

\* \*\*

line IT , 6 가 IT off-  
 가 가 (Ubiquitous)  
 'IT 839'  
 1990 GM OnStar 가 ATX Technologies  
 가



I.

II.

III.

IV.

I.

(Telematics)

(Global Positioning System: GPS), LBS(Location Based Service ) (CDMA, WiBro, DMB ) TSP(Telematics Service Provider)

( , , e-mail, ), , ,

가 (seamless)

\* ETRI /  
 \*\* ETRI /

가가

1170 2004. 11. 3. ....

가 , 가 'IT 839 ' '8 ' '9

(Car Navigation System) GPS

TSP 가 가

### II.

#### 1.

1990

가

GM OnStar 가 1997 , 2003

가,

가 가

, 2001 11%

90%

<sup>1)</sup> 2007 500

, 2010 1,000 , 2025

2000 6% 2007 19% , 2007

42% 760

(Telematics Research Group, 2003).

가 2001 210 2005 1,340 ,

2010 4,400 가 40% , 2001

4 2010 146 49%

1) TSP (Telematics-enabled autos): (Car Navigation System) GPS

< 1> OEN ( : ,%)

	2002	2003	2002	2003	2002	2003
(Auto Sales)	18	17.7	16.3	16.3	12	12.4
(Telematics Sales)	1.9	2.2	0.41	0.72	0.13	0.26
(Attached Rate)	11	12.45	2.52	4.43	1.04	2.06

< >: OEM Shipment Model, Telematics Research Group, 2004.

(Roland Berger, 2002).

OEM

< 1>

11%

가

GPS

TSP

가

가

, Telematics Research Group

(2004. 4. 21)

GPS

가

(< 2> ).

2002 6 7,500

14% 가

2008

15

2008

18

가

가

가

2002

< 2>

( : )

		2001	2002	2003	2004
		13	44	97	164
		1,593	1,945	2,107	2,358
		74	301	501	722
		36	110	220	374
		20	60	135	250
		30	65	120	220

< >: Telematics Research Group, 2003. 9.

< 3> 2002~2008

		2001	2002	2003	2004	2005	2006	2007	2008	CAAG (02~08)
( )		594.1	674.2	779.5	910.7	1,088.30	1,250.90	1,369.10	1,515.80	14%
		594.1	674.2	847.1	1,067.10	1,270.90	1,465.80	1,642.40	1,800.10	18%
( )		287.5	348.3	400.2	465.4	567.3	652.6	764.5	952.9	18%
		287.5	348.3	444.1	547.2	663.6	781.6	959.9	1,162	22%
( )		146.5	181.7	205.1	244.2	302.5	374.6	417.8	433.2	16%
		146.5	181.7	215.5	281.2	347.6	421.1	455.8	473.4	17%

< >: Fleet Management System, Allied Business Intelligence Inc, 2003.10.

3 4,800 2008 9 5,300 11  
 (Allied Business Intelligence, 2003. 10).  
 2003 20 2008 43 ~47 가  
 2001 2,050 2007 1,400  
 (< 3> ).

2.

, . 1 2002 58 92 ,  
 493 ,  
 . 2003 4 4,400  
 2002 350  
 , OEM  
 (< 4> ).

GM OnStar ATX Technologies  
 ATX 가<sup>2)</sup> . 2002 10  
 GM OnStar 가 80%  
 가 , ATX Technologies 가  
 13.7% . Ford Wingcast 가 2002 6

2) ATX Technologies (OEM)  
 Mercedes-Benz TeleAid , BMW Assist

< 4>

	( )	( )	( )	( )
( )	- OnStar[GM] - ATX (ATX technologies)	- T-Traffic (T-mobile Traffic) - Trafficmaster (Trafficmaster) - TELEAID (Mercedes-Benz) - Assist(BMW)	- G Book(Toyota) - (Honda) - Compasslink (Nissan)	- Nate Drive(SKT) - K-Ways(KTF) - MOZEN ( / )
(2003 )	4.44	2.94	0.95	0.51
(2002 )	100	200	600 400 (VICS )	15.4 (2003 )
(2002 )	350	5	4	n.a
(2003 )	90	60	82	n.a
OEM (2003 )	22	14	5	n.a
가 (2003 )	1,663	1,787	2,246	1,250 (2004 )
(2002)	212	235	145	104 (2004 )

