



# Philips Semiconductors Business Update: Spotlight on Identification

Marc de Jong

EVP and GM, Automotive and Identification

Merrill Lynch TMT Conference

June 6, 2006

# Forward Looking Statements

## *Forward Looking Statements*

This document contains certain forward-looking statements with respect to the financial condition, results of operations and business of Philips and certain of the plans and objectives of Philips with respect to these items (including, but not limited to, cost savings) in particular the outlook paragraph in this report. By their nature, forward-looking statements involve risk and uncertainty because they relate to events and depend on circumstances that will occur in the future. There are a number of factors that could cause actual results and developments to differ materially from those expressed or implied by these forward-looking statements. These factors include, but are not limited to, levels of consumer and business spending in major economies, changes in consumer tastes and preferences, changes in law, the performance of the financial markets, pension costs, the levels of marketing and promotional expenditures by Philips and its competitors, raw materials and employee costs, changes in exchange and interest rates (in particular, changes in the euro and the US dollar can materially affect results), changes in tax rates and future business combinations, acquisitions or dispositions and the rate of technological changes. Statements regarding market share, including as to Philips' competitive position, contained in this document are based on outside sources such as specialized research institutes, industry and dealer panels in combination with management estimates. Where information is not yet available to Philips, those statements may also be based on estimates and projections prepared by outside sources or management. Rankings are based on sales unless otherwise stated.

## *Use of non-GAAP Information*

In presenting and discussing the Philips Group's financial position, operating results and cash flows, management uses certain non-GAAP financial measures. These non-GAAP financial measures should not be viewed in isolation as alternatives to the equivalent GAAP measure and should be used in conjunction with the most directly comparable US GAAP measure(s). A discussion of the non-GAAP measures included in this document and a reconciliation of such measures to the most directly comparable US GAAP measure(s) are contained in this document.

## Agenda

### Business update

### Applications and market growth

### Differentiating through market and technology leadership

- Radio Frequency Identification
- eGovernment
- Near Field Communication

### Summary



## Philips Semiconductors

Top-10 supplier, Sales € 4.8 Bln (2005)

Europe 28%, Asia 62%, US 10%

80% IDM, 20% outsourced

Serving the Connected Consumer with compelling (system) solutions

Focus on SoCs and ASSP for

- Mobile and Personal
- Home (TV, STB, PC TV, Audio)
- Automotive
- Multimarket Semiconductors

**Focus on the Identification market with  
RFID, NFC and Smart Card ICs**

Inspiring place to put talent to work!



# Financial track record

*EUR million*

	2003 <sup>1)</sup>	2004 <sup>1)</sup>	2005	Q1 2006
<b>Sales</b>	3,888	4,491	4,620	1,219
Nominal growth %	(7)	16	3	20
Comparable growth %	4	18	0	13
<b>EBIT</b>	(328)	430	307	89
% of sales	(8.4)	9.6	6.6	7.3

1) Restated to present the MDS activities as a discontinued operation

# *Automotive & Identification Business Unit*

## An exciting focus for Philips

Founded May 1, 2005

Above average financial contribution  
to Philips Semiconductors

Industry shaper and leader in

- Radio Frequency Identification
- eGovernment
- Near Field Communication
- Car Access & Immobilization
- Tire Pressure Monitoring
- Car Infotainment
- In-Vehicle Networking

**Automotive & Identification**  
**18% of PS Sales**



## Agenda

Business update

Applications and market growth

Differentiating through market  
and technology leadership

- Radio Frequency Identification
- eGovernment
- Near Field Communication

Summary



# What are Identification technologies?

Contact or contactless semiconductor technology that enables people and business to:

- Securely connect to each other and to information, entertainment and services
- Identify and track goods
- Increase safety, security and simplicity

