

Timed automata have been designed for modeling a real-time system behavior over time. Main obstacle is that the formal theory assumes some unrealistic assumptions, such as that the action takes no time to execute. The model must be put more exactly, which makes the model more complicated and the whole process prone to mistakes. In the presented work we will focus on synchronization of processes over channels. There is a discussion of possible solutions. Next we will analyze chosen solutions and implement it. We will not create new tool or language but we only make extension of Uppaal language.