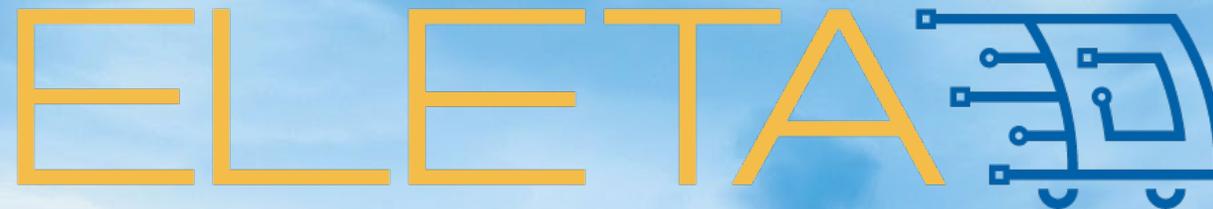


# Sharing of train tracking and Estimated Time of Arrival (ETA) information

CEF Action nr. 2016-EU-TA-0185-S  
AGREEMENT No INEA/CEF/TRAN/A2016/1367683



Electronic exchange of Estimated Time of Arrival information



**Co-financed by the European Union**  
Connecting Europe Facility



## 2016: Boosting International Rail Freight



- Combined Transport Operators in the lead
- 12 + 10 intermodal shuttle trains (200 per week)
- TIS (Train Information System) as data source

Many thanks for the cooperation!

