

THE HIGH-SPEED RAIL HANDBOOK: A TECHNICAL GUIDE¹

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ABSTRACT

The project of the new railway line Turin Lyon is an exemplary case of unnecessary work. It should overlap a railway tunnel and an international railway line with modern features; traffic data show since 2000 a collapse of road and rail movements along the corridor Italian French interested; after 14 years of experimentation its modal transfer capacity has always given negative results; the new line would not be interoperable with the rest of the Italian and French network because it has its own, even different, links between the Italian and the French of the same line. The studies carried out on the energy consumption and CO₂ production of the Turin Lyon in the construction phase, which requires the excavation of 42 million cubic meters of rock, and the management of energy consumption of the ventilation and refrigeration of the base tunnel, give a negative energy balance for the new work. Finally, because the size of the necessary works and their enormous cost would have very heavy effects on the environment and on the resources to be dedicated to the critical issues of the remaining national network and to the real needs of citizens.

Keywords: High Speed Rail, Turin-Lyon, Environmental Impact, Cost-Benefit Assessment.