

Initial report: EB is more focused on Automotive after the Test Tools deal

We have updated our investment case after the Test Tools transaction. EB is now more focused and also more concentrated on the Automotive business segment, which now represents around 2/3 of company's net sales. Based on our sum-of-parts valuation we see significant upside potential in EB's share, but believe that company has to prove its ability to also produce results before biggest leap forward. We keep our accumulate recommendation and target price of 0.90 EUR intact.

Investment case outlined

We believe that the current market value of EB doesn't fully reflect the considerable hidden potential neither in Automotive or Wireless business segments. In Automotive EB has a solid market position in a quickly growing market that has high entry-barriers for new competitors. Through its joint venture with Audi, EB Automotive's has a huge potential just inside Volkswagen group, and this is just one of company's references. In Wireless side we see good opportunities in connected devices in long-term, and in addition there's "free option" regarding possible breakthrough of defense products.

Sum of parts valuation is still attractive

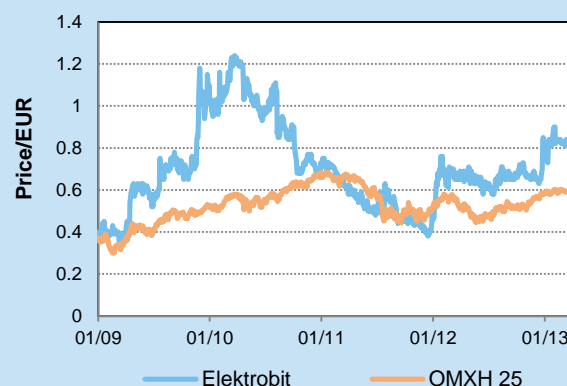
We have made stand-alone valuations for EB's both business segments. We see great potential in Automotive and believe that its value (EV) to be around 75 MEUR alone, while EB's EV is currently 77 MEUR (FY13e). With Wireless we have been very cautious, because this will be a transformation year for it.

Potential is undeniable, but results are needed

Possible the biggest weakness of EB's investment case is that company's historical track-record could be much better. Despite rapid growth, the profitability has been unsatisfactory in Automotive and there have been negative surprises for investors too many times. This means that EB needs to prove itself to the market – to show that it can also seize the opportunities and produce results. We see plenty of upside beyond our target price if this can be done.

RATING

ACCUMULATE



Share price, EUR (last close)

0.81

Target price, EUR

0.90

Latest change in recommendation

25-Jan-13

No. of shares outstanding, '000's

129 413

No. of shares fully diluted, '000's

129 513

Market cap, mEUR

105

Free float, %

Reuters code

EBG1V.HE

Bloomberg code

EBG1V FH

Next interim report

26-Apr-13

Web site

<http://www.elektrobit.com>

Analyst

Juha Kinnunen

E-mail

juha.kinnunen@inderes.com

Telephone

+358407781368



BUY



ACCUMULATE



REDUCE



SELL

KEY FIGURES

	Sales MEUR	EBIT MEUR	EBIT %	Ptx profit MEUR	EPS EUR	P/E (x)	EV/Sales (x)	P/CF (x)	EV/EBIT (x)	DPS EUR
2012	185	3	1.4%	2	0.02	36.4	0.5	14.1	35.8	0.01
2013e	197	4	2.1%	4	0.21	3.9	0.4	7.6	18.4	0.05
2014e	218	8	3.6%	8	0.05	14.8	0.4	8.9	9.9	0.05
2015e	242	11	4.4%	11	0.07	10.8	0.3	7.7	7.4	0.05

Notice that 2012 figures have been restated after the Test Tools divestment. 2013 figures are not comparable due to an accounting change.

Market cap, MEUR	105	BV per share 2013E, EUR	0.7	CAGR EPS 2012-15, %	15.0
Net debt 2013E, MEUR	-31	Price/book 2013E	1.1	CAGR sales 2012-15, %	9.3
Enterprise value, MEUR	77	Dividend yield 2013E, %	6.2	ROE 2013E, %	33.6
Total assets 2013E, MEUR	156	Tax rate 2013E, %	10.6	ROCE 2013E, %	4.8
Goodwill 2013E, MEUR	19	Equity ratio 2013E, %	60.4	PEG, P/E 13/CAGR	-0.1

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1. Investment case – major potential in Automotive and new product business

Our investment case can be simplified in the following way: current market value represents the fair value of the current business of EB reasonably well, but it doesn't fully reflect the considerable hidden potential neither in Automotive or Wireless business segments.

In Automotive the hidden values are those inside EB's 1) position at the market (client/partner network), 2) solid track-record of R&D services and 3) massive growth potential overall. It's a rare situation in the current economic situation that company's growth is not limited by market demand but by the availability of resources. This is the case for EB Automotive currently. The company has excellent track-record as a supplier of critical systems in a market that is growing extremely fast, but has very high entry-barriers for new competitors. We believe that EB would have to make significant strategic mistakes in the automotive business, if it is not going to succeed at some degree. If a "bull scenario" is considered, Automotive segment could easily be worth the whole market value of EB (around 105 MEUR currently) in some years.

In Wireless business investor currently gets a decent core business in R&D services and a "free option" regarding the new defense sector products. If these would make a breakthrough to a very competitive and massive defense sector, they could be extremely valuable for EB. We believe that current share price reflects very little expectations regarding these, which is why we like this option even though we understand that a major success is a long shot. It would require creating the right sales network and establishing EB as a solid and reliable supplier also in defense sector.

Even though we naturally do not base our recommendations on these speculations, we see both EB Automotive and defense products inside EB Wireless as potential acquisition targets. Test Tools product based business was sold in the end of January and in our opinion the price was hefty. We are certain that plenty of big companies are interested in the quickly growing automotive software market and "buying in" is the easiest way to enter this market, though it won't be cheap. Buyout case with defense is much more far-fetched, but if the products would find their way to the market, some of the huge behemoths in the sector might just find it easier to buy the technology out. Certainly EB's size wouldn't become an issue. Due to the almost non-existing synergies it is naturally also possible that EB divests either one of these business segments, though no signals to this direction have yet been given.

Naturally the investment case is not without risks or weaknesses. EB's financial track-record isn't one to pride about, which naturally also creates a lot of doubt about company's ability to reach its potential in the future. Demand is undeniable in the Automotive side, but EB's pricing power will always be somewhat limited. Even though the company's services and products are far from standard bulk, EB's clients are many times larger than it and have substantial pricing power towards suppliers. The biggest risk is the dependence on company's biggest clients, especially in Wireless. TerreStar case was a perfect example of this risk. There are always risks involved with project business in general, and positive momentum can make a drastic turn if the execution isn't there. The company has made some clear mistakes in the past, and it's understandable that these cast a shadow over the future. The amount of cash in the balance sheet is currently so large that the use of it, whether positive or negative, is going to be one of the key factors in the short-term share price development. Still, we believe that the potential outweighs the risk, and naturally this shadow is also one of the main reasons why EB is currently undervalued.

Our recommendation is accumulate with a target price of 0.90 euros for the next 6 months. If the company's underlying business continues its recent good form and reaches our estimates in the coming years, valuation of the share is cautious especially considering the extra cash in the balance sheet after the divestment of Test Tools. EB's EV/EBITDA-multiple, which is more relevant than P/E because it also takes the cash into account, is around 6.5. P/B-figure is also modest 1.1 and P/E-ratio is around 15x with our next year's estimates. If EB doesn't make any significant acquisitions in 2013, we expect company to start paying larger dividends in the coming years, since its balance sheet is currently clearly overcapitalized. We have also made separate valuations for both divisions, and based on these Automotive business is worth around 75 MEUR (valued with EV/EBITDA of 9x) and Wireless around 25 MEUR (valued with EV/EBITDA of 5.5x). Both of these values are based on stand-alone valuations and possible acquisitions would most likely happen with much higher multiples like the Test Tools deal also showed. Detailed calculations can be found in the chapter 9. These are somewhat in-line with the peer groups, though we must emphasize that good comps for EB are very hard to come by. We have illustrated the key factors of our investment case in the following table.

Summary of the key elements of our investment case

Automotive

Wireless

Value
Drivers

1. Strong position at the market
2. Solid track-record in R&D services
3. Massive growth potential both within the market and with the market
4. High entry-barriers for new competitors

1. Decent core business in R&D services
2. New defense sector products
3. Good opportunities when new appliances are going to be connected
4. More focused Wireless after the divestment of Test Tools

Risks
&
Challenges

- Availability of resources limits growth
- Weak track-record in profitability
- Limited pricing power against the very large clients in a tough industry
- Dependence on biggest clients
- Nature of project business in general

- International breakthrough of defense products requires creation of solid sales network and becoming a reliable and well-known supplier in the sector
- Dependence on biggest clients (e.g. case TerreStar)
- Weak financial track-record
- Limited pricing power

Potential

If a "bull scenario" is considered, Automotive segment could easily be worth the whole market value of EB (around 100 MEUR) in some years.

If new products would make a breakthrough to a very competitive and massive defense sector, they could be extremely valuable for EB. However, major success is still a long shot.



We believe that the underlying potential of EB outweighs the risk and therefore believe that the EB is currently undervalued.

Recommendation

Accumulate

Target Price

0.90 EUR (next 6 months)

ELEKTROBIT

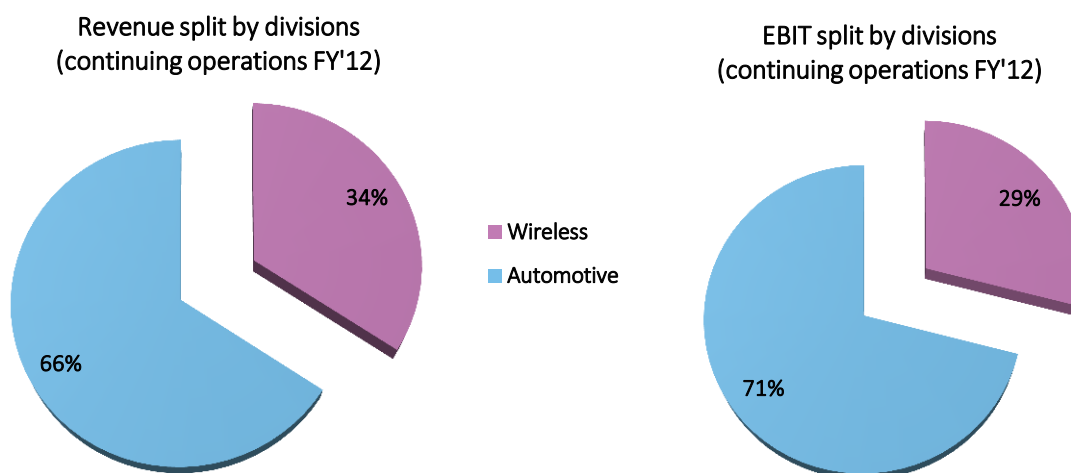
P/E (2014e)	15x
EV/EBITDA (13e)	6.5x
P/B	1.1

BUSINESS SEGMENTS

	Value (MEUR)	EV/EBITDA
Automotive	~75 - 80	~ 9 (13e)
Wireless	~25 - 30	~5.5 (14e)

2. Business segments of EB in a nutshell

EB develops advanced and demanding technology specializing in embedded software and hardware solutions for the automotive industry and wireless technologies. Company's business is divided in two different business segments: Automotive and Wireless. Within these business segments that have very little synergies between each other, EB has a mixture of service business and product based business. The core of EB's business is R&D services, which is especially true after the divestment of Test Tools product based business. In this report Test Tools business is considered as a discontinued operation, and therefore separated from the continuing operations.



Graph 1. Revenue and EBIT of EB's two business segments (continuing operations).

EB Automotive segment offers in-car software products, navigation software and development services for the automotive industry. Segment offerings include EB GUIDE human machine interface development and speech dialog platform, EB street director navigation software platform, EB Assist ADTF software development kit for driver assistance solutions, EB Tresos automotive open system architecture software components used in electronic control units and tools for their configuration as well as engineering services for the software development for infotainment, driver assistance, and electronic control units. EB Automotive serves car manufacturers (OEMs), car electronics suppliers, and automotive chipset suppliers.

EB Wireless segment provides development services and customized solutions for the wireless communications markets. Now that the Prosim radio channel emulators have been divested, its main products are for authority and defense markets. These products include EB Tactical Wireless IP network for tactical communications, EB Wideband COMINT sensor for signals intelligence, EB Counter RCIED platform for electronic warfare, EB Tough VoIP tactical IP-based communication and EB specialized device platform for specialized markets. Still the core of Wireless business is the research and development services, such as consulting, integration, software and hardware development. EB Wireless serves mobile phone and network equipment manufacturers, defense and security industry and authorities, satellite and mobile phone network operators, as well as chipset manufacturers.

EB sold its Test Tools product based business in the beginning of the year 2013. In this report we will discuss Test Tools business as a discontinued operation. Our comments about the Test Tools business deal and the basics of the sold business can be found in the chapter 4.1. Test Tools business was sold in the beginning of 2013.

3. EB Automotive – solid platform for strong growth

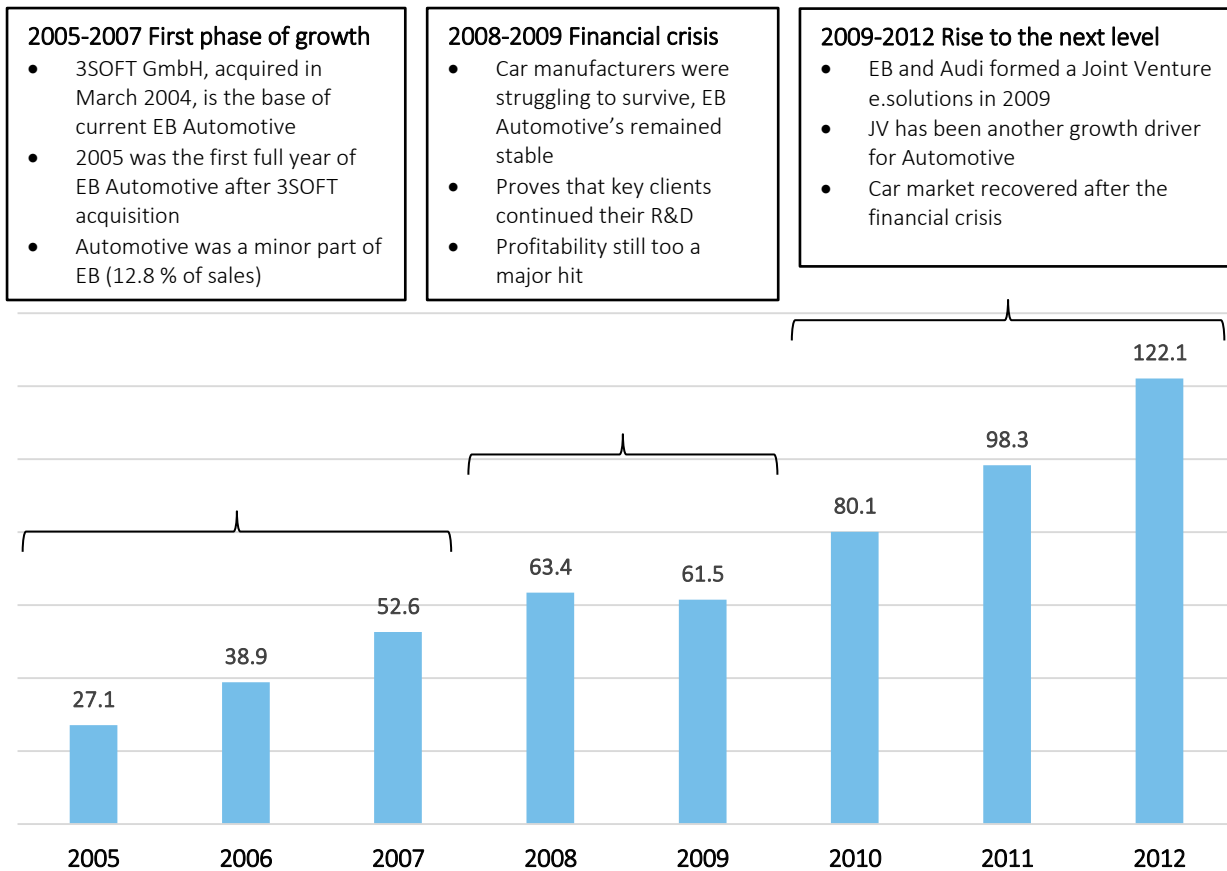
EB Automotive business segment offers a range of standard software products and professional tools that support the whole process of the in-car software development. EB Automotive has over a decade of experience in the business area and during this time it has established itself internationally as one of the important suppliers of embedded software solutions for the automotive industry.

In addition to the product development, EB's main business also in Automotive, company specializes in services and consulting for the automotive industry, supplying implementations of production ready software solutions for a broad range of AUTOSAR and FlexRay, Infotainment, Navigation, HMI (Human Machine Interface) and Driver Assistance systems. We'll go through these different service and product areas in more detail later.

Here are some key points about EB Automotive for investors:

- EB Automotive has excellent long-term growth drivers behind it. The amount of electronics inside cars, their complexity and software needed to control them is growing extremely fast. Very important industry trend, where hardware and software is separated, is currently in action. This creates more opportunities for EB Automotive in the future.
- EB Automotive's references include companies like Audi, BMW, Ford and Fiat, but it has been doing business with most of the large OEMs in the automotive business. One very interesting and important part of EB is its joint venture with Audi, which is part of Volkswagen Group. EB Automotive owns 51 % of e.solutions, while 49 % is owned by Audi Electronics Venture GmbH. Company was formed in June 2009 has been growing rapidly ever since. EB has changed the consolidation principle of e.solutions in the beginning of 2013, which is why it provided pro forma figures in its Q4'12 report. These changes are explained in detail in the chapter 3.10.
- For a relatively small player, yet already well-established in the field, there are pretty much unlimited growth opportunities in the sector. Through joint venture (JV) with Audi, EB has excellent position to grow inside the massive Volkswagen Group, and naturally company's potential isn't limited to just one customer.
- In Automotive the entrance barriers for new competitors are very high especially in the safety critical areas (ECU). Due to high complexity and connection within different systems, the barriers are high also in infotainment. This is why we believe EB to be in an excellent position to take advance of the high growth opportunities.
- We believe that the biggest weakness of Automotive is the limited pricing power and very cost-aware clients. Scalability of the business is currently relatively weak, and this remains a challenge also in the future. Also EB has had problems in finding capable engineers that are naturally critical for the growth of the business. This might lead into salary inflation.
- We believe that the value of the EB's Automotive business is roughly 75-80 million euros. Assuming no net debt, this would give EV/EBITDA-multiple of 9x, which we believe to be very reasonable for this business given the significant potential in both growth as well as profitability improvements. This valuation is also relatively well in-line with the peer group, though we have given EB Automotive a slight and well-deserved premium against the median figure. In a bull scenario the value might be around 100 MEUR, but we need more proofs of improving profitability before assigning higher value. However, it's worth mentioning that if EB Automotive would become an acquisition target, the price tag and multiples would probably be much higher.

Key milestones and revenue 2005 – 2012



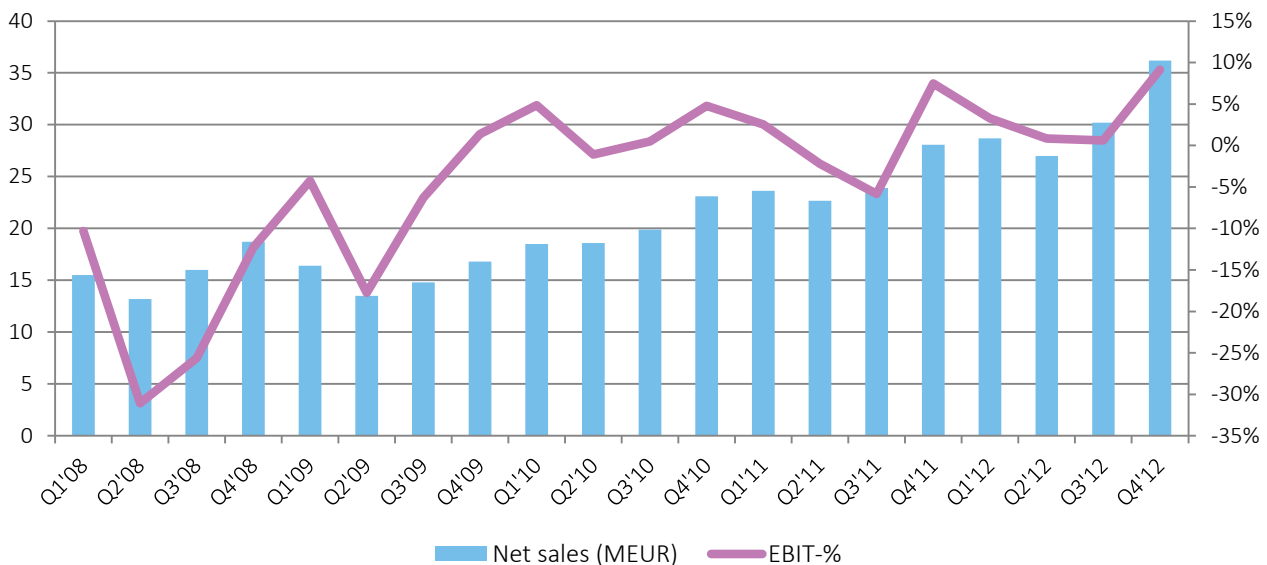
Graph 2. Development of EB Automotive's net sales and some key milestones.

