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31 August 2001

IT Hardware

Psion

SMALLER COMPANIES

UK

Upgraded from Sell to

Reduce

Current price	**62p**
Target price	**55p**

Weightings

Stock rel to its UK sector

Under	Neutral	Over

UK sector rel to FTSE-All-Share

Under	Neutral	Over

Codes

Reuters RIC	PON.L
Reuters REDD	5848
Bloomberg	PON LN

Key data

Mkt cap (GBPm)	254
Mkt cap (US$m)	369
Free float (%)	100
No of shares (m)	414
EV (GBPm)	261
NAV/Share (p)	50
Gearing (%)	0.00
Next event March 2002—Finals	

Price rel to FTSE All-Share

1M	3M	12M
-31.0%	-50.2%	-90.5%

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Psion exits tough markets, but outlook for Teklogix and Symbian weakens

- **Potential for major disappointments is greatly reduced, but immediate outlook for Teklogix and Symbian is unclear**
- **Symbian's 2002 cash call will focus investor attention on near term issues and not its long-term potential**
- **With little good news on the horizon, the valuation is not cheap enough to prompt a move to a positive recommendation yet**

H1 results

There were few surprises in the H1 numbers following Psion's major restructuring announcement in July, when Psion said it was exiting the troubled consumer PDA and PC card markets to focus on its profitable wireless networking business and Symbian. Turnover of £100.5m and the pre-exceptional loss before tax of £13m were both in line.

Psion is taking a £41m restructuring charge this year (£29m taken in H1). Combining that with the poor trading experienced in H1 means that we expect Psion to make a PBT loss (before goodwill amortisation) of £60.5m. This new forecast is £3m worse than previously expected, due to Psion's uncertainty over the prospects for its US based Teklogix division in H2 2001.

Valuation and recommendation

If we assume the market is putting Teklogix on a PE of 20x (our EBIT forecast for 2001 is £10m), the implied valuation of Symbian is currently £500m. While this is not outrageously expensive, it is still speculative, and as there are few Symbian product releases on the horizon, this valuation could be vulnerable to bad press in the coming months. This situation is not helped by the fact that Psion risks being pushed into debt by a cash call from Symbian next year. Although Psion's exit from its troubled businesses means the potential for nasty surprises has now diminished, it is hard to find a reason to turn positive just yet. Upgraded to Reduce.

Year to 31 Dec	Sales GBPm	Reported pre-tax GBPm	HSBC PBT GBPm	HSBC EPS (p)	HSBC tax (%)	PE (x)	PE rel	Net div (p)	Yield (%)	EV/ EBITDA (x)	ROIC (%)
00	220	-8	-1	-0.92	-31			0.62	1.0	25.5	0.0
01e	188	-85	-62	-14.86	0			0.00	0.0		0.0
02e	162	-15	-1	-0.17	2			0.00	0.0	9.2	0.0
03e	186	-1	13	2.20	-390	27.9	165.5	0.00	0.0	6.6	2.0

HSBC

Recommendation

Given that Psion has exited all its declining businesses, we feel a Sell recommendation is too harsh. However, it is difficult to find an excuse to move to a positive recommendation right now.

Nokia has repeatedly stated it is committed to Symbian as *the* open platform for mobiles

Symbian does offer potential to deliver substantial profits and it has some big hitters amongst its supporters. Symbian's most vocal promoter is Nokia and we expect to hear more encouraging words on Symbian from Nokia at its next set of results. NTT DoCoMo is also a fan of Symbian and this might force its adoption by the Japanese handset producers[1].

Unfortunately, two of Symbian's other shareholders seem less enthusiastic, and are investigating alternative software offerings

The problem with trying to place a value on Symbian is that it is impossible to determine exactly what level of profits Symbian will deliver in the future. Competition from handset manufacturers' internally developed software and from rivals such as Microsoft will no doubt force royalty rates down once the smartphone market takes off. Sentiment is not helped by the fact that two of Symbian's shareholders (Motorola and Matsushita) seem unenthusiastic about using Symbian in their forthcoming smartphones, and recent trade fairs do not give us much hope that we will see a deluge of Symbian products hit the market over the next 6–12 months.

