



Open Innovation @ Philips Research

Business Symposium “Open Innovation in Global Networks”
OECD & Danish Enterprise and Construction Authority
Copenhagen, February 25-26, 2008

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VP Public R&D Programs, Philips Research

One of the world's most innovative companies

 THE MOST INNOVATIVE COMPANIES

38. Royal Philips Electronics

2006 rank: 67

The former consumer electronics giant is reinventing itself as a design-led health, lifestyle, and technology player.



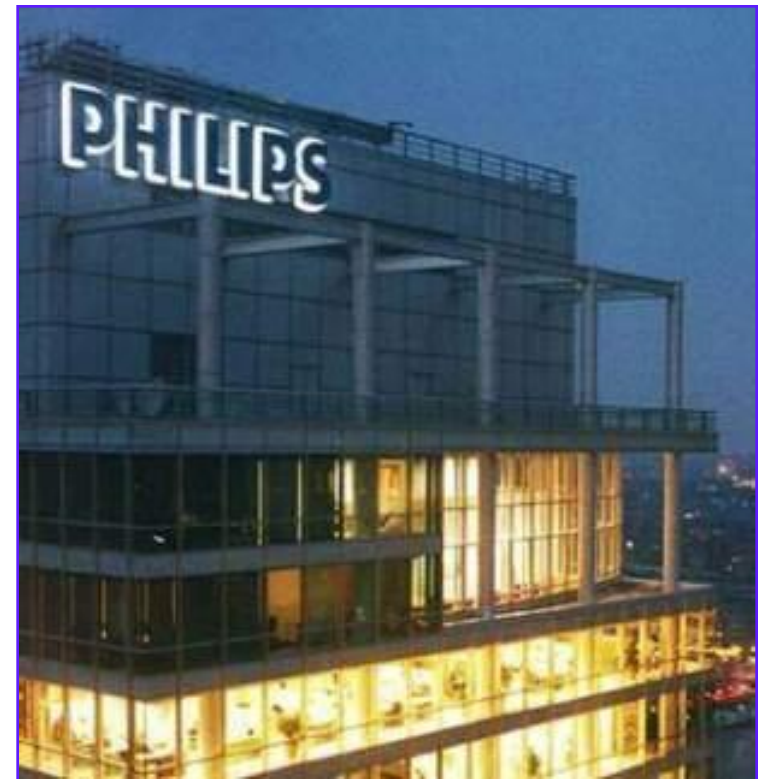
BusinessWeek

“The former consumer electronics giant is reinventing itself as a design-led health, lifestyle, and technology player. Think in-home health-monitoring devices for heart patients, computer games with sensory effects, and energy-efficient color-changing lighting. Philips taps teams of futurists, cultural anthropologists, designers, and scientists to develop user-centered products and services.”

Royal Philips Electronics

- One of the largest global electronics companies with sales of € 26,793 billion in 2007
 - 56 % of sales from new products
- Founded in 1891
- Multinational workforce of 123,800 employees end of 2007
- Active in the areas of Consumer Lifestyle, Healthcare and Lighting
- Manufacturing sites in 28 countries, sales outlets in 150 countries
- 2007 R&D expenditure of € 1.629 billion
 - 6.1 % of sales
 - 12,800 R&D staff in 25+ countries
- 80,000 patents; inventor of CD

