PSA Peugeot Citroën and Ford Motor Company unveil world's first volume Cross platform, multi company diesel engine

PARIS, 26 April, PSA Peugeot Citroën and Ford Motor Company today presented the first direct injection diesel engine developed under their cooperative agreements.

The first phase of the cooperation focused on designing small, "featherweight" diesel engines offering features and performance never before achieved in engines of this size. Through compactness and advances in common rail technology, the project addressed three priorities:

- Reduced fuel consumption.
- Unparalleled driveability.
- Significantly improved passive safety.

Marketed as the HDi 1.4 by PSA Peugeot Citroën and the Duratorq TDCi 1.4 by Ford, the first engine in the family is a 1,398 cc version that delivers advanced fuel economy, driveability and environmental benefits. At the same time, its new-generation common rail combustion and fuel injection technology significantly enhances performance.

PSA Peugeot Citroën's President, Jean-Martin Folz said: " This exciting new common rail diesel engine, will allow us to offer more economical, cleaner vehicles endowed with a high level of driveability. This first result of the cooperation between our two groups will lead us to achieve industry-leading economies of scale and will rapidly position us as the world's leading manufacturers of diesel engines, benefiting our customers and the environment".

Ford Motor Company's President and CEO Jacques Nasser said: "The advanced performance and reliability of these small diesels translates into a further reduction in fuel consumption and cost of ownership for our customers - and a reduction in CO2 emissions for our environment."

Further new engines in this family will provide both partners' small vehicles with average fuel consumption ranging from 3.4 to 4.1 liters per 100 km, with CO2 emissions of 90 and 110 g/km, respectively. Lower medium vehicles will achieve 4.5 liters per 100 km, with CO2 emissions of 120 g/km.

The HDi 1.4 and Duratorq TDCi 1.4 engines will be offered in versions covering several levels of performance, with power outputs of 60 to 92 hp (43 to 66 Kw) and torque ratings of 150 to 200 Nm.

23 applications within 18 months

The family of engines including the 1.4-liter common rail diesel will equip PSA Peugeot Citroën's platform 1 and 2 vehicles and Ford's small and medium vehicles - it will be the first cross-platform, multi-company volume engine. In the 18-month period following the launch, a total of 23 applications will be introduced for use in vehicles of both partners. This first phase of cooperation will ultimately deliver production volumes of around 6,000 engines/day.

The project team devised the engine architecture to be easily adapted to various types of vehicle based on a "plug & play" design and production concept. This required expertise covering a broad performance range with a variety of technologies and a common engine-vehicle interface. As a result, the air, water and fuel supply components, as well as the electrical and mechanical connections, are the same regardless of the host vehicle and engine version installed.

All engine versions will have more than 60% component commonality and all are based on the same core architecture.

The total initial cost to develop and process engineer the 1.4-liter diesel engine was limited to EUR

470 million, including 155 million for design.

The new engine is the first result of the agreements that the two companies signed on September 29, 1998. A year later, on October 8, 1999, the partners expanded these agreements with a large-scale cooperative program covering the joint design and production of four families of common rail direct injection diesel engines:

* 1.4- and 1.6-liter engines.
* A second-generation 2-liter engine.
* A 2.7-liter V6 engine.
* A new family of engines for light commercial vehicles

This cooperation will deliver a world-class range covering both niche and volume segments while achieving industry-leading economies of scale. It will rapidly position the partners as the world's leading manufacturers of diesel engines, and will lead to the production of more than 9,000 engines a day in 2005 and require a total investment of EUR 1.22 billion for development and process engineering.