

# Deployment scenario

## ARL e-Yield Suite

# ARL e-Yield for Rail Operator

## Overview

The deployment scenario describes how a rail cargo operator applies ARL's e-Yield Suite to his business. The rail operator is connecting sea-side container terminals with inland rail service points, and partly act as 'inland feeder' to sea-transport providers and partly pursue direct 3<sup>rd</sup> party customers in order to utilize the operated rail transport assets fully. The modest sized commercial organization of the rail operator focus on building strong ties with a small number of large-volume sea-transport providers, and secondarily building up a market of 3<sup>rd</sup> party cargoes – often small-volumes from a large number of potential customers – in competition with road and barge transport modes.

## Schedule and Capacity

The rail operator's schedule links to the partner sea-transport providers' vessel seaport calls. The rail assets operates around the clock, resulting in more frequent service cycles, than the connecting sea-transport operators' services. Additionally the sea-transport providers experience seasonal fluctuations and import/ export imbalances, hence the volume available for 3<sup>rd</sup> party customers is fluctuating across individual rail departures. The sea-transport providers' base cargo is pre-allocated with the rail operator, however, replaced with concrete volume bookings when known, and space available for 3<sup>rd</sup> party cargo bookings is adjusted accordingly.

The repetitive service is reflected in e-Schedule and space available is setup in e-Book Allocation add-on. For long-term planning a standard allocation is set for 3<sup>rd</sup> party cargo on each departure depending on whether each departure is matching the sea-transport provider's vessel schedule. For concrete rail departures the allocation available for 3<sup>rd</sup> party cargo is adjusted according to bookings received from the sea-transport providers. If the sea-transport provider is booking directly into e-Book, the sea-transport provider's pre-allocation reserves space until concrete bookings are received for the individual departures, and e-Book Allocation distribute all capacity dynamically across sea-transport provider and 3<sup>rd</sup> party customers.

## 3<sup>rd</sup> Party Customer Bookings

The rail operator interact many individual customers being a mix of end-customers and intermediaries. As bookings are received from multiple locations, central management of capacity is exercised in order to provide space guarantee for committed bookings as well as securing a high utilization.

e-Book's front-office embedded in the rail operator's own web-site provide a uniform schedule, freight quote and booking interface towards all customers, and at the same time manage available space versus bookings across all locations. To secure an as-high-as-possible yield, bookings for the space remaining after the sea-transport providers reserved space, is granted on a first-come-first-serve basis.

ARL e-Yield Suite consists of the following individual solutions:

- e-Schedule, see more on [arl-shipping.com/es](http://arl-shipping.com/es)
- e-Quote, see more on [arl-shipping.com/eq](http://arl-shipping.com/eq)
- e-Book, see more on [arl-shipping.com/eb](http://arl-shipping.com/eb)
- e-Settle, see more on [arl-shipping.com/ep](http://arl-shipping.com/ep) (p=pay)

# ARL e-Yield for Rail Operator

## Bookings from Sea-Transport Providers

Sea-transport providers submit long-term forecasts for space requirements to the rail operator, and once cargo is onboard vessel and individual connection from vessel to rail operator departure is validated, forecasts are replaced with concrete bookings detailing the cargo mix (container size and weights).

e-Book Allocation add-on's pre-allocation reflect the long term space requirements, allowing the rail operator to start accept of 3<sup>rd</sup> party cargo for the remaining space early in time. Once the sea-transport provider's concrete cargo is known, a booking is replacing the pre-allocation, capturing the concrete cargo mix and thereby allowing e-Book Allocation to release additional space to 3<sup>rd</sup> party customers.

The sea-transport provider's booking may be entered directly in e-Book front-office by the sea-transport provider's or the rail operator's staff, or received by EDI/ebXML.

## Optimal Railcar Yield

Whilst the railcars constituting the rail operator's key transport asset sets some physical limitations (volume and weight) for cargo accepted on a particular departure, the railcars offer a great deal of flexibility for different cargo combinations. The rail operator pursue a cargo mix creating as high a yield as possible considering concrete market conditions for individual cargo types.

e-Book's product and alternative product configurator allows the rail operator to define all the products accepted and their replacement options – f.ex. 1x40' heavy as alternative to 2x20' light – and thereby managing utilization of both space and weight. e-Book Allocation add-on gradually release allocation for alternative products and by e-Quote differentiating the price between product alternatives – including light & heavy cargoes – the rail operator secures highest possible yield from each railcar.

## Working with Intermediaries – Forwarders & Consolidators

The rail operator works with intermediary customers – like forwarders/consolidators – who offer customer focused value added services to the end-customers as well as provide cargo volumes to the rail operator in return for beneficial commercial terms.

Assuming that the forwarder/consolidator also use e-Yield, updated rail operator's schedules are passed electronically to the forwarder/consolidator e-Yield platform, allowing the forwarder/consolidator to focus on complementing his own value add offerings like customs clearance and door pick-up and delivery services to the core transport service provided by the rail operator, and promote the full transport service on the intermediary's own web-site.

When bookings are done on the forwarder/consolidator's web-site, they are passed onwards to the rail operator electronically.

## Feed ERP/Finance System

The rail operator is using a local finance package for invoicing and general ledger.

e-Book sends an EDI or ebXML message to the rail operator's ERP system, ensuring a full electronic re-use of data provided by the customer, and generated by the e-Yield platform.

*The e-Yield Suite support the operations of a rail operator in the schedule-quote-booking process allowing the rail operator to work electronically with sea-transport providers, intermediary-style customers and rail infrastructure services providers, as well as own back-office execution and finance systems.*

### e-Yield Deployment Scenarios:

- FCL Consolidators
  - Deep Sea Shipping Line
  - NVO/ NVOCC
  - Short Sea & Ro/Ro Operator
  - Feeder Operator
  - Air-Cargo Operator
  - **Rail Operator**
  - Independent Liner Agent
  - Barge Operator
  - LCL Consolidators
  - Truck Fleet Operator
  - Perishables Logistics Provider
  - -cargo- Low Cost Carrier, cLCC
- Note: a transport provider may seek hints from multiple scenarios.*