Headquarters:
Amsterdam, The Netherlands



About Philips Research

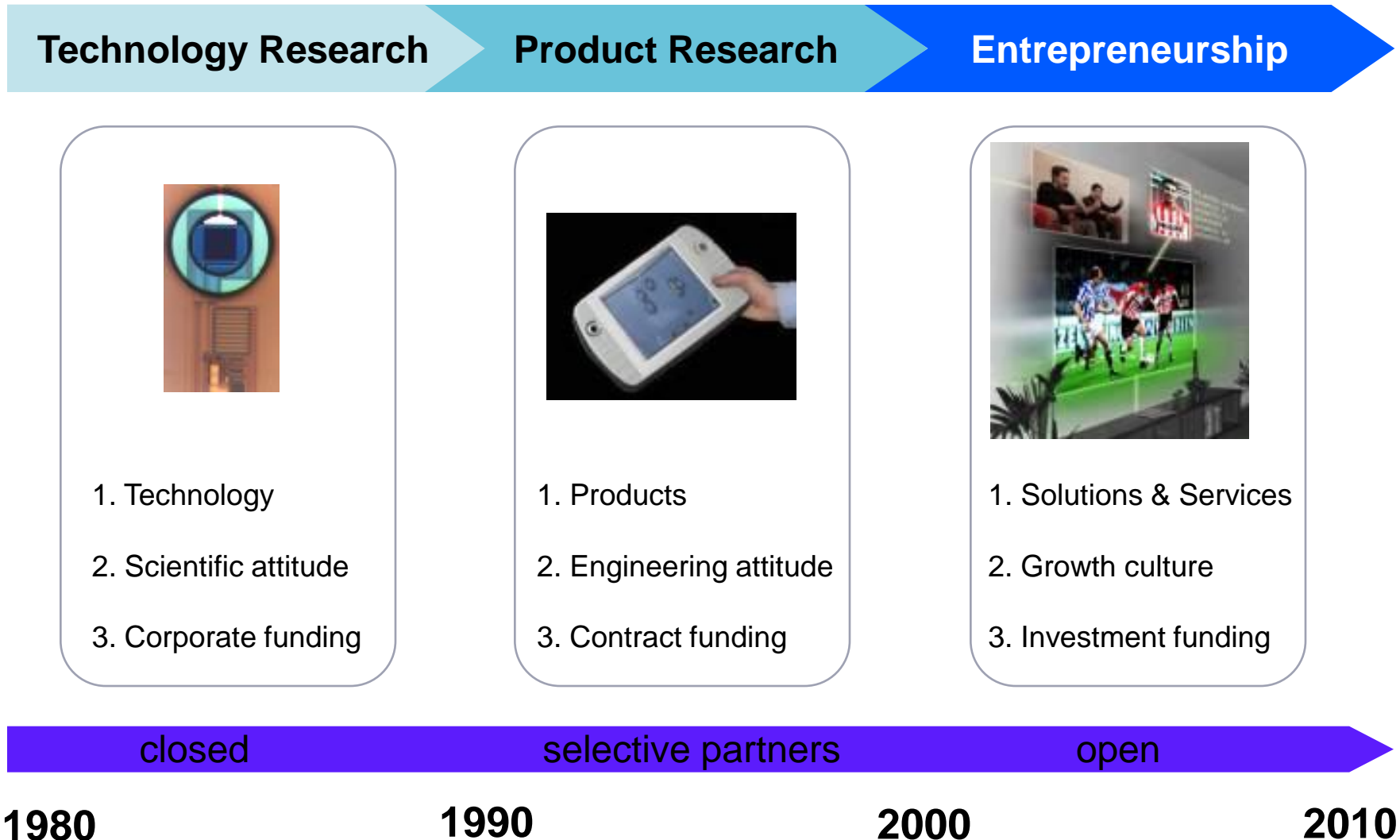
- Over 90 years of industrial research
- 1,800 employees with >50 nationalities
- 600 PhDs
- Mix of expertise areas
- Source of R&D talent
- 1.5 patents filed per scientist/year
- 0.6 scientific publications per researcher per year