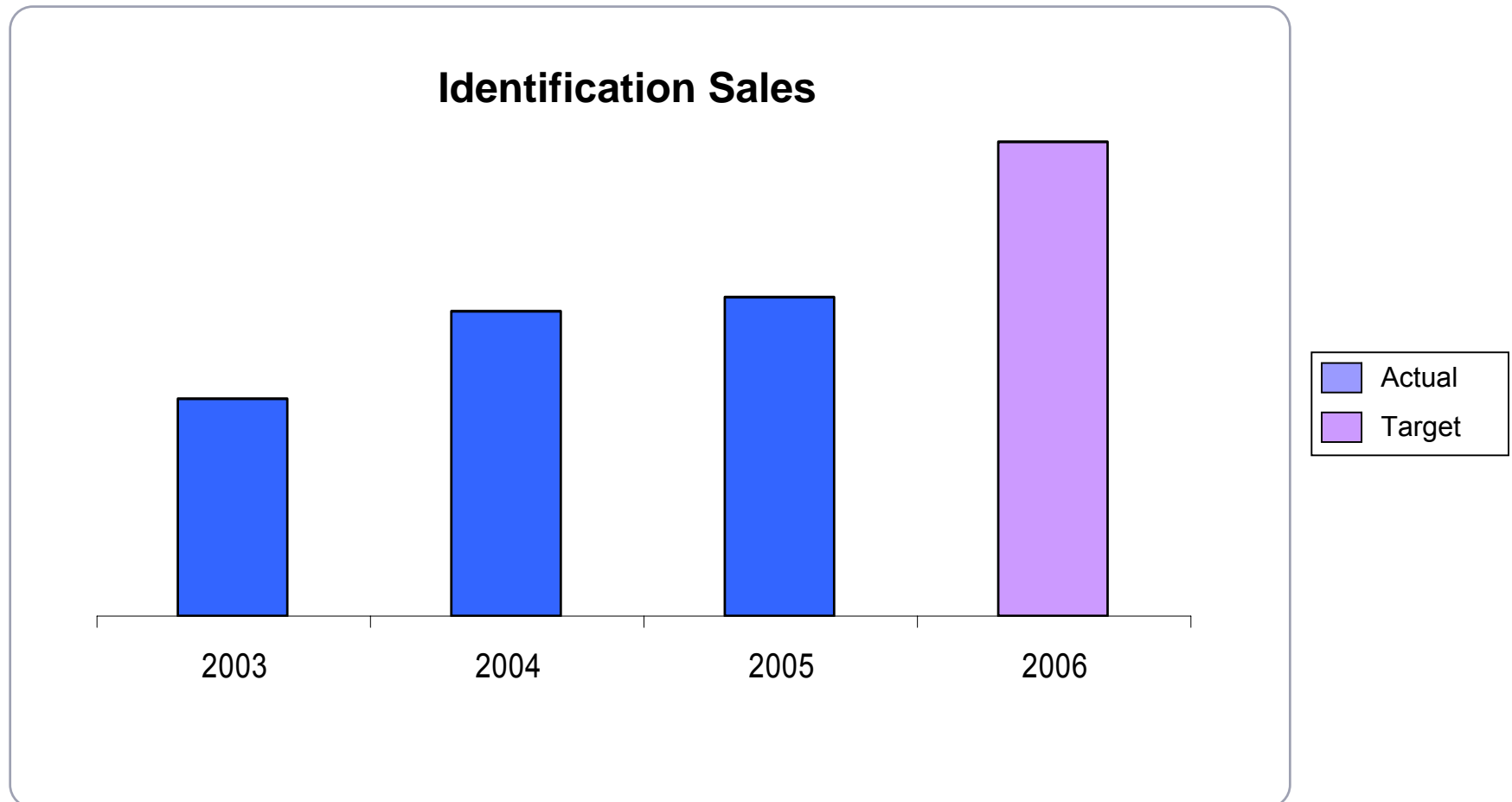
Philips ID technologies and applications:

- Smart card ICs, SIMs: banking, government, mobile and other highly secure applications
- RFID: existing niches (animal tagging, library), pharma, and SCM applications (EPC-compliant)
- NFC: wireless handsets, consumer electronics and computing domain