3.1. Short history and current situation of Automotive

The basis of EB's Automotive segment comes from the acquisition of 3SOFT GmbH in March 2004. EB bought 80 % of 3SOFT that offered product development services and products in the field of embedded software for control of technical systems for the automotive, automation and medical electronics industry. Company employed around 190 experts and had net sales of 15.5 million euros and made an operating profit of 1.1 million euros in 2003. EB Automotive has gone a long way since this, and the acquisition has proven to be the best in the history of Elektrobit. After the acquisition EB Automotive has focused solely on the automotive side, and it no longer serves the medical field.

Automotive's net sales have grown to more than 120 MEUR (FY'12 incl. e.solutions). During last few years the growth has been around 25 % per annum and in the past nine years sales have increased to around eight fold. It can be said that the business has an excellent track-record of growth, but it still hasn't even tipped into the opportunity at present considering the massive future potential.

Automotive's key figures 2008-2012



Graph 3. EB Automotive's net sales and profitability (EBIT-%) have been trending up.

3.2. Solid growth drivers also for the future

EB Automotive has excellent long-term growth drivers behind it. The amount of electronics inside cars, their complexity and software needed to control them is growing extremely fast. For example, a Roland Berger study estimates the share of electronics of cars' value will grow from 23 % in 2010 to 33 % until 2020.

Car manufacturers are also willingly to invest in, for example, infotainment as they provide a chance to differentiate from others. Even if the software and systems would be standardized, which they are not, different brands still require their own look-and-feel. EB is one of the companies specialized in installing, integrating and modifying these systems. Overall complexity of these critical systems is very high, and demand is growing for EB's expertise. Estimated annual automotive software market growth rate until 2019 is expected to exceed the growth rate of passenger car production volume that is estimated to be 5.5 % CAGR (LMC Automotive's Q4 2012 Forecast). To put it very simple; EB's market is growing rapidly and should continue this also in the future. Still, the main question is whether company can reach also a solid profitability, because the growth hasn't been really profitable in the past.

Another important trend to understand is the separation of hardware (HW) and software (SW). In the past, HW and SW used to be clearly connected and responsibility of the same vendor. Now these two areas are becoming more and more separated, and the vendors might be different and co-operating only in certain area. This is an important trend for EB, since it's not involved in the hardware side and as a consequence was left out of the projects before. Now the vendors that have both HW and SW (e.g. Alpine, Pioneer and Harman) no longer have an advantage over vendors that are concentrating only in SW (like EB Automotive). Therefore traditional HW vendors are on the losing side of this trend, especially since the hardware is becoming bulk production and added value is in the software side. With the growing complexity, the software side is coming more and more important. With software knowhow and expertise in embedded systems and their integrations, business opportunities continue to open up.

For a relatively small player, yet already well-established in the field, this means pretty much unlimited growth opportunities. Through joint venture with Audi, EB has excellent position to grow inside the massive Volkswagen Group, and naturally company's potential isn't limited to just one customer. EB Automotive is also working with companies like BMW, Daimler, and Ford, so the possibilities are pretty much endless. Currently the biggest challenge regarding growth doesn't seem to be the demand, but the Germany's tight recruiting market for knowledgeable engineers. Below one can see some references of EB Automotive, but like said there are more.



Mercedes-Benz

Picture 1. Some references of EB Automotive.

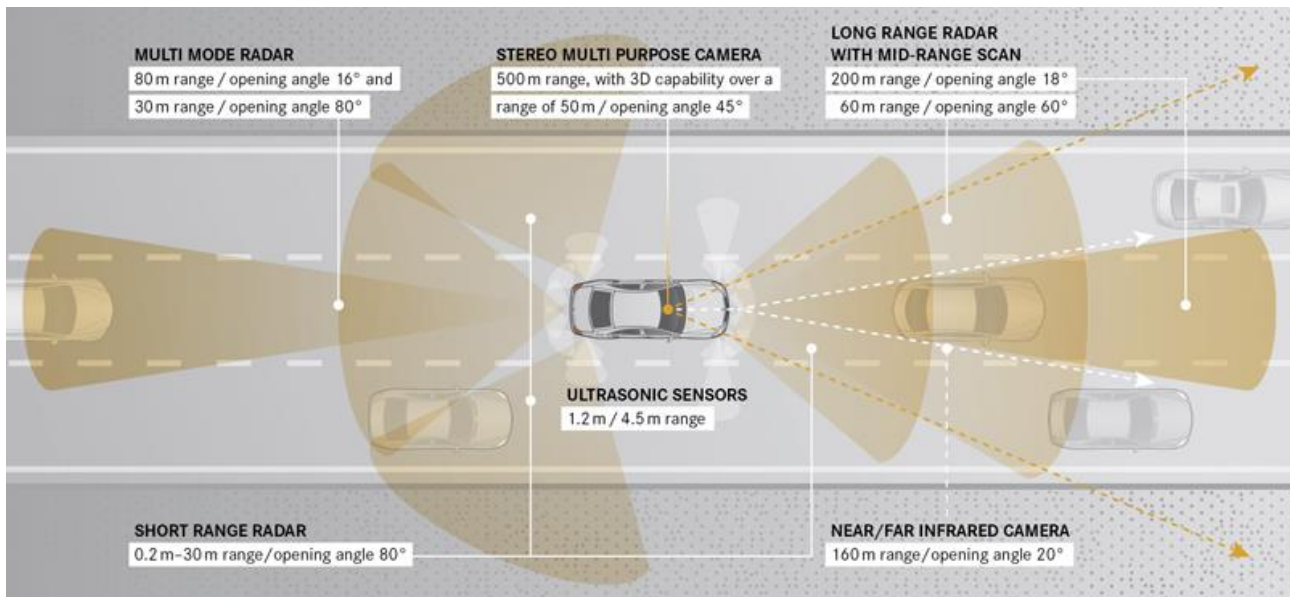
The management of EB Automotive told us that the company has never lost a client, which means that it has gained a reputation as a solid partner. Of course this doesn't mean that EB would have always received all the continuing orders, but it hasn't lost clients due to unsatisfactory work or overdue projects. EB has never been responsible for the delay in OEMs planned manufacturing start date, which is a good achievement in its line of business. New technologies are naturally not easy to apply and integrate and deadlines are tight in the business.

3.3. Expected future development – complexity will continue to grow

When thinking about the future of automotive software in general, it seems clear that the complexity will continue to grow. Different kinds of driver assistance systems, that are improving the safety and conformability of drivers as well as passenger, will continue to develop and become more and more common. For example parking and lane change assistants are becoming regular in more expensive high-end car models, but eventually they'll arrive to lower categories.

Just to give an idea of what technology is already making possible; it's already a reality that a car can drive itself from a location to a destination. This has been made famous by Google. Though this is naturally not what we are building our investment case on, it tells something about the future possibilities. The biggest challenge in this kind of a venture is actually the accuracy of maps and location services. Normally GPS is "close enough" if it's within meters of the actual location, but if a car turns couple of meters too late to a road, it's naturally a completely different situation.

To give another example, in November 2012 Mercedes-Benz (part of Daimler) published the next generation of the new S-Class that "will boast an array of new systems designed to make driving an even safer and more comfortable experience". According to Mercedes, the new S-Class will boast an array of new systems designed to make driving an even safer and introduced the Stereo Multi-Purpose Camera (SMPC), or stereo camera for short. It is capable of three dimensional detection of crossing objects and calculating their path. The camera's two "eyes" provide it with a three-dimensional view of the area up to around 50 meters in front of the vehicle, and it is able to monitor the overall situation ahead for a range of up to 500 meters. In this way, the new camera is able to provide data for processing by various systems. Intelligent algorithms evaluate this information in order to detect and carry out spatial classification of vehicles as well as pedestrians and a variety of traffic signs within a large field of vision. This is just an example of the current development, and has no specific impact on EB whatsoever. Needless to say, the complexity of these systems is huge and the number of automotive software vendors able to provide these kinds of solutions is very small. In addition, when passenger safety is involved in the systems, entry barrier for newcomers with no references or track record is very high.



Picture 2. Illustration of the new Mercedes-Benz driver assistance system. Source: [Daimler](#).

Electronically cars will become more and more complicated to control and all the different parts (such as infotainment, ECU (Electronic Control Unit) and driver assistance) will most likely become more and more integrated. This means that the market for EB's expertise will continue to grow rapidly, and considering company's current position in the bosom Volkswagen Group and with strong partnerships with many others, the future looks very bright for the company.

EB Automotive's references include companies like Audi, BMW, Ford and Fiat. Through JV with Audi company is naturally already inside the Volkswagen Group. Also Daimler is company's client, which means that Automotive is doing business with most of the giants of the industry.

To put it simple, company is currently in such a good position in a fast growing market that it should make clear strategic mistakes or there should be a drastic change in the market for it not to succeed to some degree. We don't see these happening, but there are still some worries around profitability that hasn't been in a satisfactory level in a long time. Scalability, and through this the margins, of the business is still somewhat a question mark due to unknown development of different standards.

3.4. Basics of the automotive software industry

To understand the business environment of EB Automotive, one must know that the normal development cycle of a car model is around 3 years. This means that even though EB doesn't have a solid order backlog in the business, the frame agreements are typically long and the normally the changes of suppliers regarding on-going projects is low. Therefore visibility of the business is typically a relatively good even without a long backlog. A typical lifetime of car model is around six years with one facelift, and due to tough competition in the segment there's continuous need for development.

Currently the car manufacturers are under pressure due to weakening global economic growth. Still, we don't believe that this will slow EB's sales growth significantly in 2013. One can see that even in the crash after the financial crisis, EB Automotive's sales continued to grow in a rapid pace. So unless there are significant changes inside the business area (e.g. competitive situation), the external effects shouldn't have a strong impact on EB's business. German car manufactures, EB's main client group, have generally kept the R&D products running despite uncertainty, which has served them well in the past. When the demand has normalized, companies have been able to introduce new improved models to the markets. We see no reason for this to change in the current situation, since the companies are financially strong.

3.5. High entry barriers for new competitors, standards controlling the industry are scattered at best

When there is a business area with such a positive outlook, one must always worry about new competitors trying to take their share in it. In Automotive the entrance barriers for new competitors are very high especially in the safety critical areas (ECU). Due to high complexity and connection within different systems, the barriers are high also in infotainment. This is why we believe EB to be in an excellent position to take advantage of the high growth opportunities, and we don't expect significant rise in the number of competitors in the near future. This also makes EB Automotive quite attractive as a possible acquisition target for companies looking for piece of the automotive software market. It should be one of those business areas, where it's easier to "buy-in" due to otherwise very long "qualifying process". All this is naturally very positive from the shareholders point of view.

Due to critical nature of the systems, especially ECU, there are plenty of standards and control in the industry. However, even with the AUTOSAR becoming more common, there is a huge amount of different variables and the different standards are loose at best. AUTOSAR (AUTomotive Open System ARchitecture) is a worldwide development partnership of car manufacturers, suppliers and other companies from the electronics, semiconductor and software industry. Each one of the car manufacturers wants others to follow their way, and no one wants to give in. Currently the different models *within a company or group* are slowly becoming close to same standards, so industry-wide standard is clearly far away.

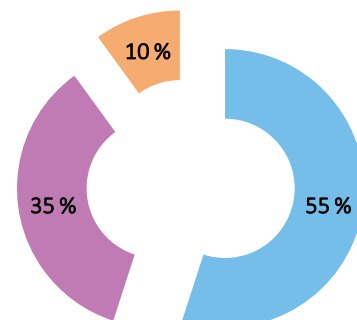
All in all, the industry has a very long way to go until it reaches any real standardization. This makes it a very challenging field to operate and create scalable products, but in the other hand, it creates a lot of business for different services such as integration services. It also keeps the big software companies, for example Microsoft and Google, mostly away from the industry. Microsoft is involved in Automotive, but not as a competitor of EB, and not in a major scale. If there would be one signal platform for all the cars, it would be quite a different market.

3.6. EB's different offerings in Automotive

EB's core business in automotive sector is software engineering, where it has a competitive edge through long experience in different software and embedded systems. With decades of experience in the R&D services in automotive industry, EB has acquired a profound knowledge about the practices of the automobile manufacturers and their processes. EB provides OEM and Tier 1 in all phases of the development cycle and is based on the existing experience in a position to assess appropriate technology and identify the most appropriate solution for the customer. Software engineering is a particularly important aspect of increasingly complex systems in the infotainment domain as well as in software and system integration.

There are no specific figures available how EB's sales are divided among services and own products, but clearly the different services are still majority of the business. We estimate that **EB's own products account for around one quarter (25 %) of total sales of Automotive**, rest being different services. EB Automotive's sales can be divided in the following categories:

- **Infotainment** (estimated to account for 55 % of sales)
- **ECU** (estimated to account for 35 % of sales)
- **Driver Assistance** (estimated to account for 10 % of sales)



Graph 4. Main offerings illustrated.

Still, it's important to understand that Automotive has only few "out-of-the-box" products, and it's difficult to say where the line between products and services actually should be drawn. Anyway, by far the most important part of the business is services and Software Engineering.

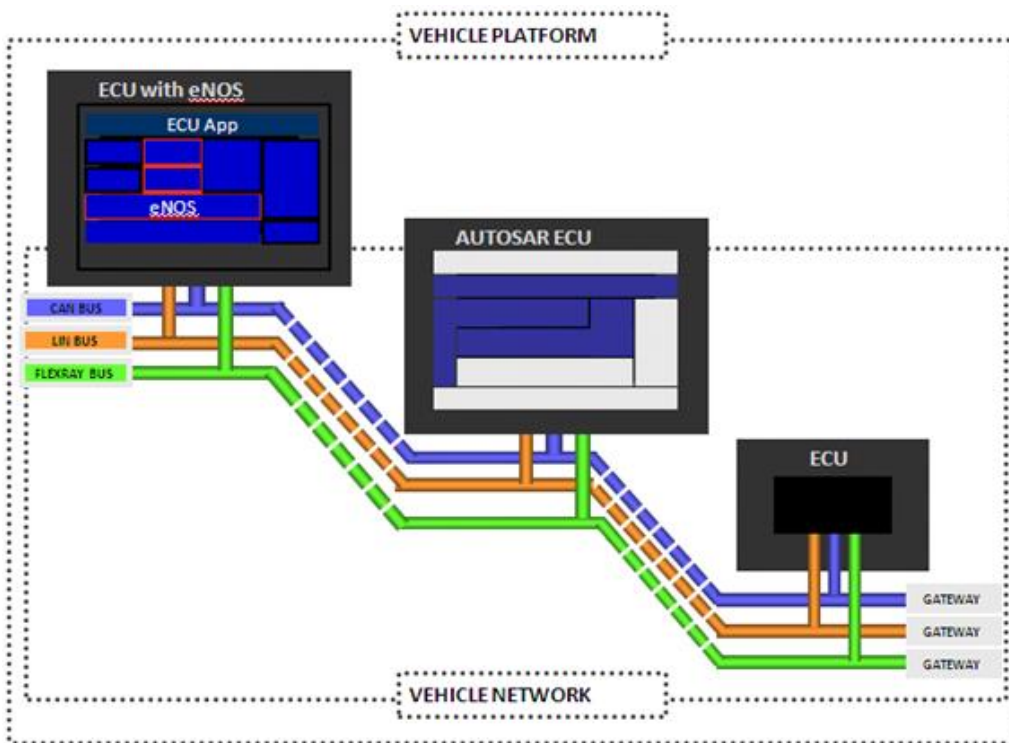
All the three product areas mentioned above have interconnection that seems to be developing stronger over time. It is very essential for EB to be on all the three areas, because they "work" together in a car. In the long run all the systems are coming more and more together, when understanding the whole as well as different aspects becomes more critical and demanding.

Automotive's products are somewhat difficult to demonstrate for investors, but probably most of car owners have used these systems. **Infotainment** is probably the most visible for drivers, which means to information and entertainment systems in cars. Normally these include things like radio, cd-player and navigation system integrated with HMI (Human Machine Interface) that are made with OEM's own look-and-feel. Good example is EB's infotainment system in the new Audi A3 that has been widely advertised by Audi. It's playing a major role in the television ads, another example of car makers attempt to differentiate through infotainment. You won't find EB's logo in your car, but it doesn't mean that its technology isn't there.



Picture 3. EB's infotainment system is clearly visible in picture of new Audi A3. (Source: Audi)

ECU, standing for Electronic Control Unit, is crucial embedded system inside the car. It is the system that makes sure that, for example, when driver steps on the brake pedal, the car also actually brakes. This is naturally the kind of system, where mistakes cannot be made and trust is essential. Due to high safety requirements and the complexity of modern car's electronic systems, this means very high entry barriers for vendors with no reputation in the market. Therefore EB's extensive two decade experience combined with strong partnerships formed during this time in the field gives it a clear and solid competitive edge over new competitors. When thinking about software industry in general, this is probably one of the most challenging areas to entry.



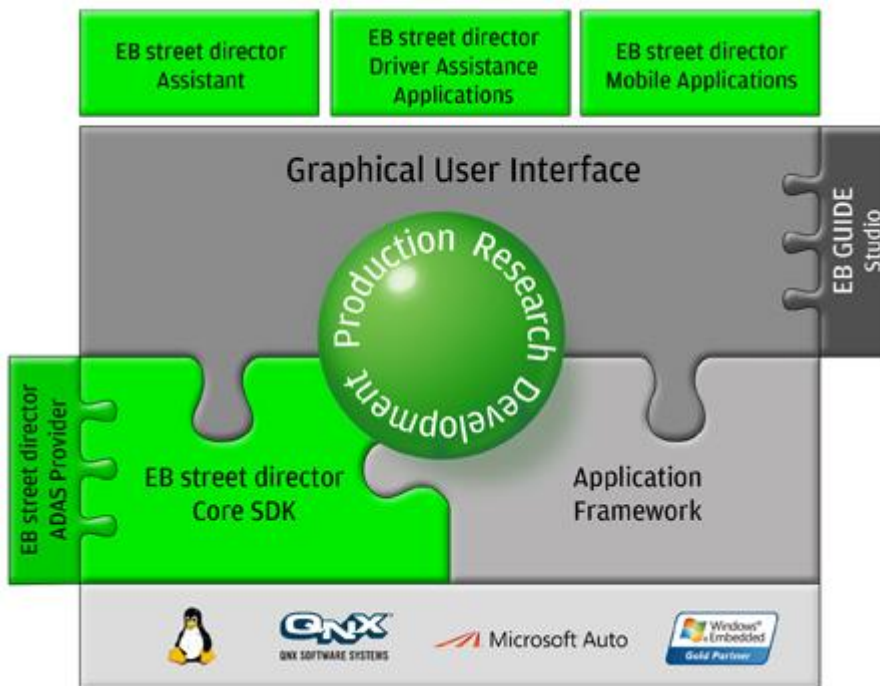
Picture 4. Simplified example of ECU in a vehicle. Source: [KPIT Cummings](#)

EB Automotive has been investing a lot in **navigation** recently. The company sees major potential in navigation systems, but not necessary in the traditionally understood form. Management of Automotive is already thinking one step further from basic navigation to integrating different driver assistance and safety applications to more accurate navigation system. In the future navigation will be an integrated part of car's control system, and external navigation devices will most likely become obsolete. However, navigation might be a larger part of the car's control system, with applications regarding safety and driver assistance. Navigation is definitely an interesting market in the future, but it's difficult to say how it will develop eventually and how well EB can establish itself there.



Picture 5. EB demonstrated Street Director Navigation Software in CES 2013 (Source: [fourtitude.com](#))

In navigation business EB's main competitors are well-known companies like TomTom and Garmin. These companies that still have external navigators are also working together with car OEMs in order to be part of the integrated systems. We believe these will be losing market share in the future, since they cannot offer anything else than navigation in the more and more complex framework. Still, the strength of EB's competitive edge in this area depends on future development to more exact navigation and its applications. Without "the next step", competition is going to be fierce, making it difficult to enjoy profits. Currently we do not put a great value in the navigation business, though we see the potential.



