

# OUTPUT FACT SHEET

## Pilot actions (including investment, if applicable)

Project index number and acronym	CE1410 REIF
Output number and title	O.T2.1 - Pilot actions
Investment number and title (if applicable)	n/a
Responsible partner (PP name and number)	Port Network Authority of the Eastern Adriatic Sea - PP5
Project website	<a href="http://interreg-central.eu/reif">interreg-central.eu/reif</a>
Delivery date	08.2021

### Summary description of the pilot action (including investment, if applicable) explaining its experimental nature, demonstration character and transnational added value

The pilot action aimed at testing a simulation of intermodal freight flows in the area of the Port of Trieste and how alterations can expand port capacities.

Over the last few years, the railway traffic of the Port of Trieste has increased considerably, passing from 5.980 trains in 2015 to 9.770 trains in 2019 (+63.4%). The economic crisis due to the COVID19 pandemic caused a decline in 2020, which is currently being recovered - the number of trains increased by 19.5% during the 1<sup>st</sup> semester of 2021, if compared to the same period of the previous year. Moreover, modal shift from road to rail plays an important role in the environmental strategy of the Port Authority: it already shows remarkable results - 52% for TEUs and 27% of semi-trailers in 2020 - which will need to grow further in order to meet the decarbonization goals at local, national and EU level.

Yet, despite the increase in rail traffic flows, the railway infrastructures of the port of Trieste have remained the same. Therefore, the main challenge this pilot action aims to tackle is identifying the possible clusterisation potential of existing freight flows not already using the train, as to further increase the modal share on rail, using an operational model.

An integrated optimization approach was used to estimate railway capacity based on the discrete event simulation of railway operations under different conditions in terms of infrastructure availability. Train departure and arrival in Trieste Campo Marzio station, shunting movements, terminal operations including administrative processes related to the free zone were considered and the optimization procedure will lead to a possible operations model to maximize the corresponding capacity. Finally, a more detailed simulation of the identified solution was performed to validate the results. Such a tool can be easily replicated in other territories (pls. see section here below).

NUTS region(s) concerned by the pilot action (relevant NUTS level)

*ITH4 - Friuli Venezia Giulia*

Investment costs (EUR), if applicable

Not relevant.

Expected impact and benefits of the pilot action for the concerned territory and target groups and leverage of additional funds (if applicable)

This pilot action, closely linked to the other one, related to the identification of existing bottlenecks, proved essential in the planning capacity of the Port of Trieste and in elaborating possible scenarios. Although the latter were concluded before the outbreak of the COVID19 pandemic, important lessons were learned, the most relevant one being that “railway capacity” is not a “fixed concept”, depending on several variables to be considered. An operational model is a powerful tool to simulate and assess railway capacity based on the change in the variables.

The pilot action has long lasting results, mainly benefiting the port community - terminal operators, railway undertaking, freight forwarders - and the local and regional economy at large, the operation tool being able to be adapted to ever changing circumstances.

### Sustainability of the pilot action results and transferability to other territories and stakeholders

The operational model which was used for this analysis will continue to be used also after the project's end, adapting it to the new layout and infrastructures which will be built over the next few years, also thanks to regional, national and EU funds.

A similar tool can be easily used also in other territories, playing a major role in assessing the potential for the existing and future infrastructural development, the only prerequisite being that the concerned entity already has detailed information on the existing railway infrastructures, also in GIS format.

If applicable, contribution to/ compliance with:

- relevant regulatory requirements
- sustainable development - environmental effects. In case of risk of negative effects, mitigation measures introduced
- horizontal principles such as equal opportunities and non-discrimination

Not applicable.

