



Hungarian Federation of Danube Ports

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DESCRIPTION OF THE PERFORMANCE MEASUREMENT SYSTEM

Title of the project:

Danube ports in the light of numbers – Introducing the new level of Port Performance Indicator System for the inland waterway ports

Project number:

01_PA1a-C1

Project acronym:

POPEI

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1 Background

In the recent years initiatives established a great base for activating the potential of river and sea ports in the Danube region. Key Performance Indicators (KPI) recommended using in order to measure port performance introduced by science based methods of different GIFT, INWAPO, DAHAR or WANDA projects are difficult to apply in practice because of their standard nature, irrespective of the specificities the individual ports possess.

The Consortium of Hungarian Federation of Danube Ports (Magyar Dunai Kikötők Szövetsége), National Company – The Maritime Danube Ports Administration J.S.Co. Galati (Compania Nationala – Administratia Porturilor Dunarii Maritime SA Galati) and Port Authority Vukovar (Lučka uprava Vukovar) has been granted by the European Union and The City of Vienna in the frame of START Danube Region Project Found for the implementation of the project POPEI.

The aim of the project is to increase competitiveness and efficient operation of inland waterway ports by:

- adjusting the KPIs to the ports' needs and specificities in order that they could use them in practice and provide their market by real information on their services and performance;
- transforming the KPIs to a performance indicator system applicable for (self) measurement for the ports and qualification of services.

Target groups are all ports along the river Danube, but in this project, the focus is on the three partner countries (Hungary, Romania and Croatia).

Project analysis

The first step was to analyse the concepts, studies and reports of preceding projects like INWAPO, DAHAR, GIFT and WANDA, then interviews and questionnaires with 12 selected ports (from Hungary, Romania and Croatia altogether) were carried out.

The main focal points of the analysis phase were as follows:

Main focal points to be concentrated on:

- Can be and if yes, how to put conclusions and proposals of these projects into practice? Which are the main obstacles?
- Do the methods and KPIs recommended to use to measure port performance reflect the real market needs of the inland waterway ports?
- Are the KPIs able to measure all aspects a port can have to draw an overall picture of their operation and services? Do the ports possess the data KPIs would need for?

KPI system specialization

According to the results of the analysis and interviews, relevant KPIs were defined and built into a complex excel-based port performance measurement system.

As next step, consultations on were carried out with selected port operators (4-4 from each partner countries) on the KPIs in order to fine-tune the system. During the consultations, the following focal points were considered:

- *the system is to reflect the specificities and the real market needs* of the Danube ports, i.e. ports with different functions across the region are to be involved to represent diversity;
- *the system is to measure the performance of ports*, i.e. data and information to give KPIs a value are achievable and can serve for market purposes;
- *the system is to be used for quality management purposes*, i.e. based on the measurement system, facilities and services can have classifications in form of ratings.

On the basis of the results of the consultations, some indicators were taken out or re-phrased and in some cases the weightings were modified.

This document contains the description of the fine-tuned KPIs and excel-based system, which will be tested with 12 selected port operators in the next project activity.

2 Description of the KPIs

The key performance indicators were defined two categories: one is based on data given by the port operators and the one is based on answers given by the port's customers in a customer satisfaction survey. Therefore, the excel-based measurement system consists of two sheets to fill in: "Port operator" sheet and "Customer satisfaction" sheet. The summary of the results appear on the "Report" sheet.

As it turned out from the analysis phase, both categories are equally important when we talk about port performance measurement, therefore both categories were reckoned with 50% weight in the final result.

Maximum 100 points can be given on the indicators, 50 on the Port operator data and 50 by the customers.

In this chapter, we describe the KPIs and the weightings methodology, and then in the next chapter the excel-based system will be introduced.

2.1 KPIs of the Port operator sheet

KPIs on the Port operator sheet were divided into four groups: Infrastructure, Traffic, Service and Capacity.

2.1.1 INFRASTRUCTURE

The first category on the Port operator sheet is connected to the infrastructural facilities of the port. Maximum 20 points from the 50 can be gained in this part, and all data is given (filled in) by the port operator. The components of this category and their weightings are as follows.

1. Number of loading berths

This indicator means the number of possibilities for the ships to carry out loading at the port. The data is measured in pieces. The maximum score for this indicator is 1,5 points from the 20, calculation is shown in the table.

Answer	Value ¹	Weighting ²	Score
1	1	1 x 0,5	0,5
2	2	2 x 0,5	1
3 ≤	3	3 x 0,5	1,5

2. Number of intermodal connections

This indicator shows how many intermodal connections (water, road and railway) the port has. According to the research and consultations, this indicator has relatively high

¹ The Excel converts the answers into a „Value“ which is the basis of the weighting

² Value x Weight

importance, therefore got higher weight and maximum 4 points from the 20. The indicator is measured in pieces and calculated as follows.

