



7th Framework Programme
SST.2013.6-2. Towards a competitive and resource efficient port transport system
Collaborative Project
Grant Agreement no. 605176

Deliverable 8.1

Monitoring the Ports Policy through PORTOPIA

DOCUMENT ID
PORTOPIA|D|8.1|DT|2013.12.31|V|FINAL

DUE DATE OF DELIVERABLE
2013-12-31

ACTUAL SUBMISSION DATE
2013-12-31

DISSEMINATION LEVEL
PU (Public)

DELIVERABLE 8.1

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Issue Date	2013-12-31
Revision	De Schepper S.
Status	Final
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Pages	22
Figures	1
Tables	1
Annexes	/

SIGNATURES

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Monitoring the Ports Policy through PORTOPIA

REVISION

Revision Date	Reviewer Name	Reviewer Signature
2014-12-05	De Schepper, S.	

DELIVERABLE 8.1

Discussion paper: linking specific and operational objectives of the EU port policy proposal to performance indicators.

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Discussion paper: linking specific and operational objectives of the EU port policy proposal to performance indicators.

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1 INTRODUCTION

Deliverable 8.1 reflects on table 2 on p.56 of the IMPACT ASSESSMENT accompanying the proposal for a regulation establishing a framework on the market access to port services and the financial transparency of ports (COM document SWD (2013) 181). This table is given below:

Table 1: The Table from the Impact Assessment

Operational objective	Core progress indicators	Source of data
OO1: Clarify and facilitate access to port services market	- the number of service providers in ports for the different categories of port services - market shares of port service providers	- fact finding survey
OO2: Prevent market abuse by port service providers with exclusive or special rights	- number of new Commission infringement procedures linked to market abuse	- Commission data on infringements procedures / complaints received
OO3: Ensure the consultation of port users on the main decisions which affect the functioning of the port in all (100%) TEN-T ports by the end of the implementation date of the initiative	- average number of procedures needed to enter/operate in a port - the number of newly installed port user committees in TEN-T ports	- fact finding survey
OO4: To ensure the transparency in the financial relations between public authorities, port authorities and port service providers in all (100%) TEN-T ports by the end of the implementation date of the initiative	- number of new Commission infringement procedures linked to transparent financial relations between public authorities, port authorities and providers of port services	- Commission data on infringements procedures / complaints received
OO5 To ensure that all (100%) TEN-T port authorities are free to autonomously set their port	- number of ports with autonomous port infrastructure charging - the number of new Commission	- fact finding survey
infrastructure charges by the end of the implementation date of the initiative, with the possibility of environmental modulation of the charges	infringement procedures linked to port infrastructure charges in TEN-T ports - the number of newly installed methods for environmental modulation of port infrastructure charges in TEN-T ports	

Starting remarks

A few starting remarks are relevant with regard to this deliverable:

1. Since the proposal was published, all kinds of stakeholders have expressed their opinion to the Commission as well as in public. These may result in a modified proposal. Furthermore the European Parliament has proposed relevant amendments. This may place the performance indicator discussion in a different perspective. However, this paper treats the table 'as is' and does not include an analysis of (potential) changes to the proposal and their effects on performance indicators.

2. This discussion paper provides independent academic feedback on the suggested indicators. ESPO as a partner in PORTOPIA has been involved, but the opinion expressed in this discussion document is the opinion of the academic partners involved in Workpackage 8 alone. A first version of the document was circulated early November to selected partners of the consortium, after which feedback was integrated and presented to the ESPO Executive Committee on December 10th, 2013. Further feedback will be integrated after discussion with ESPO and the European Commission.
3. This discussion paper argues that *if* ‘formal’ performance indicators to monitor the effects of EU policies are to be developed, it probably is sensible to use the PORTOPIA project to secure the collection of reliable data in an efficient manner. As soon as there is more clarity on the proposal, further discussions between ESPO and the Commission on this issue are advisable.
4. The indicators suggested by the Commission (see table 1 above) aim to establish a direct link between the operational objectives and related performance indicators. This is a choice. An alternative approach would be to take a more holistic view on the port’s sector and aim to identify a limited number of overall performance indicators and focus the monitoring efforts on those. Obvious potentially relevant performance indicators include the evolution of throughput, investments, environmental and economic impact and user satisfaction of the EU ports system. Such indicators cannot be directly be related to the operational objectives, but as we argue in detail below, the proposed indicators are also ambiguous, so there is an argument for taking the holistic approach.