Picture 6. EB street director Core SDK (Source: [Elektrobit](#))

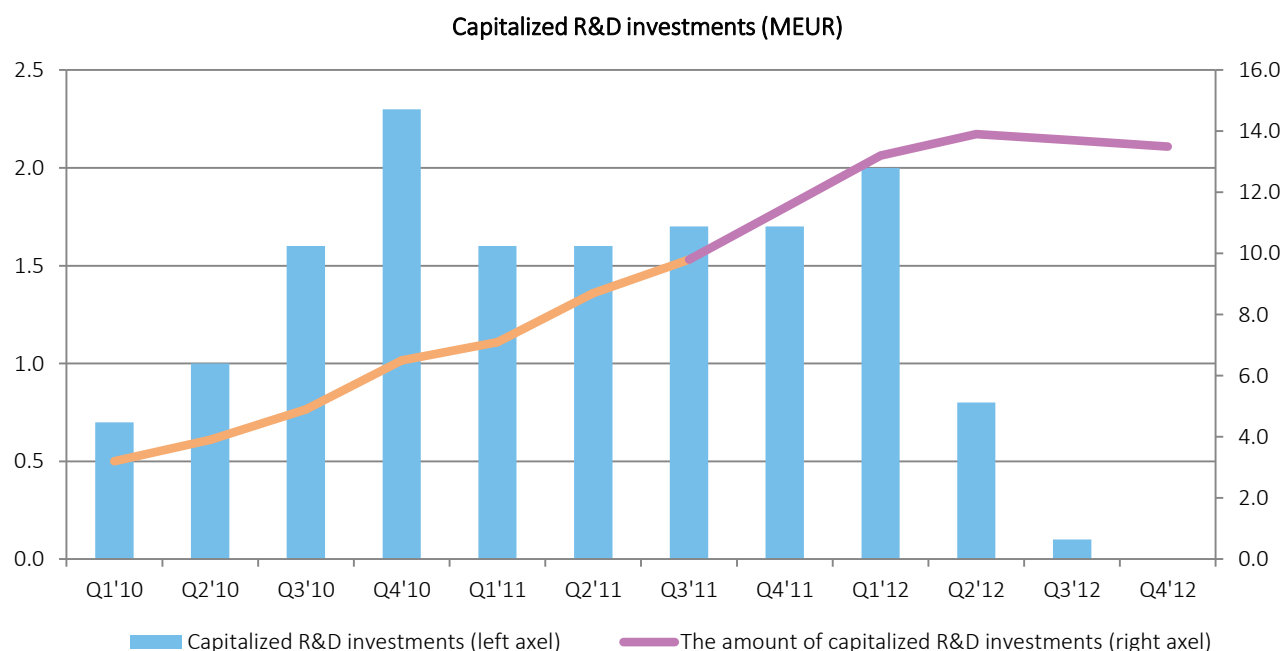
Another business area is driver assistance, which is a significant innovation area within the vehicle's electrical and electronics. Market trends such as Green Driving, Safe Driving, Urban/Mega-City Driving, and Autonomous Driving characterize this area. Different technologies such as radar, ultrasonic, and video cameras as well as navigation and wireless communications (Car2X) make this an exciting area. Some of the currently quickly growing products in this area are the parking and lane change assistants. Once again, EB has the understanding required by the complexity of integrating these technologies and the many sensors, making this area also interesting for the future.

There's also a concept of "connected car", giving at least some link also to EB's another business segment Wireless. EB's driver assistance solution EB Assist ADF has many modules, components and tools for this area. One interesting area for the future is the management and storage of all the data that modern cars are collecting all the time. This might be used for new applications in the future, for example better maintenance or following of drivers and their methods. At least rental and insurance companies might be very interested in this data, though it also provides possible problems with data security.

3.7. Business model moving towards dependency of car production volumes

EB Automotive's earnings logic is moving towards dependency of car production volumes. Currently the dependency of EB's net sales on car production volumes is limited, but the direct dependency on production volumes is expected to increase as a result of the EB's transition towards software license business models over the forthcoming years.

This change can be seen in the amount of capitalized R&D investments. At the end of 2012 these were 13.5 million euros. According to the company, a significant part of these capitalizations is related to customer agreements of Automotive business, where future license fees, based on the actual car delivery volumes, are expected to accumulate in the coming years. Apparently these have started to materialize now, since there have been also amortizations of these R&D investments in the past quarters. In Q3'12 (13.7 MEUR) it was actually a bit smaller than in Q2'12 (13.9 MEUR) and in Q4'12 there were no capitalizations of R&D investments at all. So in the past few quarters the amortizations have actually outweighed the capitalizations, which is positive especially since it hasn't been hurting the profitability. We believe that this lowers company's risk profile slightly. These have kept the accumulated absolute level stable in the recent quarters.



Note that orange line is our own estimate, EB has not disclosed earlier figures.

Graph 5. Capitalized R&D investments of EB have been stabilizing.

Assumptions behind the capitalizations of R&D investments are probably quite cautious, and risks related to them are should be well under control. Therefore we do not expect any writedowns even if the car market in general would decline this year, which seems quite likely due to weak overall economic growth. Note that when we are talking about the car market here, we refer to the amount of cars sold globally or in Europe. Once again it's critical to separate software market that is not only growing quickly but also the most critical market for EB.

However, it is important to understand the impact on both cash flows and on the other hand profitability. During 2011 and to some degree in 2012 the capitalized R&D investments have been improving Automotive's EBIT, which is somewhat disappointing, since these figures aren't very impressive to begin with. We'll be following the figures closely, because if they would grow significantly, the risks regarding to them are also growing. However, the past few quarters have been assuring in this matter. Naturally capitalizations are cash flow neutral in the end, but they have been pushing down cash flow (compared to normal income statement) in the past years. If this trend is changed in the future, or at least stabilized, cash flows should be stronger.











3.8. e.solutions – Joint Venture with Audi

One very interesting and important part of EB is its joint venture with Audi, which is part of Volkswagen Group. EB Automotive owns 51 % of e.solutions, while 49 % is owned by Audi Electronics Venture GmbH. Company was formed on first of June 2009. In the first full operational year, 2010, company amounted net sales of 11.6 MEUR and made a net profit of 0.618 MEUR. In 2011 the corresponding figures were 18.9 MEUR and 0.786 MEUR, meaning that sales grew 63 % in a year (source: Germany's trade register). In 2012, the net sales of e.solutions were 34.6 million euros (up ~83 %) and the operating profit 2.9 million euros. This not only makes e.solutions a significant part of EB Group - it makes it one of the most lucrative parts of it. The EBIT-% of e.solutions was around 8.4 % in 2012, much higher than Automotive's 3.8 %. Since that Automotive's 2012 figure also includes e.solutions, the other businesses were clearly behind it.



Picture 7. Touch Panel Prototyping is one example of co-operation between Audi and EB.

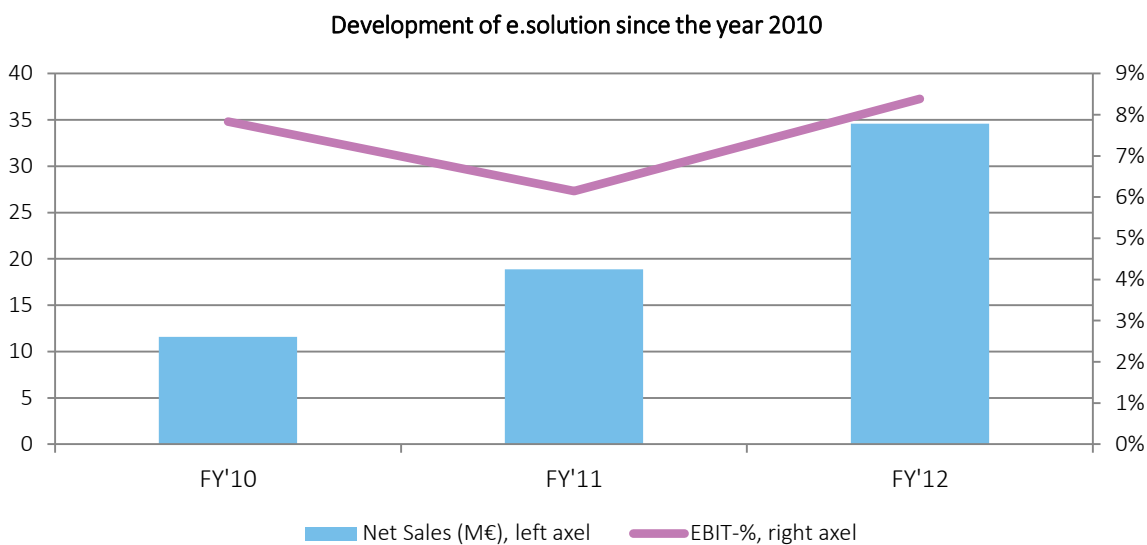
Volkswagen Group that includes brands such as Volkswagen, Audi, SEAT, ŠKODA, Bentley, Bugatti, Lamborghini, Porsche, Ducati, Volkswagen Commercial Vehicles, Scania and MAN. The Volkswagen Group is one of the world's leading automobile manufacturers and the largest carmaker in Europe.

	 Audi	 SEAT
		 BENTLEY
	Experience D[r]iversity.	
 Commercial Vehicles	 SCANIA	 MAN

Picture 8. The brand portfolio of Volkswagen Group. Source: Volkswagen AG.

In 2011, the Group increased the number of vehicles delivered to customers to 8.265 million, corresponding to a 12.3 percent share of the world passenger car market. In Western Europe over one in five new cars (23.0 percent) comes from the Volkswagen Group. Group sales revenue in 2011 totaled €159 billion (2010: €126.9 billion). Profit after tax in the 2011 financial year amounted to €15.8 billion (2010: €7.2 billion). In 2012 Volkswagen's key figures have been developing positively, so there's more to come.

So far e.solutions has practically no sales to customers outside of VW Group. While this is quite understandable, since VW Group surely looks joint venture as part of its competitive edge and isn't too excited about sharing it with competitors, this could limit EB's opportunities. The possible problem is that Audi and VW Group demands "internal pricing" for the services and software, and is reluctant to outside sales. Then the profitability of the joint venture would be constantly under pressure despite the huge potential. However, so far this hasn't been a problem, since the JV has probably been the most profitable part of Automotive.



Graph 6. Development net sales and EBIT-% of e.solutions.

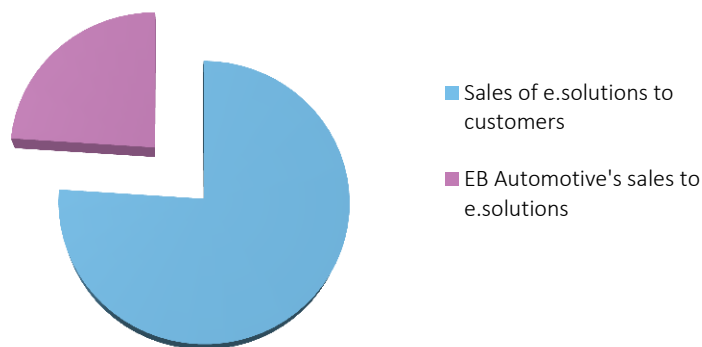
3.9. The growth of e.solutions is set to continue, but how will EB's slice develop?

EB Automotive and Audi decided to expand the joint venture activities in e.solutions to include systems engineering and provide systems integration services to AUDI AG and other VW Group companies for their future connected infotainment solutions. To build the required engineering competences and capacity, the joint venture will establish a new site in Ulm, Germany. By end of 2013 e.solutions is planning to hire up to 100 R&D engineers in Ulm, leveraging the existing knowledge base and competency in systems integration and software development. This is a massive jump forward considering that e.solutions employed "over 100" persons according to Q3'12 interim report.

Like we mentioned earlier, EB's infotainment system is currently widely advertised in the new Audi A3. This is one of the models that have been published also by EB as reference cases. Still, this should be only the beginning, since this system should be scalable to all Audis with slightly different "levels" and later basically to all Volkswagen Group's cars. This is naturally a massive opportunity for EB as well as e.solutions. It is extremely interesting to follow how well EB can capture this market inside VW, especially since it's difficult to quantify the potential realistically. Naturally the opportunity is massive, but at the same time also VW Group will naturally be in a great bargaining position and it's difficult to estimate what kind of margins are reachable.

However, the extremely rapid growth of e.solutions and new investment to it are not necessary all good for EB. The new capacity that is currently being recruited might decrease EB Automotive's share of sales to e.solutions, which have been reasonable large in the past. In 2012 EB Automotive's sales to e.solutions were roughly 11 MEUR, which is a very large part of e.solutions' net sales (34.6 MEUR in 2012).

We believe that this share of EB Automotive's sales to e.solutions will decrease in the future, when e.solutions will get more own capacity. However, it's extremely difficult to estimate how this will develop, especially since resources in automotive sector in Germany are currently hard to come by.



Graph 7. EB Automotive's internal sales to e.solution are also significant.

3.10. Changes in the consolidation of e.solutions and their effect on Automotive

In order to value EB properly, we must notice that e.solutions creates a significant amount of both net sales and EBIT in Automotive have been included in EB's group figures in the past since EB owns 51 % of e.solutions. However, it doesn't own 49 %, which has been easy to forget. In Q4 report EB stated it will start to apply the new IFRS10 and IFRS11 standards from the beginning of 2013 and therefore will consolidate e.solutions applying the **proportionate consolidation** method. As a result of the change in the method of consolidation, the proportion of net sales and operating result of e.solutions consolidated into EB group's financial statements will decrease from the previous 100 % to 51 %. According to the rules of proportionate consolidation method, the consolidated statement will also include 49% of the net sales of other EB group companies to e.solutions.

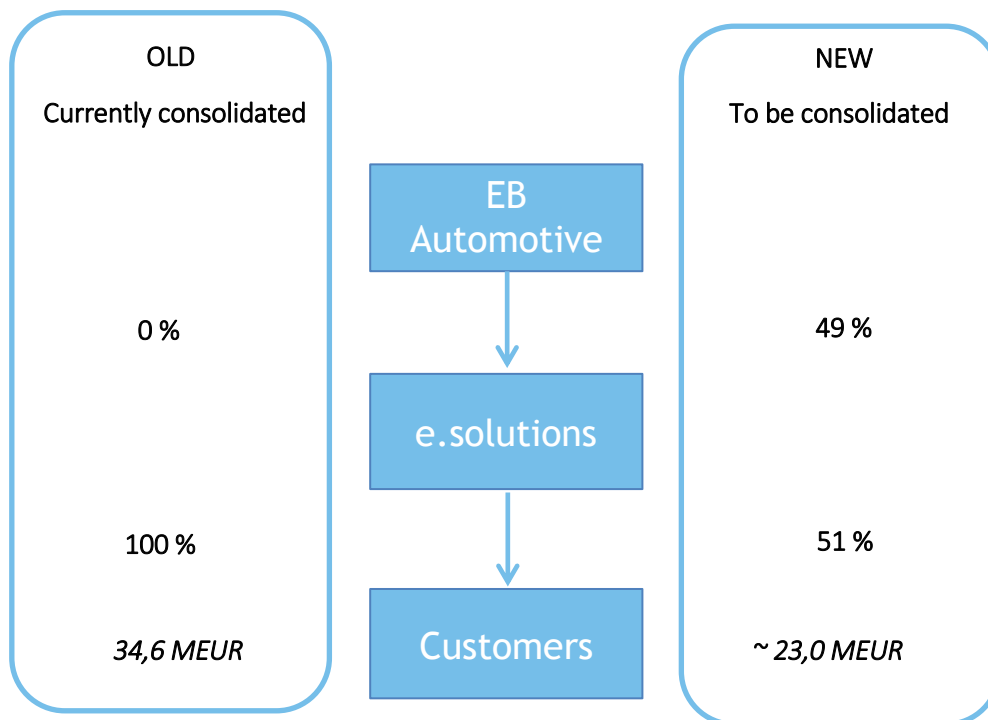
If the proportionate consolidation method would have been applied for e.solutions already in 2012, the consolidated net sales of EB group would have been 11.6 million euros and the operating profit 1.4 million euros less than was the case when the full consolidation method was applied. In 2012, the external net sales of e.solutions GmbH was 34.6 million euros and the operating profit 2.9 million euros.

In the financial reports of 2013, EB will present the year-on-year information of income statement and balance sheet with pro forma principle, assuming that e.solutions GmbH would have been consolidated to EB group according to the rules of proportionate consolidation already in 2012.

So in the future EB will consolidate only its own share (51 %), which means that 49 % of net sales and operating profit will be excluded from EB's Automotive business segment and group figures. It's important to understand that this is just an accounting change: earlier Audi's share of profits have been paid in the minority interests, so the share of EB's shareholders' isn't changing. Here are the key takeaways from the changes:

- **Automotive's reported net sales will decrease around 11.6 MEUR.** We have lowered our estimate of Automotive's net sales by around 12 MEUR due to these changes, but in the other hand adjusted underlying growth estimate slightly up after the strong Q4. According to the pro forma figures that EB provided in Q4 report, net sales of 2012 is roughly 11.6 MEUR lower, when the sales of e.solutions as well as EB's sales to e.solutions are excluded (49 % / 51 %). Before EB Automotive's sales to e.solutions (roughly 11 MEUR in 2012) were also considered to be internal, since e.solutions was consolidated to EB. This is why the sales are not directly 49 % down: it is a net difference between external sales outside of e.solutions and EB's internal sales to e.solutions, since both were earlier consolidated. We have tried to open up the changes in the following picture, where the two consolidation principles and their end-results can be seen:

Consolidation changes in Automotive



Graph 8. Consolidation change of Automotive.

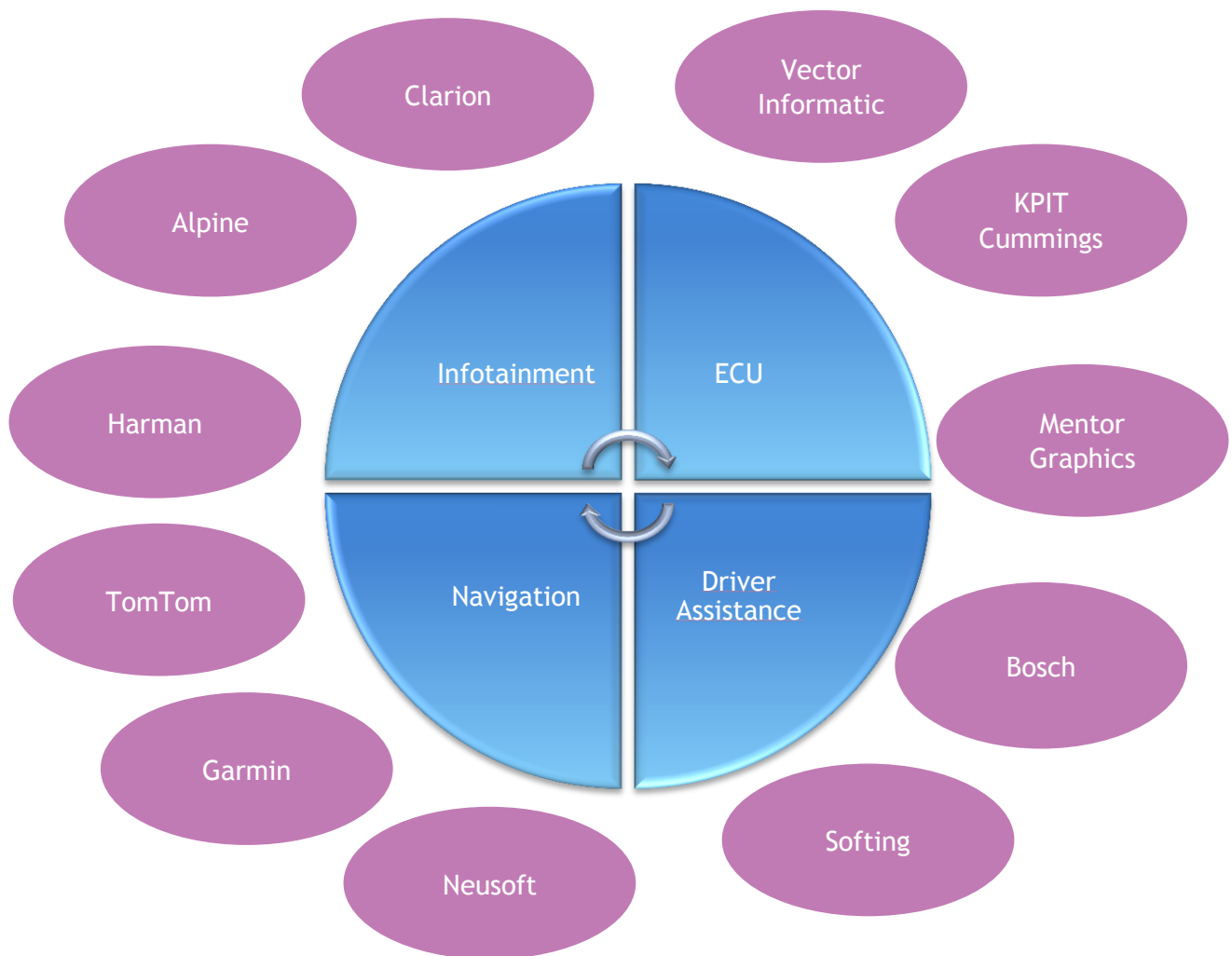
- Automotive's sales growth will probably slow down.** Sales of e.solutions have been growing very rapidly in past few years and company nearly tripled its sales in the last three year (FY'10: 11.6 MEUR, FY'12: 34.6 MEUR). This means that net sales growth of EB Automotive will slow down to some degree, since only a half of this growth will be shown in EB's figures. However, it's worth emphasizing that we haven't changed our long-term underlying growth estimates regarding e.solutions. It's also interesting to follow how EB Automotive's sales to e.solutions will develop in the future, especially considering JV's plans to expand in Ulm, Germany. The short but strong track-record of e.solutions (established in 2009) can be seen in the graph below.
- Automotive's EBIT and EBIT-% will decrease.** Similar changes will also be seen in operating profit of Automotive, since e.solutions has also been very profitable and margins have been clearly above those of Automotive segment in general. The EBIT-% of e.solutions was around 8.4 % in 2012, while EB Automotive's EBIT-% was 3.8 %. Therefore this accounting change will have significant influence on the profitability of Automotive also. Once again it's important to understand that we haven't made changes to our underlying profitability estimates, and Audi's share of profits has naturally always been paid anyway. This has just been visible in the minority interests.
- EB's reported net profit will not be influenced by the changes.** The most important thing to understand about the changes stated earlier is the net profit of EB will not be influenced by them. While Automotive's reported figures will look worse in the future, they will be compensated in the minority interests in the end of the P&L statement. Therefore the value of the business isn't changed, and Automotive's investment case is intact. These figures affect similarly to EB's group figures through Automotive.
- We have taken these changes into account in our future estimates,** but EB hasn't provided pro forma figures on quarterly level for 2012. This means that year 2012 figures are not comparable with the estimates.