Answer	Value	Weighting	Score
1	1	1 x 1	1
2	2	2 x 1	2
3	4	4 x 1	4

3. Fuelling services

This indicator shows if the port offers fuelling services for the ships. It is a yes/no indicator which consists of two parts and worth in all 1 point from the 20.

3.a Diesel

Diesel fuelling services for ships are available at the port.

Answer	Value	Weighting	Score
Yes	1	1 x 0,75	0,75
No	0	0 x 0,75	0

3.b LNG, LPG, CGL

There are other fuelling services are available at the port.

Answer	Value	Weighting	Score
Yes	1	1 x 0,25	0,25
No	0	0 x 0,25	0

4. Quality Assurance

This indicator shows if the port has quality assurance and which type. It is a yes/no indicator which consists of four parts and worth 2 in all points from the 20.

4.a ISO

The port has ISO certificate(s).

Answer	Value	Weighting	Score
Yes	1	1 x 0,4	0,4
No	0	0 x 0,4	0

4.b HACCP

The port has HACCP certificate(s).

Answer	Value	Weighting	Score
Yes	1	1 x 0,6	0,6
No	0	0 x 0,6	0

4.c GMP

The port has GMP certificate(s).

Answer	Value	Weighting	Score
Yes	1	1 x 6	0,6
No	0	0 x 0,6	0

4.d other

The port has other Quality Assurance certificate(s).

Answer	Value	Weighting	Score
Yes	1	1 x 0,4	0,4
No	0	0 x 0,4	0

5. Insurance

This indicator shows if the port has insurance and which type. It is a yes/no indicator which consists of seven parts and worth in all 3 points from the 20.

5.a liability insurance

The port has liability insurance.

Answer	Value	Weighting	Score
Yes	1	1 x 0,5	0,5
No	0	0 x 0,5	0

5.b property insurance

The port is insured against property damage.

Answer	Value	Weighting	Score
Yes	1	1 x 0,4	0,4
No	0	0 x 0,4	0

5.c against business disruption

The port is insured against business disruption (when loading is impossible).

Answer	Value	Weighting	Score
Yes	1	1 x 0,5	0,5
No	0	0 x 0,5	0

5.d against fire

The port is insured against fire damage.

Answer	Value	Weighting	Score
Yes	1	1 x 0,4	0,4
No	0	0 x 0,4	0

5.e against theft

The port is insured against loss caused by theft.

Answer	Value	Weighting	Score
Yes	1	1 x 0,4	0,4
No	0	0 x 0,4	0

5.f against water damage

The port is insured against flood damage.

Answer	Value	Weighting	Score
Yes	1	1 x 0,4	0,4
No	0	0 x 0,4	0

5.g other

The port is insured against something else not listed above.

Answer	Value	Weighting	Score
Yes	1	1 x 0,4	0,4
No	0	0 x 0,4	0

6. Investment on infrastructure

This is a yes/no indicator which shows if the port made infrastructural investment during the last year and is actually not scored. This information appears on the Report sheet as a part of the overview of the port.

6.a List of infrastructural investments

The port shall provide here a list of the developed infrastructure and the data appears on the Report sheet as additional information.

6.b Amount spent on infrastructural investments last year

This indicator means the total net amount that the port spent on infrastructural development in the last business year. The port shall provide a sum here which appears on the Report sheet as additional information.

7. Service complexity

This indicator shows how complex services the port provides and contains a list of services dependent on infrastructure available at the port. It is a yes/no indicator which consists of nine parts and worth in all 8 points from the 20.

7.a Being integrated into a logistic chain

The port is part of a complex logistic chain therefore it can provide better organised, more complex and flexible services.

Answer	Value	Weighting	Score
Yes	1	1 x 1	1
No	0	0 x 1	0

7.b Own ship

The port possesses own ship available for freight transportation.

Answer	Value	Weighting	Score
Yes	1	1 x 0,5	0,5
No	0	0 x 0,5	0

7.c Own transportation facilities

The port possesses own vehicles available for freight transportation.

Answer	Value	Weighting	Score
Yes	1	1 x 0,5	0,5
No	0	0 x 0,5	0

7.d Availability of logistic services

The port offers logistic services.

Answer	Value	Weighting	Score
Yes	1	1 x 1	1
No	0	0 x 1	0

7.e Covered transshipment possibility

There is an area at the port covered by a roof for the loading of goods.

Answer	Value	Weighting	Score
Yes	1	1 x 1,5	1,5
No	0	0 x 1,5	0

7.f Warehousing, storing

Warehousing possibilities are available directly at the port.

Answer	Value	Weighting	Score
Yes	1	1 x 2	2
No	0	0 x 2	0

7.g Transhipment of containers

The port offers possibility of transhipment of containers.

Answer	Value	Weighting	Score
Yes	1	1 x 0,5	0,5
No	0	0 x 0,5	0

7.h Ro-Ro services

The port has a Ro-Ro terminal.

Answer	Value	Weighting	Score
Yes	1	1 x 0,5	0,5
No	0	0 x 0,5	0

7.i Other services

The port provides any other services not mentioned above.