Symbian's cash call will draw attention to its poor short-term outlook and Psion's declining bank balance

These delays mean that Symbian's breakeven date is being pushed back and Psion will have to inject more cash into the venture in H1 2002. Psion ended H1 with £18m, and in H2 it hopes to be cash neutral at the operating line. However, Psion also needs to spend £9–10m on restructuring in H2, which will leave it with barely enough to fund another round of Symbian financing. Psion put £5.7m of cash into Symbian in Q1 2001 and we suspect it will have to put in a similar amount in 2002.

Even though there is a good chance Symbian will be successful in the long term, we are unlikely to see any newsflow that will support this view in the coming months

Newsflow regarding Symbian is unlikely to provide much cheer over the coming months. The stockmarket is still hoping that GPRS phones will kick-start the handset market before Christmas, whereas our view is that early GPRS phones do not yet provide enough new functionality to excite consumers. So while sentiment over the mobile internet is already low, it could be due for another drubbing.

Ironically, it is applications like Symbian that will ultimately drive demand for GPRS phones, but this will not happen any time soon, and the stock market has tired of 'jam tomorrow' stories. We don't expect the next few months to yield any hard evidence that Symbian is on track for guaranteed success.

We are taking Psion off a Sell, but feel it is still too early to push a positive recommendation

Although the risk of Psion producing another major disappointment has passed now that it has exited the PDA and PC card markets, we are reluctant to push a positive story just yet. Psion's declining cash position is likely to focus attention on Symbian's poor short-term prospects, and outlook for Teklogix is far from clear. Upgraded from a Sell to Reduce.

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[1] Many Japanese producers hope to take a larger share of the global market now that Japan has adopted WCDMA as its 3G technology (the same as Europe). Up until now, Japan has run a proprietary mobile system incompatible with other markets.

Valuing Symbian

To put a hard and fast value on Symbian, we need to know how many Symbian devices will ship in the future and what royalty rate Symbian will charge. These are not two independent questions. The bigger the market for smartphones, the lower the royalty rate needed to cover costs. Symbian may find itself up against competitors who are prepared to charge much less then the US$5 cost of Symbian's smartphone platform (*Pearl*) and the US$10 cost of its two PDA platforms (*Quartz and Crystal*).

Competition

Symbian's competition comes from two areas:

- Internally developed operating systems
- Other third-party vendors (Microsoft and Palm)

Internally developed operating systems

Motorola's new smartphone uses a proprietary OS instead of Symbian. Matsushita has said it will also examine alternatives to Symbian

Back in January, Motorola cancelled its joint venture with Psion to develop a GPRS phone/PDA based on Symbian software. However, Motorola recently released the Accompli, a GPRS phone/PDA using a proprietary operating system, which must be fairly galling for Symbian.

Matsushita, another Symbian shareholder, has also made some unhelpful comments recently. The quote below is from the *Electronic Engineering Times* (27 August 2001) following the announcement that NEC and Matsushita are pooling their resources to develop 3G phones:

> The combination of Symbian OS and ARM processor is popular among cell phone vendors, but the two companies suggested other possibilities. "If we use an operating system that requests a royalty, it will push up the cost," said NEC's Sugiyama. "We are using different operating systems now," said Yasuo Katsura, president of Matsushita Communication. "We are going to find through discussion [with users and carriers] what is the most suitable [OS] for 3G phones"

Other third-party vendors

Palm OS has made excellent headway in the PDA market, but recent sales figures show Microsoft's PocketPC is gaining share rapidly. We believe that tablet PDAs (eg the Palm Pilot and Symbian's Quartz platform) and keyboard devices (eg the Nokia 9210, which uses Symbian's Crystal platform) will remain niche markets—Symbian's financial success will largely depend on its success in smartphones.

Although Microsoft has not had much success with selling Stinger to handset manufacturers, it is now promoting the software to operators

Symbian's only smartphone competitor is Microsoft, which is aggressively pushing its Stinger platform via its relationship with the British start-up Sendo. Sendo will brand their Stinger-based smartphones with customers' logos (eg Vodafone, which is reportedly a customer), and has received cUS$10m of funding from Microsoft. This implies Microsoft is prepared to subsidise Stinger in order to see it gain a foothold in the market and we suspect Microsoft would be content with much lower royalties than the US$5 currently being charged by Symbian.

Pricing

Symbian currently employs c650 staff and 150 contractors and this does not need to grow in the medium term. We estimate that Symbian's cost base is currently in the region of US$75m pa.

