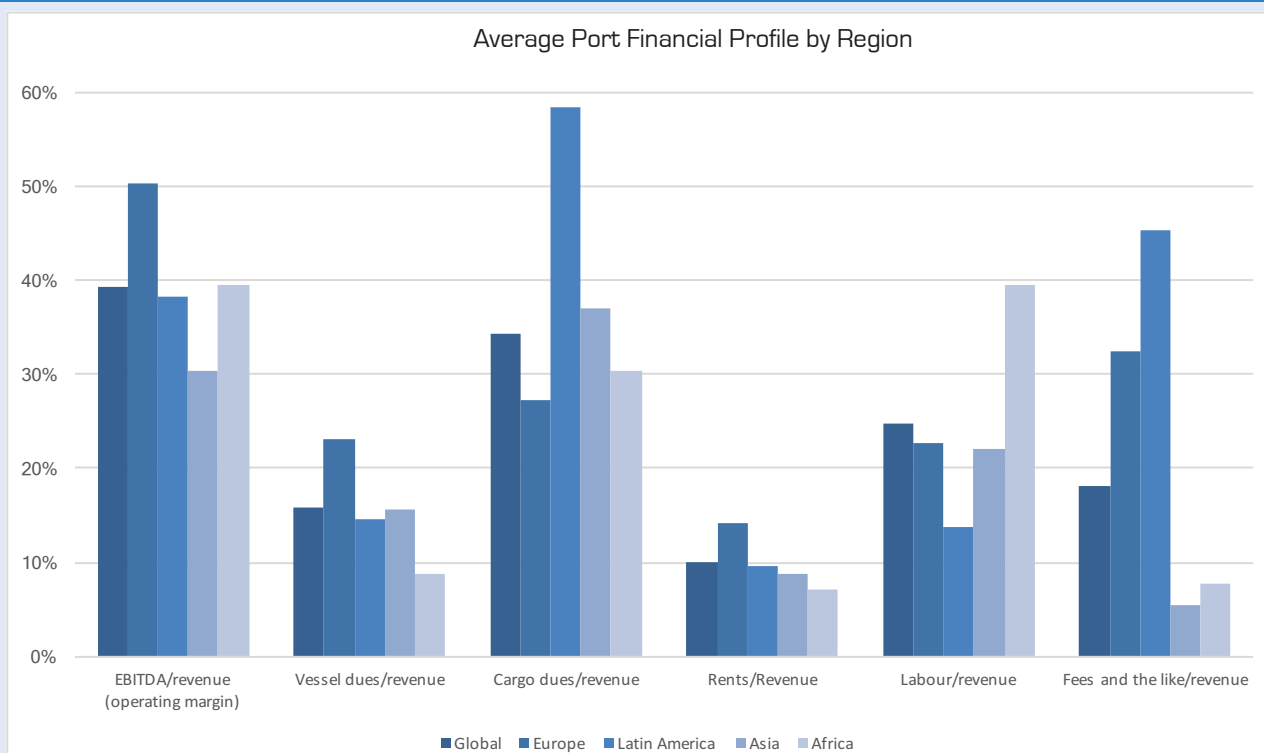
### Functional Model



### Central Government Control



# FINANCIAL SECTION



Nonetheless, a large proportion do concession service provision and more than half, where scale permits, seek to create a competitive market for those services. As a contra, many ports also maintain a presence in the port service market. This may be driven by the need to ensure that market functions effectively for port users.

This is a very good illustration of the regional financial profiles of the average ports in the Port Management Programme Networks. EBITDA, as a proxy for operating efficiency and capacity to generate cash for investment, is tightly clustered with Europe showing the highest margins.

It is always useful to look at Port Dues for cargo and vessels together. For example, Latin America is the lowest on vessels but the highest on cargo. This visual comparison suggests that the regional differences are less for the gross port dues proportion of revenue. Total revenue when averaged across volumes suggest that just over \$4 is earned on each tonne of cargo.

Rent is a traditional source of independent income for ports. The clustering of the data in this graph is consistent with previous reporting. It is interesting to contrast this with the concession/fee variable. It varies quite significantly across the network. There is a shift towards concessions to the private sector but thus far it does not necessarily imply a move away from leasing. Is this because concessions are in addition to a lease rather than a replacement for a lease?

In the labour data Africa is the outlier with a high average payroll cost as a proportion of Revenue. Is this because of lower revenue levels or is it because of higher levels of staffing? The average wage calculates at \$47'000 approximately with a large range of values. It is a number that requires a great deal of nuance and comparison with local economic indicators.