Answer	Value	Weighting	Score
Yes	1	1 x 0,5	0,5
No	0	0 x 0,5	0

2.1.2 TRAFFIC DATA

The second category on the Port operator sheet is connected to the annual traffic data of the port. Maximum 6 points from the 50 can be gained in this part, and all data is given (filled in) by the port operator. The components of this category and their weightings are as follows.

8. Annual turnover

Here the port operators shall provide their total annual turnover (net sales) generated from the transportation of goods (measured in metric tonnes) of the preceding business year. Here the ports can get maximum 3 points from the 6 . Calculation of the KPI is as follows:

Answer	Value	Weighting	Score
< 200 000	0	0 x 1	0

Answer	Value	Weighting	Score
200 000 ≤ and < 400 000	1	1 x 1	1
400 000 ≤ and < 600 000	2	2 x 1	2
600 000 ≤	3	3 x1	3

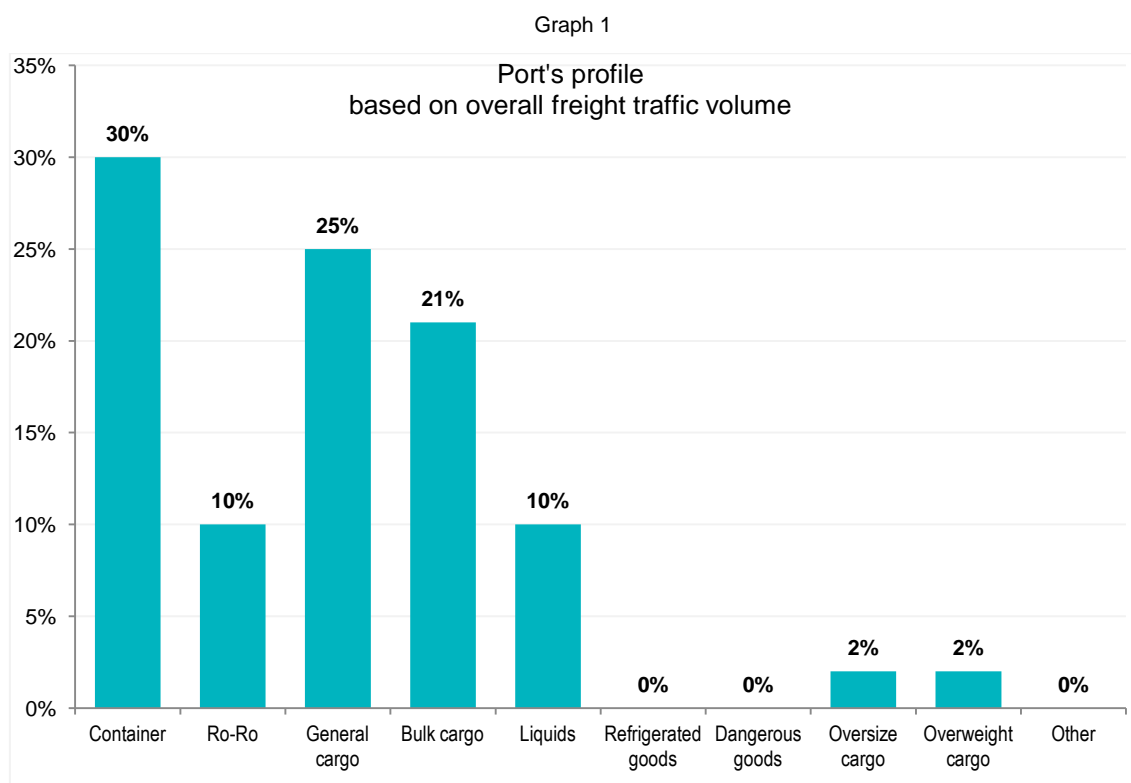
9. Liner service

This KPI means the number of customers who send contractually bound periodic shipments to the port. The maximum score for this indicator is 1 from the 6 points.

Answer	Value	Weighting	Score
0	0	0 x 1	0
0 <	1	1 x 1	1

10. Overall freight traffic volume

This indicator shows the port's profile. It contains a list of types of cargo which the ports may deal with. Here the ports shall provide the percentage of their overall freight traffic covered by the certain cargo types. This indicator may not score high points but has important role on the Report sheet, where the port's profile is viewed on a graph generated from the data given here. (Graph 1)



The maximum points here are in all 2 from the 6. The calculation methodology is the same for all the 10 components:

Answer	Value	Weighting	Score
0 %	0	0 x 0,2	0
0 % <	1	1 x 0,2	0,2

10.a Container

Percentage of transferred container cargo compared to the total annual turnover generated from the transportation of all goods in the preceding year.

10.b Ro-Ro

Percentage of transferred Ro-Ro cargo compared to the total annual turnover generated from the transportation of all goods in the preceding year.

10.c General cargo

Percentage of transferred general cargo compared to the total annual turnover generated from the transportation of all goods in the preceding year.

