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# Smart Railway stations

## Overview

- A smart station is designed to broaden its area of influence in a smart city, via the networks (transport, energy, digital).
- A smart station should take into account how its railway business will tie in with not only with key societal but also important business related issues of the future.
- Smart Railway stations is a station area that uses different types of electronics internet of things (IOT) sensors to collect data and using that data to better improve efficiency, mobility and sustainability

## *SMART TRAINS*

- A smart station is **designed to broaden its area of influence in a smart city, via the networks (trans- port, energy, digital).**
- A smart station should take into account how its railway business will tie in with not only with key societal but also important business related issues of the future.

*SMART train start running* ○ The

Sonoma-Marín Area Rail Transit

(SMART) ○ District announced that it has received the green light from the

Federal Railroad Administration to begin full passenger train service.

### *How fast is the SMART train*

- The SMART train will run from Santa Rosa to San Rafael at a projected **70 miles an hour**
- In brand new, clean diesel trains; SMART will allow you to get out of your car on Highway 101 and still get where you need to go – for work or for fun

### *FEATURES*

- Railway stations have become an important part of the discussion when it comes to smart cities.

- Which aim to implement data and technology to improve efficiency, mobility and sustainability.
- Station managers, political institutions and infrastructure managers are cottoning on to the importance of renovating their rail transport hubs accordingly.
- Take India, where the Ministry of Railways has teamed up with the Ministry of Urban Development to ensure that smart railway stations
- We will be built as part of the country's ongoing Smart Cities Mission.
- More than 400 stations across India are currently being redeveloped to provide easier access

- and improved amenities to passengers. ○ In October 2017, the International Union of Railways (UIC), alongside Spanish rail infrastructure manager ADIF,
- Hosted the sixth edition of its NextStation2017 conference with the theme ‘Smart Stations in Smart Cities’.
  - A notable lesson from the event was that smart rail stations bear connection with smart cities in that they are just as difficult to define.

Problems faced by smart railways

- “It is not basic – that is the main problem facing smart station,” says Clément Gautier, an adviser at the UIC’s passenger and high-speed department.
- “We have to be aware of each situation for each station in each city.
- There is no unique concept of a smart station

### *MERITS of railways*

- The greatest advantage of the railway transport is that it is the most dependable mode of transport as it is the least affected by weather conditions such as rains, fog etc. compared to other modes of transport.

- The rail transport is better organised than any other form of transport. ○ It has fixed routes and schedules.
- Its service is more certain, uniform and regular as compared to other modes of transport
- Its speed over long distances is more than any other mode of transport, except airways.

Thus, it is the best choice for long distance traffic.

## DEMERITS

- The railway requires is large investment of capital.
- The cost of construction, maintenance and overhead expenses are very high as compared to other modes of transport.



- Moreover, the investments are specific and immobile.
- In case the traffic is not sufficient, the investments may mean wastage of huge resources.
- Railway transport is unsuitable and uneconomical for short distance and small traffic of goods.
- Another disadvantage of railway transport is its inflexibility.
- Its routes and timings cannot be adjusted to individual requirements
- Another disadvantage of railway transport is its inflexibility.

## *CONCLUSION*

- Railway stations play an essential role in boosting the economy of any country.

- It is a central hub for people to travel from one place to another.
- It is the place where people meet up for farewells or celebrations.
- The station has many platforms, each with its tracks.
- The railway station is one of the essential parts of a town.
- People plan on where they are going and use services .