3.11. Competitive environment and competitors

EB's main competitors differ from area to area. In software engineering competitors can be giants like Wipro, in ECU company's main competitors are Vector Informatik GmbH and KPIT Cummings and in navigation competitors are well-known names like Garmin and TomTom. Infotainment area is filled with players like Alpine, Harman and other brands that people used to see for example in traditional cd-players. Bosch is a major player in the field in general, but especially in the driver assistance its offerings cross with EB's. It's also worth pointing out that especially in the R&D services in-house is naturally a very important "competitor" and outsourcing decisions in general are very important.

One industry specific factor to understand in the automotive business is that competitors can also be partners in different projects. For example EB has been integrating its competitors' products according to OEM's wishes; in the end the car makers that are the end-customers control the combination of suppliers. There are strategic partnerships, and if OEM's choose EB's product in certain area, competitors must respect this and co-operate to make successful integration of products. So it's not always a straight-forward delivery chain; EB has client relationships both directly with OEMs as well as Tier 1-suppliers.

We'll shortly go through main players in the field, and analyze their strengths and weaknesses compared to EB. A summary of the competitors and some comments about the overall situation as we see it can be found below.



Graph 9. The business areas of EB Automotive as well as their competitors.

Note that the table below doesn't cover all the activities of the companies. It is supposed to only mark significant competitors concerning EB Automotive.

Main competitors	Software Engineering	Infotainment	ECU	Driver Assistance	Navigation
EB Automotive	X	X	X	X	X
Bosch	X	X	X	X	X
Vector Informatik			X		
KPIT Cummins	X		X		
Mentor Graphics		X	X		
Wipro & similar	X				
Alpine		X			X
Harman		X			X
Clarion		X			X
Garmin					X
TomTom					X
Aisin		X	X		
Neusoft					X
Technisat					X

Table 1. EB Automotive's main competitors in the main business areas.

When looking at the table above, it's easy to see the main competitors. Bosch is operating in all the key areas regarding EB. KPIT Cummings and Mentor Graphics are both significant competitors in ECU, but in this area the main competitor is probably Vector Informatik that is focused on ECU. Software Engineering, even though we limit it to Automotive sector, is such a wide category that it's difficult to make key conclusions through this. Anyway, KPIT is active also in this field, while Mentor is active also in Infotainment.

On key takeaway from the table is the amount of competitors in infotainment and navigation versus ECU and driver assistance. While navigation category has 8 companies competing, there are 6 competitors in ECU and only 1 in driver assistance. Even though this can be partly explained by the choices made when creating the table, we believe that there's also underlying business logic; there are fewer competitors in the operations most critical regarding the safety aspects of cars.

In the following chapters will give a brief description of EB Automotive's main competitors. Information is basic in nature, and naturally we'll aim to focus on company's significance for EB. The most important ones are gone through in more detail as long as there's enough applicable data available.

**BOSCH**

Invented for life

Net sales in 2012:30.9 billion euros,
only automotive
technology**MCAP** (MEUR): Bosch
is a private company.Significant in **sectors**: important
company in all the key areas of
EB Automotive.

Bosch Corporation produces and supplies OE systems and products for automobile manufacturers. It also offers car parts and accessories, diesel systems, electronic stability systems, and driver assistance systems, as well as car services for car drivers. Company also provides testing equipment for workshops. The massive company is based in Tokyo, Japan.

Bosch is EB's main competitor in the driver assistance software and a significant player in all the key areas of EB Automotive. It's worth noting that Bosch has been also a client of EB in some projects, so it's not only a competitor. With vast resources Bosch will continue to be important player in the industry, but it's difficult to analyze it further because it's a private company.

**KPIT Cummins****Net sales** in 2012:
208 MEUR**MCAP** (MEUR): 290Significant in **sectors**:
Software engineering and ECU.

Figures from Thomson Reuters 13/3/2013. Changes may apply also due to currency fluctuations.

KPIT Cummings Infosystems provides IT consulting and product engineering services for automotive and transportation among other sectors. It offers business consulting, IT solutions and its product engineering solutions comprise a range of automotive sub-systems. Company states that it is the only specialist auto engineering services company to have worked on a wide range of automotive sub-systems that encompass the entire requirements of an automotive development cycle. Company has expertise in various sub systems such as interiors, body, exteriors, powertrain, chassis and electricals. KPIT Cummins Infosystems Limited was founded in 1990 and is headquartered in Pune, India.

When it comes to competing against EB, KPIT is a significant competitor at least in software engineering and in ECU (with their AUTOSAR & eNOS Solutions). Company is also operating in infotainment, but doesn't really compete with EB in that area. Company is also into developing the connected car concept and tells that its connected car and cloud computing services "can redefine the standards of your future infotainment systems". Company "aims to help customers overcome the challenge of keeping consumers informed, entertained and safe in their cars the way they always wanted". KPIT has been growing aggressively in the past years, and we believe it to be one of the main competitors to keep an eye on.

**Net sales** in 2012:
not available.**MCAP** (MEUR):
private company.Significant in **sectors**:
main competitor in ECU.

Vector Informatik GmbH provides tools, software components, and engineering services for the networking of electronic systems in automobile and related industries. Vector is EB's main competitor in ECU area. Among other things, it offers ECU testing solutions, such as tool chain, network analysis tool, development and test tool, test design, test creation, test hardware, testing of AUTOSAR SWCs, CAN conformance test, data logging, and engineering services. It also provides ECU calibration solutions, ECU interfaces, ECU drivers, calibration and management, diagnostics, and hardware solutions comprising Bus and ECU interfaces, measurement and control, testing and analysis, and drivers and libraries. Vector serves automotive, aerospace, commercial vehicles, and research and education industries. The company was formerly known as Vector Software GmbH.



Net sales in 2012:
roughly 770 MEUR

MCAP (MEUR):
almost 1500

Significant in **sectors**:
Infotainment and ECU.

Figures from Thomson Reuters 13/3/2013. Q4'12 figures were not updated yet.

Mentor Graphics Corporation (NasdaqGS: MENT) provides, among other things, automotive electronic components and a suite of real-time operating systems, Linux and Android products, middleware, and associated development and debugging tools for developing embedded software. Company describes itself as a leader in electronic design automation software, and says that it is unique in providing solutions for both the hardware components (the chips and boards) and the software components (the embedded operating systems and applications/drivers that control the product's operation). Company has approximately 4,500 employees worldwide.

It is important to notice that only a minor part of Mentor Graphics offerings is actually in the same field than EB Automotive, so the MCAP of 1.5 billion euros gives a misleading picture. However, company's Electrical/Electronic System Design and Harness Engineering business description sounds familiar:

"A new car now contains 15 percent more electronics than the models of one year ago, in entertainment, navigation and safety systems. As the electrical wiring systems in the transportation industry become increasingly complex, so the need for software solutions to manage this complexity grows. Mentor Graphics offers a range of solutions being used by OEMs and wire harness manufacturers throughout the world."

Source: Mentor Graphics Corporate Overview document.



Garmin (NasdaqGS: GRMN), **TeleNav** (NasdaqGS: TNAV) and **TomTom** (ENXTAM: TOM2) are pretty much similar, when thinking about them in the frame of EB's competitors. They design, develop, manufacture, and market global positioning system (GPS) enabled products and other navigation, communication, and information products for the automotive/mobile, outdoor, fitness, possible for marine, sailing and yachting, and general aviation markets worldwide. Companies offer a range of automotive navigation products, such as mobile navigation services through on-board or off-board systems. Naturally there are differences among these companies and their offerings, but they not much of significance to EB. These companies are EB's competitors in navigation sector, not in other areas.

Companies are still relatively large, especially Garmin (MCAP roughly 5.7 billion euros) and TomTom (MCAP around 750 MEUR). Telenav is much smaller with its MCAP of around 200 MEUR. Another company that can be mentioned in this group is **Trimble Navigation** (NasdaqGS: TRMB) that provides positioning, wireless, and software technology solutions. Even though Trimble is not a well-known name in Europe, it's a large company. Trimble's market capitalization is 7.7 billion US dollars and its revenue was more than 2 billion dollars in 2012.



harman/kardon®



Also companies like **Clarion** (TSE:6796), **Harman** (NYSE: HAR) and **Alpine Electronics** (TSE:6816) can be grouped together here. For example Clarion engages in the manufacture and sale of automobile products around the world. It offers car audio systems, car navigation system, and in-vehicle cameras, as well as automotive cloud information network services. The company also provides visual, bus, and communication equipment. Alpine's basic offering is very close to

Clarion, but its product line also comprises mobile media stations, audio visual products, iPod solutions, CD/DVD changers, original equipment manufacturer solutions, drive assist products, sound processors, subwoofers, as well as integration/dash kits and Bluetooth wireless technology products. When considering Harman's offerings for the area where EB also operates, there is a close resemblance, though Harman is more heavily focused in home audio, entertainment, high-fidelity sound and multimedia.

All these companies are EB Automotive's competitors in two areas: Infotainment and navigation. Infotainment was a logical development direction for those companies that use to sell CD-players for cars (and naturally still do). Clarion and Alpine were very much in this field as bulk producers, while Harman tried to position itself slightly higher. Anyway, all these companies are large, multinational companies. Harman has a MCAP of roughly 2.3 billion euros, Alpine is valued at 530 MEUR and Clarion around 300 MEUR.



Net sales in 2012:
roughly 750 MEUR

MCAP (MEUR):
around 1300

Significant in **sectors:**
navigation.

Figures from Thomson Reuters 13/3/2013. Changes may apply also due to currency fluctuations.

Neusoft (CNY: 600718.SS) is the largest IT solutions & services provider in China, but it also has subsidiaries spread across North America, Asia, Europe and Middle East. Currently Neusoft employs a total of more than 20,000 employees around the world, making it a large company in its field. Company focuses on software technology and provides Industry Solutions, Product Engineering Solutions, related software Products & Platform and Services through integration of software and services, software and manufacturing, as well as technology and industrial management capacity. Company is EB Automotive's competitor in navigation, and other operations that Neusoft has have very little to do with EB. Therefore the net sales of 750 MEUR as well as the market capitalization of ~1.3 billion euros is quite misleading, but this is still a major company in its own front.



Net sales in 2012:
over 20 billion euros.

MCAP (MEUR): 8200.

Significant in **sectors:**
Infotainment and ECU.

Figures from Thomson Reuters 13/3/2013. Changes may apply also due to currency fluctuations.

Aisin Seiki (JPY: 7259.T) is a Japan-based company engaged in the manufacture and sale of automobile parts and housing-related equipment. This massive company has three business segments, of which Automobile Parts segment is the interesting one regarding EB. It engages in the manufacture and sale of engine parts as well as information parts, including car navigation systems, parking support systems and intelligent parking support systems. Company's net sales in 2012 were over 20 billion euros (over 2300 billion yen) and company employed over 78 thousand persons. Luckily this huge company is focused mostly in different areas than EB. Aisin is EB's competitor in Infotainment and ECU. Aisin is operating in 20 countries, but its strong point is Japan.



Net sales in 2012:
not available.

MCAP (MEUR):
private company.

Significant in **sectors:**
navigation.

The TechniSat group of companies develops and produces consumer electronics products as well as information technology products - all in Germany. The group is among the leading suppliers of satellite reception products as well as of digital technology products in Germany and Europe. Currently company's product range includes car radios and navigation equipment, as well as Internet PC products LCD and cathode tube television sets. Company is EB Automotive's competitor in navigation.



Net sales in 2012:
48 MEUR

MCAP (MEUR): 47

Significant in sectors: Currently
Softing is not a significant
competitor in any area.

Figures from Thomson Reuters 13/3/2013. Q4'12 figures were not updated yet.

Softing AG (XTRA: SYT) provides analysis, consulting, development, and implementation services for the information technology (IT) projects. The company primarily focuses on the areas of process automation and production data acquisition, system and user software for micro-and minicomputer systems, long distance data transmission, computer networks, and commercial IT applications. Softing provides products and services to integrate communications functions in automation systems. In addition, the company provides vehicle adapters and data bus interfaces, FlexRay data bus systems, and programming interfaces, as well as special solutions for development, testing, production and service.

Softing is not a significant direct competitor in any of the specified areas. Softing is still a tiny company, but at least it has aggressive growth plans (incl. acquisitions), so in the future it might become a significant player in the field.



Net sales in 2012:
roughly 12 billion
euros.

MCAP (MEUR):
~10500

Significant in sectors:
Not necessary as a competitor,
but a major player in general.

Figures from Thomson Reuters 13/3/2013. Changes may apply also due to currency fluctuations.

Delphi Automotive PLC (NYSE: DLPH.K) is a global vehicle components manufacturer and provides electrical and electronic, powertrain, safety and thermal technology solutions to the global automotive and commercial vehicle markets. Out of company's four business segments, we believe that two are especially important for EB: Electrical/Electronic Architecture and Electronics and Safety. Delphi offers a range of electronic and safety equipment in the areas of controls, security, infotainment, communications, safety systems and power electronics. Companies like **Lear** (NYSE: LEA) and **Visteon** (NYSE: VC) are within Delphi's competitors, but relatively far away from EB.

Delphi is actually also one of **EB's references** or success stories. For example when Delphi was looking for a flexible navigation software solution for Audi's A1 standard head unit, company chose EB Automotive as a partner. The challenge was to upgrade the entry level hardware platform with high-end navigation and HMI features such as real alternative routes and full-word-speech-entry. The Solution was that the navigation software is based on the navigation solution EB street director. Using the EB GUIDE Speech Target Framework, a speech dialog system has also been integrated into the infotainment solution.

Dr. Wilhelm Steger, Managing Director Infotainment & Driver Interface Europe, Delphi: "EBs products were easily integrated into our system architecture and have helped Delphi to offer Audi superb quality and added functionality." (Source: EB)

We have added this example, which was just one of many with Delphi, to open up the dynamics of the automotive business. Suppliers must co-operate in order to deliver the solution that the client OEM wants. Therefore companies can be competitors in one front, but also become partners in different projects just like with EB and Delphi.

3.12. Peers of Automotive and relatively value

When thinking about peer group for valuation of EB Automotive, the task is quite challenging. There are no companies that would have a similar business portfolio; even those companies that would be a match in certain area have other businesses that make group comparisons impossible. In the other hand, companies that have little resemblance as a business might actually be better comparisons, when thinking about the potential and therefore the correct valuation of the business.

Considering the valuation and its elements, we believe that an index made out of three basic components might represent EB Automotive quite nicely. They would be something like:

- **Software business** (weight of 1/3)
- **Automotive tier 1 suppliers** (weight of 1/3)
- **IT Services industry** (weight of 1/3)

We believe that this combination is somewhat equipped to reflect the valuation side of EB Automotive, even though we understand its limitations. These sectors have very different valuations, software being clearly the highest. Therefore the weights that each component carries also have a significant impact on the outcome. Still, currently the one third of each should reflect Automotive's business portfolio reasonable well. Unfortunately it's difficult to combine such an index without also taking geographical mix and valuation differences between markets into account. Of course there are also limitations of data; for example S&P would have wide index data available for the US, but focusing solely on the US market doesn't represent EB's core markets very well. Still, valuations of Tier 1-suppliers were surprisingly high in the US, possible because automotive market is making a bit of comeback after the financial crisis.

To tackle the problem of different business areas, we have collected the peers for EB Automotive from different business areas as well as focuses. When looking at the probably best peers for EB Automotive, we find that Softing, KPIT Cummings, Mentor Graphics, Alpine, TeleNav and TomTom are all listed companies. Here Softing, KPIT Cummings and Mentor Graphics more in the embedded systems and software side. Naturally Alpine and Harman represent somewhat old-fashioned "hard and soft" suppliers; especially with Alpine one can see this with lower valuation. TomTom and TeleNav are taken from the navigation side, where the valuations are higher and more comparable with software due to scalability. Still, it's worth remembering that the navigation business has been going through a massive change during past years. In the end we come up with the following table:

Business segment peer groups

Estimates: Reuters consensus

	EV/EBITDA			EV/S			P/BV	MCAP
	2012	2013e	2014e	2012	2013e	2014e	2013e	MEUR
EB Automotive								
Softing AG	-	3.7	3.3	-	0.7	0.6	2.8	47
KPIT Cummins	7.4	5.8	5.1	1.1	0.9	0.8	2.9	287
Mentor Graphics	7.9	8.3	7.4	1.6	1.8	1.8	2.2	1490
Alpine	3.1	4.4	3.2	0.2	0.2	0.2	0.7	528
Harman	5.0	7.0	5.5	0.5	0.7	0.6	2.0	2320
Garmin	9.4	13.3	13.2	2.3	3.1	3.2	2.1	5700
TomTom	5.6	7.6	7.3	0.9	0.9	0.9	0.9	752
MEDIAN	6.5	7.0	5.5	1.0	0.9	0.8	2.1	

Table 2. Valuation of EB Automotive's peer group. Source: Thomson Reuters 13/3/2013.

Information provided for segments is limited, which causes more uncertainty on our estimates. We'll focus on EV/EBIT, EV/EBITDA and EV/S, since we have those available for EB Automotive. If we were to use the median EV/EBITDA-multiple of 7 for our 2013 estimates, EB Automotive's EV would be around 68 MEUR with our current estimates (FY'13e EBITDA ~9.7 MEUR). However, we find company's strong position in the fast growing market to earn a higher multiple.

This can be better explained, when we later take a look in the profit improvement potential. Median EV/EBIT of the same group for 2013 is 9.8, which is relatively low. With this multiple Automotive's EV would be only around 45 MEUR. Due to current relatively weak profitability of EB Automotive, EV/Sales multiple is much kinder for it. With our 2013 estimate for sales, multiple 0.9 would give EB Automotive almost a value of ~120 MEUR (FY'13e net sales ~130 MEUR). These three simple calculations have let us to wide range of 45-120 MEUR. However, this naturally isn't a satisfactory end-result. We believe that the right value is close to that given by EBITDA-multiple, which was ~70 MEUR.

To open up the dynamics of the business area in general, we have also gathered some information about the relative sizes and profitability of these companies. Some key figures can be found in the following table:

Business segment peer groups

Estimates: Reuters consensus

	Net sales (MEUR)			EBIT-%		
	2011	2012e	2013e	2011	2012e	2013e
EB Automotive						
Softing AG	48.0	54.0	58.6	10 %	11 %	11 %
KPIT Cummins	207.9	318.0	355.5	12 %	13 %	14 %
Mentor Graphics	770.6	847.7	887.3	15 %	19 %	20 %
Alpine	1887	1784	1884	3 %	3 %	4 %
Harman	3602	3126	3463	7 %	6 %	8 %
Garmin	2079	1959	1902	21 %	-1 %	-3 %
TomTom	1054	935	915	6 %	3 %	5 %
MEDIAN	1054.0	935.4	915.4	10.0 %	6.5 %	8.0 %

Table 3. Some key figures of EB Automotive's peer group. Source: Thomson Reuters 13/3/2013.

Main point here is that EB Automotive's profitability is very low compared to most of its peers. In FY'12 Automotive's EBIT-% was 3.8 % and it's important to realize that the consolidation changes haven't impacted this figure yet. This means that 2012 profitability will be pushed down with the consolidation change of e.solutions. Past few years have been much weaker, and despite the rapid growth it should be able to do better. For the 2013 we are currently estimating an EBIT margin of 3.4 %, which leaves company plenty of room to improve.

2011 median EBIT margin (10 %) is really far-fetched in the current phase of EB, though not unreachable when thinking about the business area. Currently the median figures are pushed down by navigation companies that are currently going through a major transformation. We believe double digit EBIT margin is realistic after the growth slows down and company will concentrate in optimal use of resources. Above 10 %, more scalable business model or products need to be developed. The detailed valuation EB Automotive can be found in the chapter 9.1.