10.d Bulk cargo

Percentage of transferred bulk cargo compared to the total annual turnover generated from the transportation of all goods in the preceding year.

10.e Liquids

Percentage of transferred liquids compared to the total annual turnover generated from the transportation of all goods in the preceding year.

10.f Refrigerated goods

Percentage of transferred refrigerated goods compared to the total annual turnover generated from the transportation of all goods in the preceding year.

10.g Dangerous goods

Percentage of transferred dangerous goods compared to the total annual turnover generated from the transportation of all goods in the preceding year.

10.h Oversized cargo

Percentage of transferred oversized cargo compared to the total annual turnover generated from the transportation of all goods in the preceding year.

10.i Overweight cargo

Percentage of transferred overweight cargo compared to the total annual turnover generated from the transportation of all goods in the preceding year.

10.j Other

Percentage of any other type of goods transferred but not listed above and characteristic of the ports portfolio.

2.1.3 SERVICE

The third category on the Port operator sheet describes the services of the port. Maximum 12 points from the 50 can be gained in this part, and all data is given (filled in) by the port operator. The components of this category and their weightings are as follows.

11. Demurrage guarantee

This indicator shows if the port guarantees the reimbursement of expenses caused by exceeding the undertaken loading time. It is a yes/no indicator which was identified a very important factor, therefore it worth maximum 3 points from the 12.

Answer	Value	Weighting	Score
Yes	1	1 x 3	3
No	0	0 x 3	0

12. Tugboat service

The indicator means that the port offers tugboat (or push boat) service. It is a yes/no indicator which worth maximum 2 points from the 12.

Answer	Value	Weighting	Score
Yes	1	1 x 2	2
No	0	0 x 2	0

13. Waste service (green port)

The port provides selective waste services and is a green port in any other relation.

Answer	Value	Weighting	Score
Yes	1	1 x 1	1
No	0	0 x 1	0

14. Customs services

The port offers customs administration services.

Answer	Value	Weighting	Score
Yes	1	1 x 1	1
No	0	0 x 1	0

15. Possibility of long-term warehousing

The port ensures possibility for long-term warehousing of the transported goods.

Answer	Value	Weighting	Score
Yes	1	1 x 1	1
No	0	0 x 1	0

16. Repair service

The port offers small repair services for the ships and containers.

Answer	Value	Weighting	Score
Yes	1	1 x 1	1
No	0	0 x 1	0

17. Cleaning possibility

Container and vehicle (ship and other) cleaning services are available at the port.

Answer	Value	Weighting	Score
Yes	1	1 x 0,5	0,5
No	0	0 x 0,5	0

18. Electricity and drink water supply

The port provides electricity and drinking water.

Answer	Value	Weighting	Score
Yes	1	1 x 0,8	0,8
No	0	0 x 0,8	0

19. Wi-Fi

The ports offers free Wi-Fi for the customers.

Answer	Value	Weighting	Score
Yes	1	1 x 0,6	0,6
No	0	0 x 0,6	0

20. Catering

The port offers catering services at the port.

Answer	Value	Weighting	Score
Yes	1	1 x 0,6	0,6
No	0	0 x 0,6	0

21. Investment on service development

This is a yes/no indicator which shows if the port made investments on service development during the last year and is actually not scored. This information appears on the Report sheet as a part of the overview of the port.

21.a List of developed services

The port shall provide here a list of the developed services and the data appears on the Report sheet as additional information.

21.b Amount spent on service development last year

This indicator means the total net amount that the port spent on service development in the last business year. The port shall provide a sum (in EUR) here which appears on the Report sheet as additional information.

2.1.4 CAPACITY

The third category on the Port operator sheet describes the capacity of the port. Maximum 12 points from the 50 can be gained in this part, and all data is given (filled in) by the port operator. The components of this category and their weightings are as follows.

22. Loading rate

This indicator shows the contractual daily loading rate of the port in metric tonnes. The maximum score here is 5 points from the 12 as this KPI was proved to be weighty. Calculation of the scores is shown in the table.

Answer	Value	Weighting	Score
< 1000	0	0 x 1	0
1000 ≤ and < 1200	2	2 x 1	2
1200 ≤ and < 1500	3	3 x 1	3
1500 ≤	5	5 x 1	5

23. Discharging rate

This indicator shows the contractual daily discharging rate of the port in metric tonnes. The maximum score here is 2 points from the 12 as the KPI was proved to be almost as weighty as the loading rate.

Answer	Value	Weighting	Score
< 800	0	0 x 1	0
800 ≤ and < 1000	1	1 x 1	1
1000 ≤	2	2 x 1	2

24. Possible number of ships to be loaded simultaneously

This means the maximum number of ships that can be loaded parallel at the port.

Answer	Value	Weighting	Score
0	0	0 x 1	0
1 ≤ and < 3	1	1 x 0,5	0,5
3 ≤ and < 5	2	2 x 0,5	1
5 ≤	3	3 x 0,5	1,5

25. Storage capacity

This shows the total possible storage capacity of the port in metric tonnes. The port gets one point from the 12 if they have storage capacity.