This paper consists of first an executive summary table (table 2 below) and second a more detailed analysis, with a specific focus on the market access indicators as that is on the one hand a widely debated issue and on the other hand, established academic research provides relevant insights with regard to this objective and potential performance indicators.

2 INDEPENDENT ACADEMIC FEEDBACK ON THE PROPOSED PERFORMANCE INDICATORS OF THE COMMISSION: SUMMARY TABLE

Table 2: Independent academic feedback on the proposed performance indicators of the European Commission: Summary Table

Operational objective	Core performance indicator from Impact Assessment	Source of data indicated in Impact Assessment	Feedback on indicator	Assessment of data availability	Proposed alternative	Assessment of benefits through inclusion in PORTOPIA
OO1: Clarify and facilitate access to port services market	<p>A: the number of service providers in ports for the different categories of port services</p> <p>B: market shares of port service providers.</p>	Fact finding survey	<p>A: the number of service providers is an appropriate indicator (though some discliamers apply¹) that is not currently included in PORTOPIA. More detailed decisions are required concerning services for which the indicator should be collected.</p> <p>B: Given the indirect relation between number of service providers and efficient service provision, one indicator suffices. We doubt about the feasibility of this indicator. It is also not clear how the relevant market is to be defined.</p>	<p>A: data is publicly available (but may require in depth analysis).</p> <p>B: data is not publicly available and commercially sensitive.</p>	None	<p>A: The indicator could be included in PORTOPIA to reduce the administrative burden on port authorities.</p> <p>B: No benefits</p>

¹ The performance indicator ‘number of service providers’ is not causally related to ‘better port service provision’. There are valid reasons for choosing other mechanisms to secure efficient service provision than aiming to introduce intra-port competition.

<p>OO2: Prevent market abuse by port service providers with exclusive or special rights.</p>	<p>C: number of new Commission infringement procedures linked to market abuse</p>	<p>Commission data on infringements procedures / complaints received</p>	<p>C: The indicator is ambiguous: while on the one hand more infringement procedures may signal increased awareness of the options to challenge market abuse (as the Commission notes, firms may have significant barriers that prevent complaints and legal cases), it may also suggest the continued practice of market abuse. This indicator is relevant but not a true performance indicator.</p>	<p>Data is available</p>	<p>None</p>	<p>This indicator would not benefit from integration in PORTOPIA.</p>
<p>OO3: Ensure the consultation of port users on the main decisions which affect the functioning of the port in all (100%) TEN-T ports by the end of the implementation date of the initiative.</p>	<p>D: average number of procedures needed to enter/operate in a port E: the number of newly installed port user committees in TEN-T ports</p>	<p>Fact finding survey</p>	<p>D: We have serious doubt about these indicators. It is not the number of procedures that matters, but the resulting paperwork, uncertainty length and associated costs). E: We do not think that the ‘institutionalized port user group’ is a good indicator of inclusive decision making / consultation. Alternative non-institutionalized methods may be better.</p>	<p>Data is ambiguous</p>	<p>A port user satisfaction indicator. The responsiveness of the port authority is best measured with survey based evaluations.</p>	<p>A user satisfaction indicator would benefit from inclusion in PORTOPIA.</p>

