

Philips

On the way into the third millennium

**IMF - World Conference
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**Material for the Philips
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1. Philips worldwide

With a turnover of some US\$ 30 billion, Philips is one of the top ten electronics producers worldwide:

World leaders in electronics (US\$ bill.)					
		1997		1999	
		Turnover	Inc.	Turnover	Inc.
1.	GE	90.8	8.20	111.6	10.70
2.	Hitachi	68.6	0.02	75.5	0.16
3.	Siemens	63.8	1.42	74.9	2.04
4.	Matsushita	64.3	0.76	63.7	0.10
5.	Sony	55.0	1.80	63.1	1.15
6.	Toshiba	44.5	0.06	54.2	-0.26
7.	NEC	39.9	0.33	50.6	0.10
8.	Mitsubishi	31.0	-0.86	35.6	0.23
9.	Philips	29.2	2.93	31.5	1.80
10.	ABB	31.3	0.57	24.7	1.60
18.	LG	14.7	-0.60	15.0	1.77

As a result of the sale of non-strategic business activities, turnover has not risen in recent years and the group has lost ground in relative terms. With income of US\$ 1.8 billion, Philips is one of the more profitable companies in the sector.

2. Competing for shareholder value

2.1 At present, Philips managers are concentrating on making shareholder value increase more rapidly. More than 40% of the group's shares are held by American investors, as against some 15% for British investors. This explains why Boonstras bases himself on the Anglo-Saxon corporate model.

2.2 This stronger emphasis on “shareholder value” since 1996 implies among other things:

- Founding relatively independent Lines of Business (LoB), thereby opening up opportunities for fast development in terms of market positioning.
- Evaluating business activities in relation to strategic positioning and financial targets (24% RONA). Rehabilitating persistently unprofitable activities. Selling off products in the last phase of the product life cycle.
- Making more efforts to identify strategically important market segments (products/regions) where Philips is not yet sufficiently well represented.
- Reformulating production strategy. Producing few components and subsystems itself. Bringing production activities into joint ventures whenever possible.
- Controlling production costs and cutting overheads.

2.3 From 1996 onwards, Philips has concentrated on a smaller range of activities. The number of product divisions has been cut from 12 to 6.

1996:	<i>Sound & Vision</i>	2000:	<i>Consumer Electronics</i>
	<i>Car Systems</i>		
	<i>Business Electronics</i>		
	<i>Industrial Equipment</i>		
	<i>Components</i>		<i>Components</i>
	<i>Semiconductors</i>		<i>Semiconductors</i>
	<i>Lighting</i>		<i>Lighting</i>
	<i>Domestic Appliances</i>		<i>Domestic Appliances</i>
	<i>Medical Systems</i>		<i>Medical Systems</i>
	<i>Polygram</i>		
	<i>Media</i>		
	<i>Origin</i>		

Selling off non-core business activities (Car Systems / Media / Polygram / Origin) has provided more financial manoeuvring room for a new long-term strategy (High Volume Electronics). After this sector took a beating in 1997-1999, a new 1999 - 2000 period began which was characterized by purchases aimed at consolidating "core business" (Components / Semiconductors / Medical Systems). The so-called professional products (Business Electronics / Industrial) were gradually brought into the so-called Consumer Electronics sector or set up as an independent group.

2.4 Philips intends to make medium-term expansion investments aimed at the following:

- Consolidation of Audio/Video/PCE/HVE market articles
- Consolidation and expansion of Lighting's position
- Expansion of Digital TV- / Computer Sub-systems / Optical Storage
- Expansion of IC-engineering / Semiconductors
- Acquisitions for the expansion of Medical Systems

High Volume Electronics, ICs and Lighting have become the core skills of Philips' strategic activities. As far as strategic components and sub-systems are concerned, components play a growing role in terms of supply.

Once Display Components were brought into a joint venture with LG Electronics, some of Philips' remaining activities were "packaged for sale" because they did not fit into the reformulated core strategy:

- Domestic Appliances and Personal Care
- PMF: Plastic & Metal Products
- Engineering Plants

Since the company has no financing problems, Philips intends to wait until it finds a buyer who is prepared to pay enough.

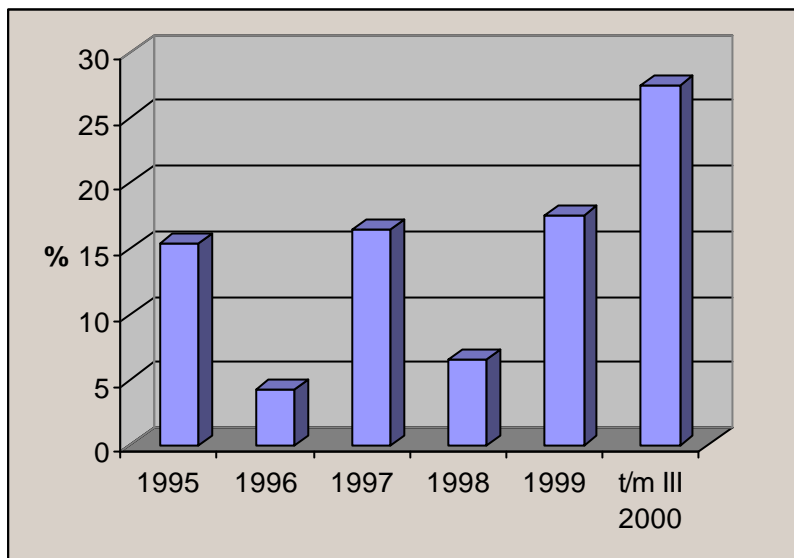
Profit and Loss Account

2.5 After a upbeat year in 1999, Philips appears poised to record strong growth and good results in 2000 as well.

Core profit & loss figures (in € mill.)					
	1996	1997	1998	1999	t/m III 2000
Sales	27,094	29,658	30,459	31,459	26,855
Oper. Income	422	1,714	685	3,859	2,332
Net income	268)	2,602	6,053*	1,799	6,810**
* Sale of 75% holding in Polygram for € 5.233bn cash and 12% holding in Seagram Company					
** Higher book value for TSMC holding and sale of part of the stake in JDS Uniphase und ASML					
t/m = up to and including					

Philips' turnover worldwide was up 23% in the first three quarters of 2000 when compared with the previous years; 11% came from foreign exchange gains (stronger dollar against the Euro) while 12% was from nominal growth. The average price declines in all sectors tapered off from 8% in 1999 to 5% in 2000, while margins and net income were up.

2.6 Return on net assets (RONA) is one yardstick for evaluating results:



The goal of Philips management is 24% RONA. In 2000, RONA did not fluctuate much when compared with the previous year and produced the desired earnings.

2.7 Philips has been cutting back on R&D spending since 1991. This trend has reversed direction during the Boonstra period. In 1997, costs for the development of products and procedures amounted to 6.2% of turnover, whereas by 1999 the corresponding figure had risen to 7.3%:

Core P&L figures: R&D costs (in € mill.)					
	1995	1996	1997	1998	1999
Turnover	25,259	27,094	29,658	30,459	31,459
R&D costs	3,851	4,050	1,841	2,048	2,284
% of turnover	6.9%	6.8%	6.2%	6.7%	7.3%

Philips enters R&D costs for the current year under "costs" in the profit & loss account. As a result of this bookkeeping method, some product groups have considerable hidden reserves (patents/licences), which can if necessary be used as security for additional funding (Rabo-Konstruktion).

Balance sheet

2.8 The first step in the improvement project which Boonstra had in mind was enhancing financial creditworthiness and restoring the financial world's confidence in Philips. The company has managed to pull this off:

Core figures for the consolidated balance sheet					
(in € mill.)					
	1996	1997	31/12 1998	31/12 1999	30/9 2000
Debts	5,855	4,030	3,587	3,314	3,508
Provisions	3,402	3,251	2,985	3,118	3,631
Stockholder equity	6,585	9,154	14,560	14,757	19,367
Unconsolid.	1,386	1,264	975	2,091	3,860
Total assets	21,907	23,322	28,153	29,496	36,325

As of mid-2000, Philips had a debt-to-stockholder ratio of 15 : 85, which meant that it had a very high potential for debt.

