sense and simplicity

Public-Private Partnerships for Open Innovation

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A well-respected, blue-chip company for over 100 years

Founded in 1891

Headquartered in Amsterdam, the Netherlands

Sales over EUR 26 billion

- Over 30% in emerging economies
- 58% of sales from new products

116,000 employees

Sales and service outlets in 100 countries

Health and well-being offer

Powered by 3 businesses: Healthcare, Lighting and Consumer Lifestyle

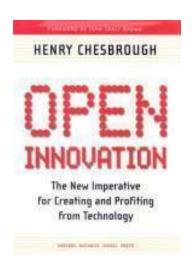
€1.6 billion investment in R&D, over 6% of sales

- Nearly 12,000 R&D staff
- •55.000 patents



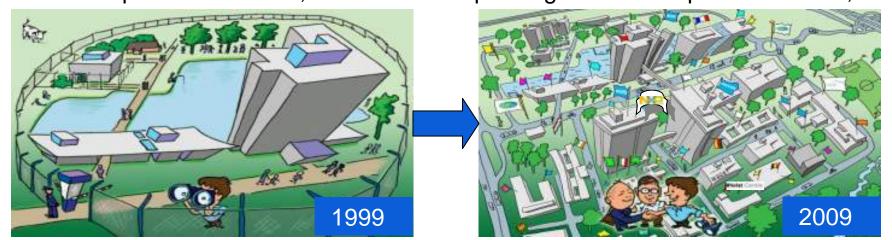
From Closed to Open Innovation

2003



"... firms that can harness outside ideas to advance their own business while leveraging their internal ideas outside their current operations will likely thrive in this new era of open innovation"

Closed Philips Research HQ, Eindhoven Open High Tech Campus Eindhoven, NL



20+ years of fruitful Philips participation in EUREKA



- Among first four companies supporting 1985 launch of EUREKA
- Probably #1 participant
- Involved in 40+ past projects, e.g. HDTV, DAB, JESSI
- Currently engaged in 3 ICT clusters

– ITEA 2	2006-2013	software-intensive XITEAZ	
		systems & services	

- MEDEA+	2001-2008	microelectronics
	2001 2000	

- CATRENE 2008-2011 nanoelectronics



25 years fruitful Philips participation in EU FP



- Amongst 12 ICT firms involved in 1984 launch of FP1
- Nearly 1,000 projects since FP1
- 139 projects in FP6 (2002 2006)



- #1 industrial participant in Information Society Technologies (IST)
- #1 industrial participant in NL
- 58 FP7 proposals with Philips involvement accepted in 2007/8
 - Success rate of 34 %, almost twice EU average

European Technology Platforms (ETPs)

- Bring together key stakeholders in specific domain
- Define Strategic Research Agenda (SRA)
- Provide input to FP7 Workprogrammes
- Implement SRA mainly through collaborative R&D in FP7
- 36 ETPs established
- Philips interested in about 10 ETPs
 - Innovative Medicines (IMI)
 - Nanomedicine
 - Software & Services (NESSI)
 - Smart Systems Integration (EPoSS)
 - Embedded Systems (ARTEMIS)

- Nanoelectronics (ENIAC)
- Photonics21
- Networked & Electronic Media (NEM)
- SusChem
- European Construction Technology

Platform (ECTP)



Joint Technology Initiatives (JTIs)

- Public-Private Partnership to execute (part of) SRA from ETP
- Critical mass of public and private resources
- Dedicated legal structure on basis of Art. 171 EC Treaty
- 5 JTIs established in FP7
 - ARTEMIS (embedded systems)
 - ENIAC (nanoelectronics)
 - IMI (Innovative Medicines)
 - Clean Sky (aeronautics)
 - Fuel Cells & Hydrogen
- 3 PPPs set up in FP7 preparing for new JTIs in FP8
 - Factories of the Future
 - Energy-efficient Buildings
 - Green Cars
 - (In preparation: Future Internet)

ITIa in EDO

Philips involved in

project proposals

Philips involved in JTI

preparations and many

projects and proposals



Achievements in establishing ARTEMIS JTI



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- Pan-European SRA developed for Embedded Systems
 - Key technology driving product innovation, fostering industrial competitiveness and enabling societal applications
- Novel PPP scheme created for industrial R&D
 - Pioneering innovative project co-funding from EC and national budgets
 - Combining best elements of EUREKA and FP approaches
- True European Research Area (ERA) established in domain of