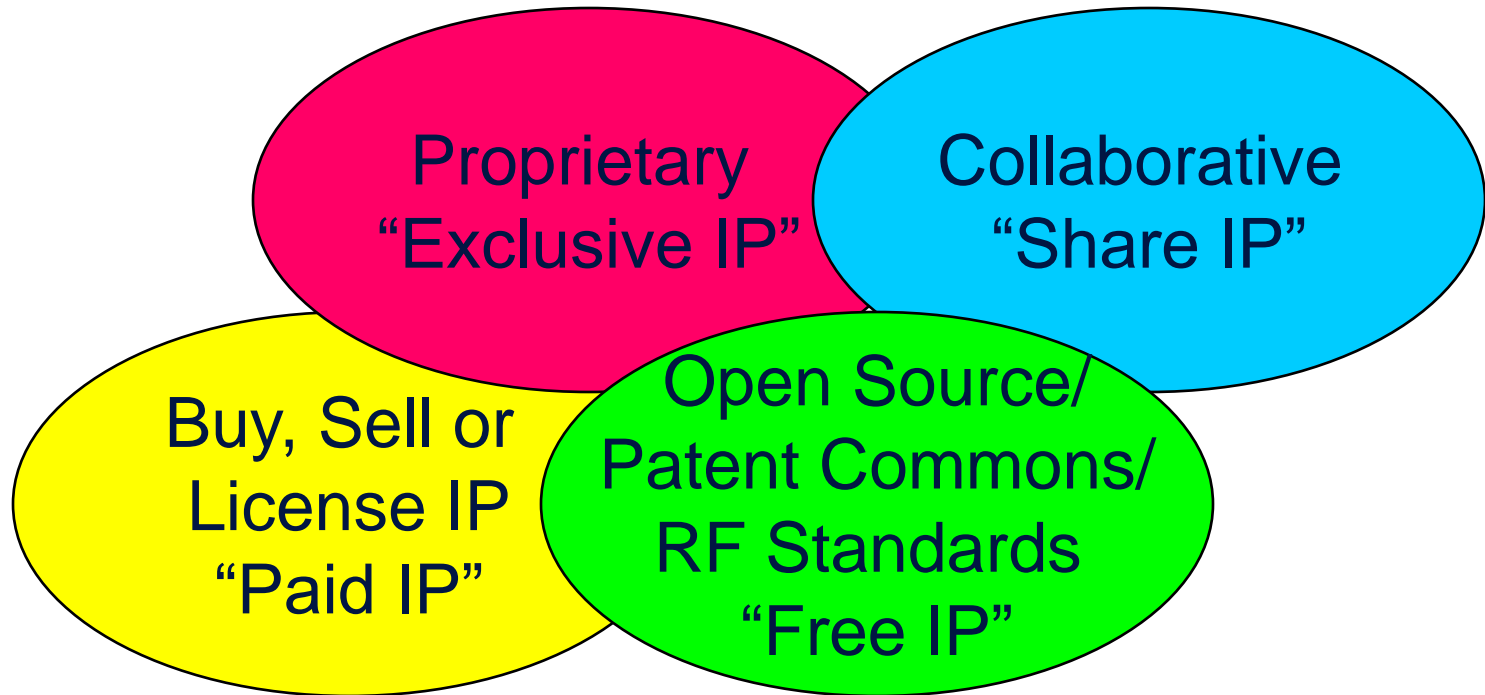
Philips Research: Thinking global, acting local