2.9 As a result of rising stock market prices for so-called "techno-funds", the "unconsolidated equity" heading has increased sharply since 1998. These unconsolidated businesses accounted for €3.8 billion of the balance sheet in mid-2000, as follows:

- Interests in sold-off businesses in which Philips had a minority holding (e.g. the lion's share of ASM-L was sold off in 2000)
- Interests acquired via the sale of subsidiaries where Philips received shares in the new parent company (e.g. 12% Seagram / 2000 turned into an interest in Vivendi)
- Strategic (minority) holdings (e.g. 25% TSMC / 50% LG Philips LCD).

The market value of these holdings is a multiple of the registered book value:

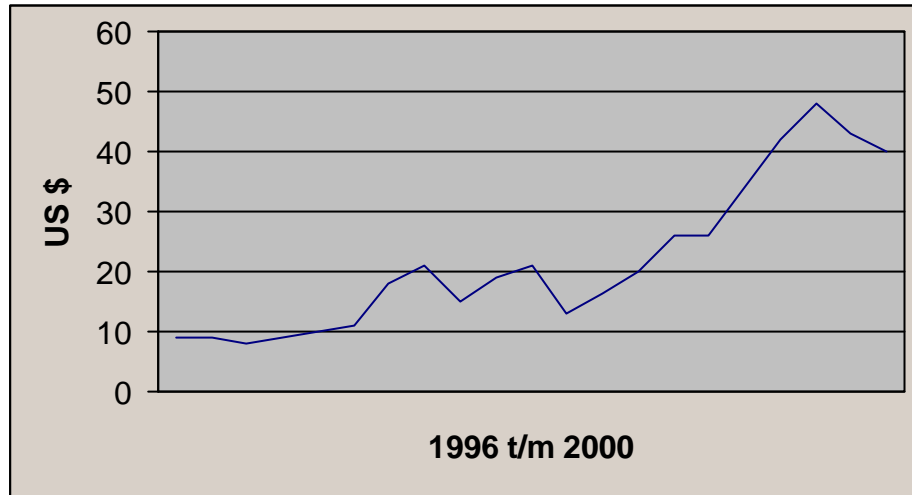
Mkt. value unconsolidated equity	
(End of 1999 / in € bill.)	
TSMC	10.8
ASM-L	3.7*
Seagram	2.4**
Uniphase	1.1
Total	18.0

* Sold off in 2000
** \$3.36m following the offer by Vivendi / Canal+

2.10 Philips has substantial "reserves":

- A potential for debt increase on the basis of balance sheet ratios
- Activation (capitalization) of direct costs for development
- Value of as yet unsold non-strategic activities
- Market value of unconsolidated companies

An estimate yields "liquid" funds totalling minimum €40 billion. Inside the existing range of activities, the group has insufficient investment opportunities which satisfy the earnings expectations (claims) set. One alternative is pay-outs to shareholders.



Share prices

2.11 Over the past two years, Philips shares have increased sharply in value and are now trading at €50.141 billion (01/01/2001), making them highly sensitive, smallish shares on the world level.

Over the past two years, Philips has propped up the group's shares by buying up its own shares:

- In 1999, Philips bought up some €1.5 billion worth of its own shares
- In July 2000, it purchased €1.7 billion worth of its own shares.

This reduced the number of outstanding Philips shares by some 11%.

2.12 Despite the fact that stock market prices have risen since early 1999, the discussion on division continues to play a role. In March 2000, the financial press made the following arithmetical calculation concerning Philips' share price:

- Thomson Multimedia is listed on the stock exchange at €16.5 billion and is comparable to Philips Consumer Electronics. However, the latter is twice as big and more profitable. The estimated stock market value for PCE is €30 billion.

- Philips Semiconductors is comparable to STM in terms of product composition and market share. STM's stock market value is nearly €60 billion.
- Lighting, DAP und Medical Systems, taken together, have an estimated stock market value of €20 billion. This price, which is based on the holdings in ASML, Seagram and TSCM listed on the stock market, is estimated at €21 billion. "Origin" adds another €4 billion to this total.

When calculated in this way, it is reckoned that Philips, as a "sum total of its parts", has a total value of some €135 billion. Philips' current stock market value is some € 50 billion (1/1/2001), i.e. some 50% below the group's real value.

3. Activities at different speeds

3.1 Philips' turnover can be broken down into various main activities:

Turnover in the product field (in € mill.)					
	1997	1998	1999	t/m III 1999	t/m III 2000
Consumer					
Electr.	12,194	12,760	12,781	8,720	10,314
Components	5,099	5,259	5,325	3,802	4,768
Semiconductors	3,793	3,963	4,557	3,156	4,879
Lighting	4,602	4,504	4,597	3,333	3,684
Professional	4,454	4,649	5,186		
Medical Systems				1,681	2,002
DAP				1,158	1,346
Total	33,568	33,927	35,243	24,371	29,520

t/m = up to and including

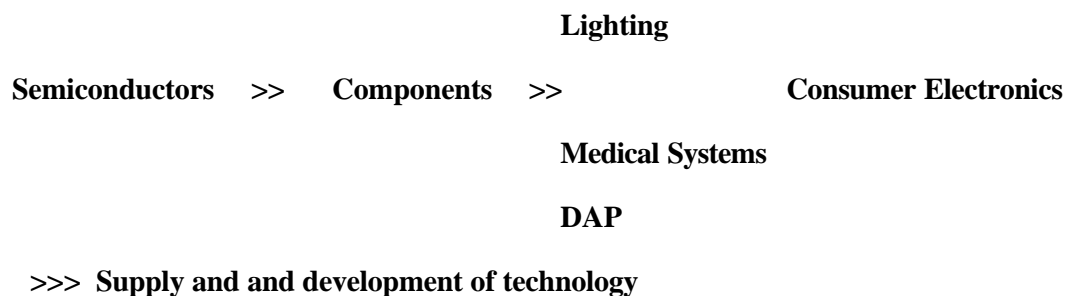
PCE accounts for nearly 35% of turnover and continues to characterize Philips. Together with lighting and DAP, PCE helps determine the degree of consumer recognition.

Turnover in the product field (% of turnover)			
	1997	1999	t/m III 2000
Consumer products	35.3	34.5	33.6
Lighting	15.3	14.5	13.6
DAP			4.9
Components	12.4	11.9	12.9
Semiconductors	10.6	12.1	5.6
Professional	14.5	16.5	
Medical Systems			7.4

t/m = up to and including

The considerable investments in brand names concern around 50% of the group's sales. On the "professional" market (Medical Systems) and on the market for business-to-business products (Components / Semiconductors), maintaining a strong consumer name is less important.

3.2 Once activities were focused over the past few years, the group's structure shows a trend towards growth:



The link between PCE on the one hand and Components / Semiconductors on the other probably stems from the scope of internal supplies.

Intern. turnover for products supplied (in € bill.)			
	1997	1998	1999
Components	1.5	1.4	1.5
Semiconductors	0.6	0.8	0.8

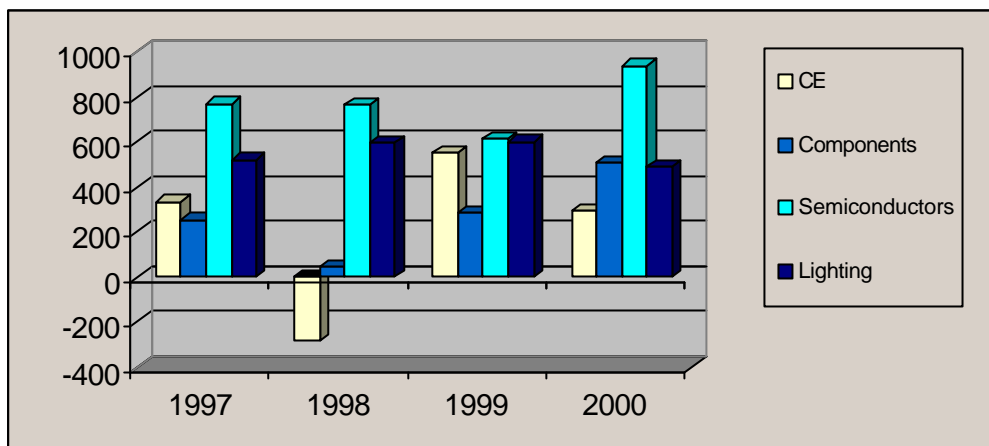
3.3 A look at financial results shows that Philips can be broken down into two main segments:

- Semiconductors und Lighting have stable margins that are "sufficient" in terms of sales to offset growing price pressure.
- Consumer Electronics and Components – which together account for some 50% of Philips turnover – have featured fluctuating, excessively low margins in relation to turnover, leading to negative results as prices have fallen faster.

