

# Gate4Rail

GNSS AUTOMATED VIRTUALIZED TEST ENVIRONMENT FOR RAIL

A characterization of the environment (railway and GNSS infrastructures)

- to evaluate the performances and properties of some fail-safe train positioning components in nominal and fault conditions;

A common test process framework for zero on-site testing

- saving effort and time.

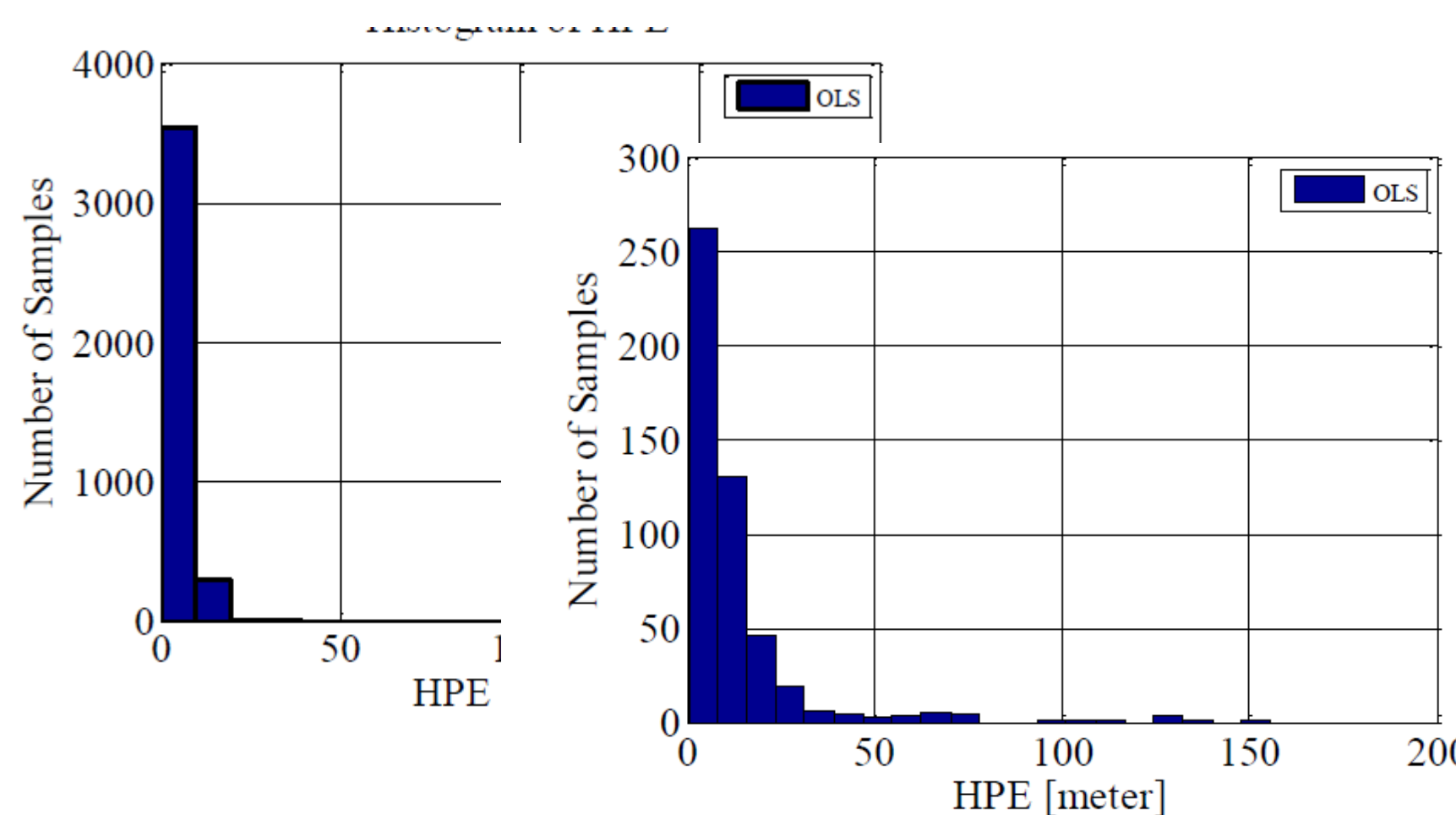


## Technical objectives

- Achieve a realistic characterization of the environment in terms of railway and GNSS infrastructure able to evaluate performances and properties of some fail-safe positioning components with respect to normal and specific failure conditions
- Simplify the analysis of the pros/cons for the GNSS application according to the different line characteristics and market segment
- Set-up of a geographical and distributed infrastructure able to verify and take advantage from the results of the existing laboratories
- Reduce costs and improve efficiency for testing technologies and their evolution and for planning maintenance and replacement activities on the line
- Performing tests of innovative products and services using up-to-date simulation environment in order to support new (type) approval processes or even a harmonised European approval process in the context of control, command and signalling systems

## Ifsttar's contribution

- To identify and characterize global and local hazards occurring in railway environments.
- To provide error models: distribution of errors and probabilities of occurrences.



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