



**LATEST MODEL:** The N700 train near Tamachi station between Tokyo and Shinagawa on its way to Hakata in July. Ninety seven of these trains will be built over the next three years

**RELEGATED:** A 500 series train approaches Hamamatsu station at speed on a Tokyo to Hakata service in 2003. The trains are now being demoted to run the all-stations service

## Catch me if you can

Britain can now congratulate itself on being a full member of the international high-speed rail club – with the opening of the 67-mile long Channel Tunnel rail link, now known as High Speed 1.

But we have a long way to go to catch up with the best in the world. In Japan, the main picture above shows the “state-of-the-art” Shinkansen.

The Shinkansen high-speed network now totals 1,500 miles after being consistently developed since the first line was opened in 1964 for “bullet trains”.

The network includes most major cities on the islands of Honshu and Kyushu and the trains operate in areas susceptible to earthquakes and typhoons.

Test runs have been completed at speeds of 275mph.

JR East has announced that new trains capable of 199mph are to be introduced for the opening of the Tohoku Shinkansen extension from Hachinohe to Shin-Aomori in early 2011.

But the normal speed for

the N700 Series which was introduced last year is 186mph. It has active suspension with tilt.

The most futuristic-looking train in Japan is probably still the 500 Series (inset), but it might surprise British readers to learn that, after 11 years in front-line service, these trains are being demoted to lowly all-stations Sanyo Kodama services this year – replaced by the new N700 Series.

For more information see: <http://www.h2.dion.ne.jp/~dajf/byunbyun/index.htm>

Pictures and map: Dave Fossett



**IMPRESSIVE:** The wide-ranging high-speed network in Japan

## An electric way forward for Britain

Renewed attempts are being made to wake the Government up to the need for railway electrification.

Railfuture has long believed that the Great Western and Midland mainlines are prime candidates and that there are several vital infill schemes that need implementing immediately.

Railfuture West Midlands is calling for 55 miles of infill electrification: four miles Barnt Green to Bromsgrove, 16 miles Walsall to Can-

nock-Rugeley and 35 miles Walsall, New Street, Water Orton and Nuneaton. Now both Network Rail and the Association of Train Operators are also pressing for this.

The Government is accused of wasting millions of pounds and undermining the environmental benefits of rail travel by choosing diesel instead of electric trains.

Iain Coucher, chief executive of Network Rail, has warned the Department for Transport of its

failure to electrify more lines as “very short-sighted”. Only 39 per cent of the network is electrified, one of the lowest proportions of any leading European country.

Diesel trains emit double the carbon dioxide emissions per mile of a standard electric train.

MPs on the All Party Parliamentary Group on Peak Oil have been told to plan for an all-electric railway as the most efficient way to use scarce energy.