Operational Results / Product areas (in € mill.)					
	1997	1998	1999	t/m III 1999	t/m III 2000
Consumer products	335	(278)	555	135	98
Components	255	44	286	203	908
Semiconductors	771	765	614	447	938
Lighting	522	595	602	447	492
Professional	207	(55)	100		
Medical Systems				69	99
DAP				131	162
Total	1,714	685	1,751	1,220	1,332

t/m = up and including

The picture becomes clear when operational results for the main groups are correlated with turnover:



In 2000, Components managed to avoid this negative fluctuation. When combined with the slightly positive result of Consumer Electronics, this explains the significant improvement in 2000 in comparison with the previous period.

3.4 During the previous period, investments in current activities were at the same level as write-offs. In 1999, Semiconductors was the only activities on which significantly more money was spent.

Investments + depreciation / Product areas (in € mill.)						
	Investments *			Depreciation		
	1997	1998	1999	1997	1998	1999
Consumer prod.	285	380	296	337	333	285
Components	400	299	259	278	357	364
Semiconductors	362	437	622	368	455	467
Lighting	216	191	176	187	173	161
Professional	123	88	99	98	77	84
Total	1,627	1,634	1,662	1,492	1,615	1,548
* excl. investments in acquisitions						

3.5 In addition to the considerable investments in Semiconductors, the selected strategic orientation of the Philips group can be seen from acquisitions. Investments are reflected by the growing book value of assets:

Assets per product area				
(31-12 / in € mill.)				
	1997	1998	1999	30/9 2000
Consumer products	5,085	4,350	4,683	5,651
Components	3,146	3,112	5,179	5,906
Semiconductors	3,136	3,106	5,188	8,231
Lighting	2,723	2,607	2,849	3,096
Medical Systems			1,840	3,606
DAP			777	892
Total	23,322	28,153	29,496	36,325

During this period, major expansions took place in the following sectors: (Components (LG-LCD), Semiconductors (VSLI) and Medical Systems (UltraSound plus two more acquisitions after September 2000)).

4. Worldwide breakdown into three currency zones

4.1 Philips has more or less divided the world market and the allocation of production sites up into three (currency) zones:

- ▪ North America + Mexico
- ▪ Europe + Eastern Europe
- ▪ Asia - Pacific + Korea / China

These are regions which display - for almost all products - separate market specificities, rates of development, different currency characteristics and production features. Each region has its own R&D and production centres and its own "border zone". Worldwide integration occurs on the plane of technical know-how (management), core components, logistics and information systems and financial consolidation.

4.2 Philips was originally a European group. Europe continues to account for more than 50% of turnover:

Turnover by region (in € mill.)				
	1997	1998	1999	2000/III
Netherlands	9,684	11,089	12,452	11,402
Europe excl. Neth.	15,831	16,430	16,600	14,117
US + Canada	7,644	8,572	9,310	8,199
South America	2,104	2,013	1,642	1,419
Asia/Pacific	11,401	10,432	11,612	10,961
Africa	113	126	107	114
Total	46,777	48,662	51,723	46,212

Sales have been growing at varying paces in the different regions. In 2000, Eastern Europe and Asia-Pacific recorded the fastest growth:

Sales increase: 1999/III - 2000/III (in € mill.)				
	Europe	NA	LA	Asia
Nominal increase	18%	19%	24%	37%
Comparable increase	16%	1%	13%	19%

Sales in North America were stable but increased sharply following consolidation due to the dollar's appreciation against the Euro. As a result of acquisitions in Semiconductors and above all Medical

Systems, turnover is expected to increase very substantially in the US in the near future. In the first three quarters of 2000, Philips' sales in Eastern Europe rose by 60%, while Philips' turnover in China has already been growing structurally for some years now:

Turnover in China (in € bill.)					
1994	1995	1996	1997	1998	1999
0.5	0.7	1.0	1.6	1.9	2.1

4.3 Certain trends can be seen with regard to the position which Philips takes in the various regions and in the breakdown of activities:

- The European countries export little outside their region, while Latin America, the Pacific and Africa are net importers. Many Philips branches produce "local for local" in these regions.
- Exports by Philips USA/Canada to the world market have risen sharply in recent years, both relatively (+10%) and in absolute terms (+ NLG 1.4 bill.). Philips is endeavouring (via acquisitions) to set up a stronger second "home" in the US, with Mexico ("border zone") as a "low-cost producer" for the region.
- A good 40% of the production of Philips Asia is earmarked for export outside the region. In absolute terms, the increase is considerable: from NLG 6.7 billion in 1995 to NLG 11.0 billion in 1997.

4.4 Inside Europe as a region, activities will continue to shift from Western to Eastern Europe in coming years. Poland and Hungary will be the two major players in this respect.

- e.g.
- Lighting activities to Poland / Eastern Europe
 - Consumer Products / Components to Hungary
 - Delocalization of TV Production from Dreux to Poland
 - Delocalization of Display Components to the Czech Republic
 - DAP / Coffee Machines from Hoogeveen to Poland
 - Irons from Hasting to Bialystok.

In Hungary, Philips initially started out with a few joint ventures. Since 1992, however, it has rapidly set up a few of its "own" plants. At present, there are 12 production sites for analog consumer products (CD / VCR / TV) for the international market. International supplies from Hungary have increased sevenfold in a few short years – with limited investment. In many cases, Philips has worked together with local companies.

4.5 A breakdown of operational income by region reveals that Philips is still quite dependent on changes in margins on European domestic markets, especially because the going is tough:

Operational income: by region				
(in € mill.)				
	1998	1999	1999/III	2000/III
Netherlands	446	513	491	945
Europe excl. Neth.	638	611	348	581
US + Canada	(473)	82	49	82
Latin America	(205)	(41)	43	(6)
Asia	287	584	337	701
Africa	(1)	1	1	2
Australia/NZ	(7)	1	0	(22)
Total	685	1,751	1,220	2,332

Philips must set earnings targets in Western Europe that allow it to conquer a profitable market share for Lighting, ICs and HVE, especially in Asia and North America, with new products. Consequently, Philips faces the following dilemma: on the European domestic market, at a time when strong brand names and existing margins must be safeguarded, production sites will have to be closed.

4.6 The contribution of the North American subsidiaries has been minimal to negative, despite the growth in turnover and considerable investments (incl. acquisitions) in this region:

Intangible assets by country			
(in € mill.)			
	30/9	31/12	31/12
	2000	1999	1998
Netherlands	1,889	1,822	1,633
Germany	624	625	698
France	450	405	410
United Kingdom	330	331	298
United States	4,618	2,576	1,167
China	775	681	574

4.7 The background for the planned international delocalizations is the desire to achieve further concentration of production. Using a benchmark, Philips noted in 1997 that it had too many production facilities which were on average too small, when compared with a few major competitors:

Benchmark Philips production sites / 1997			
(Number of branches as a %)			
Number of workers	Philips	Matsushita	Sony
< 200	29	0	0
200 - 500	32	15	10
500 - 1000	22	35	45
1000 - 2000	10	35	45
> 2000	8	15	0
Average	776	1,449	1,039

In 1997, Philips had 263 production facilities worldwide. The top management announced that the number of production subsidiaries had to be cut to 160 or 170 by the year 2002. This is partly due to ongoing concentration, but it also stems from the company's efforts to shed non-strategic activities.

