Nokia: Yuck

STRONG BUY @ €2.94

- **Monetisation of the intellectual property asset is key. Share price does not reflect the potential for IPR profits. If Nokia's management does not monetise this asset, someone else might. IPR revenue growth and profit contribution should exceed expectations.**
- **The net cash and NSN JV cover 80% of the current market cap of the business. Fear and loathing in the market make downside limited. One of the most heavily-shorted, most disliked large caps left in Europe.**
- **Initial price target of €5, based on sum of the parts with the Devices division valued at zero. A turnaround in Nokia's Device business (i.e. a hit smartphone) would offer further upside. We can see scenarios where Nokia's equity can more than double on a long-term basis.**
- **We can finally see a credible path back to profits and free cash flows.**

SAMPLE RESEARCH - NOT CURRENT INVESTMENT ADVICE

Company	Nokia
Recommendation	STRONG BUY
Price	€2.94
Price Target	€5
Upside	+70%
Price Downside	€2.50
Downside	-15%
Relevant Valuation Metric	Sum of The Parts

THE ANALYST

In this note we show that investors today are being offered a rare opportunity in an €11bn market cap business that could be valued twice as high in the future. Given the overlay of fear and loathing, the net cash position and the profitable Networks business, downside from the current share price is limited. The company is also progressing on a strong cost-cutting program and we smell the whiff of change in the air.

We understand Nokia is one of the most disliked and heavily shorted large caps in Europe. Just for a moment, conceptualise that Nokia is valued at 2.5% of Apple's market cap. Google paid $13bn for Motorola and Nokia's EV today is $8bn. Something is probably wrong.

Investors should start to focus on the component pieces of Nokia; intellectual property smart phones, feature phones, location, networks and the balance sheet.

How do we get to €19bn (€5 per share) of value for Nokia?

1. Device business = zero.
2. 15x IPR profits in 2016 = €8bn.
3. Net cash in 2016 = €6bn.
4. 50% stake in Nokia Siemens Networks = €4bn.
5. HERE/Location = €1bn.

At a minimum, anyone with a short position needs to take a moment to read on:

Point 1: IPR monetisation will be higher than expectations and will become the core piece of value in the business. IPR could contribute >€0.5bn profit in 2016.

Point 2: The 50% share in NSN is becoming a profitable and valuable asset.

Point 3: The balance sheet structure is completely wrong.

Point 4: Nokia is progressing on the turnaround plan.

Point 5: The Location division is probably not worthless.

Point 6: Nokia has significant unutilised tax losses that may not be worthless.

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1) IPR Monetisation.

Key points:

- **It is very difficult to estimate the standalone contribution from Nokia's IPR. We think most analysts model flat revenue and haven't tried to do proper estimates.**
- **Management are not yet focussed on this and are still of the mindset to build the next best phone, rather than become an IP company.**
- **There is enormous unrecognised value in the IP asset.**
- **Nokia could be making >€0.5bn contribution from IP in 2016. We would value this conservatively at 15x, making a business potentially worth >€8bn.**

Further detail:

- Estimating the current contribution from the IP portfolio is extremely difficult and to be clear, Nokia is still run as a device handset business, with the focus of the company still being on building better phones, not making more profits from selling IP to third parties.

- Therefore, for a full realisation and unlocking of the IP, Nokia would probably need to be bought out or undergo a significant management change. Both of these are possibilities in the mid-term, but not something alone to bet on today.

- Currently, Nokia's management appears to be thinking as a 'device-making and selling' business, rather than an 'intellectual property business'. We would welcome a stronger change in the rhetoric and this may become inevitable as Device volumes continue to suffer. Nokia is currently investing in R&D for their own products, revenues and gross margins, rather than thinking about cross-licensing deals and standalone IPR revenue.

- Our work below is designed to highlight the potential value here being overlooked by the stock market and serves to highlight the overall value in Nokia, when the business is looked at in its component pieces, rather than just written off as a 'broken mobile phone business heading to zero'.

- In Q3 2012, Nokia bled €500m of free cash and the market began to extrapolate the quarterly run rate to reach the conclusion that Nokia could potentially go bankrupt. We think these fears are now in the past, as Nokia was free cash positive in Q1 and the massive cost-cutting programs are more advanced, with the company also having brought more flexibility into the cost base and realised that the core feature phone division needs managing for decline. We highlight three key points for the company's device business:

    - Feature phones volume of 300 million units in 2012 is heading rapidly down.

    - Smart phones volume at 35 million units in 2012 is chronically subscale.

    - The IP asset needs to be better monetised.

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What is Nokia's IP asset?

