

Korea has designs on ultra-fast transport speeding past maglev

January 24 2017, by Nancy Owano



A group of journalists from the Ministry of Land, Infrastructure and Transport visited Osong test site in north Chungcheong province. Credit: Korea Railroad Research Institute

(Tech Xplore)—Korea has its eye on advanced transport and taking a place in the frontlines of research and development. Case in point: Its research interest in coming up with an ultra-fast train. Call it ultra-fast,

call it hyper-tube but know that this is really fast.

The goal is a train that can take passengers from Seoul to Busan in just 30 minutes. That's one-half hour compared with the present travel time of 5 hours by traditional rail and 50 minutes by plane, said *Futurism*. Its report said "this train could be twice as fast as the magnetic levitation ([maglev](#)) trains that are currently the fastest form of ground [transport](#)."

South China Morning Post also said it would leave maglev trains in the dust. Maglev trains can travel at around 500km/h. The train in Korea would go as fast as 1,000 km/h (621 mph).

"Magnetic levitation (maglev) trains, which are the fastest form of ground transport, can only go about half that speed due to [air resistance](#), which slows the train down as it picks up speed, " said *Futurism*.

RT pointed out why the speed potential differs. "Maglev trains cannot, however, compete with hyper-[tube trains](#) in speed – while both technologies have no friction, maglevs are significantly slowed by air resistance, while hyper-tubes travel in a vacuum and can attain speeds almost twice that of maglevs."

The technology involves "suspending pods inside tubes in a partial vacuum," said *Futurism*.

Those behind this train undertaking are from the Korea Railroad Research Institute (KRRI), Hanyang University and other research teams.

Actually, according a report in the *Korea JoongAng Daily*, Korea Railroad Research Institute said recently that it signed a deal with seven research institutions to develop the Korean hyperloop train, or Hyper Tube Express, HTX. That report said that travel from Seoul to Busan

would take about 20 minutes (other reports said 30 minutes, but, either way, the time estimate is impressive).

"The government has focused on interdisciplinary research and this will be the biggest effort we are working on to develop a representative future [technology](#), said a KRRI official quoted in *South China Morning Post*.

Will it come to fruition? The report quoted a KRRI official: "We hope to create an ultra-fast train, which will travel inside a state-of-the-art low-pressure tube at lightning speeds, in the not-too-distant future." He added that they will cooperate "with associated institutes as well as Hanyang University to check the viability of various related technologies called the hyper-tube format over the next three years."

What are some of the interests in studying this concept? "The railroad research institution said it will test [core](#) technologies of the system such as electromagnetic technology in the lab while developing a blueprint for general infrastructure such as tubes," said the *Korea JoongAng Daily*.

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