Identification sales have increased consistently over the past three years



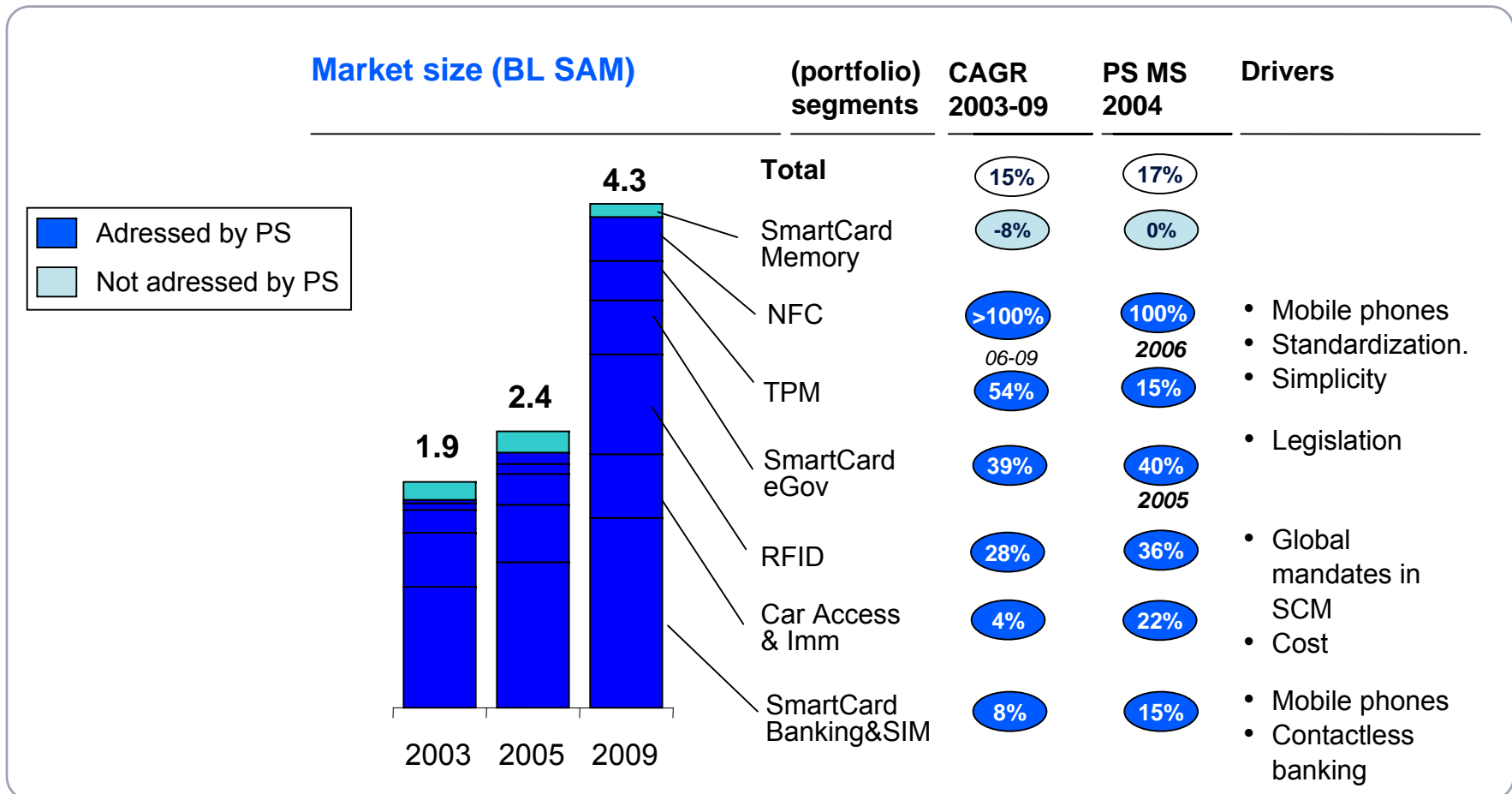
Source: Philips Semiconductors

# Our value propositions within Identification

- Active driver of new RFID applications and Identification standards
- Unique product portfolio (ICs for tags and readers) compatible with all standards across all RFID frequencies
- System/application expertise for strong customer relationships
- Best-in-class for security products and highly reliable solution
- Best in class interoperability, reliability and performance for ePassport chip solutions
- Strong innovation capabilities
  - Invented NFC technology for contactless transactions and access systems
  - Tire Pressure Monitoring single chip solutions
- Most comprehensive Car Access and Immobilisation roadmap