Answer	Value	Weighting	Score
0	0	0 x 1	0
0 <	1	1 x 1	1

25.a Open storage capacity

This shows the open-air storage capacity in metric tonnes.

Answer	Value	Weighting	Score
0	0	0 x 0,5	0
0 <	1	1 x 0,5	0,5

25.b Covered flat storage with technology

The KPI shows the total covered flat storage capacity (concerning only flat storage equipped with technology suitable for handling and loading of goods).

Answer	Value	Weighting	Score
0	0	0 x 0,5	0
0 <	1	1 x 0,5	0,5

25.c Covered flat storage capacity

Total covered flat storage capacity in metric tonnes.

Answer	Value	Weighting	Score
0	0	0 x 0,5	0
0 <	1	1 x 0,5	0,5

25.d Silo capacity

Total silo capacity of the port in metric tonnes.

Answer	Value	Weighting	Score
0	0	0 x 0,5	0
0 <	1	1 x 0,5	0,5

26. Investment on capacity development

This is a yes/no indicator which shows if the port made investments on capacity development during the last year and is actually not scored. This information appears on the Report sheet as a part of the overview of the port.

26.a List of developments related to the capacity

The port shall provide here a list of the developments related to the capacity and the data appears on the Report sheet as additional information.

26.b Amount spent on service development last year

This indicator means the total net amount that the port spent on capacity development in the last business year. The port shall provide a sum (in EUR) here which appears on the Report sheet as additional information.

2.2 KPIs of the Customer satisfaction sheet

Values of the Customer satisfaction sheet are given by one or more customers of the port. To measure this component, the ports shall ask their customers to answer the customer satisfaction survey. Then, the average values of the summarised answers shall be filled in the Customer satisfaction sheet.

In order to have as objective result as possible, it is recommended to ask at least 5 or more customers. These answers are very useful for the ports too, as they can use them for self measurement and as an input to their development strategy.

The Customer satisfaction component, as well as the Port operator data, has 50 points in the evaluation from the maximum 100 points.

The component is divided to four categories, such as *Reliability*, *Attitude*, *approach*, *Flexibility* and *Quality of service*.

2.2.1 Reliability

Reliability of the port is measured by three questions which the customers answer with numbers on a 1-10 scale, depending on how reliable they find the port regarding the mentioned factors. The answers (numbers) are equal with the Values and the weights were defined according to the proven importance of each factor. For the Reliability, the maximum score that a port can get is 14 points from the 50. The three factors are as follows.

1. The port operates at a standard, organised level as the customers would expect.

Answers can be 1 to 10 depending on how they evaluate and the weight here is 0,4. The table shows an example for the calculation.

Answer	Value	Weighting	Score
10	10	0 x 0,4	4

2. The port keeps the promised timeslots.

Answers can be 1 to 10 and the weight here is 0,5. See example in the table.

Answer	Value	Weighting	Score
10	10	0 x 0,5	5

3. Accuracy of prepared documents concerning the cargo, precise administration.

Answers can be 1 to 10 and the weight here is 0,5. See example in the table.

Answer	Value	Weighting	Score
10	10	0 x 0,5	5

2.2.2 Attitude, approach

Attitude, approach refers to the way the staff of the port handles client cases. It is measured by three questions which the customers answer with a number on a 1-10 scale, depending on how accurate they find the port regarding the mentioned factors and how pleased they are with the port's approach. The answers (numbers) are equal with the Values and the weights were defined according to the proven importance of each factor. For the Attitude, approach, the maximum score that a port can get is 12 points from the 50. The three factors are as follows.

1. Quality of provided information.

Answers can be 1 to 10 and the weight here is 0,4. See example in the table.

Answer	Value	Weighting	Score
10	10	0 x 0,4	4

2. Behaviour, communication of the port's staff.

Answers can be 1 to 10 and the weight here is 0,4. See example in the table.

Answer	Value	Weighting	Score
10	10	0 x 0,4	4

3. Short reaction time on customers' needs and questions.

Answers can be 1 to 10 and the weight here is 0,4. See example in the table.

Answer	Value	Weighting	Score
10	10	0 x 0,4	4

2.2.3 Flexibility

Flexibility shows how flexible the port can adjust to the customers' various needs. It is measured by three questions which the customers answer with a number on a 1-10 scale, depending on how flexible they find the port regarding the mentioned factors. The answers (numbers) are equal with the Values and the weights were defined according to the proven importance of each factor. For the Flexibility, the maximum score that a port can get is 12 points from the 50. The three factors are as follows.

1. Possibility to have custom made departure time. 1-10 scale

Answers can be 1 to 10 and the weight here is 0,2. See example in the table.

Answer	Value	Weighting	Score
10	10	0 x 0,2	2

2. *Ability to adjust to various customers' needs and special requirements.*

Answers can be 1 to 10 and the weight here is 0,5. See example in the table.

