МІНІСТЕРСТВО ОСВІТИ І НАУКИ УКРАЇНИ СУМСЬКИЙ ДЕРЖАВНИЙ УНІВЕРСИТЕТ КАФЕДРА ІНОЗЕМНИХ МОВ ЛІНГВІСТИЧНИЙ НАВЧАЛЬНО-МЕТОЛИЧНИЙ ПЕНТР

МАТЕРІАЛИ VIII МІЖВУЗІВСЬКОЇ НАУКОВО-ПРАКТИЧНОЇ КОНФЕРЕНЦІЇ ЛІНГВІСТИЧНОГО НАВЧАЛЬНО-МЕТОДИЧНОГО ЦЕНТРУ КАФЕДРИ ІНОЗЕМНИХ МОВ

"TO LIVE IN A SAFER WORLD"

(Суми, 28 березня 2014 року)

The eighth scientific practical student's, postgraduate's and teacher's LSNC conference

HIGH-SPEED RAILWAY LINES

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Japan was the first country that built railway lines for high speed travel. Because of the mountainous terrain, the existing network consisted of 1,067 mm (3 ft 6 in) narrow gauge lines, which took indirect routes and could not be adapted to higher speeds. Consequently, Japan had a greater need for new high speed lines than countries where the existing standard gauge or broad gauge rail system had more upgrade potential.

The Shinkansen is a network of high-speed railway lines in Japan operated by four Japan Railways Group companies. The network presently links most major cities on the islands of Honshu and Kyushu, with construction of a link to the northern island of Hokkaido underway.

The middle speed is 320 km/h (200 mph). Test runs have reached 443 km/h (275 mph) for conventional rail in 1996, and up to a world record 581 km/h (361 mph) for Maglev train sets in 2003.

Shinkansen literally means new trunk line, referring to the high-speed rail line network. The name Superexpress, initially used for Hikari trains, was retired in 1972 but is still used in English-language announcements and signage.

The Shinkansen is the world's busiest high-speed rail line.In 2008 it was carrying 151 million passengers per year . Though largely a long-distance transport system, the Shinkansen also serves commuters who travel to work in metropolitan areas from outlying cities. Japan's Shinkansen network had the highest annual passenger ridership (a maximum of 353 million in 2007) of any high-speed railnetwork until 2011, when China's high speed rail network surpassed it at 370 million passengers annually.

Railways are using Shinkansen technology not only in Japan. The countries also using this technology are Taiwan, China, United Kingdom, Brazil, United States, Canada, Vietnam and India.

Trains can be up to sixteen cars long, with each car measuring 82 ft in length. The longest trains are 400 m (1/4 mile).