## Emerging applications provide strong growth opportunities

*U.S.\$ Millions*



Source: Philips semiconductors, ABI, Frost&Sullivan

## We're shaping and leading the highest growth markets



### Radio Frequency Identification

Grew RFID revenue by 34% in 05 against a 15% market growth

Gen2 chip certified by EPC global with strong orderbook as a result

Invented MIFARE standard, #1 technology in transportation with 80%+ market share (London Oyster Card, Beijing)



### Near Field Communication

Shaper of new global standard

Widespread commercial rollout expected in 2007

World's First Commercial deployment of NFC in Hanau, Germany in April '06

Major trials around the world: Atlanta USA, Caen, France, Korea, Malaysia, Taiwan



### eGovernment

100% sales growth in 2005 and another 100%+ targeted for 2006

Won more than 80% of all passport projects globally (June 06)

Austria, Germany, New Zealand, Spain, Italy, Belgium, France, Netherlands and many more passports around the world

## Agenda

Business update

Applications and market growth

Differentiating through market  
and technology leadership

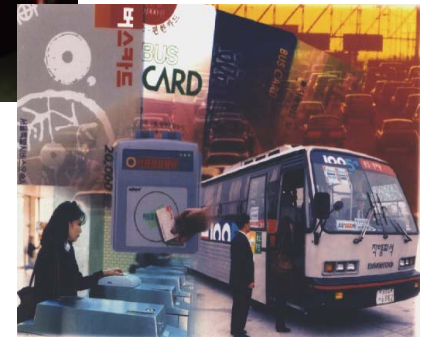
- Radio Frequency Identification
- eGovernment
- Near Field Communication (NFC)

Summary



## RFID is used in many diverse applications

- Pallet level tagging
- Item level tagging
- Public transport
- Providing food safety (against disease such as bird flu, BSE) through animal tagging
- ...and many more