<p>004: To ensure the transparency in the financial relations between public authorities, port authorities and port service providers in all (100%) TEN-T ports by the end of the implementation date of the Initiative.</p>	<p>F: number of new Commission infringement procedures linked to transparent financial relations between public authorities, port authorities and providers of port services.</p>	<p>Commission data on infringements procedures / complaints received</p>	<p>F: We do not think this is an appropriate indicator, refer to our previous comments on infringement procedures as an indicator.</p>	<p>Data are available</p>	<p>The level of port authority investments as % of turnover.</p>	<p>The alternative we suggest would benefit from inclusion in PORTOPIA.</p>
<p>005 To ensure that all (100%) TENT port authorities are free to autonomously set their port infrastructure charges by the end of the implementation date of the initiative, with the possibility of environmental modulation of the charges.</p>	<p>G: number of ports with autonomous port infrastructure charging H: the number of new Commission infringement procedures linked to port infrastructure charges in TENT ports I: the number of</p>	<p>Fact finding survey</p>	<p>G: An appropriate indicator. A precise definition of what qualifies as autonomous port infrastructure charging is required. Relevant items may include <ol style="list-style-type: none"> 1) Is there a ratification in a city council, superior government layer or other public institution 2) Are port authorities also fully responsible for the process of collection of dues without transfers to other entities of government. <p>H: This indicator is ambiguous and may not be provide additional value in relation to the first indicator.</p> </p>	<p>G: Data can be collected but requires a significant effort. H and I: data is available</p>	<p>None</p>	<p>G: could be collected effectively through PORTOPIA. This would reduce administrative burden for port authorities.</p>

	<p>newly installed methods for environmental modulation of port infrastructure charges in TEN-T ports.</p>		<p>I: While some ports have decided to differentiate prices based on environmental performance, we would argue that ports are best left free to choose the best options to improve environmental performance. That would imply the third indicator is of limited value. If there is broad consensus among port authorities that differentiated tariffs are effective then this indicator is relevant.</p>			
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Source: PORTOPIA Consortium (2013)

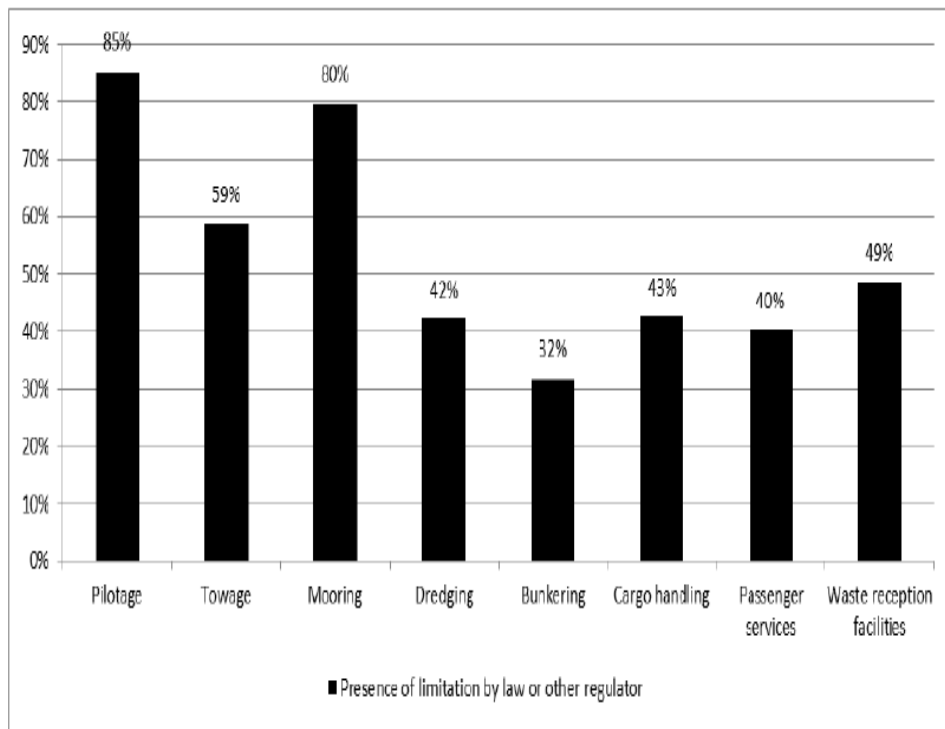
3 DETAILED ANALYSIS OF THE PROPOSED INDICATORS

The detailed analysis is more in depth for some indicators (especially those related to market access), than for others, as we focused on those that are more controversial and where academic insights may be most relevant.

