**Reviews**

1. ~~In the second paragraph of Section C, the sentence~~

~~"where drivers wish is overwritten by the calculated values~~

~~from the MPC algorithm" is not clear. Please revise it.~~

1. ~~Please consider rephrasing the sentence: "the position~~

~~vehicle k enters the critical set is called Lk and Hk".~~

1. ~~In the title of No.5 reference, i.e., [5], 'mpc' should~~

~~have been rewritten in the capital format 'MPC'. Please~~

~~refine it.~~

1. ~~spell-check.~~
2. ~~There is no descriptive legends for each line in the~~

~~first two subplots in Figure 4. Please specify.~~

1. ~~Is the control semi or fully autonomous on vehicles. How~~

~~does this approach work with human controlled vehicles.~~

~~Basically, could you validate the use and value of~~

~~autonomous vehicles in your proposed approach.~~

1. ~~In the section 5, no left and right turn in the~~

~~intersection sounds too constrained. How does the proposed~~

~~approach suit real-traffic situation, i.e., dense traffic~~

~~at peak hours~~

1. ~~Computationally, how many vehicles could the proposed~~

~~MPC handle?~~

1. ~~Compared to the solution in reference [9], the author~~

~~has mentioned that computation time has decreased. Please~~

~~include a note on the results for comparison purposes~~

1. ~~In the approach As a final comment, I would like to mention that although~~

~~interesting, the approach seems to be rather far from being~~

~~feasible in real-life conditions. A more comprehensive~~

~~comment on the steps necessary to go to that direction~~

~~would have been better than the current statement: “… the~~

~~controller is designed so that an adaptation to enable this~~

~~is possible” (see last sentence of section II.A).~~

1. ~~proposed in [7] and [8], as well as~~

~~in the MPC-based decentralized approach presented by~~

~~Makarem and Gillet (2013), the optimisation problem is~~

~~formulated and solved, without any particular reference to~~

~~problems arising from such formulation, in time coordinates~~

~~using position and velocity rather than time and “lethargy”~~

~~(i.e. the inverse of speed) as state variables. Is it~~

~~therefore really necessary to go for such a transformation?~~

~~Additional Reference~~

~~Makarem L, Gillet D (2013). Model predictive coordination~~

~~of autonomous vehicles crossing intersections. Proceedings~~

~~of the 16th International IEEE Annual Conference on~~

~~Intelligent Transportation Systems (ITSC 2013), The Hague,~~

~~The Netherlands, October 6-9.~~

1. ~~As mentioned earlier, some of the authors of this~~

~~paper had presented in the past an MPC approach of a~~

~~decentralized nature (see [7] and [8]). Why do they now~~

~~propose a centralised approach? What are the expected~~

~~benefits from centralization of the control problem?~~

1. ~~Restriction on CarMarker does not allow simulation of a~~

~~near-real traffic situation. What are the other~~

~~alternatives?~~

1. In section 2, problem statement, please explain why

there should be only one vehicle in the critical set. Why

could the intersection control allow for one vehicle in

either direction.

1. As the paper extensively uses the reference [9], please

explain or add few sentences on how the proposed approach,

apart from formulation of the problem, is different.