4.8 Western Europe will be forced to contract the most:

No. of Philips subsid./by region			
(year's end)			
	1997	1998	1999
Europe	122*	105	
Asia	74	61	
North America	51	42	
South America	18	14	
Austr./Africa	4	4	
Total	<u>269</u>	<u>226</u>	
* incl. 38 in the Netherlands			

Some of the branches earmarked for sale were sold off to "third parties" as part of less strategic activities. Even though the planned expansions in Eastern Europe (Poland/Hungary/Czech Republic) have been implemented, some branches will have to be closed in the future in Western Europe.

4.9 The sale of non-strategic activities and the concentration of production sites have had an impact on employment within the group:

	Employment / perm (average)			Begin. 2000
	1997	1998	1999	
Production	150,616	146,249	126,622	123,099
Research	21,238	20,657	21,104	20,543
Rest	63,478	64,494	62,443	61,821
Tot. perm	235,332	231,400	210,169	205,463

R&D structure has remained the same over the past few years. Other sectors have shrunk somewhat since 1998 (-4%), while staffing in production has declined by a good 18%.

4.10 Over the past few years, shrinking employment has come entirely at the expense of permanent staff:

(average)	Employment			beginn. 2000
	1997	1998	1999	
Perm.	235,322	231,400	210,169	205,463
Temp.	20,332	21,280	19,847	19,967
Total	255,654	252,680	230,016	225,430

With growing turnover and sales, Philips is farming more and more production out to "strategic partners" or "third parties".

4.11 When broken down by region, the employment picture at Philips is as follows:

	No. of employees by region			
	1990	1995	1997	1998
Netherlands		45,850	46,470	44,500
Rest of Europe	165,100	97,388	83,490	73,800
USA+ Mex.+ Canada	42,200	32,729	34,611	25,950
Lat.America	26,600	21,598	26,725	22,650
Asia-Pacific	40,900	67,933	72,428	68,200
Africa	2,100	1,531	952	800
Total	276,900	265,113	264,685	233,700
* incl. disinvestment, (de)consolidation and acquisitions				

Total employment at Philips fell a good 15% between 1990 and 1998. The most significant regional shift during this period was from (Western) Europe (-35%) to Asia-Pacific (+40).

Inside Europe there was a shift from Western Europe to Eastern Europe, a trend which to date has spared only the branches in the Netherlands. In North America, a similar move came from the US to (northern) Mexico, while China and Korea increased their shares significantly in the Asia-Pacific region.

5. Repositioning of Consumer Electronics

5.1 The repositioning of Consumer Electronics is linked to the strategy for High Volume Electronics (HVE), and was developed by Philips as an alternative technology platform for the future. The core areas are as follows:

- TV- / Video applications / LCD / set-top boxes / Internet TV
- Audio systems
- Telephone / Fax / communication / speech recognition
- PC peripherals / Notebooks / PC-TV
- Optical storage / CD-ROM + RW

These products are linked because they use the same technologies, production methods and channels and outlets. The underlying hypothesis is that TV-, Audiotelecommunications and Computer Technologies will rapidly grow together in coming years and will expand in lockstep. This will require an agreement inside the group between Consumer Electronics, Components and Semiconductors.

5.2 The market for HVE consists of four segments, which are growing at different rates:

Market-/Volume growth per product (% per year)		
	97/98	98/99
CTV	-7%	2%
PC desktop	9%	10%
CMT monitor	7%	10%
PC Notebook	21%	12%
CD-ROM / CD-RW	11%	21%
Mobile telephone	33%	34%
Cordless telephone	13%	22%

- Traditional Audi and Video products. Market growth varies 5% per year and new products are introduced gradually.
- Products that depend on CD players: CD, CD-ROM, CD-RW and DVD – a market segment that features annual growth ranging from 10% to 20%.
- The PC-based market, with growth of up to 20% per year
- Mobile communication, which relies on handheld devices, posts annual growth rates of up to 30%.

These growth rates relate to an increase in volume and must be adjusted for the decline in prices.

5.3 Philips Consumer Electronics (PCE) product portfolio includes television sets; Home Cinema, video recorders and TV-Video Combis; audio systems; recording media for audio/video; PC monitors and PC peripherals; and specialty products including LCD projectors, speech products, and remote control systems.

Core figures for Philips Consumer Electronics (in € mill.)					
	1997	1998	1999	t/m III 1999	t/m III 2000
Sales	12,194	12,760	12,781	8,720	10,314
Compar. increase	7%	7%	6%		11%
Operat. income	335	(278)	555	135	298
% of turnover	2.7%	-2.2%	4.3%	1.5%	2.9%

5.4 Philips Consumer Electronics (PCE) was recently divided up (once again) into a few main groups:

- Mainstream PCE - Audio / CD + Video / DVD activities
- Philips Consumer Communications (PCC) - Handys
- Digital Networks - TV set-top boxes
- PCB Assembly - centralized buying office for components / systems
- Special Products - small scale / professional business

Turnover for PCE – broken down into the above-mentioned sub-areas – is as follows:

	1999 / III			2000 / III		
	sales	oper. income	% sales	sales	oper. income	% sales
Mainstream CE	5,524	55	1.0%	6,267	46	0.7%
Communication	1,278	(71)	(5.6%)	1,555	34	2.2%
Digital network	496	(71)	(14.3%)	574	(73)	(12.7%)
Specialties	1,424	35	2.5%	1,703	28	1.6%
Licences	213	187		309	263	
Total	8,720	135	1.5%	10,314	298	2.9%

A considerable share of PCE profits comes from licenses. Moreover, PCC is gradually improving its position. However, it is not clear whether this improvement will be lasting in nature.

Mobile Telephones as a platform base

5.5 Philips would like to remain active in the mobile telephone sector despite its 1997 abortive marketing strategy worked out together with Lucent. The joint venture with Lucent led to a loss of NLG 1.3 billion in 1998. Since then, Philips has redirected its policy towards manufacturing GSM devices (Handys) and has (temporarily) left the US market to "third parties". In 1998, production and marketing of Handys resulted in heavy losses. In 1999, the sale of GSM units was up 70% over the figure for the preceding year, which meant that PCC was nearing the break-even point.

5.6 The various suppliers positioned themselves on the European market for Handys between 1996 and 1999 as follows:

GSM market share (Europe)		
	1996	1999
1. Nokia	16%	24%
2. Motorola	15%	17%
3. Ericsson	15%	15%
4. Alcatel		9%
5. Siemens		8%
6. Philips		6%

In 1999, Philips was not (yet) a significant player in this segment of the world market: in the US, PCC – following the dissolution of the joint venture with Lucent – was out of the picture for the time being; in Asia (excluding China), PCC had a market share of 7%.

5.7 The year 2000 seemed to bring the first positive news for PCC. Sales picked up sharply in the first three quarters and (declining) income of €34 million was recorded. The fact that results for the third quarter of 2000 (0-results) were lower than forecast was due to delivery problems, not a limited sales volume:

- 45% more units were sold than during the third quarter of 1999.
- Due to insufficient availability of core components, sales were not as high as they could have been. The forecast for 2000 was revised downwards from 18 million units to 14 million.

Philips' GSM market share for the major European countries is some 8% at present. Its goal is 10% of the world market.

5.8 In order to reach this target, Philips will have to find a joint venture partner who can help with designing and manufacturing Handys with Internet applications. Philips' new WAP telephones were rolled out too late (second half of 2000). The third Handy generation (3G), which uses the CDMA standard, a norm not developed by Philips, will be released towards 2003. In terms of R&D, Philips is lagging behind its main competitors and does not feel that it can close the gap on its own.

Philips is expected to look for a partner in Asia for a joint venture like the previous one with LG Electronics in the field of LCD and Display Components.