The number of service providers in ports for the different categories of port services

The European Commission has as goal to clarify and facilitate access to port services markets. The European Commission argues that access to port service markets is limited. The results of a study by PwC for the commission suggest that market access is limited indeed (see table 5 from the impact assessment below).

Table 5: Share of respondents indicating limitations to competitions by law/regulation (PwC, 2013)

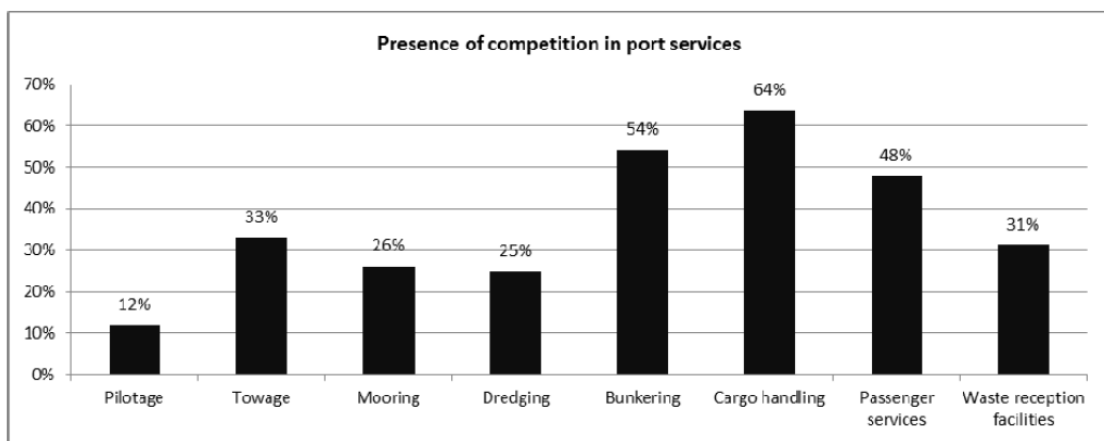


In addition, the European Commission mentions three types of entry barriers known from complaints or reports from stakeholders:

1. Monopolistic rights with a long standing history, notably for technical-nautical services (pilotage, boatmen and towage). In some Member States the providers of those services fall under the category of regulated professions with long standing exclusive rights. The possibility to create new SMEs and jobs for those services (or for innovative services closely related) is seriously restricted or does not exist at all.
2. Discretionary decisions of a public authority to grant or deny access to the port to a provider of port services or to impose disproportionate requirements. In certain Member States, market access often follows a “close door” negotiation: interested parties do not have even notice of the market opportunity. Appeals and complaints against such unilateral decisions are costly, take very long and often rejected because the local legislation authorises such decisions by port authorities.
3. Denial of fair access to land in the port, assignation of a less favoured part of the port or lack of legal certainty on the authorisation granted by the port authority, i.e. possibility to impose unilateral changes or revoking access decisions without appeal procedures.

Even though one can dispute the robustness of the PwC data, and argue that the evidence is more ‘anecdotal’ than truly factual, we agree broadly with the European Commission’s position that in various EU ports market access can be improved and that such improvement is likely to have a positive effect on port performance. The European Commission also presents data on the number of ports with competing service providers (see table 6 -from EU document- below).

Table 6: Presence of more than one operator per type of service (PwC, 2013)