Scope of innovation continues to change



New IP landscape

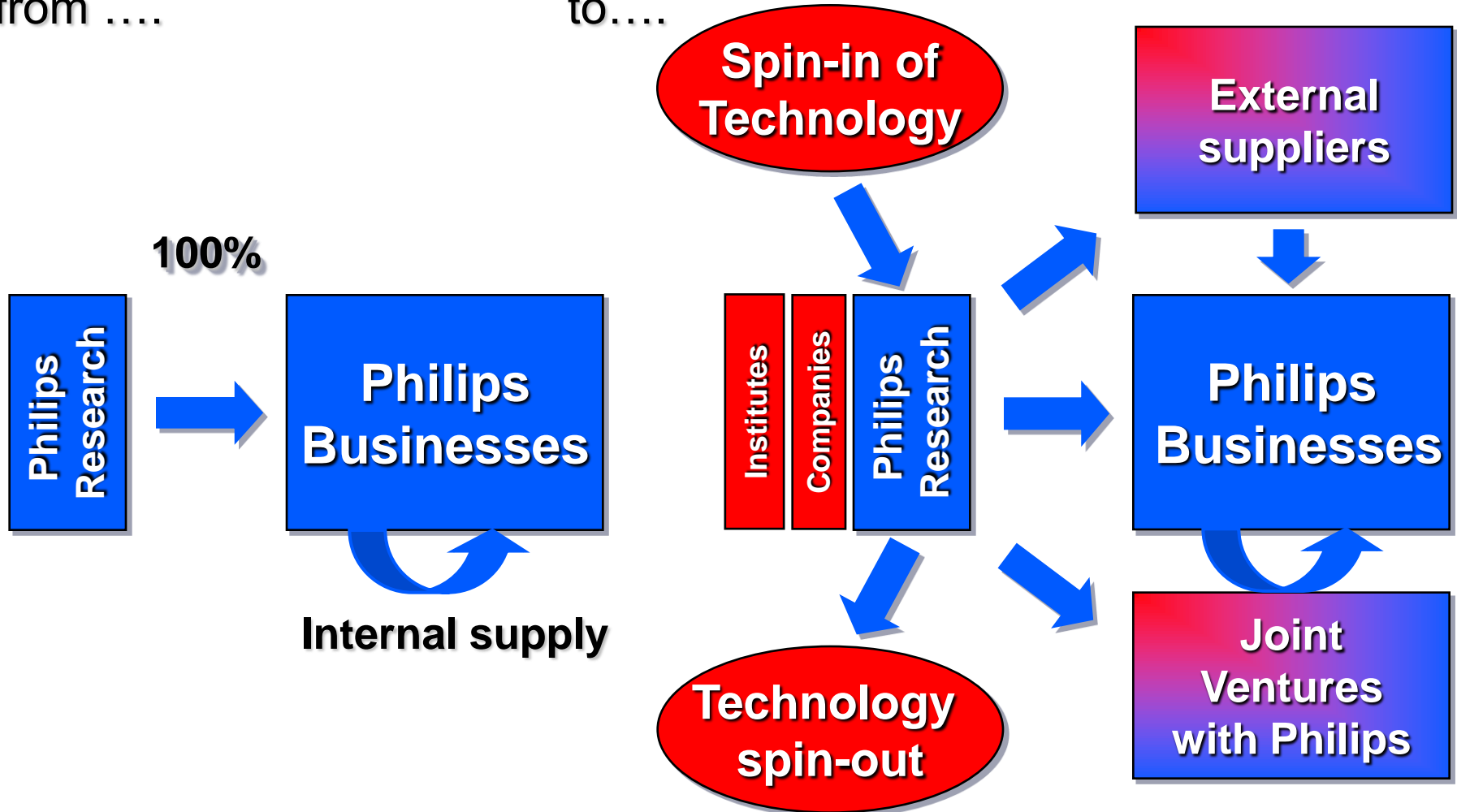


Innovation is 99% shared technology and
1% exclusive technology

From Closed to Open Innovation

from

to....



From closed to open mindset



Closed

Open

- Smart people work for us
- Discover, develop, ship
- First to discover, first to market
- Create most of our own IP
- Control our own IP

- Smart people pop into work
- Claim a portion of our own IP
- Pull from Research by others
- Use most ideas
- Trade IP



Conference
Centre

MiPlaza

Media
research
centre

Techno
Starter
Centre

Electro
Magnetic
Centre &
Cooling
Compe-
tence
ce

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b



High Tech Campus Eindhoven

World-class technology centre of high tech companies working together in development of new technologies

- 910,000 m²
- 50 nationalities
- 40 companies and institutes
- 7,000-8,000 people by 2008
- € 500+ million invested by Philips



Open
Innovation
ecosystem



ExperienceLab

- Strengthening our people and customer focus by starting with end-users
- Three facilities for testing feasibility and usability