Embedded Systems

Bringing together Europe's fragmented efforts in 2.7 billion € programme

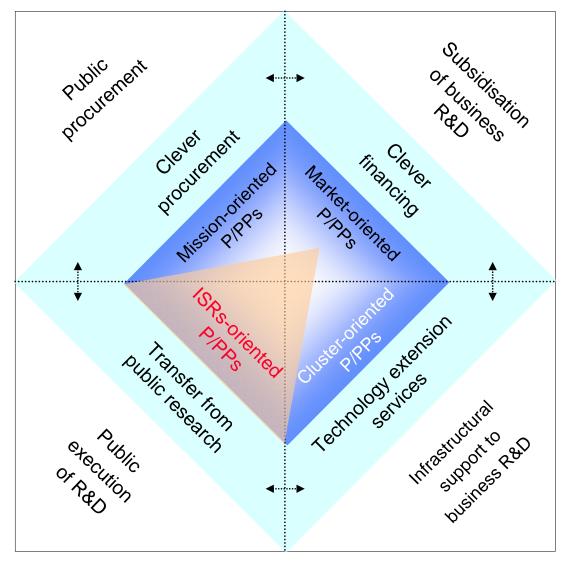
Policy measures for boosting private R&D

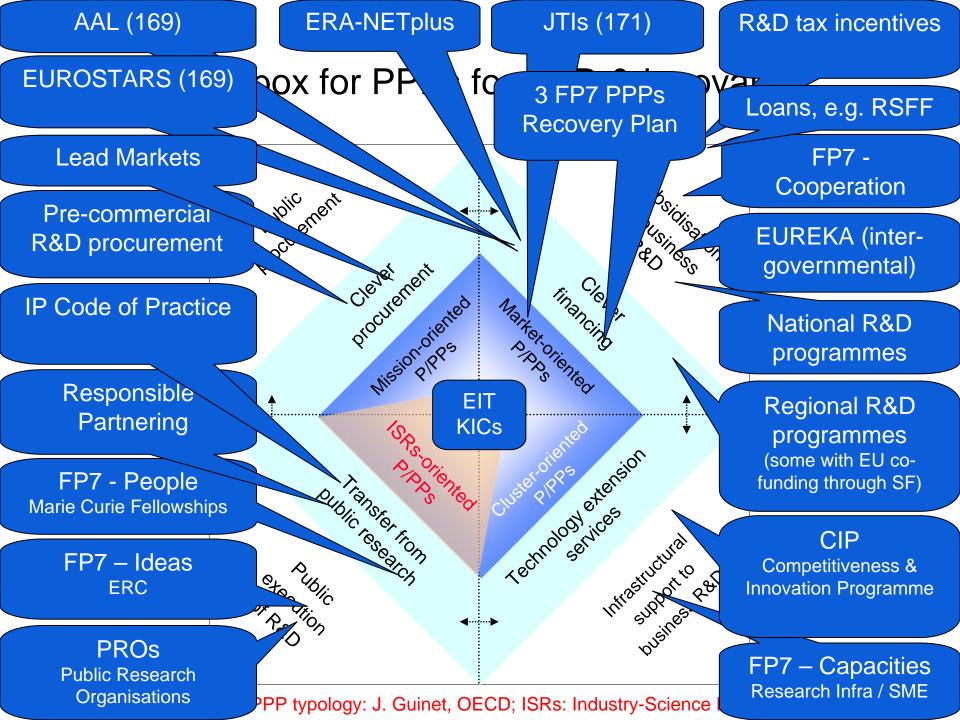
- Company investments are driven by expected returns
- Low private R&D investments in Europe reflect unfavourable framework conditions for innovation
- Wide range of policy measures across innovation system are needed to boost private R&D and innovation
 - Input: more public investments in Knowledge Triangle
 - Throughput: improved efficiency & effectiveness
 - Output: strong market demand for innovative products and services





Europe's toolbox for PPPs for R&D & innovation





Recommendations Input

Throughput

Output

- EG on 3 % Objective recommends 5% of GDP by 2020 for public + private investments in R&D + Higher Education (HE)
 - Differentiation in national balances and targets is possible
 - Bruegel proposes same target for 2014
 - OECD defines "investment in knowledge" as investments in R&D + HE + software
 - NL uses "knowledge investment ratio": R&D + all education
- Note that targets can only be set for public investments;
 level of private investments reflects framework conditions
 - EG on Knowledge-Based Economy calls for 3% of GDP of public investments in 2020: 2% in HE + 1% in R&D
 - As milestone for 2030, ERAB would like to see R&D funding rising to 5% of GDP, with industrial R&D accounting for 2/3

Recommendations Input

Throughput

Output

- EIT can play instrumental role in achieving synergies between European, national and regional investments in research, education and innovation
- ERC applicants on reserve list should receive national grants
- As key enabler of Open Innovation, Responsible Partnering Handbook should be promoted
- ERA needs better mechanism for pooling EC and national funding in variable-geometry public-public partnerships
- EU Financial Regulation needs adaptation to enable
 - breakthrough in cutting red tape by means of trust-based, risk-tolerant approach in EU research funding
 - true and lean public-private partnerships without status of Community body (e.g. JTIs)

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- Without sound market demand for innovative products and services, companies have little reason to invest in R&D
- Member States can stimulate market demand by
 - Taking actions similar to EC Lead Markets Initiative: innovation-friendly regulation, standardisation and public procurement
 - Deploying Pre-Commercial Procurement of R&D services
 - Addressing societal challenges with innovative technologies