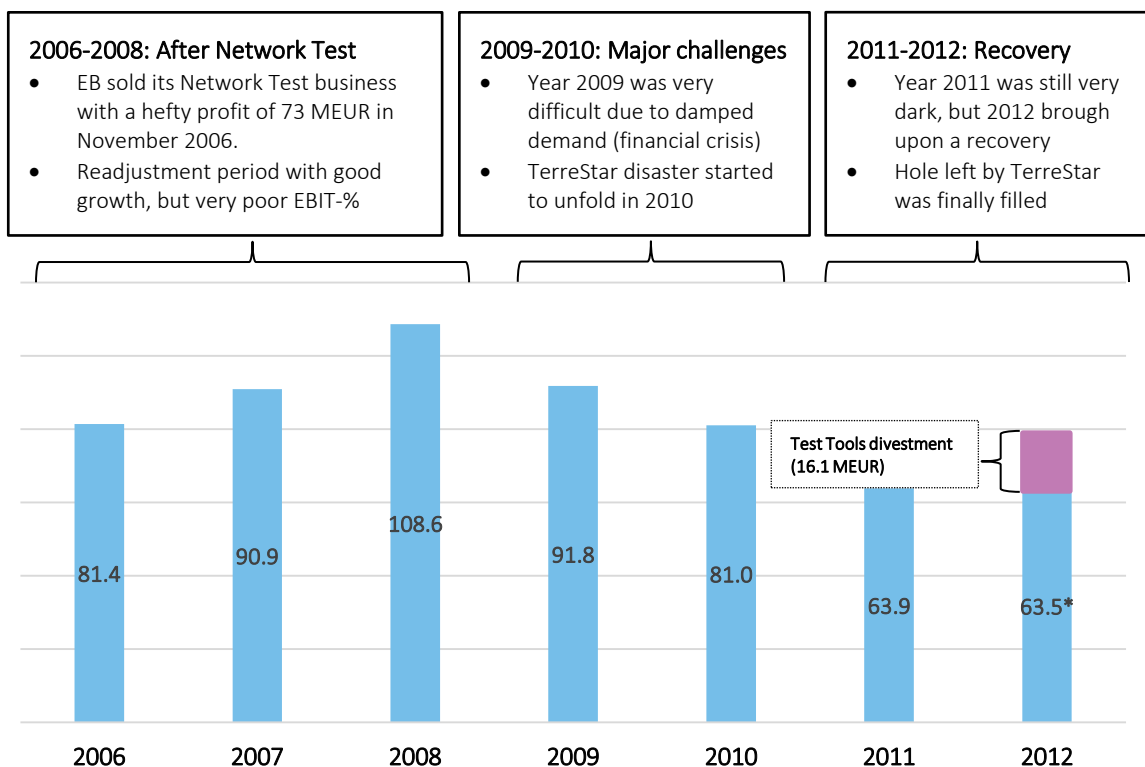
4. Wireless - interesting mixture of businesses around radio technology

The Wireless business segment offers development services and customized solutions for wireless communications markets and products and product platforms for defense and public safety markets. It used to offer also radio channel emulator products for industries and authorities utilizing wireless technologies, but Test Tools product based business was sold in January 2013. Even after the divestment there is an interesting mixture of businesses inside the Wireless business segment. Also the earnings logic varies even within businesses, which makes modeling the company a real challenge.

However, there is a relatively good balance between well-established business and new opportunities, and still the core of everything relates to radio technology. We see this as a very important factor, since a small company can easily try to do too many things, and succeed in none. Now that Test Tools Business Area is sold, company's strategy is further sharpened. The basis is the same every business area, and the main question is more how to leverage this knowhow. Our investment case of Wireless business is built on the following issues:

- Great underlying potential of the new defense products. EB Wireless has been in a great position to develop the products with the support of Finnish army, but has IRPs for products that have a great potential. We find a real breakthrough in defense sector unlikely, but really appreciate the "option" that is offered for free.
- Defense sector is dominated by group of giant companies. If EB would be able to capture a fraction of the market or even convince right people of the technological advantage of the products, it could be a potential target for acquisition.
- We believe that EB Wireless has an interesting mixture of businesses build around a solid knowhow of radio technology. Technologically we are very confident on company's abilities, but believe that the business side has been lacking in the engineer dominated business. We believe the main challenge is the commercialization of the expertise. EB has typically had plenty of "cool technologies", but too few have been profitable also for the shareholders. Core business of Wireless, R&D services, has been developing positively during the last year. With higher sales, company can leverage its basis better and margins are returning to decent levels.
- EB Wireless has operations in three sites in Finland that also reflect company's customer segments. Oulu is the headquarters of EB and has all business operations that are included in Wireless. Kajaani office is concentrated in Defense sector, conveniently located close to Finnish armed forces brigade of Kajaani. Tampere office is clearly focused on smart phones and connectivity.
- Scalability of the services business is naturally relatively weak when it comes to profit margins. Unless Defense products make a major breakthrough this will be a challenge also in the future limiting the potential profitability of the segment below 10 %. It's also easy to demonstrate the risks of the business with the case example of TerreStar. Pretty much everything that could go wrong went wrong with TerreStar and a significant amount of shareholders money was destroyed in the process.
- EB sold its Test Tools Business to Anite Plc in January 2013. Company had a solid position in testing tools with Prosim product family. This mature business provided cash flow and know-how for developing the future businesses. Still we believe that the EV of 31 MEUR was a good price for the business. Now company has plenty of cash to invest in its other operations. The transaction results in a non-recurring net profit of about 23 million euros in the first quarter of 2013, and non-recurring net cash flow of about 28 million euros in the first half of 2013.
- We believe that the value of the EB's Wireless business is roughly 25 million euros. Assuming no net debt, this would give EV/EBITDA-multiple of 5.5x, which is in-line with peer group. However, it's important to understand that Wireless is currently going through a major transformation after the divestment of Test Tools. Due to the low visibility regarding both the business and the industry, we have been cautious in our estimates and valuation.

Key Milestones and Revenue 2006 – 2012



Graph 10. Development of net sales and some key milestones of EB Wireless since 2006. **Note** that figures are not comparable. 2012 net sales figure is 63.5 excluding Test Tools and 79.6 MEUR including it.

The history of EB Wireless has many structural changes and M&A has always played a significant part in EB's business. Also the structure of Wireless has changed so strongly during the past 10 years that it's very challenging to show comparable figures. We have mostly overlooked the structural changes that occurred prior to the year 2006 in this analysis, because these are practically no relevance in the current situation.

The last major change in Wireless happened in January 2013, when company sold its Test Tools product based business. The divestment of Test Tools is changing the Wireless business segment significantly. Changes influence the cost structure as well as business logic to some degree. New Wireless is much more service oriented after the only pure and mature product based business was sold. In Q4 company also reported cost saving measures in the business segment that complicate the transparency a bit more. Here are the main changes that happened in Wireless:

- Wireless is now almost purely a service business. The only concrete products that the Wireless business segment currently sells are for Defense sector and for Authorities, and both of these are still very early in the product cycle. They might be very important in the future, but currently they don't really bring in net sales. First sales of defense products for international clients might occur in this year, which would be an important and positive signal for EB. The importance of defense is going to increase now.
- Cost structure of Wireless is currently too high for profitable business, since Test Tools business is no longer sharing the fixed costs. Company answered to this problem with the cost savings measures that were pretty much in-line with our expectations. However, we must wait until H2'13 for the savings to really materialize, meaning that H1'13 result will probably be weak.
- The seasonality of Wireless will probably be slightly lower. Especially Q4 was generally very strong for Test Tools business, which led into strong seasonality. Q3 will be the weakest quarter also in the future due to the holiday season, but otherwise the differences between different quarters should be slightly smaller.

- The business of Wireless will be even more focused on the employees and profitability will be very much determined by the utilization rates of the personnel. We recommend following figures like sales (and costs) per employee closely in the future.

4.1. The main offerings and customer segments of Wireless

We have divided Wireless into three categories that are Defense, Special Terminals and R&D Services. There used to be a fourth category called Testing Tools, but like mentioned already, this business was sold. Further information about the deal can be found in the chapter “4.1. Test tools business was sold in the beginning of 2013”. R&D Services can be also divided into two sub segments, Mobile Infrastructure and Connected Devices. There could be also Chipset vendors, but its contribution is limited and therefore we haven’t separated it into its own sub segment. In addition to these categories, you can find EB’s main offering (e.g. Prosim product family) and the main driver of the demand of the sector (e.g. LTE) in the graph below. All the categories are all connected by the expertise in radio technology, and all of them have at least two common drivers: LTE Technology and technological change. Importance of these vary between segments, but they are significant for all.



Picture 9. All the offerings of EB Wireless are linked by radio technology and driven by technological change.

Defense category is currently the most interesting in our opinion. There is a vast market for communications, jamming and intelligence solutions targeted for the sector. EB’s products for defense sector, developed in co-operation with Finnish armed forces, are now ready to be launched to the international markets. These markets are extremely harsh for newcomers, but if EB would gain fraction of this market, it could become a solid business for it. The trend of adopting new commercial technologies, such as LTE and smart phone related software applications, and combining them with proprietary military technology to gain cost efficiency is a very important trend for EB. This trend is expected to continue and get stronger, especially due to the budget pressures caused by financial burdens of countries around the world. This helps EB to some degree, and could open up new opportunities.

Special Terminals for Authorities is another interesting category that has significant future potential. Its offering is based on EB's Specialized Device Platform that won the "Technology of the Year" award by the Wireless Innovation Forum in December 2011. The EB Specialized Device Platform, based on the Android operating system, is targeted to Public Safety, Security, and other professional markets, enabling them to lower the development cost and shorten their smartphone or tablet development schedule. The EB platform gives fast access to latest commercial device technology, such as LTE and new Android releases, reducing the overall development program risk. The value of the platform comes from its scalability and versatile feature set, performance, industrialization options, and extended product life cycle. The driver for Special Terminals is therefore pretty much the same as in Defense. However, the market entry might be a bit easier here, though breakthrough definitely isn't easy in this area either.

Like said, we have divided **R&D Services** to two sub categories that are its main customer segments, Mobile Infrastructure and Connected Devices. Mobile Infrastructure's customer segment would be Network & Infra OEM's, and in the other, Connected Devices customers are Device OEM's. Basically EB offers OEM's access to the latest technology knowhow within the wireless domain. While Mobile Infrastructure is more of a "traditional business" of EB, we find Connected Devices especially interesting in this area. More and more devices are becoming wirelessly connected, and this is a trend that can be expected to continue. EB has expertise wireless technology and embedded system, therefore giving a solid platform to help OEM's with new features to perhaps ordinary products that are now taken "online". This creates an interesting trend for EB in this area: companies outside traditional wireless markets have a growing interest towards connectivity solutions creating value for their own products, which creates demand for EB's R&D services.

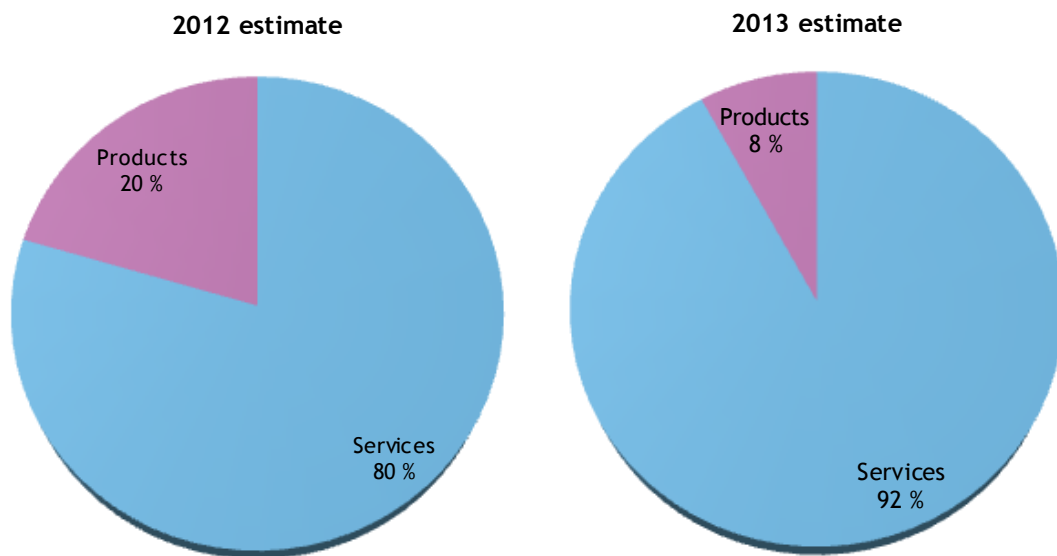
With Mobile Infrastructure the underlying driver for the market is currently the use of LTE standard that expected to continue to gain strength. LTE technology is based on multi-antenna technologies that create demand for advanced radio channel emulation tools when introducing LTE technologies. The growth of demand in the test tool market is shifting from the performance testing of LTE base stations to LTE terminals, where increasingly the over-the-air (OTA) technology will be widely used. EB's has received some important orders from this area lately, and it's very important overall.

EB Wireless serves device OEMs and ODMs, telecommunication and professional radio manufacturers, semiconductor vendors, cellular and special operators and defense and public safety authorities. EB used to be very much involved with the cellular and smartphone market, but the market has pretty much dried up in the past years. After Nokia changed its strategy, the outlook of the market has been poor. EB stated in Q3'12 report that "the demand in the smartphone services R&D market remains low" and that "changes in the business ecosystem of smart phone manufacturers have led to a shift in demand towards device platform development for chipset manufacturers." Considering the current development in the smartphone market, we don't see many opportunities for EB in the device R&D services.

4.2. Services vs. products

One interesting factor for investors is naturally the relation between services and products. EB hasn't published concrete figures for this, probably mainly due to difficulty in separating services and products. EB Wireless has only few "pure products", but often services include also concrete products especially if you're developing products for clients. In some cases EB might even end up owning part of IPR of clients' products, which would open up even more questions about services / products. For example Raptor ID built its products on EB's platform and added some extra features. In the end it's a matter of contract, who actually owns the products and to which degree. Naturally also concrete hardware products also include software that is normally critical for the competitiveness. In the end, we have categorized the products as EB's pure products that are 100 % owned by EB Wireless. Based on this determination we believe that products accounted for around 20-25 % of Wireless net sales in 2012.

However, it's important to realize that testing tools business was EB's only pure product business and very important for Wireless. Company had a solid offering through the Prosim product family. Testing tools products have many different client groups with the common need to accurately capture the veritable performance of wireless products, e.g. base stations, mobile devices, chipsets, access points and terminals during each product development phase. Selling this business changes the whole Wireless business dynamics.



Graph 11. Test Tools divestment will move business mix significantly towards services.

Like said, this is just our own estimate, not a fact or EB's comment. 2013 figure is based on the assumption that defense and authorities products would create a product based business that would be able to replaced part of the space left by testing tools. EB has been signaling that it waits for international breakthrough in defense to happen in 2013, but we are currently modest with our expectations. We'll go all these through later on, but it's very important to notice that these products have practically no sales now and their commercial success is impossible to estimate at this point.

The most important thing for investors to recognize is that EB is neither a pure service nor a product company, though after the Test Tools divestment the share of products is very small at least for a while. Earnings logic of these businesses is quite different, which is why the basis is important to understand. In general the IT service companies are valued significant lower than OEMs or software companies in the market.

4.3. Core of Wireless: R&D services

The core business in Wireless is the R&D services for its clients. They are generally companies that are somehow involved with different advanced wireless technologies. In the past Nokia was clearly the most important client and EB was known as "one of the subcontractors of Nokia" for a long time, but for the current EB this title would be totally misleading. Nokia is still a client of EB, but its contribution to EB's sales is very limited. However, company's Wireless business is still concentrated few main clients, which creates a significant risk for EB. We believe that in future EB will bring much more clients outside of the typical business sector, when the wireless technology is moving into "everyday products". Nowadays a watch can include GPS as well as different transmitters that communicate with computers automatically over the air. It's not difficult to guess that different wireless technologies will continue to spread, which should provide many opportunities for experts in this area.

Even though we believe that the demand for Wireless services will be growing in the future, R&D services isn't a goldmine businesswise. The basic R&D services business model scales up only with the number of engineers, and thus has its limitations and cannot reach very high margins (profitability). Typically 10 % EBIT margin is already extremely high and requires pretty much full usage of personnel resources as well as solid pricing. EB hasn't been anywhere near this level for years, and we believe the main challenge is the commercialization of its expertise. Of course there's also a severe competition in the field, especially after Nokia's development has weakened the overall demand and left lots of resources unused.

Still, the development of the core business has been relatively encouraging over the few last quarters. With significantly higher net sales, the profitability has been improving. After TerreStar case Wireless went through some cost-cutting and lowered its cost structure. Still company's fixed expenses are quite high especially considering that Test Tools won't be carrying its share of costs anymore. Most of EB's personnel expenses are fixed, even though theoretically they could be cut ruthlessly if the demand drops. However, this could lead into losing the expertise that the whole business is based on. Also business needs support functions that also build in some costs. But overall, Wireless is currently in a position where the profitability is growing with significant leverage compared to net sales. Company can utilize the same basis and personnel, and top line growth should appear to bottom line.

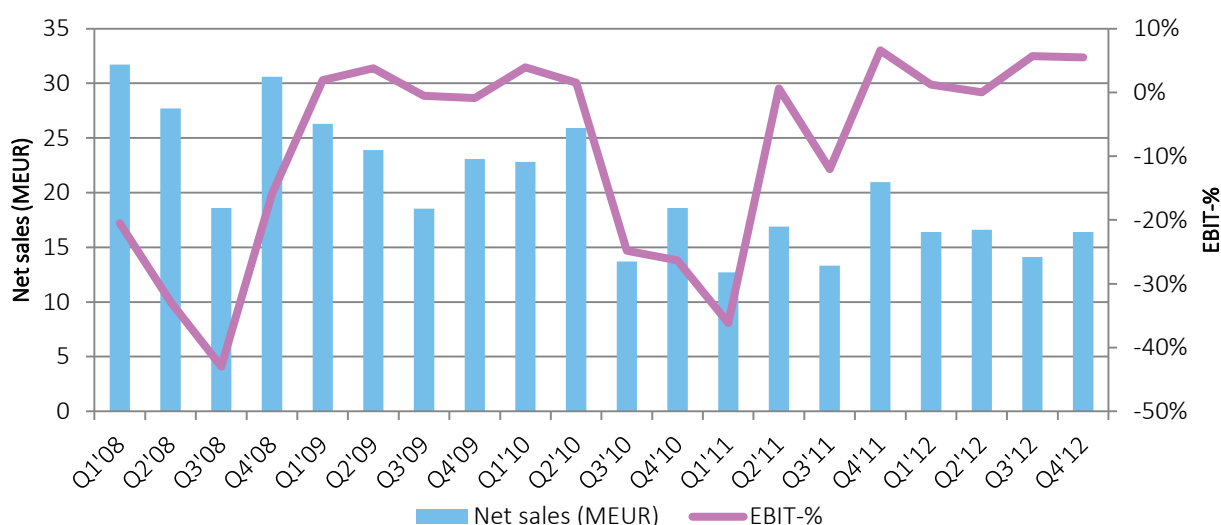
4.4. Decent underlying business hidden by the likes of TerreStar

With the bankruptcy (Chapter 11) of TerreStar Networks in 2010 EB Wireless lost its biggest client and around 40 % of its net sales basically overnight, when the business relationship stopped almost immediately. Timing couldn't have been much worse, since TerreStar's satellite phones that EB had done were just coming out, when company came down. To make matters worse, EB had to writedown huge receivables from TerreStar. At the time of Chapter 11, EB had massive 25.8 MUSD of receivables from TerreStar. Overall, case TerreStar was a nightmare for EB, even though company eventually was able to recover part of the receivables (around 13 MUSD).

Naturally one cannot just overlook such an event, but it's important to also see the underlying performance of EB Wireless. When taking this into consideration, as well as the development of defense products covered later, the financial performance of Wireless is starting to look quite positive. EB Wireless has been able to get new sales in a fast pace and cover the hole left by TerreStar.

It is interesting to see how the whole sector has been struggling in Finland after Nokia has been first squeezing its subcontractors and eventually crushing them with the strategy change. Comparing with Ixonos and Digia that were driven into to some extent similar situation after Nokia changed its strategy, EB Wireless can be very satisfied with its performance over past years. Ixonos, perhaps the best comparison for EB in Helsinki Stock Exchange, has crashed completely after Nokia's Microsoft strategy and abandonment of Symbian and MeeGo. For shareholders this isn't much of a consolation, but it is still a positive signal regarding the strength of the underlying business. Now when the sales are back to a somewhat normal, one can expect much better results.

The financial performance of EB Wireless can be seen in the following graph. Notice the effect of TerreStar and the recent positive developed. Still, the fact is that EB has been struggling with profitability for a longtime. Only few top quarters reach a good level of profitability, e.g. Q4'11 EBIT-% of 6.6 %.



Graph 12. TerreStar dragged Wireless deep in the red.