In our pricing model, we assume that Symbian has a rival with a similar cost base. The rival will offer customers low prices in an effort to take market share—the rival price offered would be enough to give it a modest economic profit if it took 100% market share.

It is possible that Symbian could find itself up against competitors who give away mobile OS software for free

We believe this accurately models Microsoft's likely strategy in wireless software. In fact, pricing could be even more aggressive than this—it's perfectly conceivable that Microsoft could give away its mobile OS for free to sell high value enterprise software to the network operators.

In our model, by 2003, nearly 100m data-oriented wireless information devices (WIDs) are being shipped (smartphones + wireless PDAs). This market would be large enough for Symbian's rival to charge as little as US$1.00 per unit in an attempt to take 100% share.

We believe that Symbian's customers may be prepared to pay more for Symbian than for the competition. Nokia in particular is a very vocal supporter of Symbian and appears determined to keep Microsoft out of the market. However, it is difficult to envisage Nokia paying US$5 for Symbian's smartphone platform for US$150 handsets, especially if rivals are able to produce cheaper phones using subsidised Stinger software.

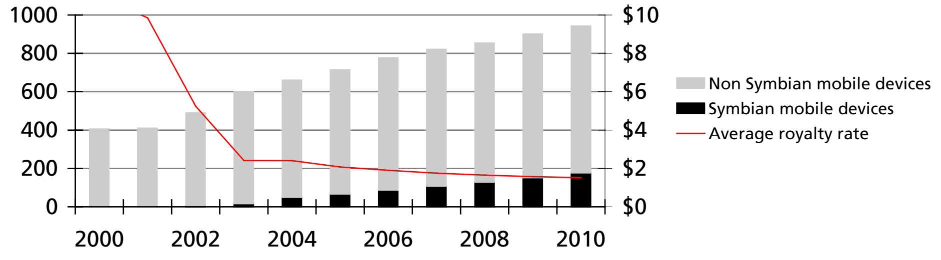
The biggest swing factor when trying to place a value on Symbian is establishing exactly what premium customers will be prepared to pay for Symbian. Our model suggests that this premium will need to be around US$1.00 per phone to justify today's share price. This sounds reasonable, given that smartphones will probably sell to operators for US$150–200.

Risks

It is not difficult to envisage a scenario that justifies Symbian's current valuation

Our model indicates that it is highly plausible that Symbian could prove itself to be worth much more than the £500m implied by Psion's current share price. Even if royalty rates fall to US$2.00 once the volume market for wireless information devices takes off, Symbian can justify its current valuation if only 19% of 950m total wireless devices use Symbian by 2010.

Scenario required to justify Symbian's current valuation of £500m



Source: HSBC

These numbers in the chart above do not look outrageous. Although the long-term handset numbers can be debated, Symbian's valuation is surprisingly insensitive to these: if the total market is smaller than expected, competitors will have to charge higher prices to cover their costs, thereby allowing Symbian to charge higher prices as well.

The only pointer we have to whether the 19% penetration target is realistic is Nokia's recent comment that it expects to use Symbian in at least half its 3G (and, we suspect, GPRS) phones—this alone could see Symbian in 10% of all mobile devices.

The main downside risk is that customers prove unwilling to grant Symbian any price premium at all, and aggressive competition means that future revenues will barely cover Symbian's operating costs. In this scenario, royalty rates could collapse to just US$0.5 per device, giving Symbian an NPV close to zero.

The biggest risk for investors is that royalty rates fall to the point where Symbian only just covers its costs