Panel members representing top management Ports from Spain, Dominican Republic, Ireland, Côte d'Ivoire, Serbia and France

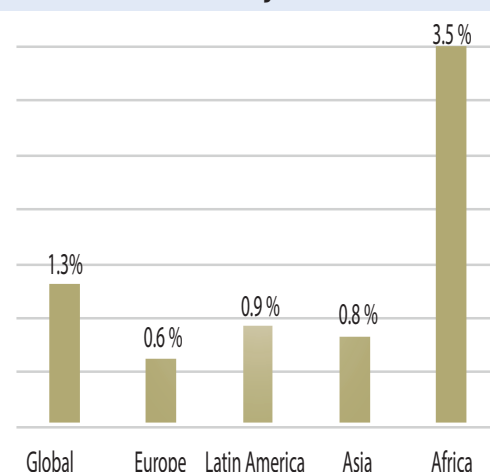
# HUMAN RESOURCES SECTION

There is plenty of debate on the how ports will develop in the future given the radical shift from a labour intensive to a capital intensive industry; and the shift from low to high skills profiles of staff members. This was a specific discussion point at the Geneva meeting with speakers reinforcing the point that the training demands of the future are in need of innovative solutions and increased delivery capacity.

The information on employee contributions to volume and value growth are a useful comparison over time and cross nationally. To interpret the values for each port requires data on average pricing, profit ratios and labour hiring practices.

The comparison between Asia and Europe, for example, suggests a fundamental difference between staff levels even if an allowance is made for possible higher pricing per unit/tonne. 1.3% of payroll is been invested for training in the network, while Africa is the highest with 3.5% and Europe the lowest with 0.6% in relative terms.

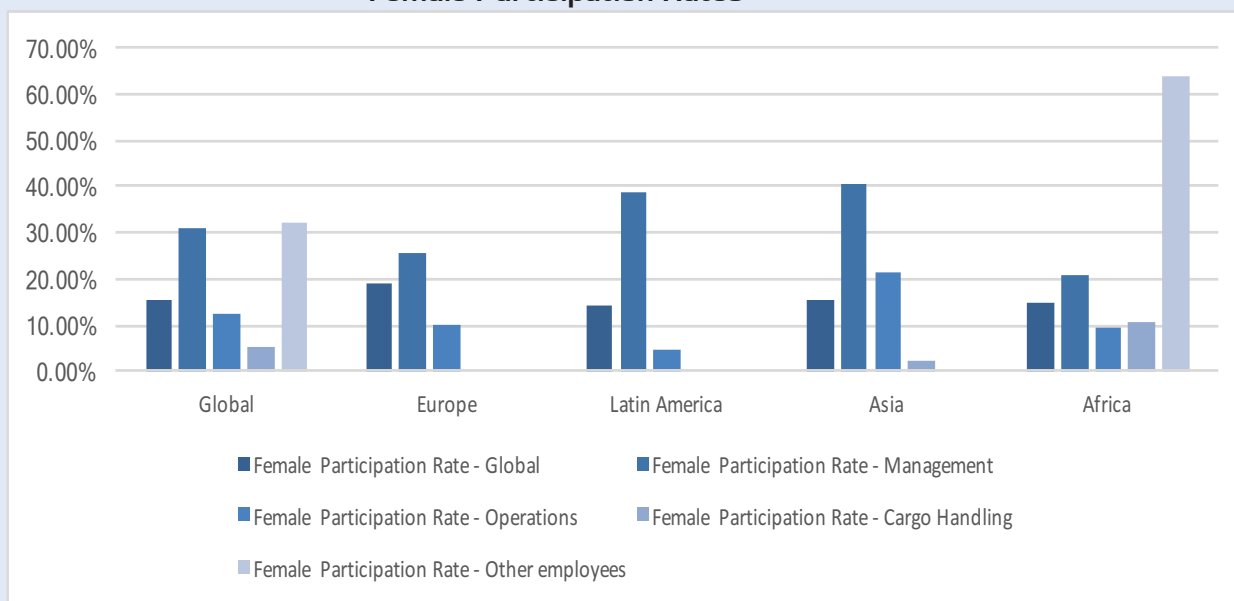
**Training Investment  
% of Payroll**



## GENDER SECTION

There is a wider societal imperative to develop a gender balance in employment levels with no area of the port operation off limits to any particular gender. At present there is progress on the 'indoor' element of port functions but significantly less progress in operational roles.