Key points:

- **€50bn of cumulative R&D and 10,000 patent portfolio. A range of patents that is largely unlicensed.**

- **As asset that has value in the new converged world (see Google/Motorola deal).**

- **Net revenue generation from 3rd party deals.**

- **A Central Technology Office focussed on new technologies and patent filings, trying to develop killer new devices.**

Further detail:

- Nokia has cumulatively invested around €50bn in R&D through the history of the business and carries around 10,000 patents, spread across different product and application families. Almost every mobile device in the world contains some technology based on Nokia patents. This has almost all been expensed, meaning there is no capitalised asset on the balance sheet to use as a starting point.
- In 2012 (2011), Nokia spent €1.8bn (€2.4bn) in R&D in the device business and €4.8bn (€5.6bn) company-wide. However, the piece we are particularly interested in is at the CTO (Central Technology Office) and Nokia Research Academy, where a smaller group of engineers are employed to develop new technologies and file patents. This is a cost base around €200-250m, supported by legal resources and somewhat separate from the bulk of the R&D effort in the Device business itself.
- The patents are used in Nokia's phones and sold to third parties. Nokia also buys technology from other players. Therefore, Nokia's annualised run-rate of €0.5bn revenue from IP is a net number of what they get paid by third parties, minus what they pay to third parties.
- Apple is a 'significant' net payer of IP royalties to Nokia, and Samsung is also a net payer.
- Nokia has €0.5bn annualised royalty sales to third parties currently. As their own business has shrunk (thereby paying out less royalties to others) and key customers have grown (Apple and Samsung) this business has become critical to the company.
- The 'majority' of Nokia's patent portfolio is unlicensed and based on deals elsewhere in the industry on similar assets, the value of patents has clearly risen in recent years (**Motorola/Google (IPR value of $5bn, $12.5bn in total) and Nortel/Apple/Microsoft/Sony/Blackberry consortium ($4.5bn)).**
- Critically, the IPR asset is extremely difficult to value. Simply multiplying a trade price per patent by the number of patents, neglects the fact that within Nokia's 10,000 patent portfolio, very few have significant value.
- Nokia is strong in radio standards and essential mobile telephony IP, with a somewhat weaker position in implementation and usage IP.
- Nokia will now grow the IPR stream from new license sales and renegotiation of old deals.
- Critically, we understand that most of the deals are up for renewal in the near-term (e.g. Samsung was negotiated when they were small, and Nokia was large, around 6-7 years ago). The balance of power has shifted.
- Nokia's Chief Legal Officer is now part of the Leadership Team and the company has bulked up the legal department to enforce and sell patents.

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What is the contribution from IPR today, and where could it get to?

Key points:

- **€0.5bn of revenue is probably contributing around €250m of operating profit.**
- **In 2016, revenue could approach €1bn, contributing over €500m operating profit.**

Revenue:

- Nokia talk about €0.5bn of annualised revenue from IPR sales. This is hidden in the 'Other' segment of the device division and needs to be 'backed-out' by deducting Smart Device Revenue and Mobile Phone Revenue from Total Device Revenue. This number was €134m in Q1 and includes some other small businesses.
- We forecast €130m, €140m and €150m in Q2, Q3 and Q4 in Device – Other.
- IPR sales will grow from this level in the coming years.

Gross Profit:

- Nokia give sales and percentage gross margin for Smart Device and Mobile Phone sub-segments. Therefore, we can 'back-out' a gross profit contribution of €119m in Q1 from the Other Device sub-segment.
- IPR sales will be close to 100% gross profit contribution given the nature of royalty business.

Opex and Operating Profit:

- Nokia has a run-rate operating expense target of €3bn in Devices by the end of 2013 and was at €2.9bn in Q1. Quarterly opex of €750m splits very roughly €450m Smart Device, €250m Mobile Phone, €50m Other.
- This gives a very rough cost base of the Other sub-segment of €200m per year, relating to the CTO, Nokia Academies and some legal teams. Although this is a somewhat separate entity, they are still trying to create new devices and new technology for use in Nokia devices – their primary goal is not IPR creation for monetisation from third parties. As previously mentioned, Nokia is not yet of this mindset but there is enormous value to be unlocked here.
- In conclusion, we estimate that IPR revenue of €0.5bn is currently generating around €250m of profit for the company, not yet offsetting the losses in the actual device handset business.