HomeLab



ShopLab



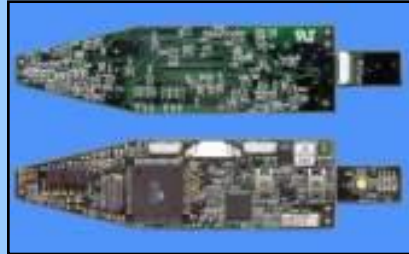
CareLab



MiPlaza: industrial R&D expertise and support



Components



Modules



Demonstrator products

Turning ideas into reality in a “one stop shop”

- Access to clean rooms, expertise, technical services, tools and facilities
- Low entry barrier and flexible support (lab, equipment, experts)
- Complete toolbox of enabling technologies
- Microsystems, nanotechnology, life sciences, electronic systems



Holst Centre

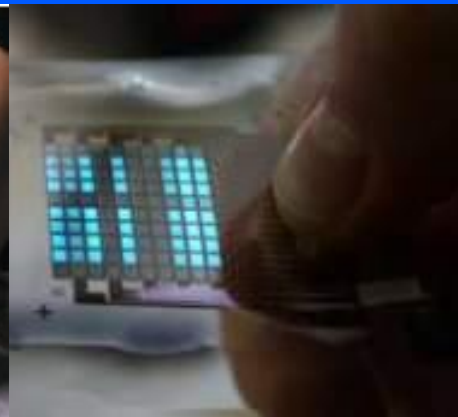


- Joint centre of TNO (4,500 fte, NL) and IMEC (1,300 fte, Belgium)
- Open innovation through precompetitive shared programs with industry
- Created in 2005, co-funded by government and industry
- Critical mass: 120 + 60 fte in 2007; 220 + 100 fte planned in 2010
- Partnering worldwide and employing 18 nationalities

**Wireless
Autonomous
Transducer
Solutions**

**Technology
Integration**

**Systems
in
Foil**





Center for Translational Molecular Medicine

PHILIPS



TU/e technische universiteit eindhoven

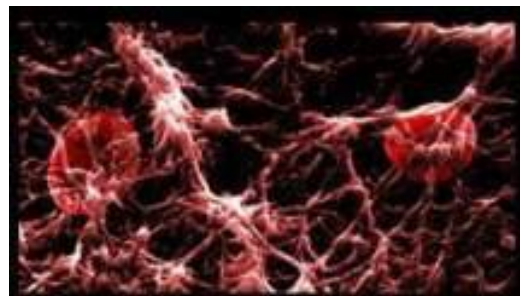


Erasmus MC
University Medical Center Rotterdam

Nederlandse Hartstichting

UMC St Radboud

NKI-AVL
The Netherlands Cancer Institute
Amsterdam University Medical Center



Internal ventures and incubators

Areas: Healthcare



Lifestyle



Technology



Venture capital from a.o.