4.5. Possible future stars: own products for the defense sector

EB Wireless has developed completely new products for the defense sector, where it has leveraged its knowledge in radio technology. These products have been developed in co-operation with the Finnish armed forces, from where EB also published a significant 15 MEUR order in the autumn of 2011. These products hold a huge potential, if EB is able to build a solid partner network for sales and able to reach the right customers. This isn't an easy task, but basically even one major contract could be very significant for a small company. Naturally the first client (outside of Finland) is the hardest to get. This will require a great deal of time and patience, but we see this as a relatively low risk option at this point.

If defense products fail to fly, company won't stand to lose much anymore, since majority of the development of these products has been financed by Finnish armed forces. However, the potential upside is massive, and defense sector could theoretically growth into a significant business area inside of EB. Only a little of this potential is currently priced in the share, which is why we consider this as a very interesting option for shareholders.

It is very important to notice the early phase of these products. Currently EB hasn't delivered any end-products for defense clients, only some prototypes. R&D work has been done over last few years that has been paid by the client, but without normal margin requirements of EB. Therefore this business has been dragging down the profitability of Wireless, but now EB owns the intellectual property right (IPR) for these products, which hold great potential in the future.

The main products of EB to the defense industry and to authorities are:

- EB Tactical Wireless IP network for tactical communications
- EB Wideband COMINT sensor for signals intelligence
- EB Counter RCIED platform for electronic warfare
- EB Tough VoIP tactical IP-based communication
- EB specialized device platform for specialized markets



Picture 10. EB's products for the defense sector and authorities. Source: Elektrobit.

The biggest challenge in the defense market is that EB is relatively unknown outside of Finland and naturally a tiny player compared to behemoths in the area. The role of challenger, even if it has technologically superior products, is a major disadvantage in the market that is very suspicious for newcomers. Sales cycles are very long, probably around three years, and solid reputation is priceless in the sector. However, EB has a significant advantage coming at least from two factors: it's coming from Finland that is generally acknowledged as both trustworthy and politically neutral country in general, and it has strong support and reference from the Finnish armed forces after years of co-operation. So even though conquering the market from the big players sounds unlikely, there is certainly a realistic possibility to gain share in some specific niches. This just requires creating a solid sales network and possibly reaching some co-operation agreements. After all, EB is aiming for niche markets of defense sector, where strategic partnerships could be achieved.

One example of this is Raptor Identification Systems co-operation. In 2012 EB developed a new handheld biometric smartphone and tablet, the RaptorPAD and RaptorONE, for Raptor ID. The products will scan irises and read fingerprints, providing the national security field with cutting-edge mobile biometric technology. Though there's some potential, Raptor is a small fish in the industry.



Picture 11. RaptorPAD™ and RaptorONE™. Source: Elektrobit.

It probably goes without saying that United States is by far the biggest spender when it comes to defense. According to some calculations US spends more in defense than rest of the world combined. After US, the world's largest military spenders are China, Russia, the United Kingdom and France. Naturally this information is of little relevance for EB, since the scales are out-of-reach anyway. However, the defense market is always leaning to the local companies, which is important to understand. Typically the "big spenders" have created a defense industry in their countries. This is also the reason why there is a lot of defense sector knowledge and knowhow in countries like US, UK and France. However, the market is relatively open outside of these countries, and many countries have very little to offer in the business. Even though Finland is small, it has some expertise in the area and it has also exported in the field.

4.1. Test Tools business was sold in the beginning of 2013

One of the most established areas of Wireless, one might say the end of evolution for EB, is the testing tools segment. Therefore it's also kind of fitting that the Test Tools business was sold in January 2013. Test Tools was a pure product business, where EB has developed its own Prosim product family. This is used, for example, testing the LTE networks and products. The first Prosim emulator was developed already back in 1995 and company holds a strong position in this niche market. Test Tools has been the best piece of Wireless business in the past years. Its profitability has been solid with the EBIT-% of around 10 % and it has been relatively stable to provide operational cash flow for Wireless. It is important to understand that now similar cash flow is needed from other sources of finance for the more interesting growth opportunities.

The overall position of EB in this business was solid and in this area EB was a well-known, established player unlike, for example, in defense. However, the testing tools market doesn't grow much and moves in cycles with new technology. There are basically three major players in this small niche market, which is worth around 75-100 MEUR annually. These companies were EB, which was probably number two, Spirent Communications and Azimuth. Spirent is a British company that is also listed on the London Stock Exchange. Its market cap is close to billion pounds, so it's a giant

company at least compared to EB Wireless. Azimuth is a private company, so there's very little information available about it. Now the third major player is Anite Plc that purchased the Test Tools business from EB. Anite is an international software and solutions company that is listed on the London Stock Exchange with a market cap around 450 million pounds.



Picture 12. Prosim product family FS8, F32 and F8. Source: Elektrobit.

Even though business formed around Prosim product family is probably the best part of Wireless, the price of 31 M€ was high enough to create plenty of value for the shareholders. With the EV of 31 MEUR, the test tools product business is valued with EV/EBIT of over 20. This is around one third higher than the multiple we would have accepted (range of 12-15), and means a price tag of almost 10 M€ over our estimate. However, the valuation depends on the EBITs used, whether overhead expenses are excluded and to which degree. We believe that the end result is a win-win deal, considering the synergies also.

Anyway, we believe that EB creates almost 10 M€ shareholders value in the deal.

Test Tools key figures			Valuation multiples		
MEUR	2011	2012		2011	2012
Net sales	14.1	16.1	EV ~ 31 M€		
EBIT	1.5	1.3	EV/S	2.2	1.9
EBIT-%	10.6 %	8.1 %	EV/EBIT	20.7	23.8

Table 4. Key figures of Test Tools transaction.

When we are looking at the valuation of the transaction, we notice that the multiples were very high. EV/EBIT of almost 24 was substantially higher than what we would expected. After all, like the EB also said, the Test Tools business offered only limited long term growth opportunities. Stable would be a more accurate description for the market outlook in general. However, these multiples are counted with the figures given by EB. Anite stated that these results include allocation of EB's group overheads. These costs that are estimated at 1 M€ will not be incurred by Anite in the future. If this Anite's estimate of the overheads is accurate, and they would be excluded from the results, naturally they would cut the multiples significantly. When we consider also the potential synergies and knowledge gained by Anite, we believe this deal might be a win-win, despite the value being over 10 M€ of our cautious estimate of Test Tools business. Also the market seems to think so, because both companies advanced in the stock market (EB +13.7 % and Anite +3.5 %) on the day that the deal was announced.

After estimating and eliminating the net sales (FY'12: 16 M€) and EBIT (FY'12: 1.3 M€) of test tools business from our estimates, we also added the overhead cost of around 1 M€ to the remaining Wireless segment. This pushed segment's profitability (EBIT-%) towards break-even at least temporarily. In the short-term earnings of Wireless will most likely slump, but with more focused and perhaps more efficient business structure we expect improvements in profitability in the coming years.

4.1. Competitive situation in different segments

It is difficult to determine the markets and competitors for EB Wireless. By concentrating in certain technology instead of certain business area, EB Wireless has a unique combination of businesses. Just to clarify to different areas, we have simplified them in the following table. The table doesn't cover all the areas where EB is active, only the most important ones. We have now divided the competitors according to the same categories than before, representing the main offerings and customer segments of EB Wireless. This is just one possibility to express the competitive field.

Main competitors

	Defense	Special Terminals	R&D Services		Testing Tools
			Mobile Infra	Connected Devices	
EB Wireless	X	X	X	X	X
Sasken		(X)	X	X	
HiQ		(X)	(X)	X	
Spirent					X
Azimuth					X
Ixonos			X	X	
Tieto		(X)	X	(X)	
Wipro			(X)		
Aricent			(X)		
Asian ODMs		X			
Kongsberg Gruppen	X				
Thales	X				

Categories: 1) competitors marked by X, 2) similar offerings but little direct competition marked by (X)

Table 5. The main competitors of EB Wireless. Notice that Testing Tools business has been divested.

Testing Tools, Defense, Special Terminals and R&D services all have different competitors, but they also have a lot common factors. Also, for example R&D Services includes concept work, software and hardware development, integration, testing, transfer to production, support, general consultancy as well as customization. Basically it includes the whole process involved with device development, and there are plenty of companies that are significant in some parts of the chain. Competitors can be completely different in different parts of this process, and often companies are more focused on hardware, software or general consultancy. It's very difficult to generalize the competitive situation, but we have made an effort to introduce the main players in the field here.

Just like in the Automotive part, we will give a brief description of EB Wireless' main competitors in the following chapter. Information is basic in nature, and naturally we'll aim to focus on company's significance for EB. The most important ones are gone through in more detail as long as there's enough applicable data available. After the Test Tools divestment there's no reason to open up that business segment much further. For example Azimuth is no longer that significant for EB, so it's not covered here. Spirent is mentioned just as a curiosity, since it has at least somewhat similar offerings and it might be useful regarding valuation.



Net sales in 2012:
~70 MEUR

MCAP (MEUR): ~40

Significant in **sectors**:
Mobile Infra and Connected
devices.

Figures from Thomson Reuters 13/3/2013. Changes may apply also due to currency fluctuations.

Sasken is especially interesting since it's relatively good peer also in a group level. Company has both automotive business and Networks Equipment, which is a rare combination. Company is listed in India and the share is valued with extremely low multiples, probably because markets do not trust on the integrity of the company. This makes it difficult to compare the investment cases, but following the business success is definitely interesting.

We have considered Sasken as one of the main competitors in the field of Mobility and R&D services, and it has been developing solutions for GSM, CDMA, UMTS and HSPA technologies, LTE and other next generation technologies. Sasken also specializes in developing network test tools, which have been used by several Tier1 NEMs to test their network equipment's. However, we don't believe it's a competitor in defense.



Net sales in 2012:
About 170 MEUR.

MCAP (MEUR):
250.

Significant in **sectors**:
One of the important players in
Connected devices.

Figures from Thomson Reuters 13/3/2013.

HiQ is pretty much a pure Nordic consultancy firm. From offices in Sweden, Finland, Denmark and Russia, HiQ offers specialized services within communications, software development and business-critical IT. Compared to EB Wireless, HiQ is clearly more focused on software. It's definitely not the best peer for EB, but it is worth keeping an eye on. EB faces HiQ in competition every once in a while, mostly in Connected devices.



Connected Devices that might also be called Wireless technology can include everything from consulting with specific technologies to quite general IT services. When it comes to Finnish companies, Ixonos, Tieto and Digia are at least in the same business areas then EB. **Ixonos** has a lot of resemblance; Ixonos creates wireless technologies, connected devices as well as multichannel online services and mobile apps. Both companies were strongly connected with Nokia in the past. Ixonos is currently feeling to full effect of Nokia strategy change; company's net sales have decreased over 30 % in 2012 and EBIT is heavily in the red. The outlook is also challenging right now. Company is trying to replace Nokia with new clients, but naturally this is challenging. Earlier we compared the current situation of Ixonos to EB Wireless after the TerreStar case.

Digia has also its own software based products (e.g. ERPs) and has customers in wide sectors from finance to trade & logistics, making it more challenging to compare. However, Digia's offering to Telecom, where company "works with service and platform providers as well as with mobile device manufacturers to optimize, transform and vertically expand the service business", is somewhat similar to EB Wireless. Still, it's not really a competitor for EB. However, Digia's profile is also quite similar in the eyes of investors (Finnish small cap), making it a good peer company in this regard.

Tieto is clearly larger than EB and most of the businesses have little connection to EB. However, company's Telecom business is relevant also for EB and they are competitors in this area, though they have also worked together in some

projects. Digia isn't a significant competitor for EB, but considering EB's investment profile, these companies might be quite relevant as peers. One might consider Affecto also in the same role as Digia, but the connection is very weak.

It's difficult to define specific competitors for **Special Terminals**, because it's based on EB's own specialized device platform that has its own target group. In this category we have marked companies that we believe to have similar expertise required to develop similar products. Direct competitors probably come from the defense sector that uses proprietary technology in their solutions.



Net sales in 2012:
Slightly below 400
MEUR

MCAP (MEUR):
Roughly 1140

Significant in **sectors**: Spirent was a main competitor in Test Tools, but no longer really significant for EB Wireless.

Figures from Thomson Reuters 13/3/2013. Changes may apply also due to currency fluctuations.

Spirent helps to design, develop and deliver networks, devices and services related to them. Spirent's lab test solutions are used to evaluate performance of the technologies. For EB the most relevant business area is Wireless, where company works with HSPA+, LTE, 3G/4G, CDMA, UMTS, MIMO & Advanced Antenna Technique and Location Based Services. Spirent Communications states that it is "a global leader in test and measurement inspiring innovation within development labs, communication networks and IT organisations". Company also works with GPS in many aspects and it company is trying to make use of this knowledge also in Military, Defense and Government environment. Like said before, Spirent was EB's main competitor in testing tools with Azimuth. After the Test Tools divestment it's no longer really significant, but we have kept it here because it might be relevant when thinking about valuations.



KONGSBERG

THALES



Defense sector is dominated by huge companies that could swallow EB without biting, if they decided to do so. Behemoths such as United Technologies Corp. (NYSE: UTX, MCAP over 70 billion dollars) and the Boeing Company (NYSE: BA, MCAP over 55 billion) are active in this area. Of course United Technologies has everything from Otis elevators to Pratt & Whitney aircraft engines and Sikorsky helicopters and Boeing is mostly known for its jetliners, but the point is that size is good in this area. Just to mention couple of others in the field, there are companies like EADS (ENXTPA: EAD), Lockheed Martin (NYSE: LMT), General Dynamics (NYSE: GD), Raytheon (NYSE: RTN), BAE Systems (LSE: BA), Rockwell Collins (NYSE: COL) and Honeywell (NYSE: HON). We don't believe it makes much sense to make detailed analysis inside the sector; we believe EB has only opportunities in this area. It's in smaller niches that are very interesting in its category, while they are minor curiosities for the giants of defense.

When looking for the most relevant companies for EB in defense sector, we may have to divide them in two groups. These groups would be 1) possible competitors and 2) possible strategic partners. To large behemoths that we discussed above would go to the latter group. Companies like Kongsberg and Thales might be relevant in the first one, though due their size they could be in the other group also. Still, these are the two companies with the most similar offerings with EB Wireless.

Kongsberg Defense & Aerospace AS is one of EB's competitors in the defense sector. Company offers, among many other things, tactical radio and communication systems primarily for land based defense. Kongsberg Defence & Aerospace, incorporated in 1997, is based in Norway with a marketing office in Washington DC. Company is a subsidiary of Kongsberg Gruppen ASA that is listed on the Oslo Stock Exchange with the ticker KOG. The Group has net sales of around 2 billion euros, which is also close to its market cap. This makes it a really big company compared to EB, but a small one compared to the big boys in the defense industry. Little less than half of company's net sales come from defense in 2012.

Thales SA (ENXTPA: HO) provides integrated solutions and equipment for government and private-sector customers in the aeronautics, space, transport, defense, and security markets in France and internationally. Among a large variety of different products and services, the company provides defense and security systems, such as radio communication products, infrastructure systems and networks, as well as information technology security solutions.

One of the possible “best matches” for EB in the really big companies might be **Rockwell Collins** that designs, produces, and supports communications and aviation electronics for commercial and military customers worldwide. Its Government Systems segment provides communications systems and products to enable the transmission of information, including satellite communications; navigation products and systems, such as radio navigation products, global positioning system equipment, handheld navigation devices, and multi-mode receivers. Company serves customers like the U.S. Department of Defense, other ministries of defense and defense contractors. Company has offerings in the same areas as EB, though it naturally is in completely different scale and position. We don’t consider it as a competitor, more as a company that might be interested in what EB has done in the area.

Also **Boeing** has lots of interesting businesses. Company is involved in many things from aircrafts to reconnaissance and space exploration. In its GS&S segment offers operations, maintenance, training, upgrades, and logistics support services for military platforms and operations. **General Dynamics**, an aerospace and defense company, also has strong relevance in the communication area of defense. It offers services that support a range of government and commercial communication, and information-sharing needs, including communications systems, information technology services and intelligence, surveillance, reconnaissance, and tactical communication systems. These kinds of companies might have interesting opportunities also for EB.

The defense companies mentioned above were from the States, and also operate mostly there. In Europe, the main players are EADS, BAE Systems and possible the already mentioned Thales. European Aeronautic Defense and Space Company (**EADS**) engages in the manufacture and sale of commercial aircraft, civil and military helicopters, commercial space launch vehicles, missiles, military aircraft, satellites, defense systems, and defense electronics worldwide. Company provides defense electronics and security market solutions, such as integrated systems for global border security and secure communications solutions.

BAE Systems operates as a defense, aerospace, and security company worldwide. It offers a range of products and services, for example communications, electronic warfare systems, intelligence, surveillance and reconnaissance. Company also helps government and corporate clients collect, manage, and exploit information to reveal intelligence, maintain security, manage risk, and strengthen resilience. It also offers secure networked communications equipment.

4.2. Peers of Wireless and relatively value

We have collected the valuation peer group for Wireless with the same principals than for Automotive. It’s not only the relevance of the business, but even more importantly the dynamics of the business model that has to match. We have selected Saken that is perhaps the best match in businesswise, HiQ that is perhaps more concentrated on the software side, Spirent that is peer in testing tool products and relatively good also otherwise and Ixonos that is similar in IT services. In the end we have added Tieto, Digia and Affecto in little bit more general companies in the business. Even though these companies have only a loose connection to EB, overall their valuation should be reasonable similar to EB Wireless.

From the defense sector we have included Kongsberg Gruppen, which gives some exposure to this sector also. Once again it’s important to understand the limitations of such comparisons, and consider their implications carefully. Here the outcome seems rational. To complete the “business matrix”, we have included also Etteplan to the combination. The reasoning behind adding Etteplan, company that provides engineering design services to global industrial equipment manufacturers, is that its business is mostly based on expertise of the personnel. This business model, “expertise for hire”, is also present in EB Wireless in some scale and therefore might be one factor to consider in the peer valuation. Also the investor profile of Etteplan is close to Elektrobit (Finnish small cap company).

Business segment peer groups

Estimates: Reuters consensus

	EV/EBITDA			EV/S			P/BV	MCAP
	2012	2013e	2014e	2012	2013e	2014e	2013e	MEUR
EB Wireless								
Sasken	1.1	3.9	3.7	0.2	0.6	0.5	0.6	39
HiQ	8.6	9.5	9.0	1.2	1.4	1.3	3.0	251
Spirent	9.7	8.9	8.2	2.8	2.4	2.2	3.0	1137
Ixonos	0.0	2.3	2.0	0.0	0.2	0.2	0.4	12
Tieto	5.3	5.8	5.5	0.6	0.8	0.8	2.3	1297
Affecto	6.2	5.8	5.5	0.6	0.7	0.7	1.3	85
Kongsberg	5.9	5.6	5.1	0.9	0.8	5.3	2.3	1900
Etteplan	0.0	6.2	6.7	0.0	0.6	0.6	3.1	64
MEDIAN	5.6	5.8	5.5	0.6	0.7	0.7	2.3	

Table 6. Valuation of EB Wireless's peer group. Source: Thomson Reuters 13/3/2013.

Unlike in Automotive, we do not accept premium for EB Wireless. The track-record simply doesn't support this, and the normal business has relatively little potential. We are not forgetting about the defense sector potential, but like we have said constantly, we consider this a free option due to its very uncertain nature. If we would consider it in the valuation also, it would no longer be one. We'll get back to valuation more specifically later, but to conclude the discussion here: we find the EV/EBIT multiple of 8 to be too high to make Wireless business attractive.

It's difficult to analyze the dynamics of the business area, because there is actually complete mixture of businesses in the peer group. Still, one thing that we can easily conclude again is that EB is underperforming in profitability. EB Wireless has been in the red for most of the years in it have been in the current formation, and actually this year's EBIT-% is the best in a longtime. If Q4 result is in-line with our current estimates, FY'12 EBIT margin will be 3.6 %. This is far behind the median of the peer group (7.5 %) and only Ixonos has worse profitability in the group. See the details in the following table. Of course the poor profitability is also an opportunity, if company can make a real turnaround. However, EB's track-record is poor when it comes to profitability. The detailed valuation EB Wireless can be found in the chapter 9.1.