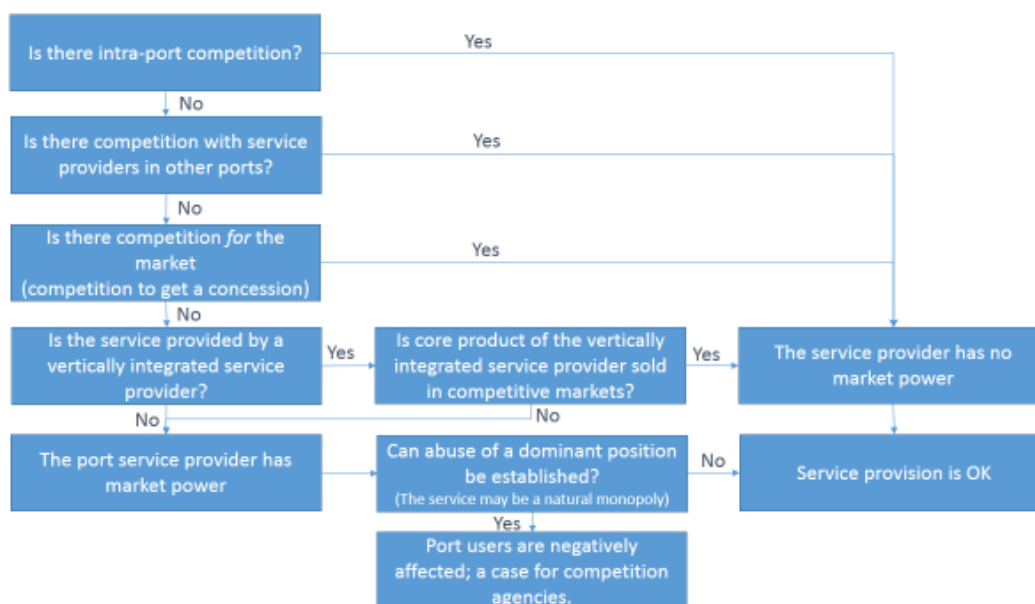


The data as presented in table 6 is in line with the suggested performance indicator: the number of service providers.

Key consideration: no causal relationship between improved market access and the number of service providers

There is no causal relationship between improved market access and a higher number of service providers. Figure 1 shows the conditions under which a dominant position of a port service provider is detrimental for a port. Such a dominant position is ultimately the only issue that may hamper port users².

Figure 1 Conditions for dominant market positions of port service providers



It follows from figure 1 that there is no causal relationship at all between the number of service providers and problematic service provision. Service provision may be fine with only one service provider in the following cases:

1. There is sufficient competition with service providers in other ports. This generally is the case for ship chandlers, ship repair, bunkering and terminal services.
2. There is competition for the market. If the service provider has won a competitive selection process to award services with appropriate selection criteria (including regarding the price of services) the service provision is OK. This may be the case for services with a large minimum efficient scale compared to the market size, such as towage services in small and medium sized ports. This issue of MES is very relevant for most port services and most ports.
3. If the service is provided by a vertically integrated service provider whose end product is sold in competitive markets. This may be the case in a ‘user owned single user port’ (Vale’s own port facility in Tubarao), or a service port (like ABP). Such commercial undertakings should have the freedom to decide on the service bundle they want to provide.

² In the case of a ‘grandfather right’ for the provision of ship chandling, a service with fierce competition between service providers in different ports, there may be entry barriers but these do not hurt the port, as external competition ‘disciplines’ the service provider. This shows that in the absence of a dominant position, entry barriers in one specific port are not problematic.

4. In the case that a service provider has a dominant position, but abuse cannot be established³. This may for instance be the case for port authorities that provide services in-house⁴.

Data availability

Data for this indicator is available and publicly available. However, substantial efforts are required to collect these data.

Conclusions on the indicator ‘number of service providers’

To conclude, the performance indicator ‘number of service providers’ is not causally related to ‘better port service provision’. There are valid reasons for choosing other mechanisms to secure efficient service provision than aiming to introduce intra-port competition. However, with these disclaimers in mind, the number of service providers is a valid indicator *for some specific port services and specifically for large ports*. More specific analysis would be required, but terminal handling and towage seem relevant services, while the indicator does not seem relevant for bunkering and waste collection. If the Commission continues to aim to collect these data, integration in PORTOPIA may be advisable.

Market shares of port service providers

We refer to the analysis of the preceding point. Given the indirect relation between number of service providers and efficient service provision, we argue that one indicator suffices. We have serious doubts about the feasibility of this indicator. Market shares are confidential for various services, so require huge data collection efforts. These may be worth the effort in the case of a complaint for abuse of a dominant position, but it seems out of order to collect these data for all ports. More principally, we are not convinced of the relevance: whether or not there is intra-port competition is what really matters, not the market shares of the competing firms. These can (and do) also change over time.

