SIMRAN to check rail accidents

By Akhilesh Kumar Singh/TNN

Kanpur: "May I have your attention please. Train number 'XYZ' is delayed by six hours. Sorry for the inconvenience." This shrill computerised announcement at railway stations will soon be a thing of the past.

Thanks to a device developed jointly by the Indian Institute of Technology, Kanpur (IIT-K) and the Research, Designs & Standards Organisation (RDSO), Lucknow, people will now have computerised access to a data bank on movement of trains. The device will also be handy in minimising head-on collisions between trains which cause maximum fatalities on Indian tracks.

Under the Railway Technology Mission Project, the IIT-K and RDSO have developed a device called Satellite Imaging for Rail Navigation (SIMRAN), through which minute-wise detail of trains' movement will be available to railway authorities and commuters alike.

POTENT DEVICE

The device will be put on trial within the next six weeks for which Kanpur-Allahabad route in north-central and Chennai-Chidambaram in south zone have already been identified. Before trial, giant electronic screens will be installed at stations on these routes to tell passengers about the device and its advantages. Once the trial is successful, the entire information will be available on the railways website, making it accessible to the public.

"The device has been developed through several approaches, including GPS and GSM for communication with a central server," said mission coordinator Nalinaksh S Vyas, faculty at department of mechanical engineering, IIT-K.

Giving details of the device, Vyas told TOI on Wednesday that each train will be equipped with a train locator unit. It will receive information from GPS satellites and continuously identify the train's position in the form of its present latitude and longitude values along with its speed, direction, date and time.

"This information will be transmitted to traffic control centres through local radio network also. Through satellite imaging, location of trains and other details will be displayed on screens at the central control room and data on stations and the website will be automatically updated," he added.

Assuring that orders for installation of screens had already been placed, project investigator B M Shukla, a senior software engineer at the institute's computer science department, said even global position of the 9,400 railway stations across the country will be on display. "Train drivers and guards will now have access to data on movement of their trains as well as other trains, making it possible for them to avoid collisions," Shukla said.

"The system will be effective even in adverse climatic conditions. It will also enable drivers to know about unmanned crossings, bridges and the feasible speed at which they should drive," Shukla said.