Symbian model

Symbian Year to Dec 31 $m	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
MODEL SUMMARY											
Total handset shipments		*410*	*490*	*600*	*660*	*715*	*777*	*821*	*854*	*901*	*943*
WIDs as % of handsets		*0%*	*10%*	*15%*	*20%*	*25%*	*30%*	*35%*	*40%*	*45%*	*50%*
Proportion of mobile devices using Symbian		*0%*	*0%*	*2%*	*4%*	*9%*	*11%*	*13%*	*15%*	*17%*	*19%*
Symbian's average royalty rate		*9.92*	*5.25*	*2.49*	*2.50*	*2.14*	*1.95*	*1.83*	*1.72*	*1.63*	*1.58*
Symbian revenue		*23*	*38*	*63*	*112*	*193*	*220*	*247*	*270*	*298*	*329*
Symbian operating profit		*(49)*	*(35)*	*(14)*	*28*	*99*	*118*	*136*	*151*	*169*	*189*
MARKET SIZE											
Total handset shipments		*410*	*490*	*600*	*660*	*715*	*777*	*821*	*854*	*901*	*943*
WIDs as % of handsets		*0%*	*10%*	*15%*	*20%*	*25%*	*30%*	*35%*	*40%*	*45%*	*50%*
Symbian licensees' market share		*75%*	*75%*	*75%*	*75%*	*75%*	*75%*	*75%*	*75%*	*75%*	*75%*
Proportion of licensees' WIDs that use Symbian		*5%*	*5%*	*15%*	*25%*	*50%*	*50%*	*50%*	*50%*	*50%*	*50%*
Proportion of mobile devices using Symbian		*0%*	*0%*	*2%*	*4%*	*9%*	*11%*	*13%*	*15%*	*17%*	*19%*
Pearl phones as % of handsets		*0%*	*10%*	*14%*	*19%*	*24%*	*29%*	*33%*	*38%*	*43%*	*48%*
Quartz phones as % of handsets		*0%*	*1%*	*1%*	*1%*	*1%*	*2%*	*2%*	*2%*	*2%*	*3%*
Total Pearl style units (m)			*47*	*86*	*125*	*170*	*221*	*273*	*325*	*385*	*448*
Total Quartz style units (m)		*1*	*2*	*5*	*7*	*9*	*12*	*14*	*17*	*20*	*24*
WID shipments		*1*	*49*	*90*	*132*	*179*	*233*	*287*	*342*	*405*	*472*
PRICING											
Symbian Pearl price ($)		*5.00*	*5.00*	*2.09*	*2.10*	*1.72*	*1.53*	*1.42*	*1.37*	*1.32*	*1.30*
Symbian Quartz price ($)		*10.00*	*10.00*	*10.00*	*10.00*	*10.00*	*10.00*	*9.50*	*8.35*	*7.48*	*6.91*
SYMBIAN REVENUE											
Royalties		1	10	25	62	143	170	197	220	248	279
Consulting	20	22	29	37	50	50	50	50	50	50	50
Total turnover	**20**	**23**	**38**	**63**	**112**	**193**	**220**	**247**	**270**	**298**	**329**
Growth		*+15%*	*+66%*	*+63%*	*+79%*	*+73%*	*+14%*	*+12%*	*+9%*	*+10%*	*+10%*
COSTS											
Software gross margin (after Java, L&H royalties etc.)	*95%*	*95%*	*95%*	*95%*	*95%*	*95%*	*95%*	*95%*	*95%*	*95%*	*95%*
Consulting gross margin	*100%*	*100%*	*100%*	*100%*	*100%*	*100%*	*100%*	*100%*	*100%*	*100%*	*100%*
Total number of employees	*600*	*650*	*650*	*650*	*683*	*717*	*752*	*790*	*830*	*871*	*915*
Cost per employee $k)	*100*	*110*	*113*	*116*	*118*	*121*	*124*	*128*	*131*	*134*	*137*
Gross profit	20	23	38	61	109	186	212	237	259	286	315
Gross margin	*100%*	*100%*	*99%*	*98%*	*97%*	*96%*	*96%*	*96%*	*96%*	*96%*	*96%*
R&D costs	(42)	(43)	(44)	(45)	(49)	(52)	(56)	(60)	(65)	(70)	(75)
R&D as a percentage of sales	*209%*	*186%*	*115%*	*72%*	*43%*	*27%*	*25%*	*24%*	*24%*	*23%*	*23%*
SG&A costs	(27)	(29)	(29)	(30)	(32)	(35)	(37)	(40)	(43)	(47)	(50)
SGA as a percentage of sales	*133%*	*124%*	*76%*	*48%*	*29%*	*18%*	*17%*	*16%*	*16%*	*16%*	*15%*
Operating profit	**(49)**	**(49)**	**(35)**	**(14)**	**28**	**99**	**118**	**136**	**151**	**169**	**189**
Operating margin (%)	*-242%*	*-210%*	*-92%*	*-23%*	*25%*	*51%*	*54%*	*55%*	*56%*	*57%*	*58%*

Note: these figures are denominated in US$

Source: HSBC.