ELETA 



**LINEAS**  
YOUR FREIGHT FORCE



**ProRail**



**DB NETZE**



INFRA



**Rail Cargo Group**  
Member of ÖBB



**INFRABEL**

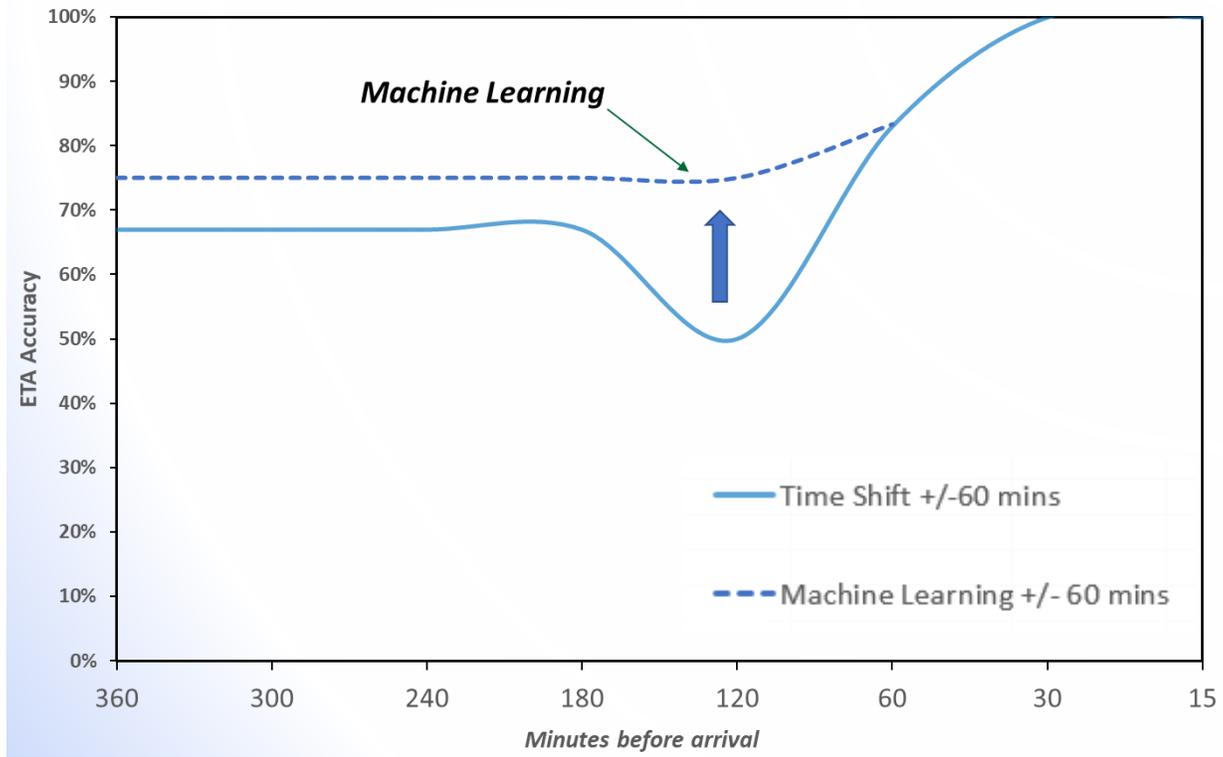
**SBB CFF FFS**



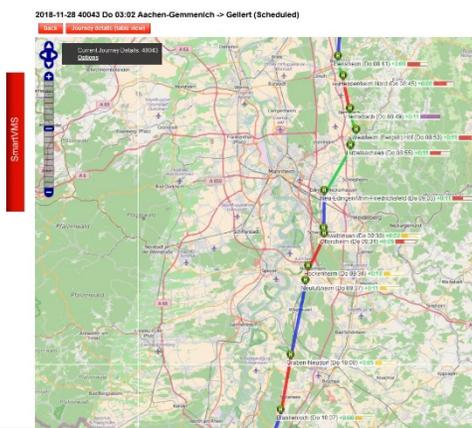
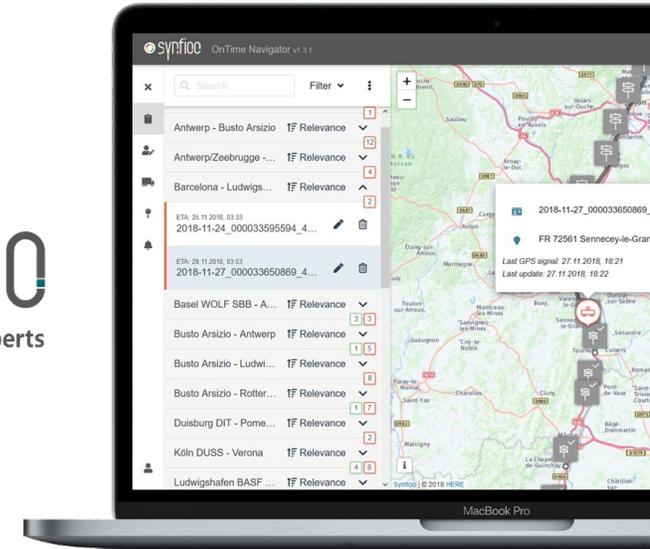
**RNE**  
RailNetEurope



# Algorithmic Calculations and Artificial Intelligence enable customers to compute ETA's with sufficient reliability



Example: Train 43034, Busto to Ludwigshafen (September-October 2019)



Station	Longitude	Latitude	Arrival (PREDICTED)	Arrival (GPS)	Departure (PREDICTED)	Departure (GPS)	Departure (GPS)	Delta
Busto Arsizio	7.5862	47.537796			2019-11-28 14:52	2019-11-28 14:52		+0.00
Verona	7.88888	47.28888	2019-11-28 14:55		2019-11-28 14:55	2019-11-28 14:55		+0.00
Hallertau	7.81788	47.12888	2019-11-28 16:01		2019-11-28 16:01	2019-11-28 16:01		+0.00
Ludwigshafen	7.87888	47.78888	2019-11-28 16:13		2019-11-28 16:13	2019-11-28 16:13		+0.00

## Learning by doing - Experiences from 2 years

- The willingness to exchange information is ample
- Reliable data provision is needed for customers wishing to compute the ETA's for their trains
- TIS/RNE contractual framework is effective, but (too) laborious
- Absence of unique (international) train numbers causes a lot of extra work; especially ad-hoc changing train numbers causes problems
- There is need for harmonisation of definitions, terms and messages

## To-do's:

1. Streamline data sharing
2. Harmonise terminology on quality of ETA's
3. Implement unique train identification number
4. Involve terminals as data source & recipient



Thank you for your  
attention

[www.UIRR.com](http://www.UIRR.com)

[a.toet@knv.nl](mailto:a.toet@knv.nl)



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