**Female Participation Rates**



## OPERATIONAL EFFICIENCY: CARGO, VESSELS AND LAND

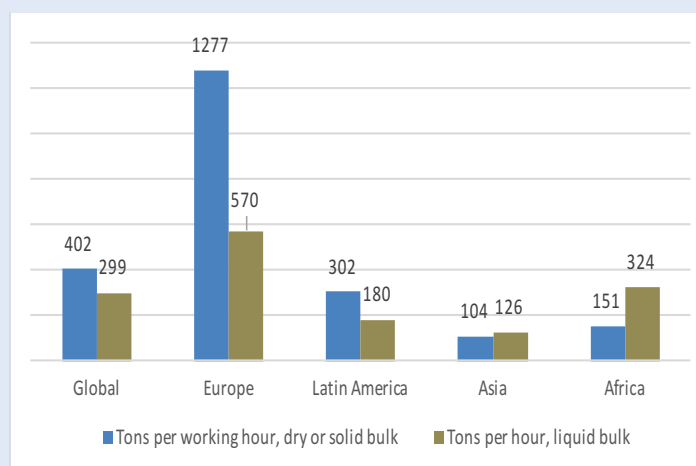
Regional comparisons of performance in cargo handling, vessel servicing, and land utilization suggest a wide range of operational differences. For example, waiting time for vessels from first request to movement to the berth are high in Africa but quite low, if not negligible, in Asia and in Europe. There may be logical operational configurations that explain this difference or the high waiting time in African members may be due to a shortage of berths.

The land utilization indicator, based on hectares in the port suggest that Europe has the highest productivity levels. This in turn may well be a product of necessity as many of these ports are situated in or close to old cities.

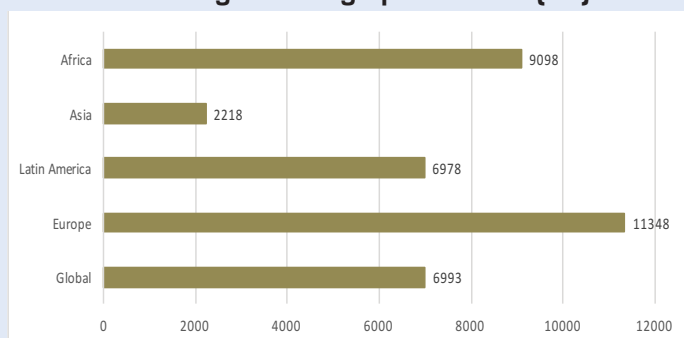
Box movements per hour are a difficult indicator to collect and to compare. The rate is a function of driver productivity, road train capacity, yard proximity, crane technical capacity, terminal management and ship load configuration. The current measure is a comparison of average box handling rates per gross crane hour. A dialogue with members is ongoing to identify the reasons for the range of indicators. The detailed indicators are known to Terminal Operators but not always known to the reporting port entity.

# OPERATIONAL EFFICIENCY: CARGO, VESSELS AND LAND

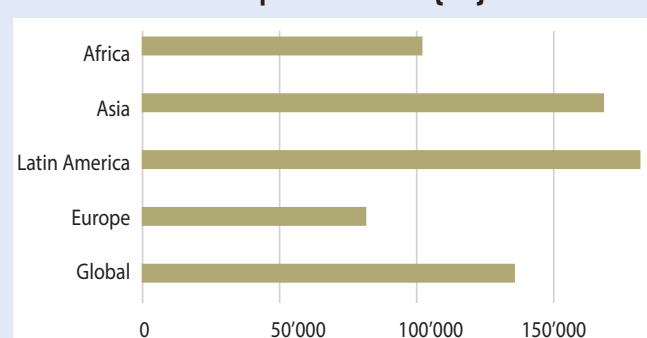
## Tons per Hour (Liquid and Dry Bulk)



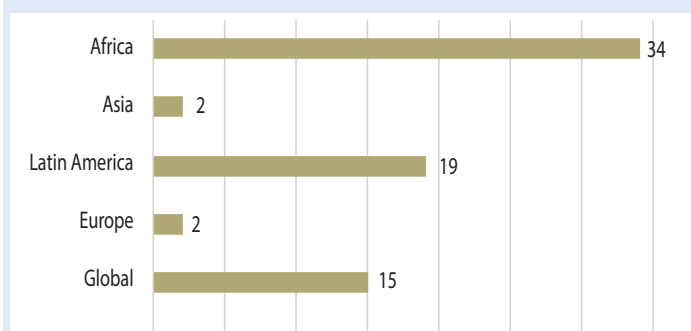
## Average Tonnage per Arrival (All)