# Pharmaceutical applications provide strong consumer benefits and growth for business

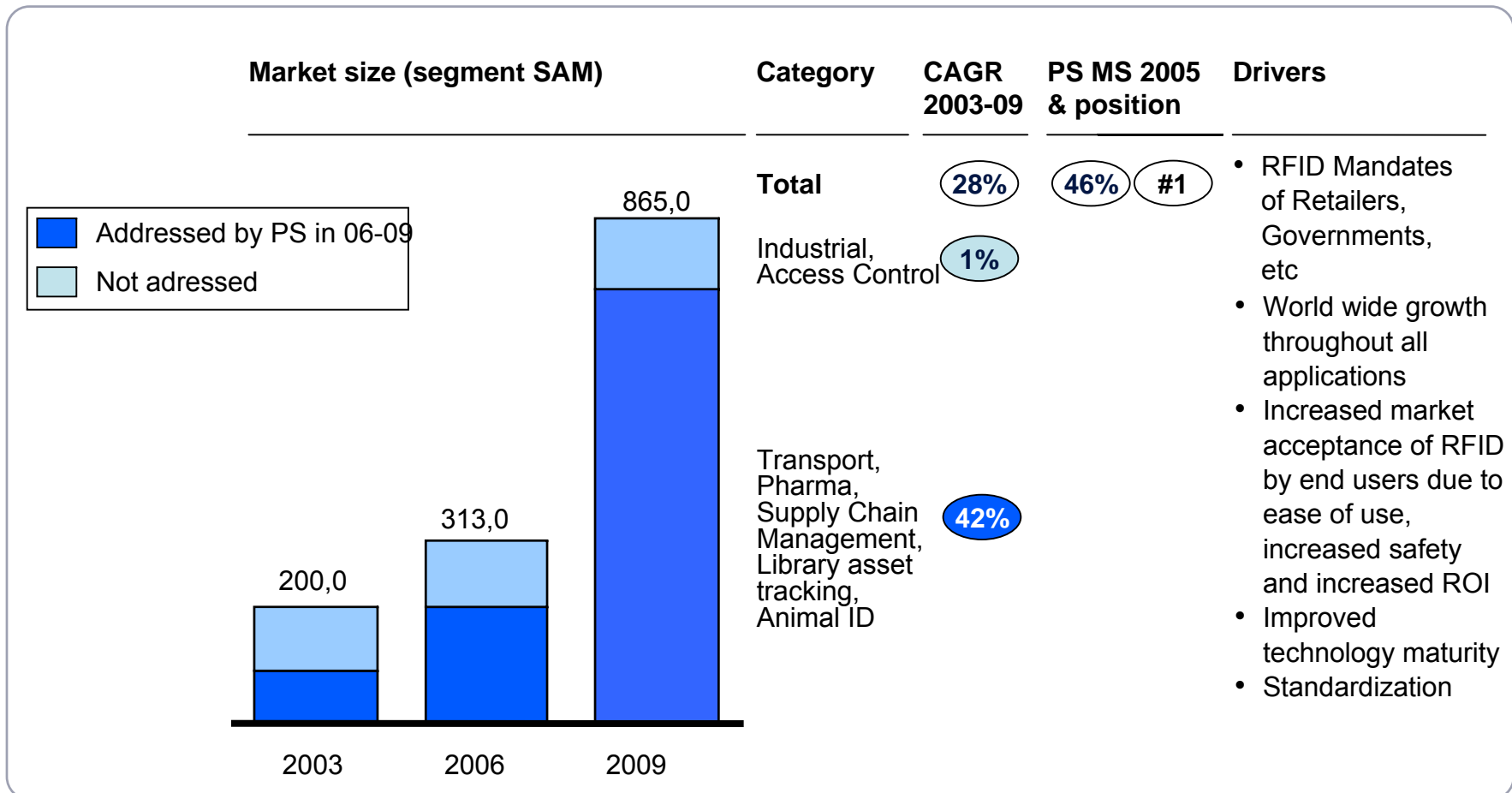
- Anti-counterfeiting
- Reduce out-of-stocks
- Inventory management
- Warehouse management

- \* Better medical care
  - \* Saving lives
  - \* Better ROI



## RFID market is expected to realize huge growth over the next three years

*U.S.\$ Millions*



## Our leadership is based on important differentiators

- Full coverage of RFID applications and standards: LF, HF and UHF
- World-wide business development and customer support based on extensive application knowledge
- Strong partner network for extended market coverage
- Trusted industry leader with two decades of experience
- Leadership in technology
  - Strong IP portfolio, high quality, ultra low power, cost-competitiveness



# Why RFID is a good business for Philips

- High volume for existing industrial base
- Fast profitable growth with leading positions (market and technology)
- Continual repeat business for consumables in RFID applications



## Proactively leading the privacy debate and delivering privacy enhancing technologies

- Responsible implementation by industry is a must
- Privacy enhancing technologies are required
- More consumer-in-control solutions are needed
- Philips already provides technologies that facilitate such privacy decisions