) Vehicle Telematics Database(Telematics Research Group, 2003)

(ETRI, 2004.6)

< 5> 2002

10 OEMs

( : )

			(2002 )
1	Chevrolet	OnStar	761
2	Buick	OnStar	203
3	Cadillac	OnStar	200
4	GMC	OnStar	199
5	Mercedes-Benz	TeleAid(ATX)	191
6	Pontiac	n.a	100
7	BMW	Assist(ATX)	45
8	Oldsmobile	OnStar	45
9	Saab	OnStar	38
10	Lincoln	VCS(ATX)	11
10			1,800

< >: Top 10 OEM Selling Telematics and Services, TRG, 2003. 3.

1170 2004. 11. 3. ....

(< 5> ).

가

(Safety) (Security)

CDMA,

TDMA, GSM 3

가

가

(Coverage) 가 가

(Roaming)

2004 25 , 100

가 3 2

가 (Telematics Research Group,

2004.4). < 6>

가

가 가

가

. 2003 4

가 가

가 2002 67 88

가 .

< 6>

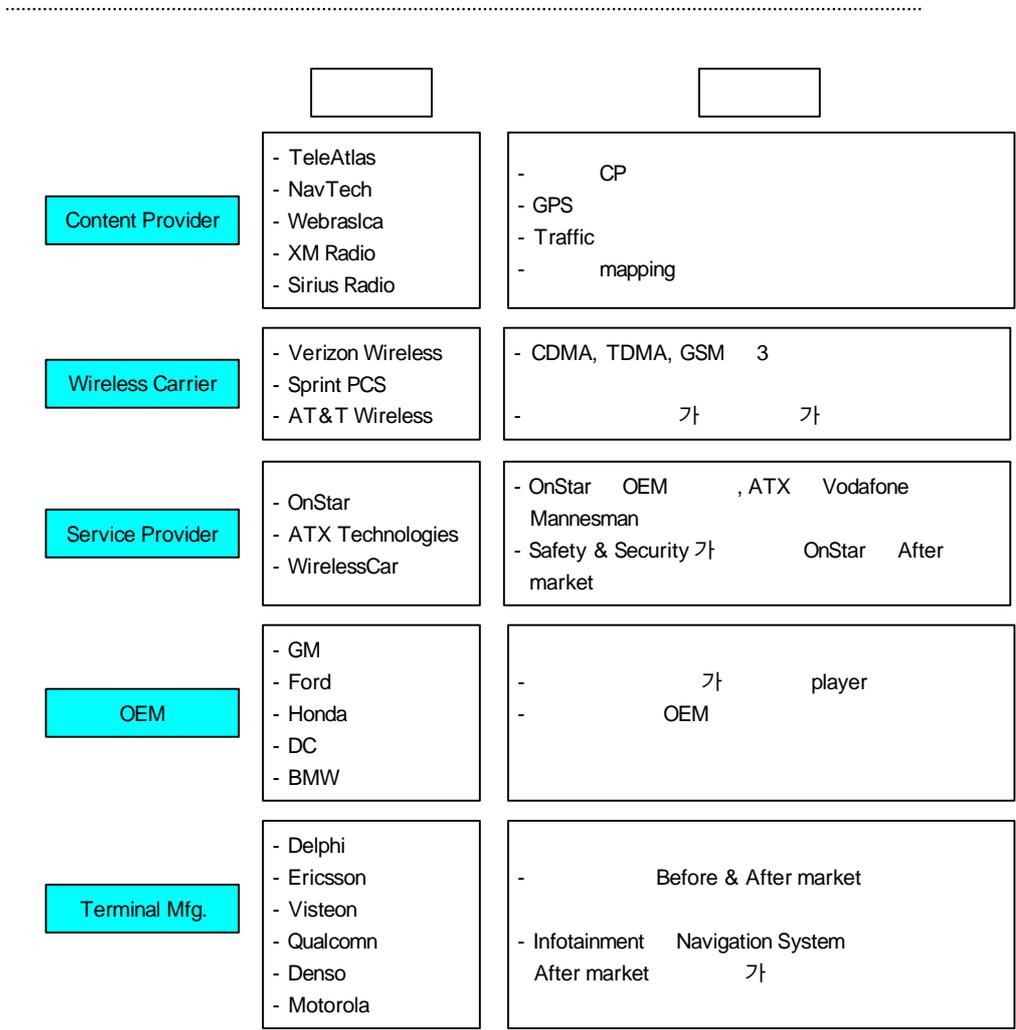
	2001	2002	2003	2004
	12	15	19	25
	51	67	88	101
가 ( )	40,166	48,097	47,969	39,962
가 ( )	2,218	1,900	1,238	922
가 ( )	1.63	2.02	2.45	n.a