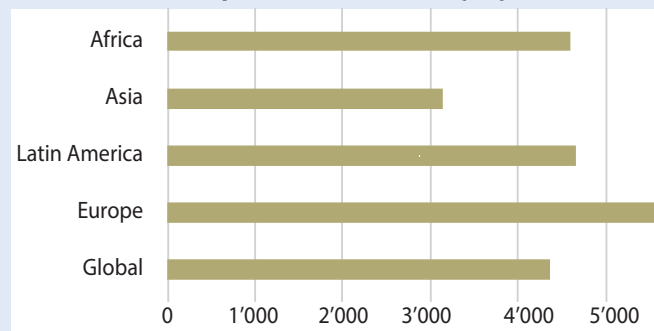
## Tons per Hectare (all)



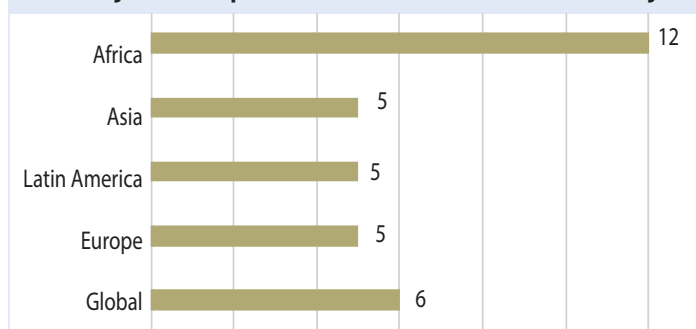
## Average Waiting Time (h)



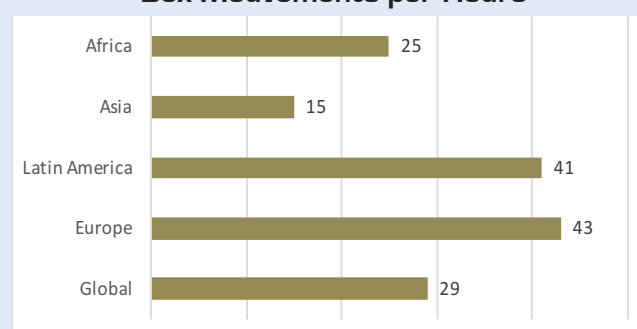
## Tons per Berth Meter (all)



## Twenty-Foot Equivalent Unit Dwell Time in Days



## Box Movements per Hours



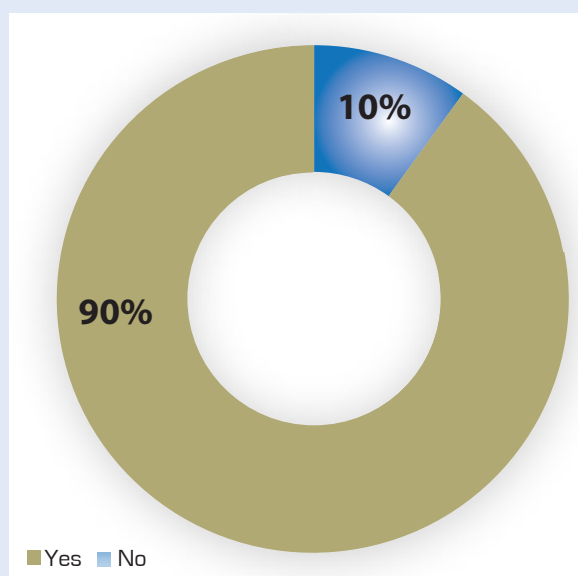
# ENVIRONMENT SECTION

Environment is the new category of indicators added to this survey. The debate across the Network needs to focus on how useful these measures are and how they can be understood in conjunction with data that shows all ports have an Environment Management System (EMS) and all ports monitor pollutants (air, water, noise etc.).

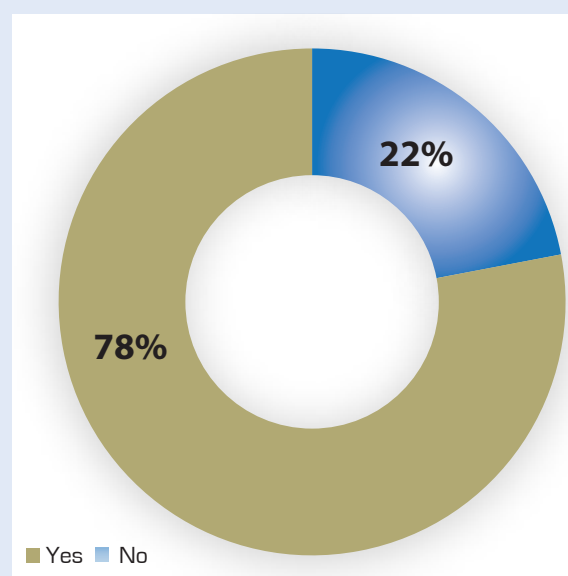
Therefore, for management and monitoring all ports are recorded as 'Yes', which gives no sense of relative performance. The financial data has a different focus as they can illustrate the rising level of relative spend on environmental matters, operationally and in capital projects e.g. mitigation spending for habitats.