6. Strategic reorientation for Components

6.1 Philips Components, with 1999 revenues of € 5.3 billion, is the world leader for display applications based on CRT, LCD and plasma technology. In the area of storage, all major PC and audio/video setmakers use Philips drives and sub-assemblies. Components has morphed away from passives and batteries and has cast its future in with “emerging electronics” for handheld devices, multifunction displays, and Internet connectivity for consumer appliances and automotive electronics. ‘Enabling Internet Everywhere’ is the challenge for the future, and today the division is expanding from power management and wireless connectivity products into new solutions for the smart handheld consumer products of the future.

6.2 In the most recent repositioning (1999), the Components product range was divided up into five main groups:

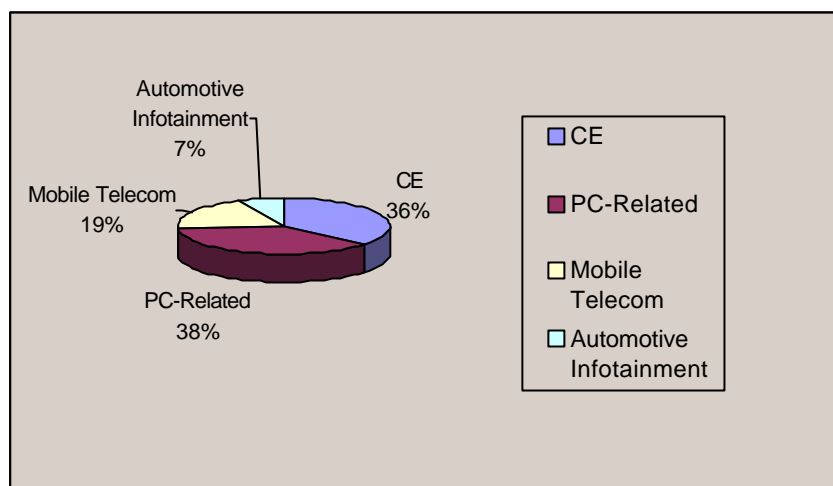
- Display: Color TV + Monitor Tubes / Large Flat Displays / Key Components
- Flat Display: LCDs / Cells & Modules / Poly-Leds / Software & Electronics
- Optical Storage: CD / CD-ROM / CD- RW / Pick-up Units
- Advanced Ceramics and Modules
- General System Components

In 1999, Display Components accounted for some 50% of turnover out of a total of €5.2 billion, whereas Flat Display accounted for around 20%. Just recently – following the sale of all activities involved – the main group Advanced Ceramics and Modules was once again dissolved.

6.3 With regard to analog – conventional products, Philips is being increasingly overtaken by “following” producers from “low-wage countries”. This development is only natural if one considers the “age” of these products. The problem is that Philips is having difficulty changing over to new products and applications.

In the new digital applications (e.g. Mobile Telephone / EDP), Philips faces new competitors (Nokia / Ericsson / Motorola / computer manufacturers) with different product philosophies and development strategies and shorter “time to market”. Product development in this segment moves so fast that Philips has not been able to keep up in the past. Hewlett Packard claims that in two years, it will account for some 70% of turnover in the EDP world with products which are not yet available.

6.4 Philips Components is active in two areas: the stable TV- and CMT segment, and the hectic, fast-growing market for end products in the world of Audio / Video, Communication und Notebook PCs:



Philips Components still gets about half of its \$5.1 billion annual revenue from the sale of CRTs. Another 20% of sales comes from the FDS division. Both activities will be part of a joint venture in Korea with LG Electronics Co. Ltd..

6.5 In recent years, turnover has been stable including consolidation of some activities (e.g. passive components). In 2000, sales and operational income took off, primarily due to strong sales growth for Optical Storage (CD-RW):

	1997	1998	1999	t/m III 1999	t/m III 2000
Segment revenues	5,099	5,259	5,325	3,802	4,768
External sales	3,664	3,814	3,754	2,666	3,462
Comparable. increase	5%	5%	3%		20%
Operational income	255	44	117*	34*	199**
% of turnover	7.3%	5.2%	0.8%	2.1%	

* €169m of additional income from the sale of passive components
 ** €309m of additional income from sale of AC&M

6.6 Components is a major supplier of other Philips companies or “set-makers” within Consumer Electronics. In 1999, internal supplies posted the largest increase, a trend that is continuing in 2000.

Components / Intern. & ext. turnover (in NLG. €)			
	1997	1998	1999
Internal	1,595	1,445	1,571
External	3,664	3,814	3,754
Total	5,259	5,259	5,325

6.7 The improved results in 1999 and above all 2000 were due to the turn-around of Optical Storage, an improved product mix following the sale of analog products and the related lower price decline:

Core figures for Philips Components				
	1997	1998	1999	t/m III 2000
Volume increase	19%	21%	13%	25%
Nominal increase	27%	4%	-2%	30%
Comparable increase	5%	5%	3%	20%
Price decline	14%	16%	10%	5%

During the 1997 – 2000 period, volume consistently increased by a good + 15% per year. In 1997 and 1998, however, this gain was wiped out by a price decline of some 15%. The improved result is primarily due to the fact that price decline tapered off sharply while volume continued to increase at the same pace.

6.8 Along with the rise in sales figures, some disinvestment took place in 1997 – 2000, with a total turnover of some €1.3 billion:

Disinvestment in Components: 1997 – 2000 (in € mill.)			
	Turnover	Plants	Workers
1997-98	623m	25	7.033
1999-2000	578m	16	4.023

6.9 Despite the sale of some activities after 1998, capital needs for Components rose considerably. This is primarily due to the fact that a joint venture was set up with LG Electronics for the manufacture of LCDs.

Core figures for Philips Components (in € mill.)			
	1998	1999	t/m III 2000
Turnover	5,259	5,325	4,768
Assets 31/12 & 30/9	3,112	5,179	5,906
Investments	299	259	
Write-offs	278	357	

6.10 The development and industry plan for Components in the HVE strategy focuses on the determination of critical (sub)systems and on the guarantee that competitive production facilities will be available for the necessary components. Here, one example is "Mobile Telephones", an area where Philips is a major OEM supplier of components:

Able to supply:	150 components	
Willing to supply:	3 subsystems:	Power Storage Display

Philips is looking for opportunities to sign co-design and co-development agreements covering sub-systems with the leading global players (Ericsson / Nokia).

6.11 Components would like to become a software developer, systems integrator and assembler. A large share of non-critical components (electronic / mechanic) can be purchased from "third parties".

Components: World ranking (1998)		
	External	Internal
Key modules	67%	73%
Modules	9%	15%
Sub-systems	24%	12%

As far as internal sales are concerned, the share of component sales is higher than for external customers, who are increasingly tending to view Philips Components as a supplier of integrated sub-systems.

6.12 Component policy focuses on division into segments and the sale of non-critical components:

- In 1998, Philips produced some 40,000 components / type numbers, which were originally developed for its own end products.
- Some 300 core products account for 80% of turnover. These can also be supplied to other OEM businesses.

Driven by rapid market development, the HVE segment has shifted significantly towards parallel product development, in cooperation with first-tier suppliers capable of supplying complete sub-systems.

Display Components

6.13 In the Display Components segment, there has been talk for over 15 years of replacing CRT with new products (LCD/Flat Panel). However, the breakthrough on the high-volume market has failed to materialize. CRT and CMT technology is being supplied on a huge scale by manufacturers based in the Far East. In the next few years, sales volume for CRT and CMT on the world market will increase further.

Due to the price decline, particularly for smaller display units, this market segment has become irrelevant for Philips.

Price decline CMT			
		Estimate	
1997	1998	1999	2000
-35%	-35%	-15%	-5%

By the year 2004, small- and medium sized display units will account for some 55% of CRT volume worldwide, yet it is estimated that sales value will represent only 30% of the world market.

6.14 Philips is the market leader for CTV, out in front of Samsung and LG Electronics. Philips controls (together with Thomson) with European market and controls (together with Sony and LG) the US market, while Samsung, CPT and LG are the key players on the Asian market. In the Asia-Pacific region, Philips has a market share of some 5% and is thus insufficiently "present". In terms of volume, worldwide market growth is some 5% annually with a price decline ranging to 2% to 8% depending on type.