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Upside and Growth:

- IPR revenue should grow faster than expected for the following reasons:

    a. The 3rd parties (Samsung, Apple, other Android players, tablet manufacturers etc.) are much bigger now than when the royalty deals were negotiated 5-7 years ago. Although these players may be more powerful than Nokia, they are using more of Nokia's patents, and Nokia are using less of theirs. On a like-for-like basis, there should be a revenue uplift as the large deals are renegotiated.

    b. The Samsung deal is being renegotiated now and we expect a significant uplift in net revenue. The existing Samsung deal may have been negotiated in 2007 - a time when Nokia were selling 437m phones and Samsung were selling 161m. Now Samsung are on track to sell 500m in 2013 and Nokia will sell around 268m. We think the deal may be an absolute $ per year amount, which could therefore see a significant uplift.

    c. As Nokia shrinks, they pay out less in royalties for third party technology. This is a small, natural hedge in the business.

    d. The global device market is growing. Global handset units will be around 1.9bn in 2012, up from 1.1bn in 2007. With forecast growth of +5% per annum, Nokia should at least grow IPR in-line with global handset sales. On top of this, there will be usage of Nokia technology in tablets, eReaders, mobile PCs, laptops etc. as connectivity and convergence become central themes in the coming years.

    e. Nokia is actually focussing on this business for the first time ever. They have bulked up the legal team recently, appointed the Chief Legal Officer to the Group Leadership Board and acknowledge they are not monetising the asset. Most of the 10,000 patent portfolio is unlicensed. For example, they took apart an HTC phone and discovered some of the audio technology was being used on an unlicensed basis.

    f. The company is still growing the patent portfolio.

- **We forecast a 20% CAGR in IP sales, meaning Other Sub-segment sales get to €957m in 2016, generating a profit contribution of €550m.**

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2) NSN Estimates Are Low and there is value here

- Nokia Siemens Networks moved from losses in Q1 2012 to strong profits of €196m (7% margin) in Q1 2013. Management has a fairly conservative target of 5-10% operating margins for NSN long-term. For Q2, they helpfully guide for an operating margin of 5% +/-4%, i.e. 1%-9%.

- We are also seeing a steady profitability turnaround at Ericsson and this improvement in the network equipment industry is a result of significant consolidation, such that there are only two to three players in each market segment at the moment. Furthermore, NSN and Ericsson have a higher mix now of capital-light services sales,

have aggressively cut costs and will benefit from roll-outs of next generation networks (e.g. LTE) and pent-up demand for data capacity amongst smartphone users.

- Although NSN may struggle to match Q1 profits in Q2, due to regional mix, we think NSN could clear €1bn of non-IFRS operating profit this year. Consensus is at just €0.8bn.

- If NSN can grow sales at just 3% per annum and get to a 9% margin, then the 50% stake in NSN should be worth €4bn, based on 15x net earnings in 2015. For those who are bullish on Ericsson, we posit that the 50% stake in NSN and the net cash, justifies 80% of Nokia's current total market cap and highlights the deep value proposition on offer.

- A 9% operating margin, although at the upper-end of management's range, could prove conservative, given that NSN breaks-even at 30% gross margins, hit 34% in Q1 2013 and still has €0.5-1bn of costs (4-8% of sales) to take-out of the business, given the later commencement of the restructuring program.

- For reference, the Executive Chairman of NSN, Jesper Ovesen, is fully focussed on the profitability of the business and has a strong restructuring track record at TDC, and Lego.

3) An Inefficient Balance Sheet

- Nokia has net cash of €4480 million, but behind this lies an inefficient and conservative structure. The headline net cash position is built of the following:

	Total (€m)
Nokia gross debt	4353
NSN gross debt	1270
Cash & equivalents	-10103
Net Debt	**-4480**

Source: Nokia Q1 2013 results filing

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- The problem with this is that Nokia, despite carrying a massive cash position, paid €106m of financing charges through the P&L in Q1 2013 and will annualise around €300m of cash interest out of the business.

- In the middle of 2012, the market was extrapolating Nokia's quarterly cash burn and the equity price was being marked down on the basis that they could feasibly go bankrupt. This is no longer the case given the dramatic cost cutting measures successfully undertaken in both the Device and NSN divisions. In Q1 2013, Nokia was free cash flow positive and in 2013 as a whole we forecast positive free cash flow. In 2012, the business lost €815m of free cash.

- The company has a €1,250m 5.5% bond maturing in 2014, €750m 5% convertible maturing in 2017 and two large unused revolving credit facilities. Otherwise, the majority of the debt matures 2018-2020 across Nokia and NSN. It appears there are limited options near-term to simply 'take out' the debt. However, in a year or two we can

envisage a more stable Nokia undertaking a large refinancing operation to right-size the balance sheet for a smaller company, reduce borrowing costs and use the cash resource to reduce gross debt.

- On our 2015/2016 forecasts we would not rule out cash returns to shareholders or buybacks. Nokia has €200m cash to spend in Devices on restructuring and €750m in NSN. We should of course expect some ongoing cash out on restructuring in Devices beyond 2013 (given likelihood of shrinking volumes in the Mobile Phone segment). However, Nokia is really an increasingly capital-light business and would be making >€1bn of free cash from 2016 onwards. This paves the way for cash returns and that would surely mark the survival of the business into the new world.

4) Long Turnaround and Rebuild.