Examples of spin-outs

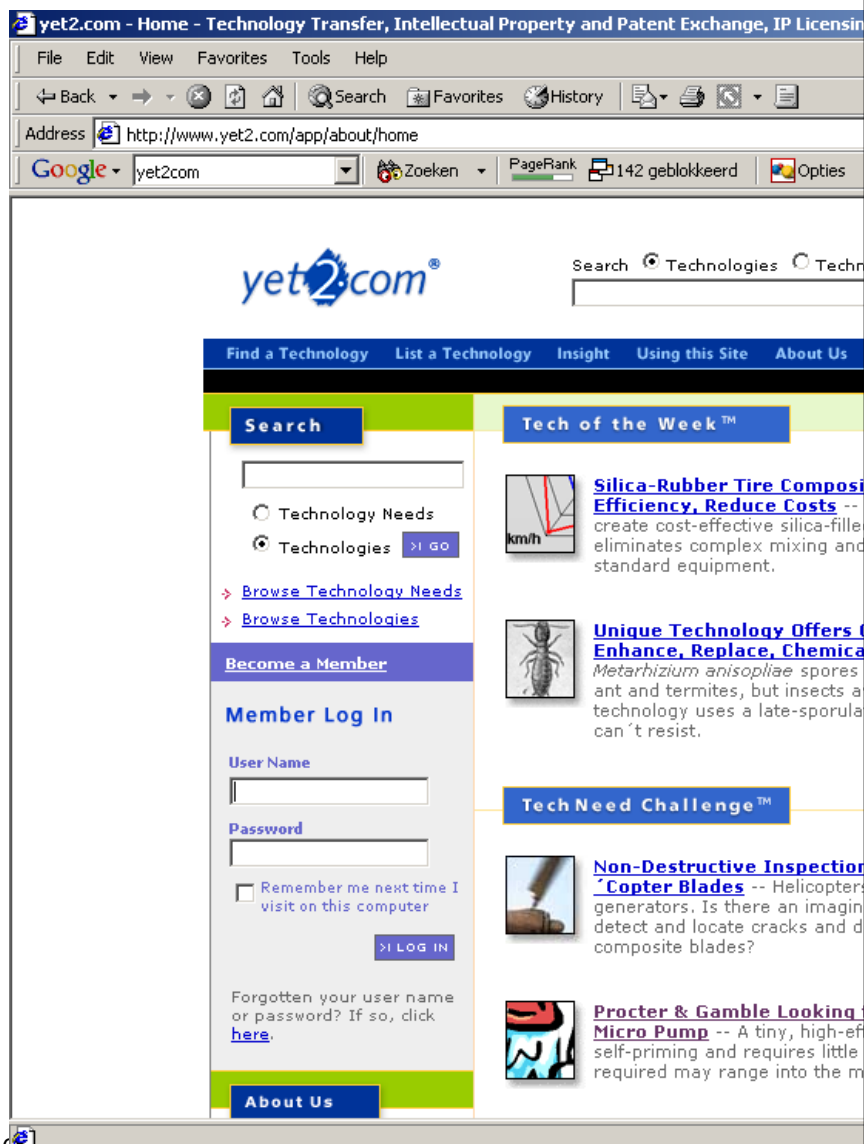




Creative Conversion Factory

- Open Innovation Incubator Initiative for turning ideas into products
- Opened November 12, 2007; located in business accelerator on HTCE
- Still part of Philips Research, soon (Q1/2008) separate foundation
- Focus on Ambient Experience; two projects already up and running
 - Intelligent Playgrounds (TU/e ID, Philips Design, Philips Research)
 - Ambient Way Finding (NH Hotels, Philips Design, ...)