Answer	Value	Weighting	Score
10	10	0 x 0,5	5

3. *Flexibility regarding the fulfilment of customers loading needs after operating hours.*

Answers can be 1 to 10 and the weight here is 0,5. See example in the table.

Answer	Value	Weighting	Score
0	0	0 x 0,5	5

2.2.4 Quality of service

Quality of service refers to the content of the provided services and also to the way the port provides them. It is measured by four questions which the customers answer with a number on a 1-10 scale. The answers (numbers) are equal with the Values and the weights were defined according to the proven importance of each factor. For the Quality of service, the maximum score that a port can get is 12 points from the 50.

4.1. *Offered services at the port are well maintained, clear and well taken care of.*

Answers can be 1 to 10 and the weight here is 0,2. See example in the table.

Answer	Value	Weighting	Score
10	10	0 x 0,2	2

4.2. *Satisfaction with the infrastructure and facility level of the port.*

Answers can be 1 to 10 and the weight here is 0,4. See example in the table.

Answer	Value	Weighting	Score
10	10	0 x 0,4	4

4.3. *Speed of service.*

Answers can be 1 to 10 and the weight here is 0,2. See example in the table.

Answer	Value	Weighting	Score
10	10	0 x 0,2	2

4. *Quality/price ratio of the port's services. 1-10 scale*

Answers can be 1 to 10 and the weight here is 0,5. See example in the table.

Answer	Value	Weighting	Score
10	10	0 x 0,4	4

3 Excel-based performance measurement system

Once the KPIs were defined, they were converted to an Excel-based performance measurement system. This system calculates the scores after each key performance indicator automatically and converts them into a summary on the Report sheet. The data shall be given (filled in) by the port operator.

Only the empty cells are allowed to edit, and most of the answers can be chosen from a drop down list, so it is very easy to use and can be filled-in quickly without mistakes.

In this chapter we introduce this excel-based system. The logic of the performance measurement and the KPIs were detailed in chapter 2. Here you will find pictures of the Excel sheets and short descriptions.

3.1 Port operator sheet

The first two tables (Graph 2) of the Port operator sheet were prepared in order to provide basic information about the port.

The second table (General data regarding the port) appears on the Report sheet and provides an overview of the port (see sample in point 3.3.)

The first table (Contact information) will not be shown in the report; it is just technical information in case of any further questions or need of further contact.

Graph 2

<i>Please provide the name of contact details of the person who is filling this form in.</i>		
Contact information		
1.	Name of contact person	
2.	E-mail address	
3.	Phone number	
4.	Position	
<i>Please provide the requested data of the port.</i>		
General data regarding the port		
1.	Name of the port	
2.	Country	
3.	Location of the port in water-kilometers	
4.	Year of the establishment	
5.	List of Activities	
6.	Introduction of the port <i>Brief information (1-2 sentences) about the port, that will appear below the name on the Report sheet.</i>	

After the introductory part, the indicators can be found in the above mentioned categories and can be filled in one by one (Graphs 3, 4, 5, 6). The formulas which count the scores are hidden.

Graph 3

<i>Please provide the latest accessible information and bear in mind the unit of the data expected.</i>			
Data required	Explanation	Data	Unit
I. INFRASTRUCTURE			
1. Number of loading berths	<i>The number of possibilities for the ships to carry out loading at the port. Please provide the number of the berths.</i>		pcs
2. Number of intermodal connections	<i>Please roll down the next cell to choose from the four options possible concerning your port's operation.</i>		pcs
3. Fuelling services			
3.a Diesel	<i>Please enter yes if diesel fuelling services <u>for ships</u> are available at the port.</i>		yes/no
3.b LNG, LPG, CGL, other	<i>Please enter yes if other fuelling services are available at the port.</i>		yes/no
4. Quality Assurance			
<i>Please enter yes if the port has quality assurance listed below.</i>			
4.a ISO	<i>The port has ISO certificate(s).</i>		yes/no
4.b HACCP	<i>The port has HACCP certificate(s).</i>		yes/no
4.c GMP	<i>The port has GMP certificate(s).</i>		yes/no
4.d other	<i>The port has other Quality Assurance certificate(s).</i>		yes/no
5. Insurance			
<i>Please enter yes if the port has insurance listed below.</i>			
5.a liability insurance	<i>The port has liability insurance.</i>		yes/no
5.b property insurance	<i>The port is insured against property damage</i>		yes/no
5.c against business disruption	<i>The port is insured against business disruption (when loading is impossible)</i>		yes/no
5.d against fire	<i>The port is insured against fire damage</i>		yes/no
5.e against theft	<i>The port is insured against loss caused by theft.</i>		yes/no
5.f against water damage	<i>The port is insured against flood damage</i>		yes/no
5.g other	<i>The port is insured against sg. else not listed above</i>		yes/no
6. Investment on infrastructure			
<i>Please enter yes if the port made infrastructural investments during last year.</i>			
6.a List of infrastructural investments	<i>Please list in the next cell what kind of infrastructural investments have your port made in the last year. This data will be appear on your report sheet as additional information.</i>		listing
6.b Amount spent on infrastructural investments last year	<i>Total net amount that was spent by the on infrastructural development in the last business year.</i>		EUR
7. Service complexity			
7.a Being integrated into a logistic chain	<i>The port is part of a complex logistic chain therefore it can provide better organised, more complex and flexible services.</i>		yes/no
7.b Own ship	<i>The port possesses own ship available for freight transportation.</i>		yes/no
7.c Own transportation facilities	<i>The port possesses own vehicles available for freight transportation.</i>		yes/no
7.d Availability of logistic services	<i>The port offers logistic services.</i>		yes/no
7.e Covered transshipment possibility	<i>An area covered by a roof for the loading of goods.</i>		yes/no
7f Warehousing, storing	<i>Warehousing possibilities available directly at the port.</i>		yes/no
7.g Transshipment of containers	<i>Possibility for the transshipment of containers.</i>		yes/no
7.h Ro-Ro services	<i>The port has a Ro-Ro terminal.</i>		yes/no
7.i Other services	<i>Any other services not mentioned above.</i>		yes/no