However, financial data is difficult to isolate and report. The positive story, if only based on a small number of responses, is that the majority of ports comply with the highest international standards. For those that do not choose to seek ISO certification the port size and relative cost may explain opting for local level compliance.

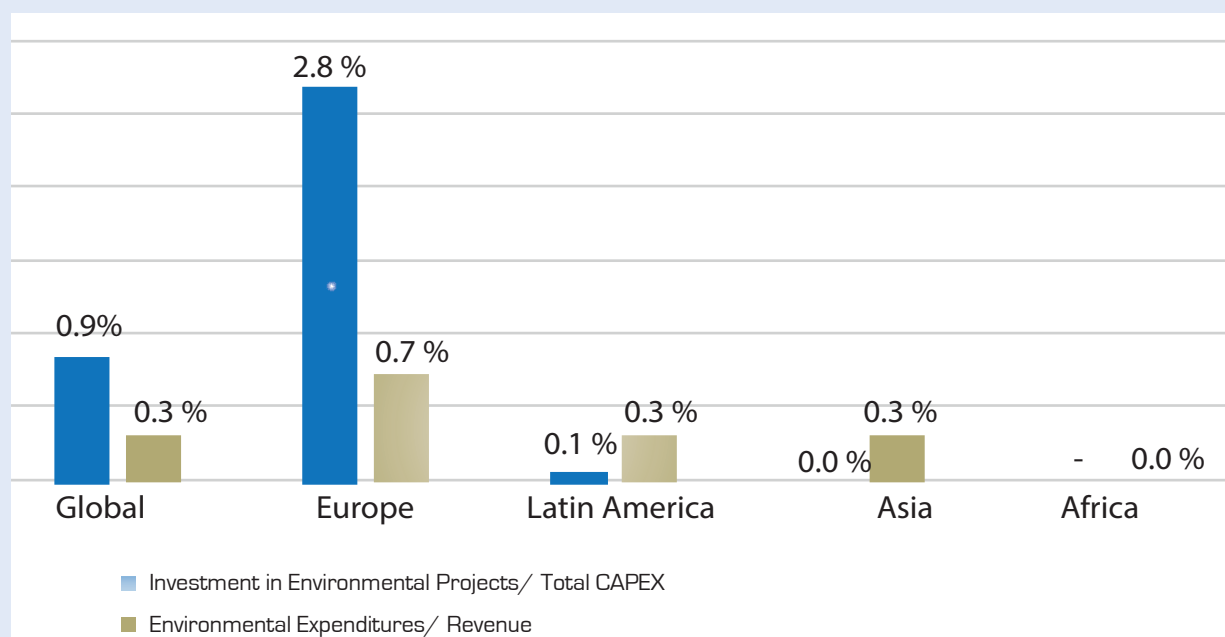
### ISO 14 001 Compliance



### Environment Management System



### Environmental Investment and Expenditures by Network Ports





# CONCLUSIONS AND ACTIONS AGREED

Conclusions and actions agreed by the delegates during the Geneva Port Performance Conference:

- Each member port should review their returns to complete and validate their submissions, in consultation with UNCTAD.
- The importance of network commitment to the project (management buy-in) was endorsed by the delegates present.
- The importance of Human Resource indicators e.g. training and staff development in the global maritime economy was highlighted by contributors in panel discussions.
- Satisfaction surveys are outside scope at present given the local nature of each survey making global and regional comparisons problematic.
- A new Scorecard section for environmental performance indicators was introduced in this cycle. Feedback on this from network members is encouraged to assess the value of the indicators, the challenges with data collection and the potential for additional or alternative measures
- A proposal to share individual port scorecards was discussed and it was agreed to review options at local level so that a decision can be made in the next cycle.
- Feedback on the data definitions and text explanations is encouraged and the manual can be accessed on the data collection platform.
- The reporting by region was welcomed and a proposal to report by port volume tiers and port cargo profiles will be examined by UNCTAD. Feedback from members on the value intervals for such a tiered reporting format is encouraged.
- The graphical presentation of scorecard outcomes is welcomed, and it is proposed to enhance the graphs available in line with those presented by Valencia and Gijon ports (Spain)
- To explore the use of the results of the regional and global Port Performance Scorecard as a tool to measure the contribution of the ports participating in the network to the achievement of the global sustainable development goals.

## Port Management Programme

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Group Picture in the Assembly Hall of Palais des Nations