## Isuzu introduces All-New ELF truck(N-series) in Japan

- First Vehicle ever in the Category \* to clear a Fuel Economy Standard for Heavy Duty Vehicles

Isuzu Motors Limited (President: Mr. Yoshinori Ida) thoroughly remodeled the ELF for the first time in 13 years, and will unveil its high roof cab and wide cab series from December 13, and its standard cab series in February 13, 2007 in the Japanese market.

In making the model changeover, Isuzu put the two different categories of light-duty and mediumduty trucks in the same category and developed trucks that can be used anywhere in the world with the concept of "SEE GLOBAL." (Inhouse Name: 700 Project)

Based on the requirements for trucks gathered from around the world, Isuzu improved safety, economic efficiency, and environment performance of a vehicle to the maximum possible extent on a global scale.

The first vehicle in this 700 Project is the new ELF, a light-duty truck to be released today in the Japanese market.

The New ELF, which is the 6th generation of its series, addresses drastic environment changes surrounding the light-duty truck market in Japan including severer environment regulations, revision of driver's license system, decline of working population, frequent traffic accidents and thefts, growing importance of truck operation management. The new ELF will propose three new values of trucks for life in the future. They are "a best-fit vehicle for a new driver's license system," "an energy-saving vehicle in the age of new emission standard," and "safety and security."

Since its first release in 1959, the ELF has always responded to needs of the times and markets by adopting advanced technologies ahead of time. Today, the ELF is sold to more than 100 countries in the world. Its cumulative production volume since 1959 has exceeded 5 million units. The vehicle has captured the No. 1 market share not only in Japan\*1 and but also in many foreign countries. The ELF is the best-selling low-cab-forward truck supporting logistics in the world.



6th generation ELF (Received 2006 Good Design Award)(\*\*)

Main features of the new ELF are as follows:

All-redesigned interior and exterior

- (1) Interior and exterior were redesigned completely. They are functional designs with no wastes. (Received 2006 Good Design Award in the high roof cab and wide cab categories)
- (2) Upright front pillars and body sides of the wide and high roof cabs realized a large interior space.

Optimum vehicle size for a new ordinary driver's license

- (1) The cab width of the current ELF high roof cab was extended by 75mm to 1770mm to develop a 1.8m wide high roof cab, alone and without equal in this category\* As a result, cab-body gap was reduced and body capacity was increased with wider width.
- (2) A thorough weight reduction of a vehicle was realized with a small turbo engine displacement, a newly developed lighter cab, and improved frames, suspensions and tires. The new ELF is lighter than the present ELF by 200kg. Sufficient vehicle model variation is guaranteed even within the framework of a new ordinary driver's license\*2.
- (3) A "drive van" truck (E Cargo) was developed with a combination of a light body originally engineered by Isuzu and a high roof cab. The vehicle is best suited for urban delivery.

## Fuel-efficient vehicle for new emission standard

- (1) Type 4JJ1-TCS D-Core\*3 3L intercooler turbo diesel engine was newly developed. This is the main engine of the new ELF. The engine generates maximum possible torque per engine displacement and is light and compact. High fuel efficiency and reduction of emission gas demanded of the engine were fundamentally improved. The engine has complied with new long-term exhaust gas regulations and cleared\*5 a fuel economy standard for heavy duty vehicles\*4. The engine has also acquired a certification for 2005 low emission standard for heavy duty vehicles.
- (2) The new ELF is equipped with automatic idling stop and start system as standard system. This is the first application in the category\*.

Safety and Security

- (1) The new ELF is equipped with Smoother Ex, which is an improved version of the Smoother E Series evolved from a manual transmission system. Smoother Ex is an easy drive system originally developed by Isuzu based on the manual transmission. Automatic gear shifting and sequential manual control of transmission were realized to cope with the ever-increasing number of drivers having only AT (automatic transmission) driver's license.
- (2) An antitheft electronic locking system (immobilizer) is adopted for the new ELF as standard equipment. This is the first application to a commercial vehicle in Japan.
- (3) By using computer-aided design analysis, a good balance was achieved between the increased cab strength and the reduction of cab weight.
- (4) In consideration of the safety of the passenger seat, the ELF SE Custom is fitted with a set of an air bag and a pretensioned seat belt for the passenger seat as standard equipment. The ELF SG•ST Grades have this set as an option.

<Target Sales Volume> Total Sales Projection of ELF Series: 40,000 units/year (domestic)

\* 1.5-ton and 2 to 3 ton cabover truck category excluding hybrid vehicles

- \*1. 2 to 3 ton cabover diesel truck category.
- \*2. When a new driver's license system is introduced in July 2007, with a new ordinary driver's license, one can drive a vehicle with GVW less than 5 tons and payload less than 3 tons.
- \*3. Highly efficient diesel engine series for the next generation originally engineered by Isuzu. They are going to be the core of diesel engines in the future. Philosophy, technology, and performance of Isuzu have been embodied in the engines.
- \*4. T1 to T3 Categories

With the addition of transport category to the energy conservation law, weighted average fuel consumption of diesel-powered heavy duty vehicles in respective categories shipped to the Japanese market must attain target standard values in every fiscal year from 2015.

\*5. This attainment excludes certain models.