The cells to be filled in are marked with orange colour and there are also explanations to each KPI to make them clear.

Graph 4

Data required	Explanation	Data	Unit
II. TRAFFIC DATA			
8. Annual turnover	Total annual turnover (net sales) generated from the transportation of goods (measured in tons) of the preceding business year.		mto/year
9. Liner service	Number of customers who send contractually bound periodic shipments to the port.		pcs
10. Overall freight traffic volume			
10.a Container	Percentage of transferred container cargo compared to the total annual turnover generated from the transportation of all goods in the preceding year.		%
10.b Ro-Ro	Percentage of transferred Ro-Ro cargo compared to the total annual turnover generated from the transportation of all goods in the preceding year.		%
10.c General cargo	Percentage of transferred general cargo compared to the total annual turnover generated from the transportation of all goods in the preceding year.		%
10.d Bulk cargo	Percentage of transferred bulk cargo compared to the total annual turnover generated from the transportation of all goods in the preceding year.		%
10.e Liquids	Percentage of transferred liquids compared to the total annual turnover generated from the transportation of all goods in the preceding year.		%
10.f Refrigerated goods	Percentage of transferred refrigerated goods compared to the total annual turnover generated from the transportation of all goods in the preceding year.		%
10.g Dangerous goods	Percentage of transferred dangerous goods compared to the total annual turnover generated from the transportation of all goods in the preceding year.		%
10.h Oversized cargo	Percentage of transferred oversized cargo compared to the total annual turnover generated from the transportation of all goods in the preceding year.		%
10.i Overweight cargo	Percentage of transferred overweight cargo compared to the total annual turnover generated from the transportation of all goods in the preceding year.		%
10.j Other	Please list if there are any other type of goods transferred but not listed above and characteristic of the ports portfolio.		%

Graph 5

Data required	Explanation	Data	Unit
III. SERVICE			
11. Demurrage guarantee	The port guarantees the reimbursement of expenses caused by exceeding the undertaken loading time.		yes/no
12. Tugboat service	The port offers tugboat (or pushboat) service.		yes/no
13. Waste service (green port)	The port provides selective waste services and is a green port in any other relation.		yes/no
14. Customs services	The port offers customs administration services.		yes/no
15. Possibility of long-term warehousing	Possibility for long-term warehousing of the transported goods directly at the port.		yes/no
16. Repair service	The port offers small repair services for the ships and containers.		yes/no
17. Cleaning possibility	Container and vehicle (ship and other) cleaning services are available at the port.		yes/no
18. Electricity and drink water supply	The port provides electricity and drinking water.		yes/no
19. Wifi	The ports offers free wifi for the customers.		yes/no
20. Catering	The port offers catering services at the port.		yes/no
21. Investment on service development	Please enter yes if the port invested in service development during the last financial year.		yes/no
21.a List of developed services	Please list the services in the next cell which the port has developed or newly created in the last year. This data will be appear on your Report sheet as additional information.		listing
21.b Amount spent on service development last year	Total net amount that the port spent on service development in the last business year.		EUR

Graph 6

Data required	Explanation	Data	Unit
IV. CAPACITY			
22. Loading rate	<i>The contractual daily loading rate of the port in metric tonnes.</i>		mto/day
23. Discharging rate	<i>The contractual daily discharging rate of the port in metric tonnes.</i>		mto/day
24. Possible number of ships to be loaded simultaneously	<i>Maximum number of ships that can be loaded parallel at the port.</i>		pcs
25. Storage capacity	<i>The possible total storage capacity of the port in metric tonnes.</i>		mto
25.a Open storage capacity	<i>Total open-air storage capacity in metric tonnes.</i>		mto
25.b Covered flat storage with technology	<i>Total covered flat storage capacity (concerning only flat storage equipped with technology suitable for the handling and loading of goods).</i>		mto
25.c Covered flat storage capacity	<i>Total covered flat storage capacity in metric tonnes.</i>		mto
25.d Silo capacity	<i>Total silo capacity of the port in metric tonnes.</i>		mto
26. Investment on capacity development	<i>Please enter yes if the port invested in capacity development during the last financial year. Please list in the cell below, what kind of services were developed or newly created.</i>		yes/no
26.a List of developments related to the capacity	<i>Please list in the next cell what kind of capacity developments has your port invested in last year. This data will be appear on your report sheet as additional information.</i>		listing
26.b Amount spent on service development last year	<i>Total net amount that was spent by the on capacity development in the last business year.</i>		EUR