On the world market for CMT, Philips is in third place, behind Samsung and LG. Market volume is increasing at between 10% and 13%, which means that CMT accounts for over 30% of the entire display unit market. However, competition is keen in this sector, and prices are falling by up to 35% for smaller display units.

**Philips mkt. sh. for Display Components
(mid- 2000 / world market)**

TV tubes	18%
Monitor tubes	9%
Mobile Flat Display	35%
LG Philips LCD	23%

6.15 For TVT and CMT, from mid-1999 onwards, Philips has focused its market strategy and industry plan on the following:

- Aiming at the higher market segments rather than trying to achieve added value through maximum volume.
- Bringing out new products::
 - TVT real flat
 - CMT 19 inch
- Changing over to producing larger and wider display units:
 - investing in Jumbo TVT
 - investing in CMT 17 and 19 inch
- Changing over to producing in "low-wage countries":
 - Scaling back TVT 14 inch
 - Setting up production facilities in the Czech Republic
 - Shifting production capacity from the US to Mexico
 - Downscaling CMT 15 inch in Taiwan and delocalizing to China

6.16 The Components division is therefore looking for a "strategic partner" in the Asia-Pacific region. In mid-2001, Philips would like to launch a joint venture with LG for Display Components combining all CRT technology and related components. As at the end of 1999, Philips had a turnover of \$ 3 billion, 12 CRT production sites, 24,000 workers and an EBIT of \$ 157 million. This joint venture will also include the planned CRT production site in the Czech Republic. In the Display Components sector, in 1999 LG Electronics had a turnover of \$ 2.2 billion, 5 CRT production sites, 12,000 workers and an EBIT of \$ 357 million.

6.17 These figures prove that LG's production facilities are clearly more efficient than those of Philips. This will have the following consequences:

- Joint determination of an allocation policy: some Philips branches in Taiwan, the US and Western Europe are to be closed.
- Exhaustion of existing production capacity in Korea and establishment of new, large-scale production capacity in China, Mexico and the Czech Republic.
- Joint determination of a sourcing policy making it possible to take advantage of LG's position in relation to local outsourcing.
- To ensure cost-effective operation, some 8,500 of the present total of 36,000 workers employed by the two merger partners are to be gradually eliminated following the merger.

As facilities are expanded in the Czech Republic, China and Mexico, corresponding amounts of workers will be let go in Taiwan, Western Europe and the US.

LCD / Flat Display Systems

6.18 Philips has not really managed to master LCD production technology itself. Production facilities in Eindhoven have not kept up in terms of development. The attempt to solve this problem through a joint venture with Hosiden Japan failed. Losses in Japan quickly totalled over US\$ 100 million a year. In a fast-growing market, Philips was unable to supply LCD display units and lost market share. With a market share of some 3% in 1998, Philips is no longer at the top in this field. In Cells & Modules (small display units for handheld devices / mobile telephones), Philips leads with over 35% of the market.

6.19 Trends on the Flat Display market show that Philips, a market leader for CRT, must not let this market segment slide:

Market trends for Flat Display (in US\$ bill.)		
	2000	2005
Total	26.0	70.0
Mobile teleph.	9%	20%
Computers	61%	53%
TV	8%	14%
Others	22%	13%

In absolute terms, all market segments, taken together, are expected to double. This high growth is primarily due to mobile telephones and TV, which form the core of the HVE strategy and constitute two focal points for PCE, Philips Components and Philips Semiconductors.

6.20 The strategy for Flat Display Systems comprises several elements:

- Launching a joint venture with a successful manufacturer, LG-LCD / Korea, in order to be (remain) in touch with market trends.
- Restructuring existing facilities in Waalre (close) and Kobe (completely reorganize and possibly incorporate in LG's facilities).
- Further developing new technologies where Philips has maintained its "front-runner" position (PAL / PolyLED).
- Cooperating closely with Monitors and Semiconductors.

6.21 On 1 July 1999, Philips entered into a manufacturing joint venture with LG Electronics / Korea in the LCD field. Philips acquired a 50% holding in the new company, LG Philips LCD, for €1.7 billion.

Heavy investments have been made in Korea in production capacity for LCD display units since mid-1999. In a year and a half, LG Philips LCD has leapfrogged from fifth place on the market to first place, with annual volume increases of 40%. This expansion has been driven by Philips Semiconductors (ICs) and Philips Lighting (CFL / LumiLeds / Light Management).

Optical Storage

6.22 It is difficult for Philips to master a promising technology like Optical Storage because the "time to market" is too long.

In the CD-ROM field, Philips' market share has remained stuck at 10%, with insufficient volume for mass production. In the "rewritable" field (CD-RW), Philips has kept up with the competition, with market shares ranging from 20% to 40%, depending on the product. As regards the new DVD-RW market, Philips hopes to maintain this situation, thereby raising overall market share from 12% to some 20%.

6.23 Sales volume and financial results improved in the second half of 1999 and the first half of 2000. Owing *inter alia* to the doubling of CD-RW sales (data processing), Optical Storage showed a profit in the first half of 2000. The R&D centers and the first production plants are located in Eindhoven, Hasselt (Belgium), Singapore and Bunnyvale (USA). Over the past two years, "low-cost" production facilities in Győr (Hungary), Yuarez (Mexico) and Shanghai (China) have been further expanded.

6.24 In the Optical Storage sector, Philips has opted for a two-pronged market strategy:

- PC-OEM: from niche market to mass production
cooperation with PC makers: Compaq / Dell / IBM / HP
- Digital Video / Audio: close cooperation with Philips CE / HP / Sony
further development of DVD-RW standards

It is open to question whether Philips will be able to pull this strategy off on its own. It is looking for a partner to which it could outsource production of drives (e.g. Ionics / Philippines). However, another solution could be strategic cooperation with an Asian partner.

The question could be whether Philips Components might enter into a joint venture with "third parties" and cease to exist as an independent unit.

7. Expansion of Semiconductors

7.1 With sales of around \$5 billion in 1999, Philips Semiconductors is one of the top ten semiconductor suppliers in the world:

		Turnover / Mkt. share Chip-makers (in US\$ mill.)			
		1997	1998	1999	Mkt. share 1999
1.	Intel	21,746	22,675	26,806	15.9%
2.	NEC	10,222	8,271	9,210	5.5%
3.	Toshiba	7,253	6,055	7,618	4.5%
4.	Samsung	5,856	4,752	7,125	4.2%
5.	Texas Instr.	7,352	6,000	7,120	4.2%
6.	Motorola	8,067	6,918	6,394	3.8%
7.	Hitachi	6,298	4,649	5,554	3.3%
8.	Siemens	3,441	3,909	5,223	3.1%
9.	STM	4,019	4,300	5,077	3.0%
10.	Philips	4,440	4,502	5,074	3.0%

In Europe, Philips is the No. 3 supplier of semiconductors after STM – with which it is already cooperating – and Infineon, the Siemens subsidiary which went public just recently.

7.2 Semiconductors has introduced the Nexperia platform for digital video applications in set-top boxes. It is designed for consumer products at "living room prices". Combined with the Nexperia platform, the division invests in key technologies such as identification and security, power management, bluetooth wireless communications and user interface design. Philips is leading in developing the new generation of in-car entertainment and information systems as well as in-car networking systems.

7.3 In the telecommunications sector, Semiconductors has expertise in RF chipsets, digital processing systems, power control, networking, wireless communication and display drivers. Eight out of every ten mobile phones in the world are powered by Philips chips. Philips is a leading developer of third generation mobile communication systems, working closely with many of the main mobile phone companies.

In 1999m, the sale of the Handy manufacturer contributed some 40% to turnover. Semiconductors also focuses on the computer peripherals sector, including solutions for working across platforms; connecting peripherals (printers, cameras, scanners etc.) to PC systems; audio, video and connectivity solutions for multimedia; and driver and control solutions for displays.

