A quick statement to hyperloop systems

We are frequently asked why we dont offer a hyperloop system or why we dont participate in that hype.

Our answer doesn’t change since 10 years: these systems are expensive, we already have a railway network, we would just need to optimize track/station switching without decreasing speed!

ICE, TGV et al are are well capable to go around 300km/h, the current problem is that they hop from spot to spot, coming to a halt for minutes, what a waste of energy to decelerate 500tons from full speed to zero!

So our simple solution that can be realized in a fraction of time and with a fraction of the needed cost to set up the hyperloop just to save a few minutes, is a carousel high speed train going a long distance without stopping, just reducing to commuter train speeds like 150km/h, at which both trains dock for 1 minute at ie 4 one-way ports over the whole commuter train length. So the latter does the “last mile”-job, with much less waste of energy.

How would that such a system perform on a 500km travel distance? Supposed there are 10 stations between these 500km distanced towns A&B, the commuter train1 would leave station1, speed up to 150km/h within 3 minutes at 0.23m/s2 (the subway accelerates 5 times faster), hold that speed for the docking period, brake and go back to his station1 or to station2, depending on the distance between those two towns. At the journey s end commuter train 2 would dock a few kilometers before reaching town B and reduce speed to come to a halt at the destination station.

Would docking be safe? How many seconds do you have in the subway in a chaotic two-way situation? 15-25 seconds? One minute for 5m from one train to the other docked one in a one-way situation is largely enough, and the speed of 150km/h would demand for 2.5km docking length, make it 5km for safety reasons to bring the train to an emergency halt in case of blocked doors etc.

So what s the time en route? 2 x commuter trains for stations 1 and 12; 0-150km/h in 3 minutes each(fast train can be >3km out of the town s heart), plus 10 x decelerating to 150km/h for ie 5km for each docking event =50km at 150km/h=20minutes, plus 450km at 300km/h=1.5h; so in total it wouldn’t take you 2hours for the trip; the hyperloop would have saved you an hour - at a much higher system realization cost!

So nail it down to the question if that hour is worth all the co2 to produce that new system and dismantle the old -and if all people can afford the ticket fees or if that hype created yet another system for the upper half…