Business segment peer groups

Estimates: Reuters consensus

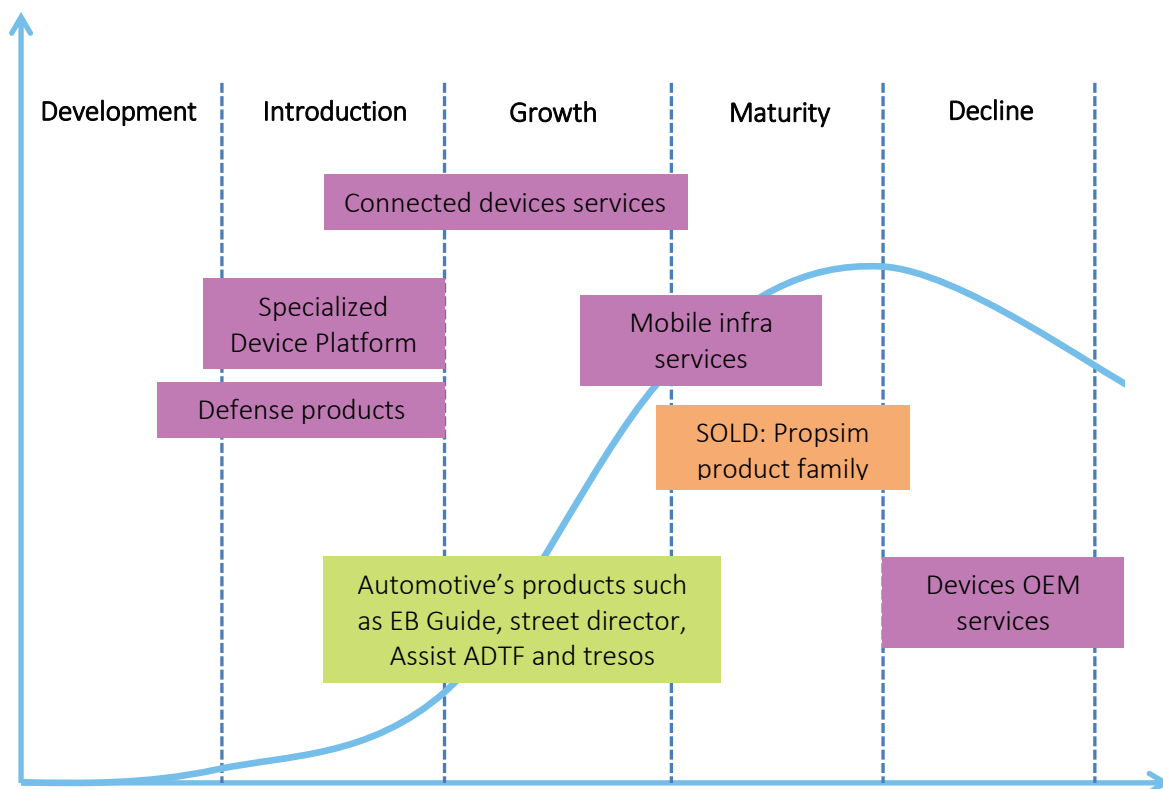
	Net sales (MEUR)			EBIT-%		
	2011	2012e	2013e	2011	2012e	2013e
EB Wireless						
Sasken	95.6	69.9	72.2	17 %	15 %	15 %
HiQ	161.1	168.8	179.5	14 %	14 %	14 %
Spirent	362.5	392.2	431.0	29 %	27 %	27 %
Ixonos	64.7	67.2	70.6	5.4 %	7.8 %	8.3 %
Tieto	1833.9	1757.6	1761.5	11.3 %	13.2 %	13.7 %
Affecto	132.8	139.0	145.9	9.0 %	11.3 %	12.5 %
Kongsberg	2102	2313	2449	17.9 %	18.3 %	18.8 %
Etteplan	135.0	139.0	145.5	8.5 %	10.1 %	8.9 %
MEDIAN	148.1	153.9	162.7	12.9 %	13.8 %	14.0 %

Table 7. Valuation of EB Wireless's peer group. Source: Thomson Reuters 13/3/2013.

5. Potential lies within the new products

One very important factor to realize about EB is that many of its products are still under development. These have massive potential, but they are not visible in sales or profits yet. However, upon development they have naturally carried some costs, even though EB has been able to charge some of these from its clients (especially in Defense sector). Therefore they have been pushing down company's profitability, though the affect is quite challenging to quantify. Here we have demonstrated the most important products and their position in the product cycle in both Wireless and Automotive.

Basic product cycle can be divided to development, introduction, growth, maturity and decline. If we divide EB's different business services and products into these categories, picture would be the following. Note that we naturally don't know all the possible products that are in development phase, if company hasn't published them.



Graph 13. EB different offerings in different life cycles.

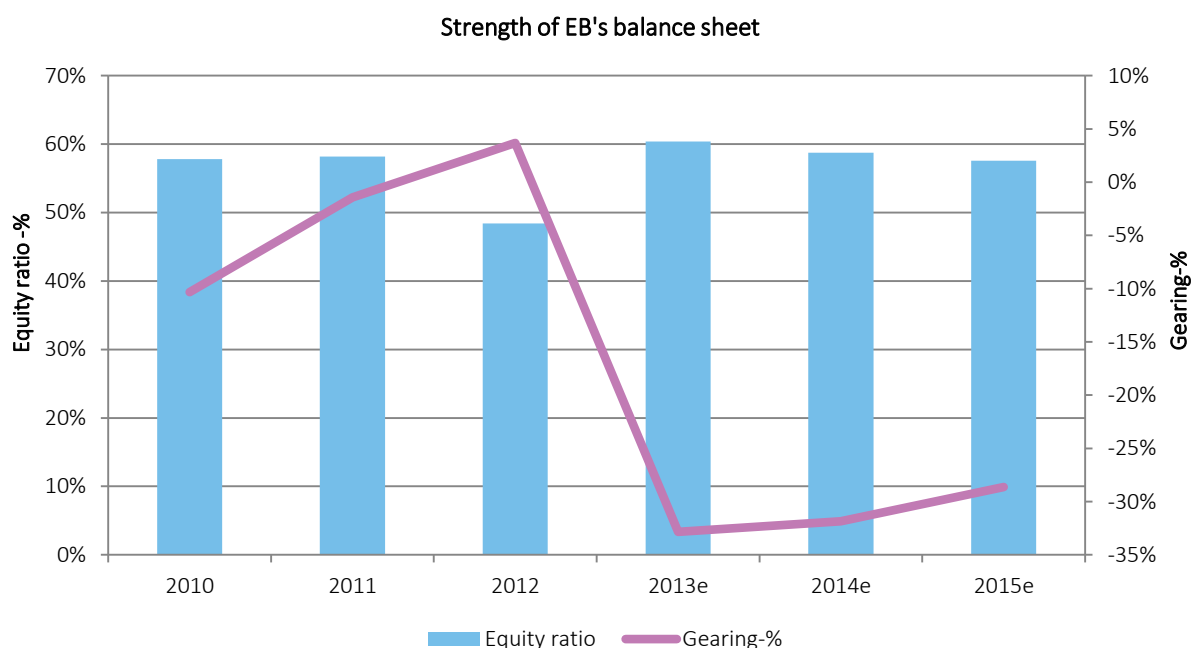
6. Group balance sheet – from overcapitalized to normal and back

Elektrobit's balance sheet is currently exceedingly strong. If we go all the way back the year 2006, company's balance sheet was undoubtedly overcapitalized. Company's gearing was almost 50 % negative in 2006, meaning that company's balance sheet was full of cash (107 MEUR) and company had very little debt. After this the cash flows have been weak and company has also paid some capital back to investors. As a result, EB's balance sheet has been weakening clearly over the past five years until 2012.

The shareholders were distributed 0.20 euros per share from the share premium fund back in 2009, meaning around 25.9 MEUR in total. This was a massive "dividend" when thinking about the balance sheet and the excess capital was pretty much paid out. However, shortly after this the TerreStar catastrophe hit the company both to the balance sheet (writedown of receivables) and to the income statement (effect on net sales and profitability). The company was unfortunate, because it could have used some buffer back then. In 2009 company had 59 MEUR of cash in the balance sheet, but in 2010 this was down to 20.6 MEUR. TerreStar situation was more or less finalized in Q3'12, when company received cash flow of 13 MEUR after finally finding an agreement with TerreStar. This made the balance sheet stronger for a change.

We see the closing balance sheet of year 2012, with equity ratio of around 50 % and gearing-% around 0 %, appropriate for company's current businesses. Due to rapid growth especially in Automotive that ties up working capital, we believe company needs some buffer and a strong balance sheet. This kind of situation is good; company should have enough cash to fund its growth, but there's no extra capital that might lead into temptations like unprofitable expansion of sales or too expensive acquisitions.

However, the situation changed once again after the Test Tools transaction, from which company will receive a hefty 28 MEUR of net cash flow during H1'13. Board's dividend proposal was only 0.01 € / share for the financial year of 2012. Considering that company has just received around 0.22 € / share from the Test Tools deal and that company's balance sheet is already strong, this naturally raises questions about what company is planning to do with the money. The board of directors emphasized the result from the financial year of 2012 as a basis for its dividend proposal. This leaves the question unanswered. Anyway, after proceeds from Test Tools are visible in the balance sheet, it is clearly overcapitalized again.



Graph 14. EB's balance sheet is clearly overcapitalized after the Test Tools transaction. Notice that figures differ slightly from the official due to different formulas used.

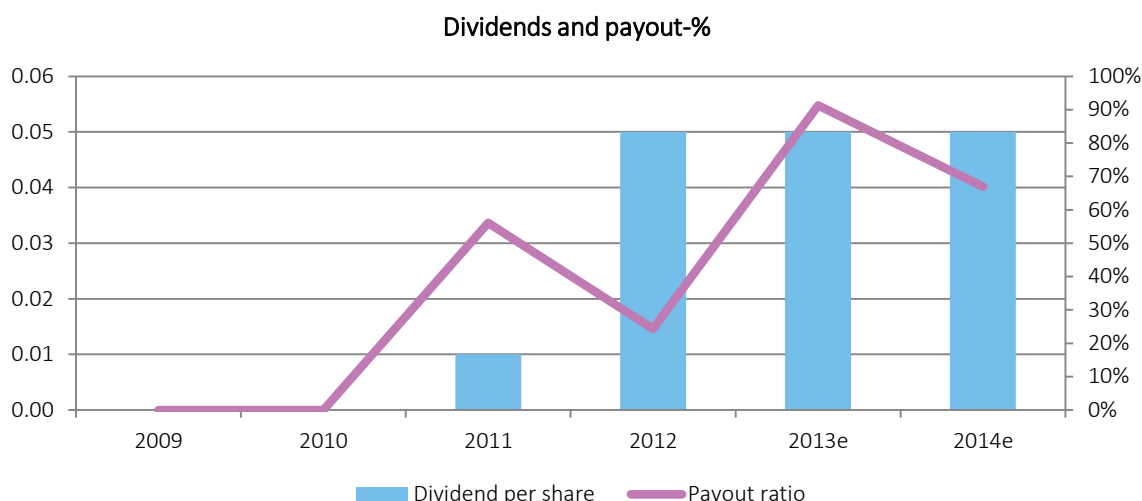
6.1. We believe that EB is saving firepower for acquisitions

Naturally we can only speculate with the matter, but it wouldn't too much of a stretch to think that company is preparing for acquisitions. After the Test Tools divestment, even considering the earlier financing effect of the solid Test Tools business, we believe that company around 20-25 MEUR of "extra" in the balance sheet. This would give a good basis even for a larger acquisition, and a smaller one can be easily accomplished with this cash.

We believe that the most likely targets are in the Automotive sector that's growing rapidly. EB has typically made relatively large acquisition compared to its size, but in our opinion the less risky strategy in acquisition would be smaller bolt-on acquisition. Bolt-on strategy works well if company can buy smaller companies that have complimentary expertise and offerings to those of EB Automotive. If the offerings were to complement each other, EB could use its good customer relationships and capture larger part of the clients' purchased in the field. We believe that this would be the most direct way to gain synergies, but naturally this is just speculation.

In the history of EB there are good acquisitions that have created shareholder value (like the 3SOFT where current Automotive business mostly derives from), but there are also strategic mistakes (like WiMAX and RFID in Wireless). We are interested to see what happens, and do not take a stance either for or against acquisitions at this point. However, we do understand that some investors are worried that "cash is burning in the pockets" of EB, but won't start guessing about the possible acquisition more in advance.

Of course there are other possibilities also. Perhaps company will pay larger dividend from the financial year of 2013, perhaps it wants to pay more stable (or growing) dividends in the future. If company doesn't find suitable and reasonable priced target for acquisition, company could pay high dividends annually in the future. Naturally we hope that company won't do an acquisition just for the sake of growth, because normally that ends poorly for the shareholders. Similarly we believe that a large one time dividend isn't an optimal solution considering the long-term investment case. High but stable dividend yield supports the share price over the long-term and keeps the firepower available for a long timer, if an opportunity rises. Solid implementation acquisition strategy requires patience both from the management as well as shareholders.



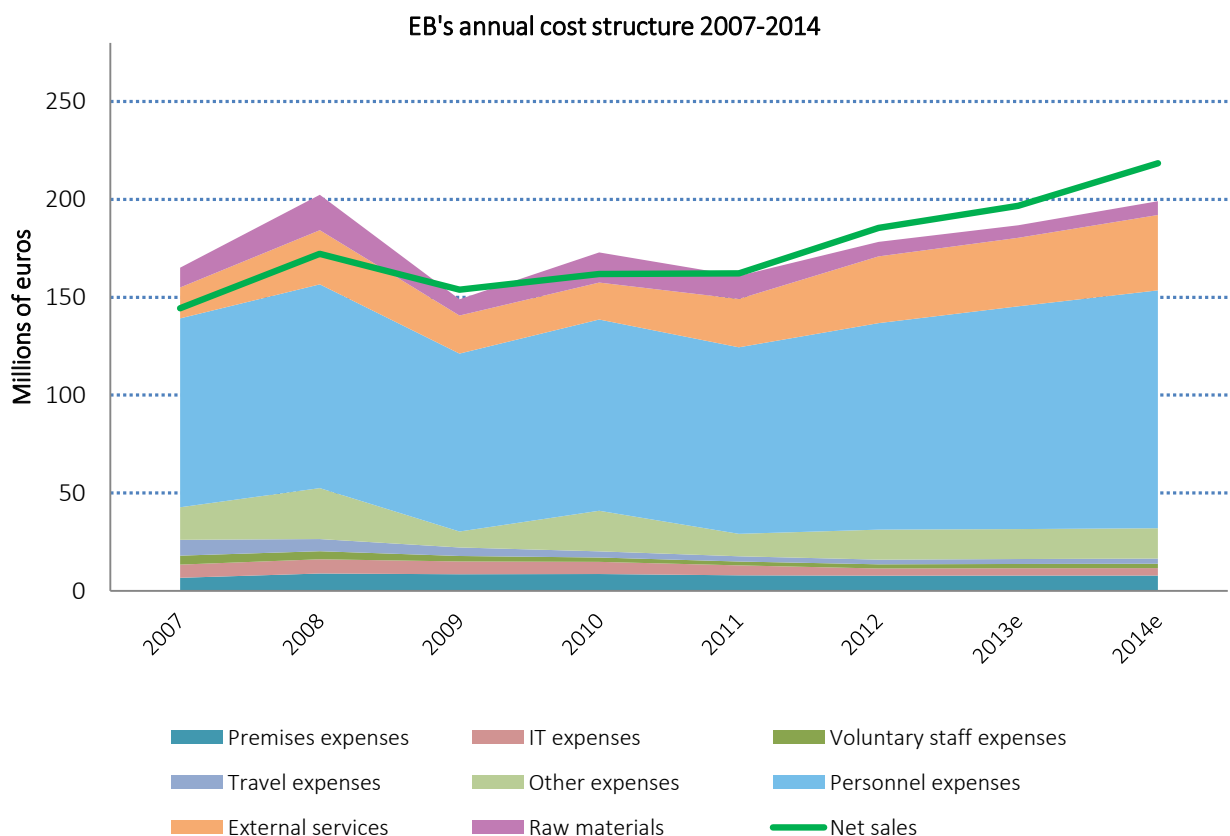
Graph 15. Dividend per share and payout ratio 2009-2014e. Estimates by Inderes.

7. Cost structure and profitability

While competent employees are crucial for EB's business success, their salaries are also clearly the most important piece in company's cost structure. In 2012 personnel expenses were 105.5 MEUR, which is close to 60 % of EB's all expenses. Therefore the number of employees, average salary and the usage of personal (sales per employee) and the development of these are crucial for EB's financial success. Naturally the product sales mentioned earlier have also significant influence on the financials, but the personnel and its utilization will still be the key factor also in the future.

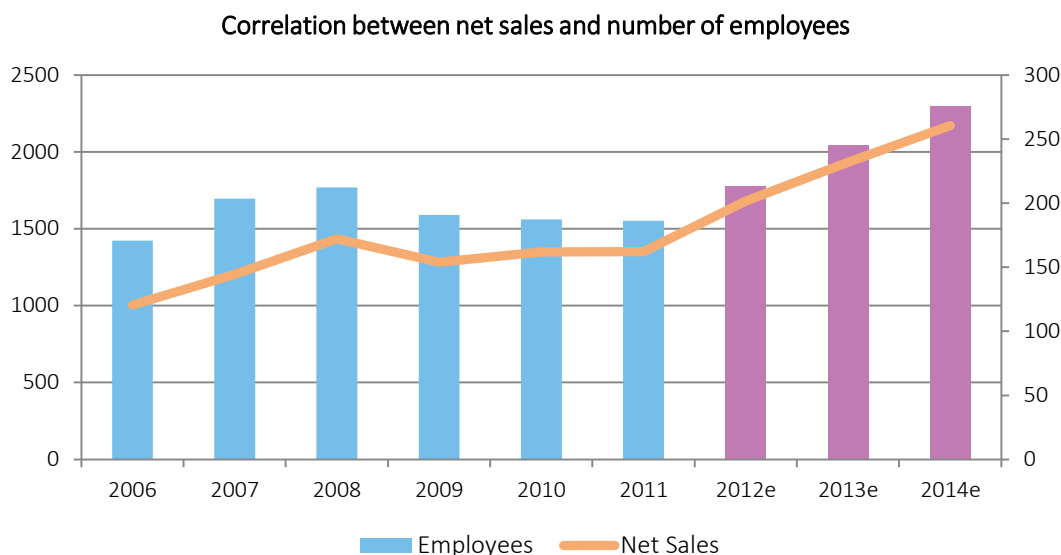
We have tried to open up the cost structure in the following graph. It includes all the expenses that company has specified in its annual reports. There are also future expenses that should demonstrate how we expected costs to develop, if the estimated sales growth would materialize. Note that the following cost structure doesn't include depreciation, amortizations or impairments. It's difficult to see the details in the small graph, but the main points to understand are the following:

- 1) Clearly the most important factor in cost structure is **personnel expenses**. Most of the personnel is in Germany (Automotive) and Finland (Wireless). Salaries are higher in Germany, but neither one is a "cheap labor" country.
- 2) Fixed expenses, such as premises and IT expenses, excluding personnel expenses are low. However, large part of personnel expenses should be considered fixed in medium term, as company's business naturally derives from the knowhow and competence of employees.
- 3) **Utilization of personnel**, simplified to sales per employee, is a key factor regarding EB's profitability. This is true especially for services.
- 4) **Operational leverage is modest** due to low relative share of product sales, but could be increasing significantly in the future. Still, profitability should improve significantly with sales.
- 5) Most of the growth in expenses should occur in personnel, external services and raw materials, when net sales grow. Other expenses should be more or less stable.



Graph 16. EB's cost structure on annual level 2007-2014e.

Since personnel expenses are the key for future profitability, we have also demonstrated scenario for the correlation between net sales and number of employees. Like mentioned, salaries are clearly higher in the Automotive segment than in Wireless. Also it's much more challenging to find capable engineers (especially without wage inflation) in Germany due to excellent employment situation in the country. Still, the logic is similar in both segments after 2012 – if company desires to grow, recruitments are necessary. However, it's important to notice that the situation will change at least in some degree after the divestment of Test Tools, which was a product business.



Graph 17. Net sales of EB are always somewhat correlated with the number of employees.

7.1. Focus on profitability that should improve over time

Profitability (EBIT-%) of EB has been low for years now. In 2012 management made improving the profitability its main focus area, and some positive development is already visible now. Still, a lot of work remains to be done. We believe that company should be able to reach EBIT-% of around 6-7 % in the medium time period (around 3-5 years). However, this would require major efficiency improvement both in Automotive and Wireless as well as pricing increases. Still, it's very important to understand that our investment case doesn't expect these figures: our EBIT margin estimate over the long-term is only just above 5 %. We believe that this level should be reachable already through growth of sales.

In Wireless segment there are three key drivers for improving profitability. First one is scale benefits that company achieves through growth in sales. EB Wireless has relatively wide cost base that has been working against the company after TerreStar shocked the level of net sales. Now that the sales are normalizing, the fixed cost base is used more efficiently and costs are not added linearly with the sales. In addition to this company is moving towards more product based business model, where business and margins are naturally more scalable in general. Third point normal; efficiency has to be improved and level of costs should be lowered. Of course over the long-term even the business logic, for example through more product based business portfolio, could improve the profitability. We have summarized our key points in a following way in Wireless:

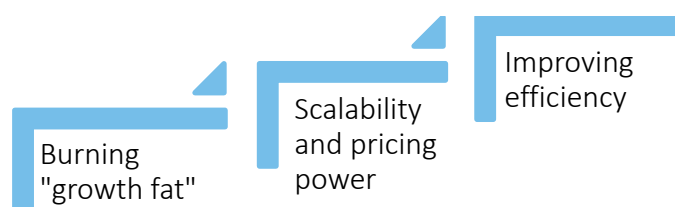


Graph 18. Key drivers for improving the profitability of Wireless.

