Better utilization of information and resources in a
synchronised way between the port and dry-port area.
Automated security and customs checks to speed-up the
total amount of time spent in the port area.
Pre-booking of spaces in the dry-port parking area and
on the ships to optimize the management of the limited
available spaces and the ships load factor.

The same architecture of the SAIL DSS can be used at
strategic, tactical and operational decision levels. The results
of the decision procedure show:
• How the management strategies are of basic importance
to improve the system performances.
• The suitable application of the ICT based solutions has a
huge potential for efficient real time management of
transport systems, reducing the lead times in the port
and dry-port areas.

Analysing the current situation the main critical issues
concern the lack of synchronization between the several
involved actors in the flow and the impossibility
of registering information about goods in real time.
These aspects increase the probability of errors in the
registration of data about goods, the redundancy in the
information exchanges and often they can double the
works for the shipping agent and the freight forwarder.
There are many activities that are still manually
performed, such as the operations to register the exit of
the trucks from the dry-port terminal. Moreover some
communications are made only by voice, and as such
require the presence of the freight forwarder operator
at the Customs office.
These criticalities are listed below:
• the accessibility at the port: due to high volume of
traffic concentrated in precise moments during the
week and the requested controls by the police and
by the customs, situations of high congestion are
very frequent;
• the lack of space outside the terminal: there is a
congestion that frequently impedes traffic flow in
the whole port area and sometimes even in the city
area around the port.
SAIL develops a Decision Support System (DSS) to be used by Decision Makers (DMs) that have to take operational as well as tactical decisions in logistics networks composed by a port and a dry port. Moreover, the proposed management and planning approach is based on the specification of two main modules that are the core of the DSS: a simulation model and an optimization module. If the performance has to be improved, then the DSS determines the decision variables that should be chosen in order to optimize a specific objective function. Hence, the simulation module foresees the evolution of the system and provides to the optimization module the estimated results.

**Transport mode or supply chain elements:**

- **Nodes:** sea port, dry-port (inland intermodal terminal)

- **Multimodal transport elements:**
  - Rail/Road/Maritime Transport
  - Loading/Unloading
  - cargo position monitoring
  - incident detection
  - customs and security operations
  - management of parking area in the port and dry-port areas

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http://www.sailproject.eu/

http://www.teorema.net/it/um/ReD/ HarborLogistics/SAIL.aspx

More Best Practice cases and information about BESTFACT can be found at:

http://www.bestfact.net