³ Abusive behaviour can be seen both in excessive pricing and the exclusion of other market participants from the relevant market. Excessive pricing is analysed with the difference between the costs actually incurred and the price actually charged. An exclusionary abuse is given, if a company uses market power to exclude competitors. In this case, regulators can secure access to the service as it is deemed an ‘essential facility’.

⁴ This framework in principle also applies to the port authority. But in this case ‘intra-port competition’ (various port authorities) is not feasible / effective. Port authorities can possess market power. Competition cases also demonstrate this. In the Netherlands, the competition agency concluded that Port of Rotterdam Authority has market power. This has led to a ‘soft law’ approach, where the competition agency stipulates that the port authority and port users annually have to formally agree on port tariff changes. In Finland, the port authority in the 1990s raised prices for port passengers vessels with about 400%, but had to reduce price increases after an investigation of the competition agency.

The number of new Commission infringement procedures linked to market abuse

We refer to the analysis of the preceding point. We agree with the objective to prevent market abuse by port service providers. Our major criticism of this indicator is that it is ambiguous. While on the one hand more infringement procedures may signal increased awareness of the option to challenge market abuse (or improvement from the EC's side to facilitate these processes and make them less burdensome), it may also suggest the continued practice of market abuse⁵. So it would be hard to argue that more infringement procedures are unequivocally better, while it can also not be argued that less procedures are by definition better.

We would argue that these indicators are relevant for the Commission to know, but cannot act as true performance indicators. These indicators would not benefit from integration in PORTOPIA. We would argue that *port user satisfaction* is a better 'outcome' indicator. User satisfaction with port services might be expected to be directly (and inversely) related to abuse of market power. This is the better option, but obviously the results of user satisfaction surveys require careful interpretation and the survey questions need to be carefully designed - in cooperation with the service providers and or ESPO.

Average number of procedures needed to enter/operate in a port

We have serious doubt about this indicator. For the following reasons:

1. It is not the number of procedures that matters, but the resulting 'administrative costs' and uncertainty. Procedures, for instance regarding compliance with environment, safety, and labour regulations are relevant for securing relevant public interests. Reducing the number of procedures is not the core challenge, instead central is to make procedures user friendly.
2. Often transparent processes to grant concessions for operating in a port require procedures, such as registering as interested party, signing non disclosure agreements, signing an agreement on the awarding process, submitting proposals and so on. These procedures do not create entry barriers but are required for a sound process to grant concessions.
3. The term 'procedure' is ambiguous, i.e. one procedure can be sub-divided in different detailed procedures and so on. This indicator is in our opinion not enough 'high level'.

As alternative we refer to our suggestion regarding port user perceptions regarding the quality of port services as the central 'outcome indicator'. This indicator should capture the 'Ease of doing port business' in a port.

The number of newly installed port user committees in TEN-T ports

We have some concerns regarding establishing 'institutionalized port user groups'. While we acknowledge the value of institutionalized interaction with port user groups in a number of cases, such as Port of Rotterdam and Antwerp, both with active port cluster associations (Deltalinqs in Rotterdam and Alfaport/VOKA in Antwerp), we do not think this is a valid 'template' for all ports. In our opinion, the central objective is a

⁵ As a small parallel, take the well known case of theft reports. What do more theft reports indicate: that there are more thefts or more confidence / friendly procedures of public authorities?

shift towards more inclusive port visioning and planning projects. Generally, the managing body of the port (in most cases the port authority) takes the port planning initiative. An inclusive approach is advisable as it yields better port development plans. However, port authorities should be free in determining *how* to involve stakeholders. Institutionalized port user groups may have some serious disadvantages:

- They may not be representative of all relevant stakeholders
- They may provide power to vested interests
- They may enforce a ‘consensus’ result, whereas in some cases long term port development may be better off with some ‘bold choices’. Take as example the shift towards sustainable energy / biobased chemicals. Port user groups may lead to reduced ambitions, whereas for port development, a more radical change of the existing path is advisable. Academic research has clearly established how institutions can lead to a lock-in that prevents radical transitions – even if these may be in the public interest (see Kemp et al, 1998 as one reference).