< >: Vehicle Telematics Database of 2003 vehicles, TRG, 2003.

### III.

#### 1.

BM(Before Market)



< >: Overview on Telematics business(Arthur D. Little, 2003.3.12)

( 1 )

(Original Equipment Manufacturer: OEM) .<sup>3)</sup> , OEM

가 가 .  
 가 OEM 가  
 가 .

3) 가 OnStar GM OEM

2.

GM OnStar ATX technologies  
 . ATX Technologies 가 BMW, Mercedes-Benz, Maybach, Rolls-Royce Motor  
 Cars OEM 가 가 2002  
 30 , OEM GM OnStar 가 2003 250  
 가 가 . ,  
 OnStar 가  
 . 가  
 , OEM

가. GM OnStar

GM OnStar 1997 . 2003  
 , 2004 1 가 가 250 , 2005 720

**OnStar**

**서비스 플랜**

**Safe & Sound** Provides safety and security services whenever you're in your vehicle  
**Directions & Connections** Provides safety and security along with directions and information services  
**Handset** For vehicles with the handset system  
**Personal Calling** Let's you make calls from your vehicle, hands-free

**서비스 종류**

- Air Bag Deployment Notification
- Emergency Services
- Stolen Vehicle Tracking
- Remote Door Unlock
- Driving Directions
- Roadside Assistance
- GM® Goodwrench® Remote Diagnostics
- Personal Calling
- Information/Convenience
- Remote Horn & Lights
- Accident Assist
- Side Assist
- Online Consistat

**서비스 제공 차량모델**

CADILLAC	HUMMER	BUICK	CHEVROLET
GMC	OLDSMOBILE	PONTIAC	SABU
SAFARI	ACURA	AUDI	ISUZU
SUBARU	VOLKSWAGEN		

주 : OnStar 홈페이지(www.onstar.com) 내용의 재구성, ETRI, 2004.8.

( 2) OnStar



( 3) OnStar : 3-button ( )

가 . 1997 가

GM 1999 OnStar ,

OEM(Saab, Audi, Volkswagen )

2004 66 .

GM OnStar Fiat 20%

Viasat OnStar . OnStar 2005 GM

71% . Operator Interface

Machine Interface

, 가 가 Operator .

OnStar ( 3) 3-button

, 가 가 Before

market .

(White-dot or Phone button for Personal Calling)

OnStar (Blue button for all other OnStar services)

(Red emergency button)

OnStar (safety),

(information)

(concierge) 가

. OnStar

가 가

.