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- We envisage the four phases of the turnaround as follows:
    - Heavy P&L losses (2011 and 2012), exaggerated by write-downs and impairments.
    - Cash losses (2012), exaggerated by restructuring costs.
    - Return to break-even in the P&L and cash flow (2013).
    - Profit recovery and stabilisation and growth in cash flows (2014 and 2015).
- We are somewhere between phase two and phase three, as such the Nokia buy case carries significant uncertainty but significant potential reward. The market is also tipping the odds in your favour given the ongoing negative sentiment and common consensus that Nokia is broken and finished.
- Beyond the two parallel restructuring programs in Devices and NSN, there is some potential that the **Mobile Phone division** (~240m of low-end, feature phones last year), gets a more radical solution. The company has already changed their mindset to managing for cash and optimising the installed base of around 800 million Nokia feature phone users, mainly in developing markets. The business has an operating cost base of €250m per quarter and falling, which means with a stable gross margin they aim to sustain a contribution margin around 5%. However, the manufacturing footprint of the Mobile segment could be downsized even further, with more production outsourcing to contract manufacturers. We have this division heading towards break-even in 2015/2016 with an annual decline of volumes of 20% in 2013, followed by -15% and -15%, in 2014 and 2015 respectively.
- As well as the monetisation of the IPR asset, the key to Nokia ‘not being a short’ is their **ability to shrink losses in the Smart Device segment**. Smart Devices sold just 35 million units last year (in a global market of ~1.5bn phones and ~0.8bn smart phones). With a market share of just 4% of smartphones, and a cost base of €450m per quarter, Smart Device is the major bleeder at Nokia. The division haemorrhaged €1,539m last year, a number drastically reduced to ‘just’ €179m in Q1 2013. For Nokia to break-even in Smart Devices will require quarterly volumes of >10 million devices at an ASP around €180, no growth in operating costs and a gross margin >22%

(20.7% in Q1). This is a massive ask and is not something we factor into our forecasts. If Smart Devices were to become profitable via a hit new phone, the Nokia story improves dramatically. Let us now forget that there are an awful lot of people working on a daily basis to try and make this happen – the probability of which is priced at zero by the stock market.

- Our base-case scenario is steady Smart Device growth to 45 million units in 2015 (from 24m annualised in Q1 2013). This means Nokia need to hold market share at current levels, on the assumption that the global device market is flat at 1.6bn units and Smart Devices become 75% of total units. We don't think this is a big ask given the absolute necessity for Microsoft to make Windows Mobile work for them, the revamped product lines (Lumia and Asha), the installed base of Nokia feature phones in developing economies and the typical cyclical nature of products in the industry. It is no exaggeration to say that one hit phone out of the Nokia R&D/Design lab would be enough to change the fortunes of this business completely! Within Nokia, let's not forget there is a lot of technical and design expertise and a lot of people working hard on this project.

5) Attributing €1bn to Location.

- For the purposes of this analysis we value Location/Navteq at €1bn in our sum of the parts. This is because the business is currently break-even and will struggle to monetise third party revenues, given the Nokia ownership. HERE generated €154m of non-IFRS operating profit in 2012 but is undergoing a transition as revenue from cross-sell to the Symbian platform is falling. HERE is somewhat linked into the fortunes of the Nokia device business but we think it must have some strategic value above zero.

- For reference, TomTom has a market cap of €900m and Google just bought Waze for $1.3bn. Clearly, location/mapping assets are valued by the industry and Navteq may one day exploit their mapping asset via additional revenue lines linked to location-based advertising, vertical search and traffic services. However, let us park this for now.

- Navteq claims 80% of the automotive map market and has begun to sign platform deals (e.g. with Amazon, Oracle, SAP) covering verticalised usage of the location services and maps. These could be a driver of future value, but for now we put Location/HERE in at €1bn in our SOTP.

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6) Tax Losses.

- Nokia has €1.3bn of deferred tax assets recognised on the balance sheet and claims to have €10.3bn tax-loss carry forwards, for which no asset has been recognised. The issue here being that Nokia generates taxable profits in countries where they don't have tax losses to utilise, and they lose money where the tax losses could be utilised.

- For reference, Nokia paid €478m of cash tax in 2012, against IFRS PBT of negative €2.6bn and non-IFRS PBT of negative €215m. This is a **disastrous situation for the accounting department and a source of major value destruction for shareholders.**

- The company guides for cash tax of €200m per annum in Devices and €200m per annum in NSN, as a minimum amount. We forecast this through to 2015. It is unclear whether a return to profits in the Device segment would enable utilisation of tax losses, but management have been so focussed on the restructuring and survival of the core business that items such as tax optimisation and the inefficient balance sheet have been neglected. Likewise, they are late on deploying the legal resources necessary to save the company through better monetisation of the IPR – the key issue we discuss at the top of this note.

- If an acquirer could use a fraction of the tax losses, Nokia looks even better value.

7) Conclusion:

We add Nokia to the Strong Buy list today.

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