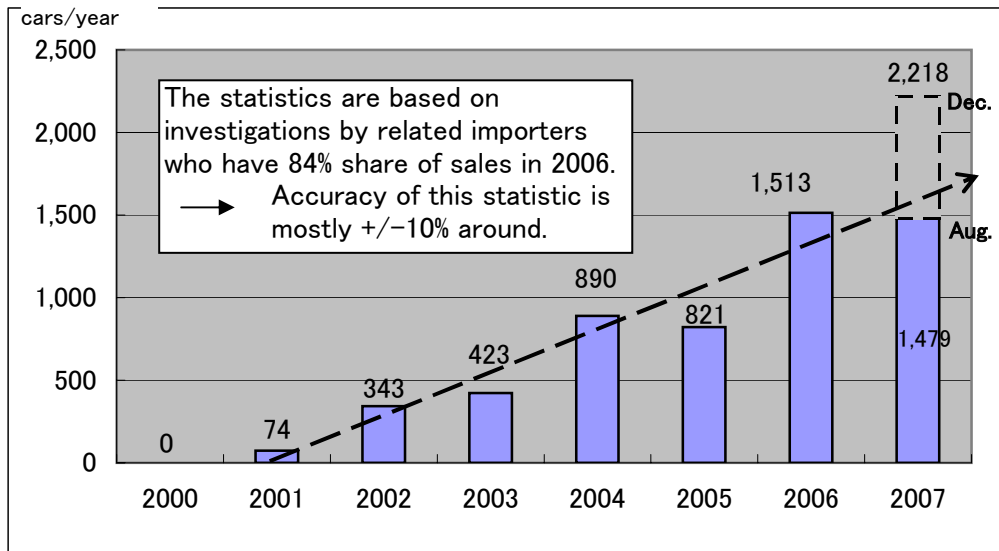


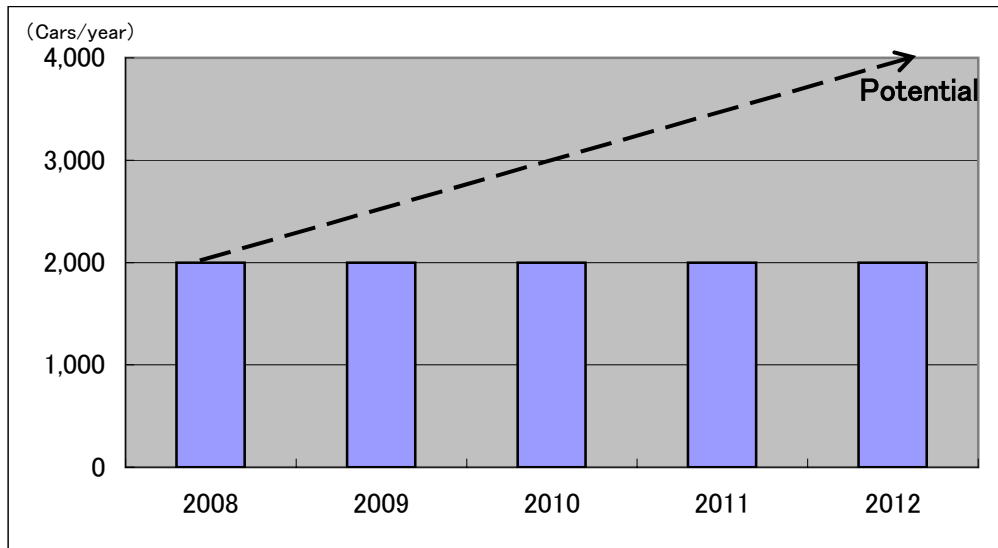
## Situation/Expectation of UWB Radars in Imported vehicles

### 1. Market Penetration of current 76GHz ACC Radar



- So far approx. 5,500 cars with ACC Radars were registered since CY2001.
- Further increase from the current 2000 cars/year level can be expected.

### 2. Market Penetration for future UWB (High Resolution) Radar



- Statistics based on replies from importers: **2,000 cars/year** and **10,000 cars within next 5 years**
- Statistics + tendency of above 1: **3,000 cars/year** and **15,000 cars within next 5 years** are expected.

### Penetration example of other safety applications (from Mercedes-Benz)

Passive Safety	Seat belt pretension	1969	Start of development
		1980	Market introduction SEC
		1984	Standard for Mercedes
	Airbag	1980	Market introduction SEC
1992		Standard for Mercedes (Driver)	
		Option for Mercedes (Passenger)	
1998		Windowbag in E-Class	
2000		Windowbag in C-Class	
PreSafe	2001	Head-Thorax-Sidebag in SL	
	2002	in S-Class	
Active Safety	ABS	1970	Press Communication - Test vehicle
		1978	Market introduction S-Class
		1992	Standard for Mercedes
	ESP	1996	Market introduction SEC
		1998	Equipped on A-Class, S-Class
		1999	Standard for Mercedes (accelerated introduction as consequence of elk test)

(Source: Mr. Hollingsworth, ACEA, "Car Park Penetration by New Technologies")