## Agenda

Business update

Applications and market growth

Differentiating through market  
and technology leadership

- Radio Frequency Identification
- eGovernment
- Near Field Communication

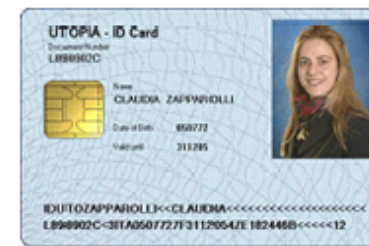
Summary



# eGovernment applications are in the public sector based on secure contact & contactless chip technology

## eID Documents

- ePassport
- National ID card
- Driving license
- eVisa



## Public Service Cards

- Health cards
- Social security cards
- Residence permits
- Citizen Cards

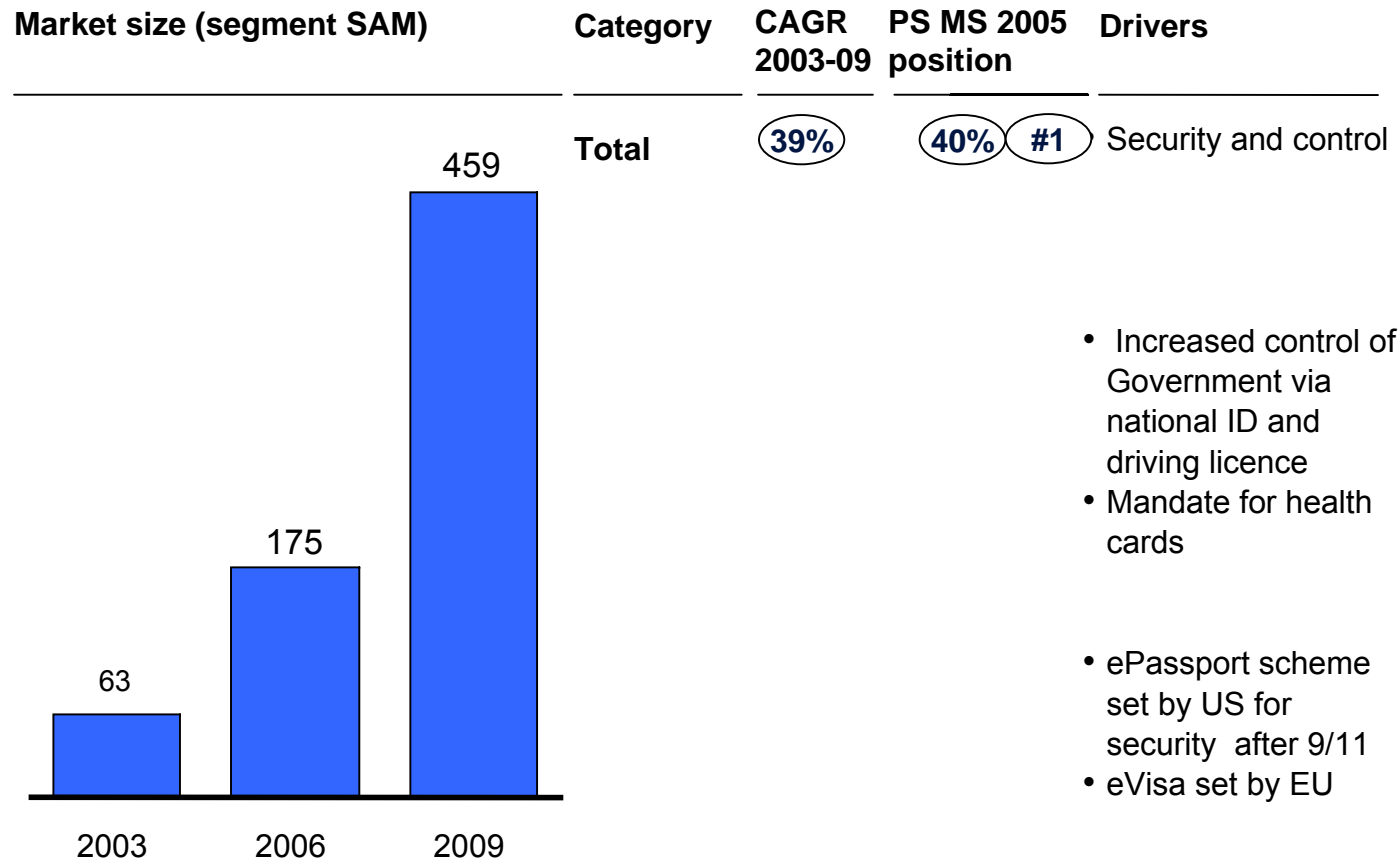


## Public Employee Badges

- Governmental department badges
- ID token

# Mandates are driving eGovernment market growth

*U.S.\$ Millions*



*(inlays not included)*

Source: Philips Semiconductors, Frost & Sullivan

## We design solutions to meet the specific requirements for eGovernment applications

### Interoperability

- Products and operating software designed to fully meet various smart card IC and application related standards (ISO, International Civil Aviation Organization/ICAO, and so forth)