After filling in all the indicators, the port operators can check themselves the results on their Report sheet, where the scores appear by category and in total.

3.2 Customer satisfaction sheet

As it was described in point 2.2., the Customer satisfaction sheet contains the average of the results on the customer satisfaction surveys where the clients evaluated the port's performance.

After receiving back the answered customer surveys, the port operators shall make the totalizing of the numbers on the 1-10 scales, then count the average and fill in the Customer satisfaction sheet. The results will appear on the Report sheet by category and in total.

Of course, the customers also have the chance to write comments in the customer satisfaction survey (Graph 7). That will not show up on the Report sheet but the port operator can see them on the customer surveys (Graph 8).

Graph 7

OTHER COMMENTS
<i>Please write your comments on the topic here.</i>

Graph 8

Customer satisfaction survey		
Indicator	Value	Unit
1. Reliability		
<i>1.1. The port operates at a standard, organised level as the customers would expect.</i>		1-10 scale
<i>1.2. The port keeps the promised timeslots.</i>		1-10 scale
<i>1.3. Accuracy of prepared documents concerning the cargo, precise administration.</i>		1-10 scale
2. Attitude, approach		
<i>2.1. Quality of provided information.</i>		1-10 scale
<i>2.2. Behaviour, communication of the port's staff.</i>		1-10 scale
<i>2.3. Short reaction time on customers needs and questions.</i>		1-10 scale
3. Flexibility		
<i>3.1. Possibility to have custom made departure time.</i>		1-10 scale
<i>3.2. Ability to adjust to various customers needs and special requirements.</i>		1-10 scale
<i>3.3. Flexibility regarding the fulfilment of customers loading needs after operating hours.</i>		1-10 scale
4. Quality of service		
<i>4.1. Offered services at the port are well maintained, clear and well taken care of.</i>		1-10 scale
<i>4.2. Satisfaction with the infrastructure and facility level of the port.</i>		1-10 scale
<i>4.3. Speed of service.</i>		1-10 scale
<i>4.4. Quality/price ratio of the port's services.</i>		1-10 scale

3.3 Report Sheet

Finally, when both the Port operator sheet and the Customer satisfaction report sheet are complete, the final result of the measurement appears on the Report sheet.

The Report sheet contains an overview of the port (activities, main characteristics), overview of the port's profile (graph based on the annual freight traffic volume), technical specifications, and information about the latest investments (developments) and of course the final score of the performance measurement.

Graph 9, Graph 10 and Graph 11 show the content and preview of the Report sheet.

This sheet also contains a diagram which shows the port's profile (Graph 1) and was introduced in point 2.1.2.

Graph 9

Name of the port
Country
Information
List of activities
Brief information (1-2 sentences) about the port

Graph 10

Technical specifications of the port		
Location of the port	0	water-km
Number of loading berths	3	pcs
Loading rate	1500	mto/day
Discharging rate	1 300	mto/day
Storage capacity	500 000	mto
Intermodal connections	Water-Road-Railway	3
Investment on development last year		
Infrastructure	Invested amount	
list of developed infrasturcutre	0	EUR
Service	Invested amount	
list of developed services	0	EUR
Capacity	Invested amount	
list of developed capacities	0	EUR

Graph 11

Customer satisfaction	
Number of customer surveys:	0
1. Reliability (maximum: 14)	14
2. Attitude / Approach (maximum: 12)	12
3. Flexibility (maximum: 12)	12
4. Quality of services (maximum: 12)	12
TOTAL	50
Port operator data	
1. Infrastructure (maximum: 20)	20
2. Traffic (maximum: 6)	6
3. Service (maximum: 12)	12
3. Capacity (maximum: 12)	12
TOTAL	50
FINAL SCORE	100

The port performance evaluation fulfils several beneficial functions:

- 1) The evaluation provides information outwards (for clients and competitors) through uniformed presence and usage of same viewpoints. Having proper publicity and involving as many Danube ports as possible are very important terms to fulfil this function.
- 2) Thanks to the performance measurement, ports can recognise their development needs through comparison with other ports and through the feedback from customers. „Weak points” become visible.
- 3) This is a good possibility for the customers for giving feedback.
- 4) Performance measurement stimulates competition and development.
- 5) The measurement system can be a ground of applications for EU funds.