Forecasts

Psion Year to Dec 31 £m	**1997** Full	**1998** Full	**1999** Full	*2000* *H1*	*2000* *H2*	**2000** Full	*2001* *H1*	*2001* *H2*	**2001e** Full	**2002e** Full	**2003e** Full
TURNOVER											
Psion Enterprise / Teklogix	12.9	22.1	24.2	*17.9*	*46.2*	64.1	*63.9*	*79.1*	143.0	157.0	181.0
Psion Digital Solutions	178.1	137.7	127.2	*76.4*	*79.2*	155.6	*36.5*	*8.5*	45.0	5.0	5.0
Total turnover	**191.0**	**159.8**	**151.4**	*94.3*	*125.4*	**219.7**	*100.4*	*87.6*	**188.0**	**162.0**	**186.0**
		-16.3%	*-5.3%*			*+45.1%*			*-14.4%*	*-13.8%*	*+14.8%*
OPERATING PROFIT											
Psion Enterprise / Teklogix			2.7			5.7	*3.3*	*6.7*	10.0	13.0	18.0
Enterprise operating margin			*+11.2%*			*+8.9%*			*+7.0%*	*+8.3%*	*+9.9%*
Digital Solutions operating profit			7.2			4.7	*(7.7)*	*(7.3)*	(15.0)	(5.0)	0.0
Connect operating margin			*+5.7%*			*+3.0%*			*-33.3%*	*-100.0%*	*0%*
Group overhead and one-offs			(3.8)			(6.8)	*(26.8)*	*(19.7)*	(46.5)	(2.0)	(2.0)
Operating profit	**10.6**	**11.1**	**6.1**	*4.1*	*(0.5)*	**3.6**	*(31.2)*	*(20.3)*	**(51.5)**	**6.0**	**16.0**
Operating margin	*5.5%*	*6.9%*	*4.0%*	*4.3%*		*1.6%*			*-27.4%*	*3.7%*	*8.6%*
ASSOCIATES AND JVs											
Symbian (28%)			(7.0)	*(5.2)*	*(5.3)*	(10.5)	*(6.3)*	*(3.7)*	(10.0)	(7.0)	(3.0)
Travanti (47.5%)						(1.3)	*(1.0)*		(1.0)		
INTEREST AND PBT											
Net interest	0.8	2.1	4.0	*4.1*		6.9	*0.7*	*0.3*	1.0	(2.0)	0.0
Goodwill amortisation			(0.1)			(6.7)	*(16.6)*	*(7.0)*	(23.6)	(23.6)	(23.6)
Other		11.4	1.5								
FRS3 PBT	11.4	24.6	4.5	*3.0*		(8.0)	*(54.4)*	*(30.7)*	(85.1)	(26.6)	(10.6)
Add back disposal losses (profits)		(11.4)	(1.5)								
Add back goodwill amortised			0.1			6.7	*16.6*	*7.0*	23.6	14.0	14.0
HSBC PBT	**11.4**	**13.2**	**3.1**	*3.0*	*(4.3)*	**(1.3)**	*(37.8)*	*(23.7)*	**(61.5)**	**(12.6)**	**3.4**
TAX AND EARNINGS											
Tax	(3.7)	(3.6)	(1.2)	*(1.0)*		(2.5)			0.0	3.8	(1.0)
Tax rate	*32%*	*15%*	*27%*	*33%*		*30%*			*0%*	*30%*	*30%*
Dividends	(1.9)	(2.1)	(2.4)	*(0.8)*		(2.6)			0.0	0.0	0.0
FRS3 EPS	2.1p	5.5p	0.9p	*0.5p*		(2.6p)			(20.6p)	(5.5p)	(2.8p)
HSBC EPS	**2.1p**	**2.5p**	**0.5p**	*0.5p*		**(1.0p)**			**(14.9p)**	**(2.1p)**	**0.6p**
FRS3 EPS (fully diluted)	2.1p	5.5p	0.8p	*0.5p*		(2.6p)			(20.6p)	(5.5p)	(2.8p)
HSBC EPS (fully diluted)	2.1p	2.5p	0.5p	*0.5p*		(1.0p)			(14.9p)	(2.1p)	0.6p
Dividend (p)	0.51p	0.55p	0.62p	*0.2p*		0.62p			0.00p	0.00p	0.00p
Dividend cover	*4.1x*	*10.0x*	*1.4x*			*-4.2x*					

Source: HSBC

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