While we do not argue against institutionalised user groups per se, we do stress that stakeholder inclusion does not require institutionalised user groups and may benefit from including stakeholders not represented in user groups (e.g. local communities). Furthermore, we argue that formally involving institutionalised user groups does not necessarily mean that the managing body takes an inclusive approach to port planning (see the PhD research of Dooms, 2010), as informal inclusion mechanisms may play a more important role. Again, we suggest as a better option to measure port user satisfaction regarding the external orientation and responsiveness of the port authority. Such an approach can be embedded in PORTOPIA.

The number of new Commission infringement procedures linked to transparent financial relations between public authorities, port authorities and providers of port services.

We refer to our previous comments on infringement procedures as an indicator. As an alternative indicator, we propose *the level of port authority investments*. The key issue to our understanding is to realize a shift towards more autonomous managing bodies, that have the freedom to set their own charges and to use their revenues to invest in the port complex. The investment level of port authorities is currently rather limited (see the ESPO report on governance from 2010). Thus increased port authority investments signals the above mentioned shift. A suggested more precise indicator that can be compared across ports would be the investments as a % of turnover.

The number of ports with autonomous port infrastructure charging

We fully agree that this is an appropriate indicator. The indicator may best be integrated in PORTOPIA to reduce administrative burden for port authorities. The PORTOPIA approach is that ports have a ‘governance profile’ that they keep up-to-date themselves. The statement ‘we autonomously decide on port infrastructure charging’ (or a similar statement) can be included in the port governance profile. Most governance indicators remain the same every year, so this approach where data are stored puts a very limited burden on port authorities. In case of indications that governance profiles have been changed, PORTOPIA will actively approach port authorities to update their governance profile. A precise definition of what qualifies as autonomous port infrastructure charging is required. Relevant items may include

1. Is there a ratification in a city council, superior government layer or other public institution

2. Are port authorities also fully responsible for the process of collection of dues without transfers to other entities of government.

The number of new Commission infringement procedures linked to port infrastructure charges in TENT ports

We refer to the previous comment regarding indicators related to infringement procedures. If the indicator *the number of ports with autonomous port infrastructure charging* is available, we do not see the value added of this additional indicator. Furthermore, we do not know whether most procedures are likely to occur at the national level or at the European level.

The number of newly installed methods for environmental modulation of port infrastructure charges in TEN-T ports.

While some ports have decided to differentiate prices based on environmental performance, we would argue that ports are best left free to choose the best options to improve environmental performance. The impact of price differentiation may be limited, given the small share of port dues in total port costs. Furthermore, it may have a global impact rather than a local impact. So while ports that decide to implement such a pricing structure certainly deserve recognition, it should likewise be recognized that other investments to promote sustainability (for instance, investments in shore power, in wind/solar energy in the port, in vapor recovery units for tank storage or other mitigation/reduction of environmental effects) may be better suited for specific ports. Some of these performance indicators could be monitored through the current Ecoports system as well as PORTOPIA, in WP3 on environment, health and safety.

REFERENCES

- De Langen, P. W., & Pallis, A. A. (2006). Analysis of the benefits intra-port competition. *International Journal of Transport Economics*, 33(1), 69.
- De Langen, P. W., & Pallis, A. A. (2007). Entry barriers in seaports. *Maritime Policy & Management*, 34(5), 427-440.
- Dooms, M. (2010). Crafting the integrative value proposition for large scale transport infrastructure hubs: a stakeholder management approach. Asp/Vubpress/Upa.
- Flor, L., & Defilippi, E. (2003). Port infrastructure: An access model for the essential facility. *Maritime Economics & Logistics*, 5(2), 116-132.
- Kemp, R., Schot, J., & Hoogma, R. (1998). Regime shifts to sustainability through processes of niche formation: the approach of strategic niche management. *Technology Analysis & Strategic Management*, 10(2), 175-198.
- OECD (2008). Port competition and hinterland connections. Round Table.
- Pallis, A. A. (1997). Towards a common ports policy? EU-proposals and the ports industry's perceptions. *Maritime Policy and Management*, 24(4), 365-380.
- Verhoeven, P. (2011). European port governance: Report of an inquiry into the current Governance of European Seaports (The ESPO Fact Finding Report). Brussels: European Sea Ports Orga