7.4 As can be seen from the technology portfolio, Philips still has a strong presence in the field of analog chips (for audio and video applications) but has failed to carve out a place for itself in the field of MOS memory chips (for PCs):

Technology portfolio / 1999 (% of total turnover)		
	Total market	Philips
Discretes / Optos	13%	20%
Mos Logic	15%	18%
Mos Micro	38%	20%
Mos Memories	18%	-
Analog & mixed signal	15%	41%
Bipolar Digital	1%	1%

Thanks to the technical skills of its various productions sites, Philips Semiconductors is well placed to enter some growing sales markets:

Market segments and Semiconductors position (1999)		
	Breakdown Semiconductors	Mkt. growth 1999 - 2003
Communications	35%	25%
PC peripherals	18%	22%
Audio / Video	30%	16%
Automotive	12%	16%
Industrial	5%	15%

7.5 As a result *inter alia* of the takeover of VSLI, Philips Semiconductors is a fast-growing company that makes a stable and substantial contribution to the group's income:

Core figures for Philips Semiconductors (€ mill.)					
	1997	1998	1999	t/m III 1999	t/m III 2000
Sales	3,144	3,212	3,796	2,605	4,192
Comparable increase	1%	14%	5%		34%
Operat. income	771	765	614	447	938
% of turnover	20.3%	19.3%	13.5%	14.2%	19.2%

7.6 Europe accounts for some 40% of turnover in the Semiconductors division:

Semiconductor sales by region / 1999	
Total	€3.79bn
Europe	40%
North + South America	21%
Asia / Pacific	39%

Semiconductors has historically enjoyed a strong position in the Asia / Pacific region. However, sales in North America – one of the most important regions for the development of PCs – have lagged behind. The recent takeover of VLSI is to be seen in this light.

7.7 If we analyze the scope of internal supplies, Semiconductors is closely linked to Philips as a group. In recent years, nearly 17% of turnover for semiconductors has come from sales to other Philips subsidiaries. Consumer Electronics and Components are the biggest internal purchasers.

Core figures for Philips Semiconductors (in € bill.)				
	1996	1997	1998	1999
Internal sales	0.5	0.6	0.8	0.8
External sales	2.5	3.1	3.2	3.8
Total sales	3.0	3.7	4.0	4.6

7.8 In a fast-growing market, turnover for Philips Semiconductors is growing at roughly the same pace as with the major competitors:

Core figures for Semiconductors (in € bill.)		
	1999	t/m III 2000
Sales Philips	3,796	4,192
Comparable increase	5%	34%
Volume increase	14%	37%
Price decline	9%	3%
Volume growth worldwide		30%

7.9 Philips Semiconductors is a global organization with 18 manufacturing and assembly sites, 30 design centers and four system labs. It has main manufacturing facilities in:

- ▪ US: San Antonio / Albuquerque / Fishkill
- ▪ Far East Shanghai / Hsin Chu / Singapore
- ▪ Europe. Hamburg / Nijmegen / Böblingen / Caen / Hazel Grove

Recent additions have been the purchase of VLSI, a fully operational facility from IBM in East Fishkill, New York and the completion of a joint venture facility in Singapore together with TSMC / Taiwan.

The acquisition of the (unprofitable) company VLSI Technology / USA (purchased for € 1.1 bn) has strengthened the company's supply capability in terms of mobile telephones, set-top boxes and HDTV and considerably expanded Semiconductors' digital technology platform (ASICs) of Semiconductors and market position in the US.

7.10 Due *inter alia* to acquisitions in the US and despite the significant improvement in productivity, a performance which is repeated every year, the number of employees in the Semiconductors segment is slowly increasing, as can be seen from the rising number of production sites and the even faster growth in turnover:

	1996	1997	1998	1999	2000
Headcount	25,833	26,916	26,583	29,952	30,871

At the same time, Semiconductors is insisting on outsourcing at least 20% of turnover to strategic partners (e.g. TSMC / Taiwan)

7.11 The Semiconductors division has considerable capital needs (capital-intensive production) and has outstripped turnover growth in recent years (anticyclical investing):

Core figures for Philips Lighting			
(in € bill.)			
	1998	1999	t/m III 2000
Turnover	3,212	3,796	4,192
Assets 31/12 & 30/9	3,106	5,188	8,231
Investments	437	622	1,425
Depreciation	455	467	
R&D	508	783	941

The bulk of the expanded production capacity comes from takeovers (VLSI / IBM New York) or from new companies founded in cooperation with strategic partners (Singapore / TSMC). However, investments have outstripped depreciation in existing establishments as well.

At present, Philips can afford these investments. However, they will not yield the same high profits as in past years. The management team at Semiconductors has set itself the strategic goal of remaining in the top five in the world. The question is whether Philips in coming years will be prepared to maintain this investment level in Semiconductors. If results lag behind expectations and investment needs remain considerable, a decision could be taken to sell off part of Semiconductors as an independent listed company or to enter into a joint venture with another supplier.

8. Consolidation of Lighting

8.1 Philips Lighting is number one in the global lighting market, a position supported by leadership in innovation combined with a systematic approach to seeking out new market opportunities. Its strategic ambition is to set the pace in the lighting industry as the first-choice innovative partner for the supply of creative and cost-effective lighting solutions. Products include a full range of incandescent and halogen lamps, compact and normal fluorescent lamps, high-intensity gas-discharge and special lamps, lighting electronics, automotive lamps and batteries.

8.2 The world market for Lighting can by and large be broken down into three producers: General Electric, Osram / Siemens und Philips. Each has around 20% of the market for Lamps and a varying share of other production fields.

This division of the world market has various consequences:

- A high "entry threshold" for new suppliers
 - a high degree of technological complexity and capital intensity
 - mass production
 - worldwide commercialization
- Market, production and pricing development controlled according to consultations with the other major producers
- Gradual introduction of new products and a controlled value-oriented approach for existing products

8.3 Turnover for Philips Lighting is composed of a few (related) product groups. In this connection, Lamps consistently makes the biggest contribution to turnover and income:

Lamps	51%
Luminaires	19%
L.E. & Gear	16%
Automotive & Special	11%
Rest	3%

8.4 On a stable market, i.e. a market with a volume growing annually by some 2%, turnover for Lighting has been rising only gradually for several years:

Core figures for Philips Lighting						
(€ bill.)						
	1996	1997	1998	1999	t/m 3 1999	t/m 3 2000
Sales	4,000	4,549	4,453	4,548	3,333	3,684
Comparable increase		5%	1%	1%		2%
Operat. income	319	522	595	602	447	492
% of turnover	7.8%	11.3%	13.2%	13.1%	13.4%	13.4%

Since 1996, sales margins have improved considerably thanks to a better marketing mix, more stringent purchasing policies and reduced indirect costs.

8.5 The Lighting division has considerable capital needs (capital-intensive production) but current investments are limited:

Core figures for Philips Lighting			
(€ bill.)			
	1998	1999	t/m III 2000
Turnover	4,504	4,597	3,684
Assets 31/12 & 30/9		2,849	3,096
Investments	191	176	
Depreciation	173	161	

Lighting operates primarily on the basis of self-contained procedures and has a relatively old stock of machinery. Investments are focused on prolonging existing lines or moving production sites to "low-wage countries" (Poland / Mexico / China).

8.6 Europe accounts for nearly half of total turnover for Lighting. Philips is not sufficiently present in the Asia / Pacific region:

Turnover for Lighting by region / 1999	
Total	€4.6bn
Europe	47%
North + South America	36%
Asia / Pacific	17%

8.7 The market shares of Philips Lighting vary according to product group and region:

Mkt. share of Philips Lighting 1999				
	Lamps	Lumin.	LE&G	Auto
Western Europe	35	18	22	37
Eastern Europe	23		44	
North America	22			6
Latin America	34	9		28
Japan	3			25
Asia/Pacific	19	12		20
Total	21		26	22

Above all for Luminaires, market share is too low to produce at sufficient volume. In North America, Philip is not represented in this market segment at all, as a result of which income lags behind.