Technology licensing

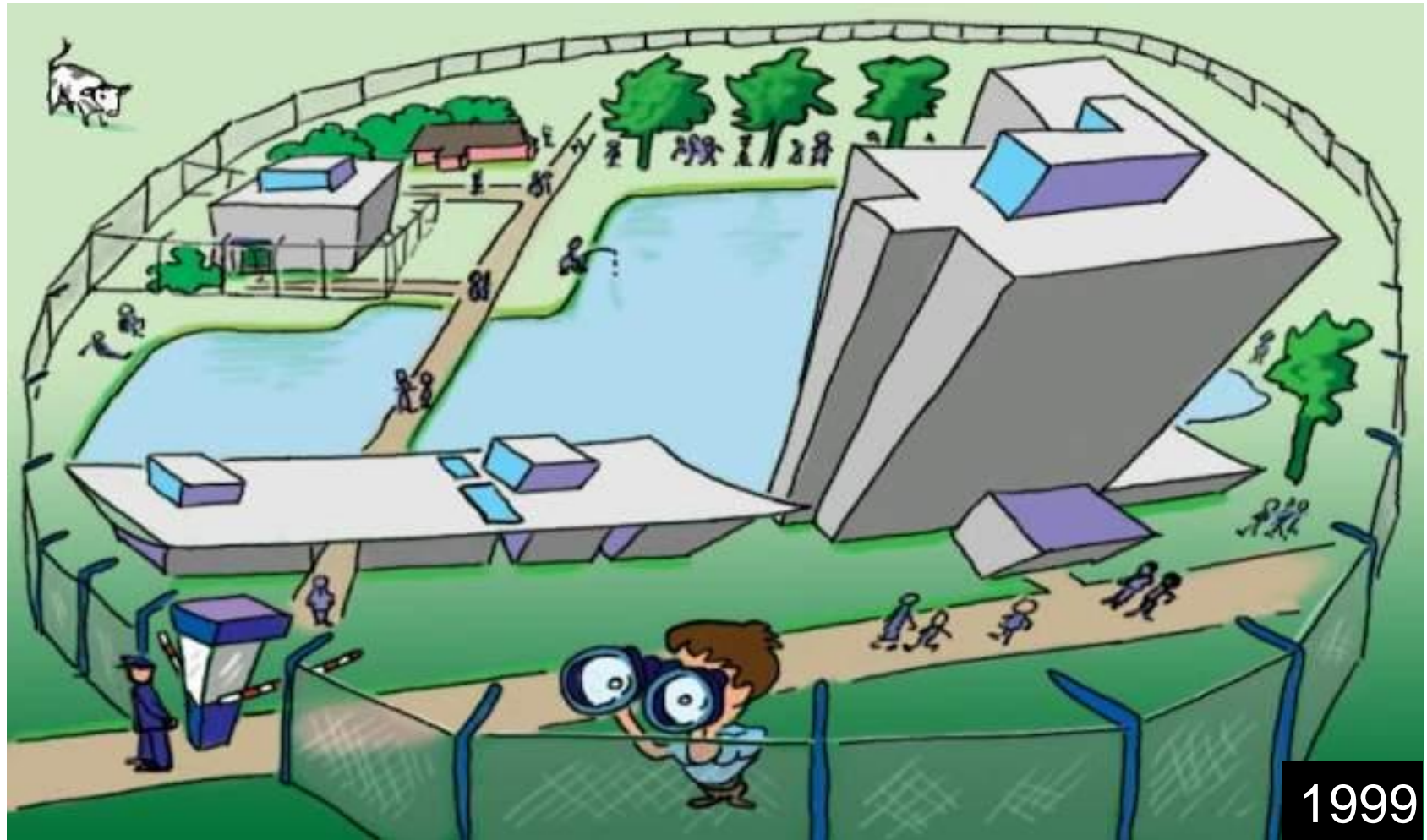


Philips' windows on European Research Area

Status end of Q3, 2007

- About 100 projects in European and national R&D programmes
- About 900 partnership links in these 100 collaboration projects
 - 48 % PROs + universities, 32 % large firms, 12 % SME, 8 % unknown/other
 - Involving about 550 different partners
- About 16 % of Philips Research FTEs involved in public programmes
- Numerous research contracts granted to universities
- Participation in various institutes, e.g. Holst Centre, CTMM, ESI
- About 25 part-time professors + 10 professors as external advisors
- Numerous visiting students, R&D trainees and postdocs
 - 40 graduate students + postdocs and 150 undergraduates at Philips Research Eindhoven

Philips Research headquarters



..... to open high-tech campus



Policy implications - 1

- Foster user involvement, customer intimacy, pilots, trials
 - For success in marketplace
- Stimulate start-ups, venturing, entrepreneurship
 - For Growth and Jobs
- Support Open Innovation Centres and innovation intermediaries
 - For sharing facilities, services and expertise
- Provide SMEs with innovation vouchers
 - For knowledge, advice or services from public or private R&D labs
- Avoid segregation of SMEs, large firms and research organisations
 - As complementary actors in Open Innovation

