

# Bullet train will be customised to suit Indian conditions

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**New Delhi:** The “lurch”, a sideways rocking movement Indians have learnt to balance while walking or standing in trains, will be a thing of the past in bullet trains even at 320 kmph. The E 5 Series Shinkansen will “compensate” for any roll and will also be modified to meet harsh Indian hot weather conditions and omnipresent dust.

Managing director of the National High Speed Rail Corporation Ltd (NHSRCL) Achal Khare explained the lurch control: “When you travel by train and negotiate a curve, you will feel some kind of lurch. They have sensors fitted at the bogie level and the sensors will sense the curve ahead in advance and then will actuate a hydraulically operated cylinder to neutralize the lurch. This is important from a passenger comfort point of view,” he said.

He said there is a discussion on with rolling stock manufacturers and consultants to fine tune design. “The environmental conditions in Japan are different. Initially, we thought we will bring the

trains lock, stock and barrel since it’s time tested. But when we went into detail, we discovered that the temperature and dust conditions are creating a big difference. In our ambient temperature, we are asking for 55 degree centigrade; they design for 40 degree...15 degrees in air conditioning will make a big difference. The air conditioning equipment will be very heavy and they have very compact design. So, accommodating that increased equipment will be a challenge.” The NHSRCL chief said the other challenge is the dust conditions. So, the equipment in the trains that are exposed will have to be re-designed with air filters.

The NHSRCL is hopeful of completing the first 50 km stretch between Billimora and Surat in Gujarat by December 2023 or early 2024. In reply to whether the Ahmedabad-Mumbai Bullet train project can even be partially ready by early 2024, Khare said, “We are trying to do something by December 2023 or in the beginning of 2024. We are trying something that is done, if not commercially, at least for trial purposes.”