### Data Security

- Highest security levels met for chip hardware & chip software
  - Advanced Common Criteria EAL5+ security certified chip design as basis for a composite chip Software Security Certification (CC EAL4+)

### Reliability

- Combination of long lifetime, quality of product, interoperability and data security

### Data Lifetime

- 20 years extended EEPROM data retention (industry standard 10 years)
- 500.000 Erase / Program cycles (industry standard 100.000 cycles)

## Resulting in a strong market position in ePassports

Currently more than 80% of the ePassport projects worldwide have chosen the Philips SmartMX ePassport chip solution (status May '06: 28 out of 33 projects)

### Public ePassport projects

- Austria
- Belgium
- France
- Germany
- Netherlands
- New Zealand

### Confidential ePassport projects won

- Asia
- EMEA
- Americas



## Agenda

Business update

Applications and market growth

Differentiating through market  
and technology leadership

- Radio Frequency Identification
- eGovernment
- Near Field Communication

Summary



# NFC applications are grouped in two application areas for mobile, computing and gaming

## Transactional



- Payment
- Ticketing
- Transport
- Content discovery
- Data exchange

## Connectivity

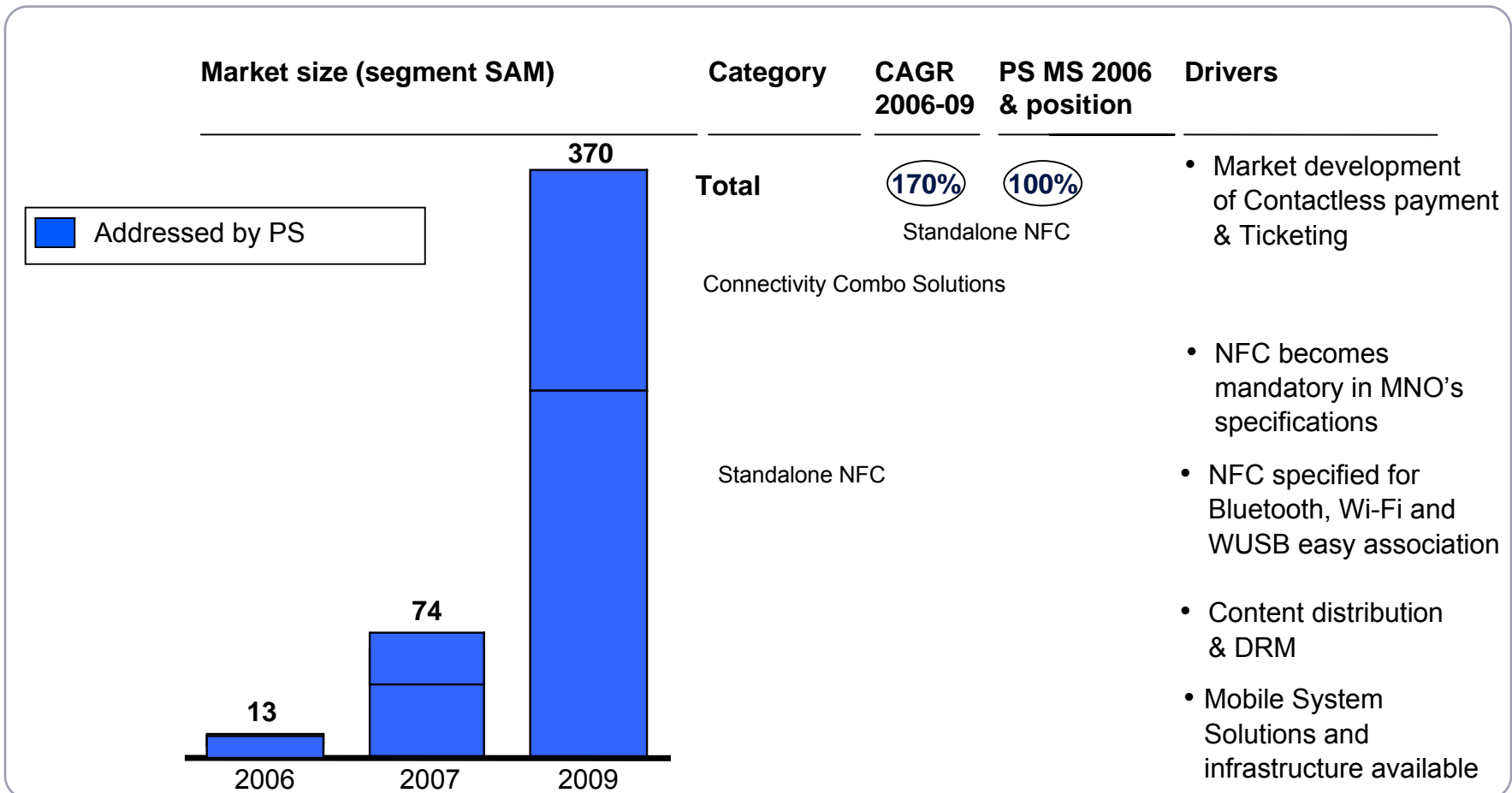


- Bluetooth
- Wifi
- Peer to Peer

Conduct transactions or connect to information **simply** with the swipe of a mobile phone!

## NFC is a new wireless technology with unrivalled market growth

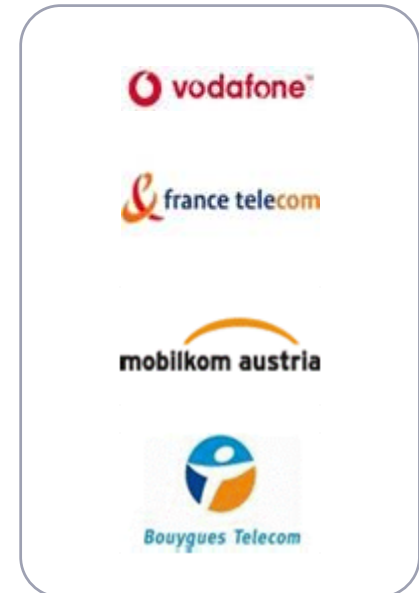
