

CA: B1 Topic: Spatio-temporal Data Acquisition & Analysis, Monitoring Devices and User Communication**Code: MS-E1: Implementation and extension of a model for real-time automatic matching of complementary transport needs**

In this line of research, we develop methods and models to facilitate automated assessment of outcomes of people working together. This is of importance whenever someone states a need which can be fulfilled by collaborating with other persons or entities having complementary needs (such as buying / selling things, getting from one location to another, etc.). Since most such needs are embedded in the “real world”, we restrict our works to needs having a spatio-temporal component. Further, due to the fact that a lot of our research concerns topics from the transportation and mobility domain, we mainly consider transport needs in a first stage. We look at ways to formalize and specify them in a ubiquitous manner and propose a model for publishing and processing such complementary needs. For a prototypical implementation, we model needs as Linked Data, enable matching complementary needs by simulating common satisfaction processes and assess outcomes using a variety of similarity measures. The submission currently being prepared involves a description of this prototype, and the underlying model which contributes to building systems that simplify and generalize the search for spatio-temporal information.