Fast Facts:

- The Desiro City is the result of a two year, €50 million investment and development programme

- The Desiro City is a second-generation, evolutionary platform based on the proven Siemens Desiro, one of Britain's most reliable train designs

- With well over 1,500 cars either in service, or on order, Desiros now operate across six rail operators (namely South West Trains, London Midland, Heathrow Express, Northern, National Express East Anglia and First TransPennine Express) and cover over 40 million miles in passenger service per year

- The original Desiro's extensive UK penetration and popularity now sees it connecting key towns and cities (from Glasgow to Weymouth) from Scotland to the South of England

- Desiro trains in the UK have already covered more than 150 million miles in passenger service on Network Rail infrastructure

- Siemens is the only train manufacturer in the UK that maintains a service contract for every train it has supplied

- The company's maintenance and service team comprises a dedicated, hand picked, team of 600 people (with such diverse backgrounds as Formula One and yacht building in addition to rail experts) looking after 10 different fleets of trains, totalling over 300 units

- Siemens is the only company in the UK to have built five dedicated train maintenance facilities. The company is currently working on the sixth depot in Shields, Glasgow

- The UK maintenance team has been fully involved in the design of Desiro City, feeding back the practical experience of traincrew, cleaners and maintenance technicians

- One of the first applications for the Desiro City could be the new Thameslink programme if Siemens were chosen as preferred bidder.

Main features of the Desiro City:

- Highly flexible and modular single car concept design with a combination of motor and trailer cars for tailored performance levels

- Ultra modern, modular and flexible interior design with multiple interior configurations available

- Ability to carry more passengers, in comfort, than current designs

- Lightweight bogie design to reduce track wear

- Driver-friendly full width (central driver position) or gangway cabs
- Increased passenger flow and decreased ‘dwell times’ thanks to larger doors, vestibules and wide aisles
- An intelligent air conditioning system with a free cooling mode
- Intelligent diagnostic system to identify areas of concern before faults occur
- State of the art passenger information system and wireless remote access facility
- Integrated CCTV for passenger security and reassurance
- Spacious luggage provision
- Easy disabled access
- Full compliance to the latest safety regulations with optimised safety features including an innovative smoke management system
- Comprehensive testing regimes and fault free running tests ensuring operational availability from very first day of service.

Environmental benefits:

- Overall weight reduction of up to 25% compared to current UK fleets
- Ability to reduce primary energy consumption by as much as 50%
- Lightweight aluminium body and improved aerodynamics for better power efficiency
- Intelligent energy management – each train is able to monitor its own energy consumption and provide instant information to the driver using the advanced driver advisory system
- Intelligent air conditioning (that offers a balance between heating, cooling and fresh air) automatically adjusts output depending upon passenger numbers in each individual carriage
- Energy efficient LED lighting
- A low-power ‘sleep’ mode – that can be remotely operated - will save energy during stabling
- Provision for an energy storage system that uses braking power for reacceleration
- Recycling quota of 95%.