(Safe & Sound Plan) , ( 4) OnStar : Handset ( )

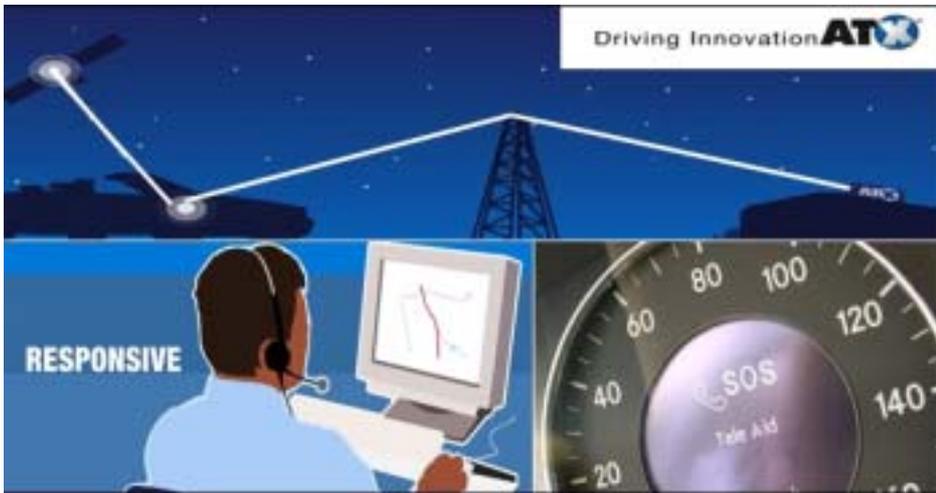


( )<sup>4)</sup> .

(Handset Plan)  
 3-button OnStar 가 cellular analog cellular  
 network cellular agreement  
 phone . 3-button .  
 Personal Calling .

. ATX Technologies

ATX Technologies 1994 , 1996  
 Ford OEM (BMW, Mercedes-Benz, Maybach,  
 Rolls-Royce ) . 2000 12 19 , 2004 3  
 53 3 ATX  
 3 가 가 . ATX Europe BMW-Europe  
 , , GM OnStar 가  
 가 .  
 1996 ATX Technologies 2001 6



( 5) ATX Technologies

: TeleAid(Mercedes-Benz)

4) 16.95 / (Safe & Sound plan) × 12 199 ( )  
 34.95 / (Direction & Connections plan) × 12 399 ( )

< 8> ATX Technologies

BMW - Canada	
BMW - Europe	
BMW - North America	
Maybach	
Mercedes - Benz - USA	
Mercedes - Benz - Canada	
Rolls - Royce	

< >: www.atxna.com

2002 30  
 , 2003 7 Vodafone Passo GmbH  
 . Mercedes-Benz TeleAid , BMW  
 Assist . GM  
 OnStar ,  
 2003 OEM .  
 “24/7/365 (Response Center)”  
 , (Emergency services), (Navigation services),

< 9> ATX Technologies

(Emergency services)	- (Automatic Collision Notification) - (Emergency Response) - (Breakdown Services) - (Remote Door Unlock) - (Stolen Vehicle Recovery) - (Security System Notification)
(Navigation services)	- (Voice Navigation ) - (Traffic Information) - (Destination/Points of Interest Download)
가 (Personalized Telematics Subscriber Web Page)	- 가 - FAQ -
가 (Additional services)	- (Owners Manual) - (Concierge) - (Vehicle Information) - (Customer Care)
24/7/365 (Response Center)	- , -

) ATX Technologies (www.atxna.com)

.....

가 가 .

OnStar ATX Technologies  
 (Verizon) , Ford 가  
 , 100 Wingcast 가  
 (Sirius Satellite Radio), ,  
 가 가 2002  
 6 , , 3 가 ,  
 WirelessCar 가

Trafficmaster 가 2001 Teletrac  
 4 .

가  
 가 (OEM) 가 ,  
 GM OnStar  
 ATX Technologies 가 .  
 가 .

GPS TSP  
 . 가 .

가

가

Killer Application

가

가

가

(

)

3

가

/

< >

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- [2] , “ (1)~(3),” , 2004. pp.4~7.
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- [18] Arthur D. Little, “Overview on Telematics business,” 2003. 3. 12.
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- [20] <http://www.telematicsresearch.com>
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