Master thesis

A study of interaction effects between three parameters of homogeneity of operating program on track section

At present, railway operation quality becomes worse worldwide in the form that railway operation is more sensitive to disturbance resulting in larger delays and lower average punctuality. It is widely accepted that better operation quality can be achieved with more homogeneous operating program. From the standpoint of infrastructure occupancy, an operating program is defined as homogeneous, when all trains have same blocking time; buffer time is entirely evenly spread; running direction is not changed. The bigger the variations in blocking time, buffer time and running direction, the more inhomogeneous the operating program is.

These three parameters are dependent of each other in complex railway systems. Variations in blocking time are accompanied by the variations in buffer time. The changes of running time also bring out changes in buffer time. The main objective of this master thesis is to investigate the interaction effects between homogeneity of blocking time, buffer time and running direction. The results of this work are useful for evaluation of homogeneity of operating program in the future.

Of interest please contact:

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