8.8 Thanks to the introduction of new lamp types and an improved product mix, income for Philips Lighting has remained stable despite an accelerating price decline. Important market introductions of recent years:

- Halogená, launched recently in the US . With its unique form, this lamp offers consumers whiter light and a lifetime about three times longer than standard incandescent lamps.
- The CLEO Natural range of tanning lamps which apply the latest scientific and medical knowledge in providing a sensible, effective tan in a soft and gentle way.
- The TL5 office lighting system, consisting of the T5 small-diameter (16mm) fluorescent lamp along with efficient TL5 fixtures incorporating sophisticated lighting controls, to provide high-quality lighting and minimize energy demands
- The UHP (Ultra High Power) lamp, for use in LCD projectors. UHP also increases the application possibilities of fiber-optic lighting.
- BlueVision automotive lamps with the high-tech, high-end look; Xenon automotive lamps that give more than twice as much light as conventional halogen lamps while using only half the energy

The division's extension of its LumiLeds joint venture with Agilent Technologies (a spin-off from Hewlett-Packard) in the field of LEDs (light-emitting diodes) strengthens its leading position in this field and underlines its confidence in this technology being applied to an increasing range of applications.

8.9 Since product innovations succeed more or less well, the market share of Philips Lighting may vary considerably depending on the product inside the Lamps division:

Market share Lamps /Europe (1999)	
GLS	38%
TL	40%
CFL	34%
Halogen	15%
HID	45%

Philips Lighting was clearly too late with the introduction of halogen lamps, as Osram was faster to market.

8.10 In Western Europe, Philips Lighting has faced a few difficulties of late:

- Slow introduction of new technologies / products with a long-lived development cycle, fixed agreements with major "outlets" for commercialization
- New suppliers of standard products which are based outside Europe (e.g. in China)
- A stagnating market in Western Europe and further concentration of GWBs
- A growing market in Eastern Europe, where local production and new competitors have broken through and positioned themselves (Pila too expensive for the Russian market)
- Phasing-out of market-regulating mechanisms, a move which has exacerbated the price decline for standard products.

8.11 In the past, prices for standard products used to fall by some 2% to 3% per year. The division was able to offset this within the existing production units and logistic chains by taking the following steps:

- Introducing new "specs"
- Developing an improved mix favoring lamps with higher margins
- Increasing volume and maximizing related advantages
- Introducing measures to enhance production efficiency
- Improving logistics

In the medium term, mass production is to be shifted to a low-wage country (Poland), which means that new products will have to be designed and tested in Western Europe (T5).

8.12 Under pressure from international competition, prices for standard products – and now for Lighting as well – have been falling by 8% yearly, a figure too large to offset by normal cost-cutting programs. In the short run, falling prices threaten production in Western Europe. Philips Lighting is reacting as follows:

- Accelerating delocalization of production to Eastern Europe (Terneuzen / Weert)
- Redirecting R&D design into a network structure, with more input from branches in Eastern Europe (procedures design) and the Far East (electronics)
- Restructuring logistical procedures and inventory management.

8.13 It may be concluded from the (negative) results for Pila / Poland that these measures did not prove sufficient in the medium term to cope with the price decline:

- Wage advantages in Poland were rapidly wiped out by an accelerating price decline, and this scenario may well be repeated (e.g. in the Ukraine).
- Thorough product replacement is difficult or impossible in Poland. Consequently, major price changes are no longer possible.

Over the medium term, Philips intends to take other steps to remain a market leader on the Lighting market.

8.14 Some few key opportunities which offer good prospects for Philips' Western European branches are as follows:

- Concentrating on basic product design focusing on the replacement of standard lamps (CLF / T5) and the integration of Electronics (Oss)
- Reorienting the component strategy: new materials / systems through cooperation and outsourcing
- Developing niche markets with existing standard products in various implementations (OEM / Prof) and of products with another pricing profile
- Designing a marketing strategy and a separate organizational structure for specialization

9. Expansion of Medical Systems

9.1 Philips Medical Systems (PMS) is among the world's top three suppliers of diagnostic imaging equipment, information technology and related services. It is committed to leading the way in developing technologies and services to help healthcare providers improve quality and cost-effectiveness of patient care, from diagnosis to treatment. Its strong customer partnerships extend from world-renowned teaching hospitals to small clinics in less developed countries.

Headquartered in the Netherlands, PMS operates manufacturing sites in the Netherlands, Germany and the USA. Extensive research and development is conducted in close co-operation with Philips Research and over 30 medical and technical institutions.

9.2 PMS's range of equipment covers:

- X-ray: the Diagnost family offers the widest range of X-ray systems available, and half the world's cardiology X-ray procedures are performed using Philips' equipment.

Magnetic resonance imaging: the Gyroscan Intera is Philips' new general-purpose system, which makes truly interactive scanning a reality.

Computed tomography: Philips' two new systems, CT Aura and CT Secura, are designed to perform a wide range of diagnostic procedures, from routine to complex.

Ultrasound: through its subsidiary, ATL Ultrasound, PMS offers all-digital broadband ultrasound imaging expertise. The performance and quality of ATL's equipment are widely recognized and it will be used by NASA in the international space station launching in 2001.

Medical Systems supplies products for the professional market, a field from which Philips has been gradually withdrawing. This division offers relatively few advantages and does not contribute much to the Philips brand. Analysts expect that it will be sold off to a third party following consolidation via acquisitions.

10. Domestic Appliances and Personal Care

10.1 The Domestic Appliances and Personal Care (DAP) division manufactures and markets home comfort and kitchen appliances, shavers and other personal care products. Personal care products include electric shaver (38% of total turnover), female depilatory products, skin care, dental care, hair-care, fitness and sun-care products. Among the division's kitchen appliances are mixers, blenders, food processors, toasters, coffee makers, deep fryers, and grills. Its home comfort range of products includes vacuum cleaners, irons, air cleaners and heating appliances.

10.2 DAP has eight production sites, which employ a total of some 9,500 workers. In 1999, Europe accounted for around 55% of turnover (€ 1.8 billion), as compared with 17% for North America, 11% for Latin America and about 13% for Asia. Analysts also expect this group to be sold off to a “third party”.

Overview of major acquisitions in 1997 - 2000

1998			
ATL Ultrasound	USA	Medical Systems	€732 mill.
1999			
Micrion / FEI			US\$ 30 mill.
LG LCD 50%	Korea	Components	€1.7 bill.
VLSI		USA Semiconductors	€1.1 bill.
Voice Control Systems (VCS)	USA		€56 mill.
Purchase of own shares			€1.5 bill.
2000			
ADAC Laboratories	USA	Medical Systems	US\$ 426 mill.
Medquist	USA	Medical Systems	€1.3 bill.
Optiva Corporation	USA	DAP	
LG Display 50%	Korea	Display Components	
Purchase of own shares / July			€1.7 bill.
LG Electronics 15%	Korea		

Overview of major activities/businesses sold off in 1997 – 2000

1997

Split-up from Grundig / Germany

Car Systems	in VDO	€625 mill.
11% holding in ASML		
50% holding in UPC	in UIH	€223 mill.
5.4% holding in TMSC / Taiwan		€898 mill.
25% holding in Bang & Olufsen		f. 160 mill.
Cartes et Systemes / France	in De La Ruie	GBP 56.1 mill.
Mechatronics / Holland		MBO

1998

PIE Medical	an Esaote SpA / Italien	
75% holding in Polygram		12% Seagram +€ 5.2 bill.

Philips Components sold off lots of activities in 1997 / 98:

25 plants some 7,000 employees

Prof. Systems Klagenfurt	Hard Ferrites
Motors Dordrecht	Powder Uden
Dry Reed Switches	Film Capacitors
FSM	Resistors
Phonotics	Ceramic Caps
HDD	Electrolytic caps

1999

Complex Programmable Logic Devices	
Conventional Passive Components	€358 mill.
Winding-up of joint venture Consumer Communication - Lucent	

2000

Origin	Merger with Atos / France	
Discrete & Ferrite Ceramic	an Yageo	€650 mill.
24% Anteile ASML		€2.71 bill.
Holding in JDS Uniphase		€681 mill.
Philips Projects	in Tyco	
Mecoma		