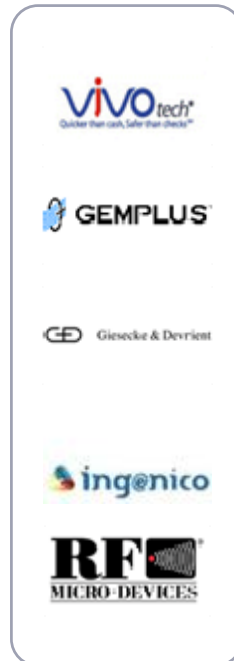
*U.S.\$ Millions*



Source: Philips semiconductors, Frost & Sullivan

# PHILIPS

The technology is supported by 70+ companies through the NFC Forum



## As inventor of NFC, we have a clear lead in the market

- Technology & Market leader (First to Market)
- Strong IPR ( $\geq 50\%$  of known essential IP)
- Full sales support and customization service
- Key partners in banking and content industry
- Good product mix with security chips



# NFC trials are resulting in strong market traction and consumer feedback

- **RMV in Hanau, Germany for public transport - World's first commercial implementation - Apr '06**
- Taiwan – public transport - July '05
- Caen, France trial – payment, content discovery, access - Oct '05
- Atlanta, USA – payment, content discovery – Dec '05
- Roda Stadium in the Netherlands for ticketing - '05
- Malaysia for mobile payment - Apr '06
- SKT Telecom – payment, content, public transport access - May '06
- Thailand - mobile payment – '06
- Philippines for mobile payment & ticketing – '06



## Agenda

Business update

Applications and market growth

Differentiating through market  
and technology leadership

- Radio Frequency Identification
- eGovernment
- Near Field Communication



Summary

# Summary

- Identification is an exciting business with many diverse applications
- RFID, NFC and eGov are extremely high growth markets
- Philips has the right blend of technology, application expertise and partner network to ensure our continued, profitable leadership in these areas

