The UIC 406 capacity method used on single track sections

This paper describes the relatively new UIC 406 capacity method which is an easy and effective way of calculating capacity consumption on railway lines. However, it is possible to expound the method in different ways which can lead to different capacity consumptions. This paper describes the UIC 406 method for single track lines and how it is expounded in Denmark. Many capacity analyses using the UIC 406 capacity method for double track lines have been carried out and presented internationally but only few capacity analyses using the UIC 406 capacity method on single track lines have been presented. Therefore, the differences between capacity analysis for double track lines and single track lines are discussed in the beginning of this paper. Many of the principles of the UIC 406 capacity analyses on double track lines can be used on single track lines – at least when more than one train follow each other in the same direction. Anyway, special care has to be shown to how to expound the UIC 406 capacity method in specific cases. Therefore, this paper discusses where to divide the railway lines into line sections and how crossing stations and junctions and conflicts when entering these crossing stations and junctions can be analyzed. The paper also describes network effects on single track railway lines and how the network effects can have influence on the capacity consumption. Furthermore, it is discussed how it is possible to make capacity statements of a railway network.

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