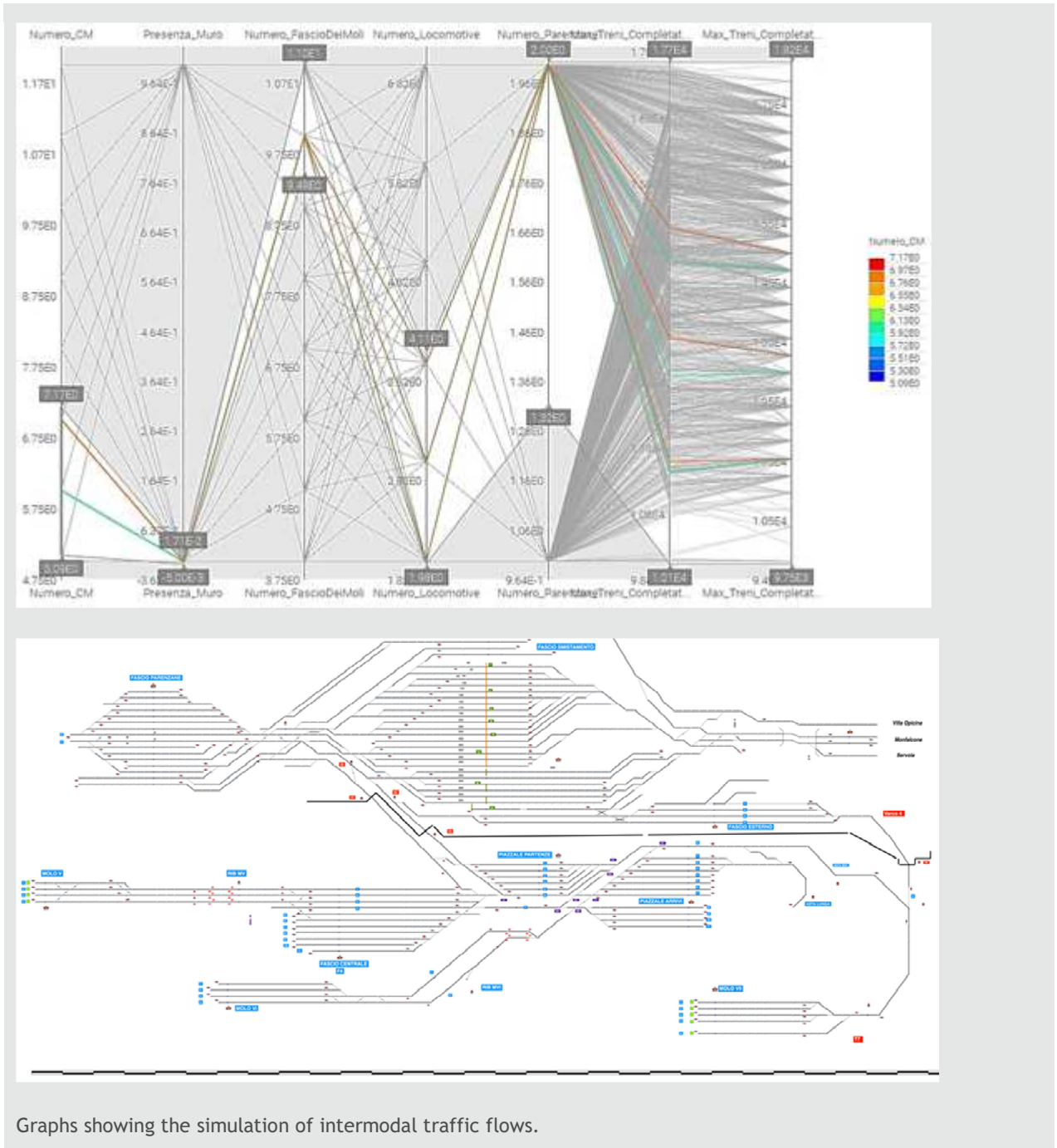
References to relevant deliverables (e.g. pilot action report, studies), investment factsheet and web-links

If applicable, additional documentation, pictures or images to be provided as annex

The output is based on the following deliverables:

- D.T2.3.2 Pilot action launch report
  - D.T2.3.4 Establishment of Market player working group for pilot action no. 3
  - D.T2.3.7 Pilot evaluation report
- Download link: <https://www.interreg-central.eu/Content.Node/REIF/Pilot-action--7---Port-of-Trieste---Operational-model.zip>

A video summarizing the pilot action outcomes is to be published on the REIF website.



Graphs showing the simulation of intermodal traffic flows.