Policy implications - 2

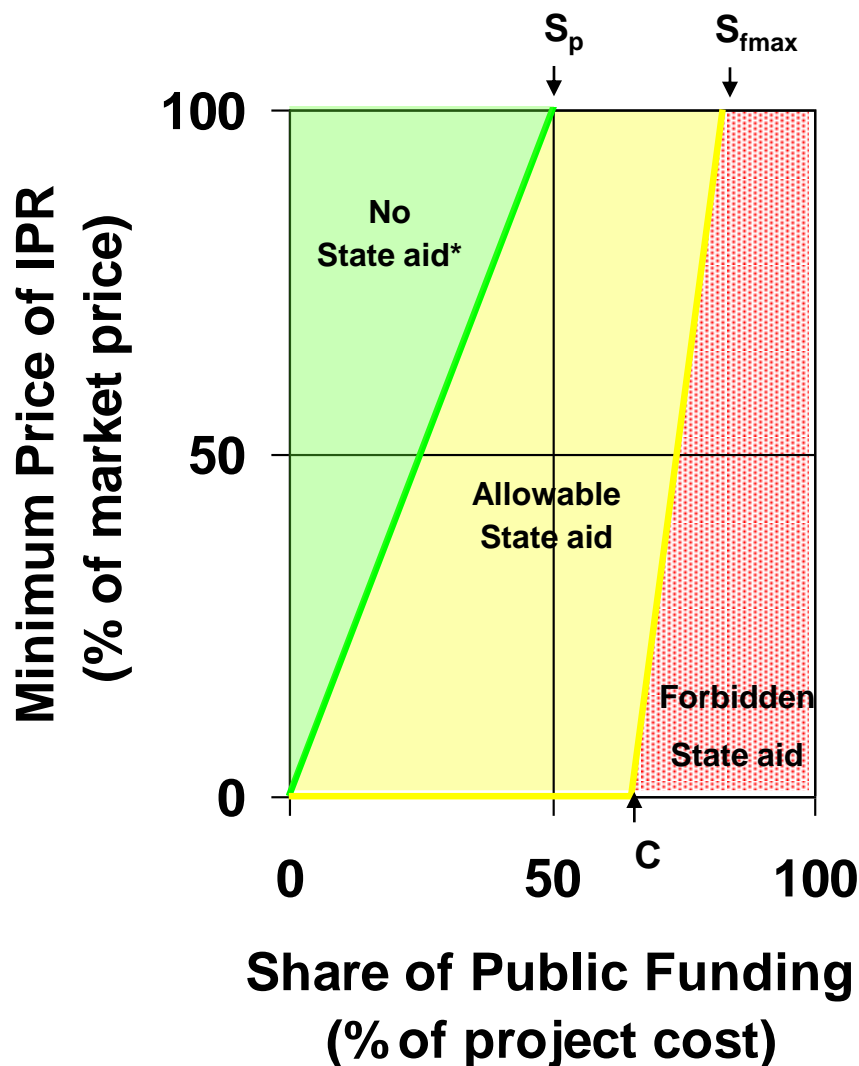
- Don't geographically constrain MNE exploitation of publicly supported R&D
 - Allow IP access and transfer to worldwide affiliates
- Encourage temporary staff exchanges
 - Via Marie Curie (FP7) and similar national mobility schemes
- Promote 10 commandments of “Responsible Partnering”
 - See <http://www.responsible-partnering.org/>
- Provide operational guidelines on R&D PPPs and EU State aid rules
 - See http://www.eicta.org/index.php?id=34&id_article=181

PHILIPS

sense and simplicity

Thank you for your attention!

New tool for assessing State aid in R&D PPPs



Three key parameters

	Example
S_p : Share of project (as % of cost) performed by public sector	↓ 50 %
C : Ceiling of allowable aid intensity including bonuses	65 %
S_f : Share of project (as % of cost) funded by public sector	x-axis



S_{fmax} : Maximum allowable share of public funding
 $= C(100-S_p)/100 + S_p$ 82.5 %

Details on http://www.eicta.org/index.php?id=34&id_article=181

*) Provided that project share performed by private sector receives no direct public funding