H2 expands hydrogen infrastructure in Germany

H2 MOBILITY will see its filling station network grow by as many as thirty stations by the end of 2021.

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The German Federal Ministry of Transport and H2 MOBILITY signed a Memorandum of Understanding on the further expansion of the hydrogen infrastructure. Under the agreement, by the end of 2021 more than 60,000 fuel cell cars and 500 commercial vehicles would be able to refuel in Germany.

The first phase of the hydrogen infrastructure expansion will be completed by mid-2020. At that point, with 100 stations in seven regions (Hamburg, Berlin, Rhine-Ruhr, Frankfurt, Nuremberg, Stuttgart and Munich) as well as along the connecting arteries, Germany will have a public hydrogen infrastructure that will make possible hydrogen mobility with virtually no restrictions.

While most H2 stations today have a capacity sufficient for refuelling 40 to 50 cars per day, in future it will be possible to fill up about three times as many vehicles at one station. The first few manufacturers, including Hyundai and Toyota, as well as the German companies StreetScooter and

Faun, have already announced hydrogen models in this sector for the years ahead. Toyota, for one, will increase its production in the hydrogen passenger-car sector tenfold from 2020, and Hyundai has announced a similarly large scale-up. The new hydrogen stations will be set up in the regions with the greatest demand for hydrogen.

Hydrogen-powered mobility

Germany’s federal government has supported hydrogen and fuel-cell technology since 2007 with its National Innovation Programme for Hydrogen and Fuel Cell Technology (NIP). Among other things, the programme funds H2 filling stations, which at this time are being built and operated in Germany primarily by H2 MOBILITY Deutschland and its shareholders Air Liquide, Daimler, Linde, OMV, Shell and TOTAL.

According to H2 MOBILITY, hydrogen-powered drivers can already refuel their vehicles in three to five minutes at 76 public hydrogen stations in Germany, for ranges of 500 to 700 km. The hydrogen stations are usually integrated into existing service stations. The design is compact and mainly uses standardised components for the dispensers, H2 storage, and compression.