The cost structure of Wireless is currently too high for profitable business, since Test Tools business is no longer sharing the fixed costs. Company answered to this problem with the cost savings measures that are carried out in H1'13. With different businesses of EB naturally have different underlying margins and profitability. When focusing into profitability, it is clear that potential margins are higher in 1) own products and especially in 2) software side in Automotive.

We believe that **Automotive segment** should be able to reach two-digit EBIT-% (perhaps around 10-15 %), if it were to focus solely in profitability instead of growth. Of course this isn't the optimal strategy considering the vast growth opportunities in the business, but it's important to understand that underlying profitability of the business is currently being overshadowed by fast growth. One factor to consider in Automotive is always the balance between higher margins "now" and dependence on the car volumes. It's interesting to see how this balance will develop in the next years, and how it will influence the margins.

Another critical thing is the scalability and pricing power of EB Automotive. We believe that these two are actually closely connected, because the scalability brings cost-benefits the EB's clients and through that company can also achieve some pricing power. In "typical" projects the competition might be too much around price, which always creates pressure on the margins. In Automotive we see the key factors like this:



Graph 18. Key drivers for improving the profitability of Automotive.

Looking at EB's business sectors, there is certainly potential in the margins also. Generally competitors are enjoying much better margins, which is both a reason to worry and an opportunity. Right now we are leaning more towards the opportunity side, but if company isn't able to improve its profitability significantly in 2013, we must consider also the possibility that there's something more problematic behind these figures. For example, company's value added might be lower, competitors might have a stronger than expected competitive edge through scales or technology or company might be inefficiently run due to poor management. We have identified many explanations for poor track-record in the past, but if the underperformance continues without clear reason (such as TerreStar in Wireless), one must consider that there is an underlying reason for this in the company.

Key Financials (MEUR)	2010	2011	2012	2013e	2014e	2015e
Revenue	162	162	185	197	218	242
EBITDA	-8.8	4.7	9.8	11.9	15.5	17.9
EBIT	-17.3	-4.0	2.5	4.2	7.8	10.7
Working Capital	29	26	29	26	29	32
Equity	71	66	67	92	93	96
Interest bearing debt	13	9	18	10	10	10
Total Assets	124	115	143	156	162	171

Key Figures	2010	2011	2012	2013e	2014e	2015e
Revenue growth	5.2 %	0.2 %	14.4 %	6.1 %	11.0 %	10.9 %
EBITDA-%	-5.4 %	2.9 %	5.3 %	6.0 %	7.1 %	7.4 %
EBIT-%	-10.7 %	-2.5 %	1.4 %	2.1 %	3.6 %	4.4 %
Asset turnover	1.3	1.4	1.3	1.3	1.4	1.4
ROI %	-15.0 %	-4.7 %	3.4 %	4.8 %	7.9 %	10.5 %
ROE %	-17.6 %	-7.7 %	3.5 %	33.6 %	7.7 %	10.3 %
Equity Ratio	57.8 %	58.2 %	48.4 %	60.4 %	58.8 %	57.6 %
Revenue/employee	104	104	99	102	103	104

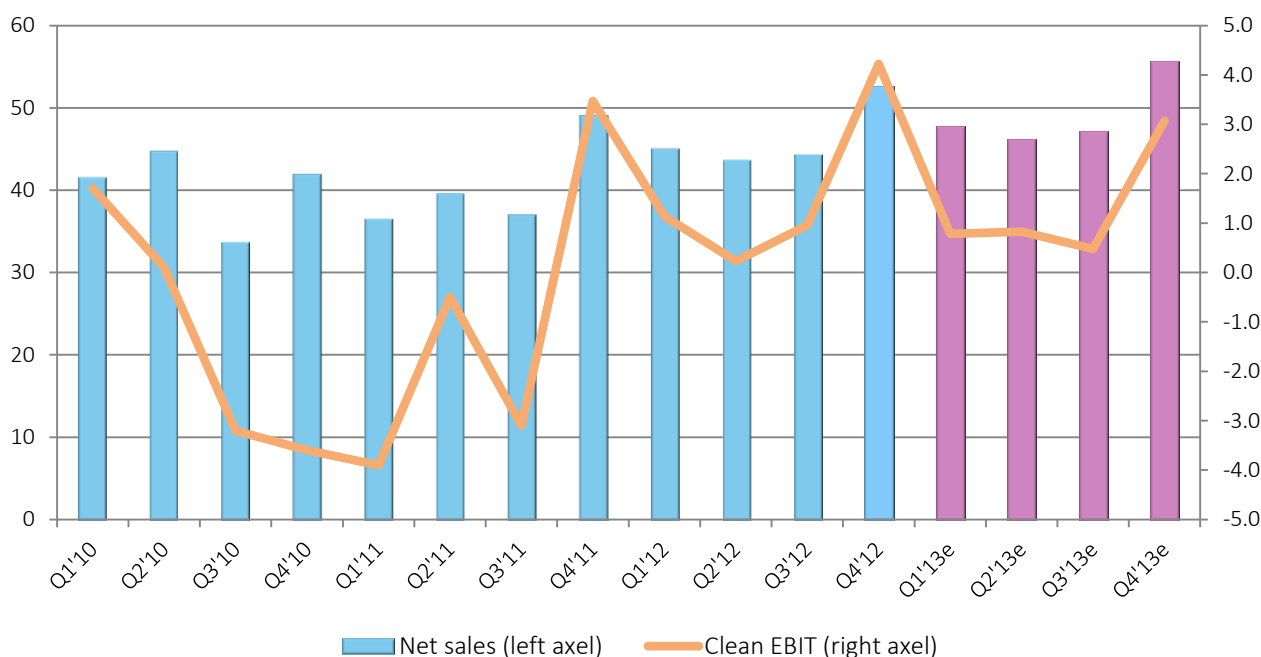
Table 8. Key figures and financials. **Note** that figures are not comparable due to Test Tools transaction.

8. Future estimates – profit improvements expected

EB's sales and profitability are relatively challenging to estimate. In short-term profitability is influenced by sales / services mix, success and timing of the projects and other such factors. Since the margins are typically higher in product sales compared to services and there's practically no order book, the timing of product sales can significantly affect the profitability in each quarter. The sale of Test Tools business has evened this in some degree, but it's still a factor. Especially in Automotive costs and revenue don't necessary go hand in hand, for example due to dependency on the car volumes. Also company's cost structure has been quite unstable considering the nature of the business. All in all, quarterly figures might be sometimes misleading, and for example rolling 12 month figures might serve investors better. In addition to these, in the past there have been many non-recurring items that have made forecasting more difficult. Naturally it is hoped that these don't play a significant role in the future.

The year 2012 gave a good comparison level for 2013, if we exclude the non-recurring items and adjust the figures due to the Test Tools transaction. Unfortunately EB hasn't published comparable quarterly figures for 2012, which causes uncertainty on the quarterly estimates due to the seasonality of the business. Company will be publishing comparable figures in the coming quarterly reports, so this problem will disappear over time. In this report we'll focus mostly on the annual figures, while quarterly figures play a larger role in the quarterly reports.

Group's key financials quarterly 2010-2013e (MEUR)



Graph 19. Net sales and EBIT excluding NRIs on a quarterly level.

8.1. 2013 outlook is good for Automotive, but for Wireless this will be a transformation year

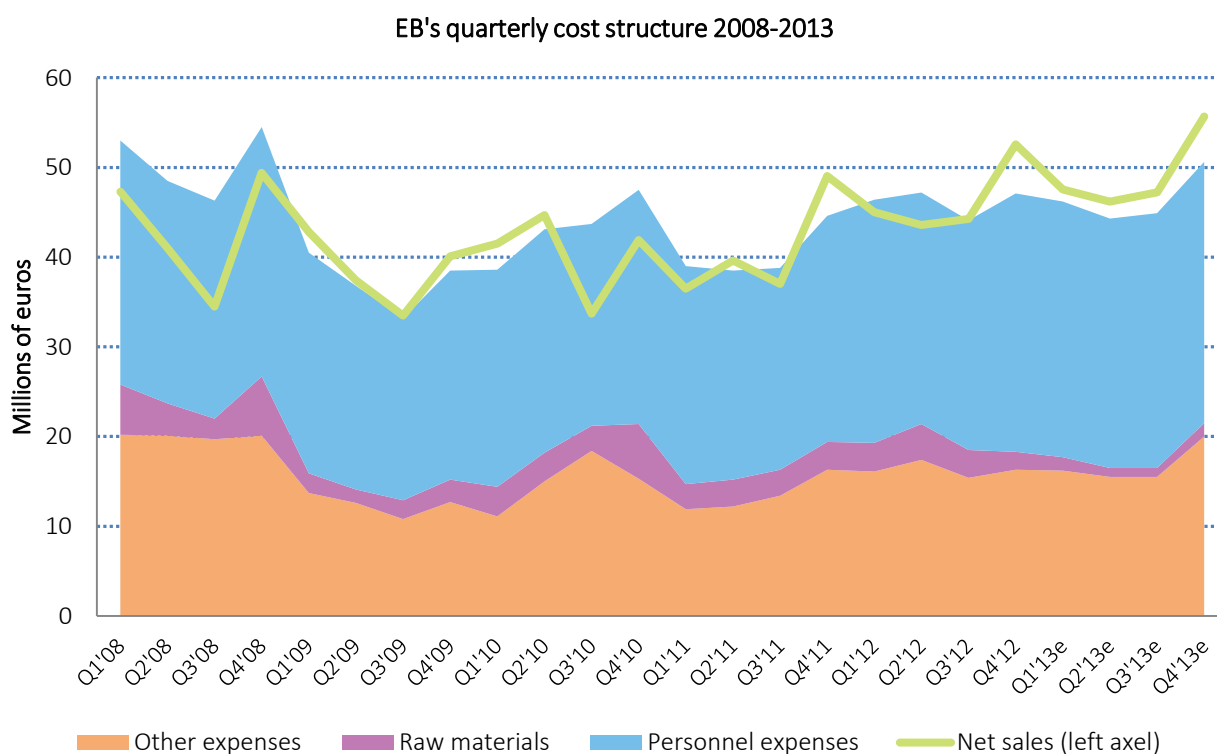
We will start opening up the future forecast from the guidance of EB, which is especially important in the middle of structural changes. EB expects for the year 2013 that net sales will grow and operating result to be at the same level as it was in 2012 without non-recurring items (pro forma net sales of EUR 173.8 million, and pro forma operating profit without non-recurring items of EUR 5.1 million, in 2012).

In addition, company states that the operating result is expected to be clearly better in the second half than in the first half of 2013 due to higher product license sales in the Automotive segment during the latter half of the year and other seasonality factors, and due to the planned cost saving measures in the first half in the Wireless Business Segment.

This is slightly worrying, because it puts additional pressure on H2'13. However, in EB's situation this sounds well-grounded. The background to the cost saving measures in Wireless are the sale of the products and services to a US based customer will not materialize due to the customer's financial challenges, and part of the common cost base of the Wireless Business Segment that was previously allocated to the sold Test Tools product business, was not included in the transaction.

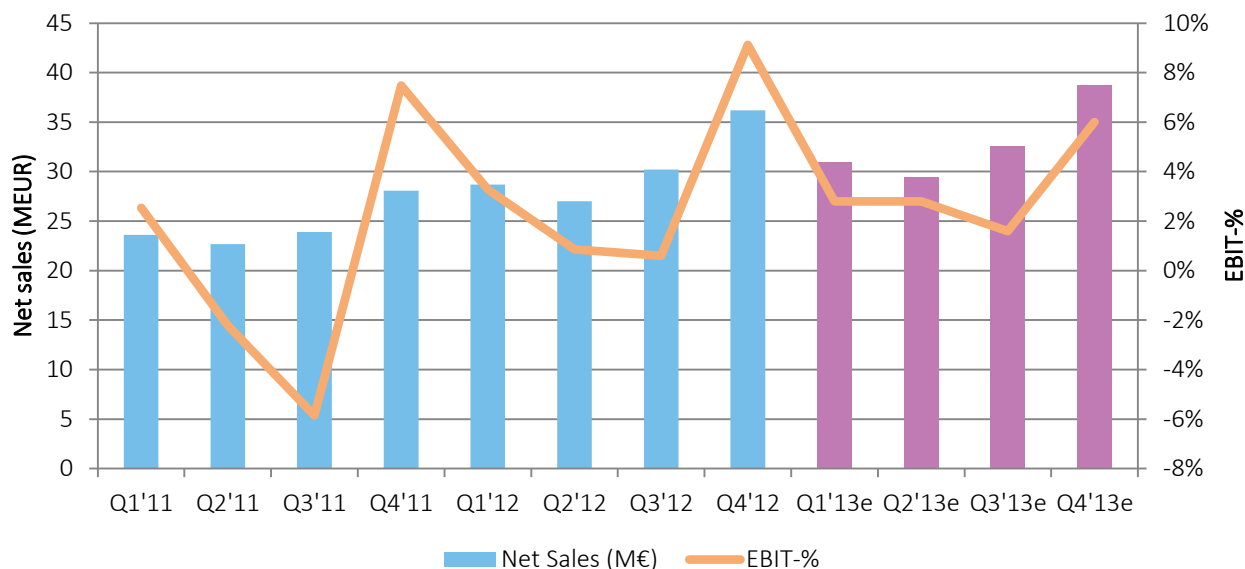
The profit outlook for the year 2013 does not include the non-recurring net profit of about 23 million euros in Q1'13 resulting from the sale of the Test Tools product business or possible non-recurring income or costs related to the reorganization cases of TerreStar Networks Inc.

We expect net sales growth to continue in 2013 despite the weak overall macro-economic situation. Especially in Automotive we are confident about the growth prospects, since the demand is there. In Wireless the situation is more uncertain, and probably the market won't be supporting growth – EB has to earn it in Wireless. The structural change caused by the Test Tools transaction will put anyhow Wireless in a challenging situation, and we believe that the year 2013 will be transformation year for the segment. At least the first half of the year will most likely be weak, and Q1 result will include also 1 MEUR of restructuring charges. It is still important to understand that the visibility for 2013 is generally poor, and situation needs to be followed closely. In the graph below there is a graphical illustration of the quarterly cost structure that we are expecting for the year 2013.



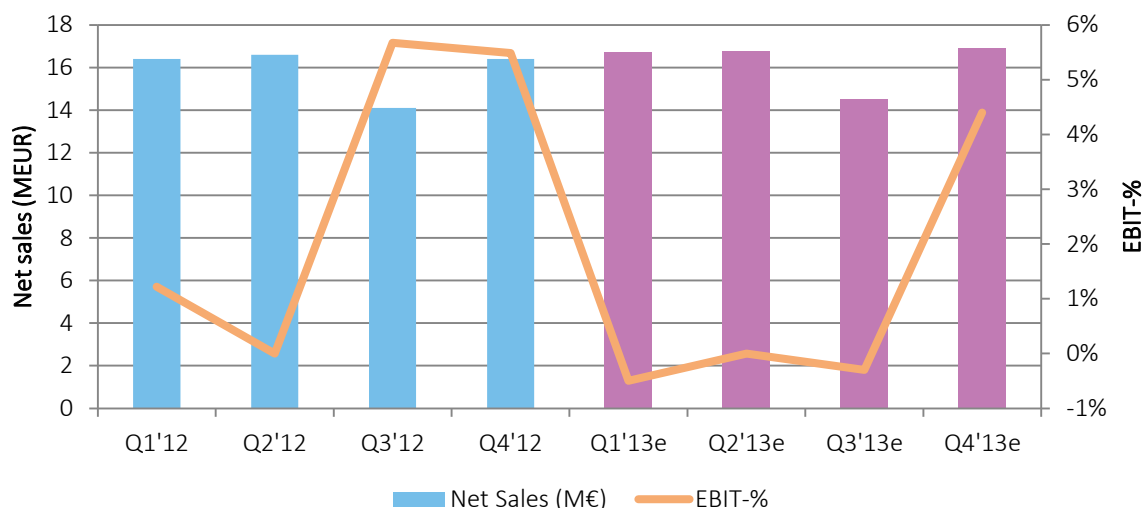
Graph 20. EB's cost structure on quarterly level 2008-2013e.

The uncertainty regarding the development of the automotive market in 2013 has increased in the latter part of 2012. This isn't surprising considering the problems at carmakers are currently facing especially in Europe. Still, due to strong underlying growth in automotive software market, this shouldn't affect EB much. Like we showed before, Automotive's net sales were stable even during the financial crisis, and this was a terrible market environment for most car manufacturers. We believe that Automotive's net sales growth in 2013 will slow down from 2012 figures, but still remain in a very high level. We currently expect underlying growth rate in Automotive to be roughly 19 % next year, while it has been around 23-24 % in the past few years. However, it's important to notice the consolidation change and its effects, which is why our actual growth estimate is only ~8 %. This caused by a change in accounting principles and has nothing to do with the actual business.



Graph 21. Estimated development of **Automotive** on quarterly level 2011-2013e. Figures not comparable.

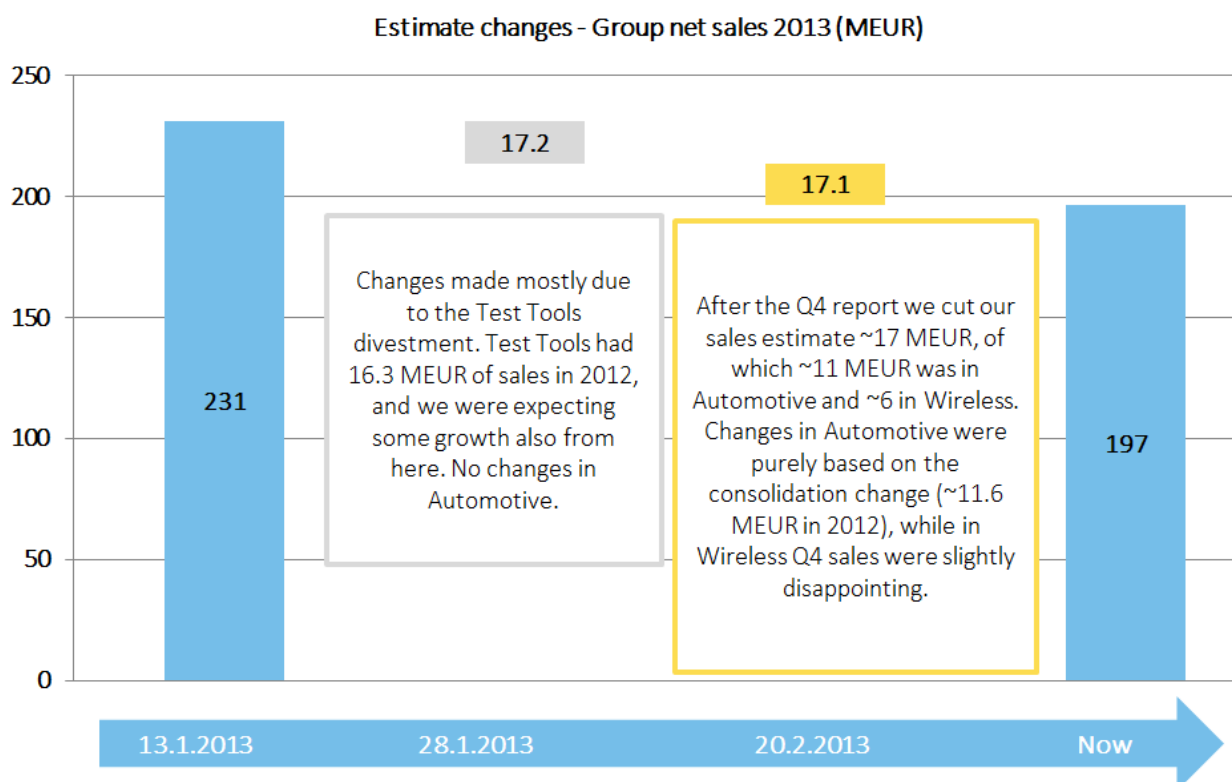
In Wireless, which had exceptional underlying growth in 2012, we expect the slowdown to be much harder. Currently we expect net sales growth to be only around 2 %, while 2012 growth excluding the divestment of Test Tools was almost 25 %. Still, these figures are reasonable strong and slowdown shouldn't have any negative effects on profitability as long as pricing environment doesn't change adversely. If anything, growth in Automotive's expenses should be easier to control without a huge pressure for new resources. Therefore we believe that EB will be able to improve its profitability in both segments in 2013 despite the uncertainties.



Graph 22. Estimated development of **Wireless** on quarterly level 2012-2013e.

8.1. New pro forma 2012 figures and our 2013 estimates

There have been some major changes in both of EB's business segments in the past months. These have also greatly influenced our future estimates in both business segments. Especially the changes in Automotive might not be obvious or transparent for all the investors, which is why we wanted to open up the changes behind them. In the following graphs you can see how our 2013 estimates have changed after the Q4 report and how they relate to the new 2012 pro forma figures. We have also compared the pro forma figures to the 2012 figures of continuing operations, where Test Tools divestment is taken into account but not the changes in Automotive. However, pro forma are naturally the most important when looking into the future, and estimates should be compared with them.

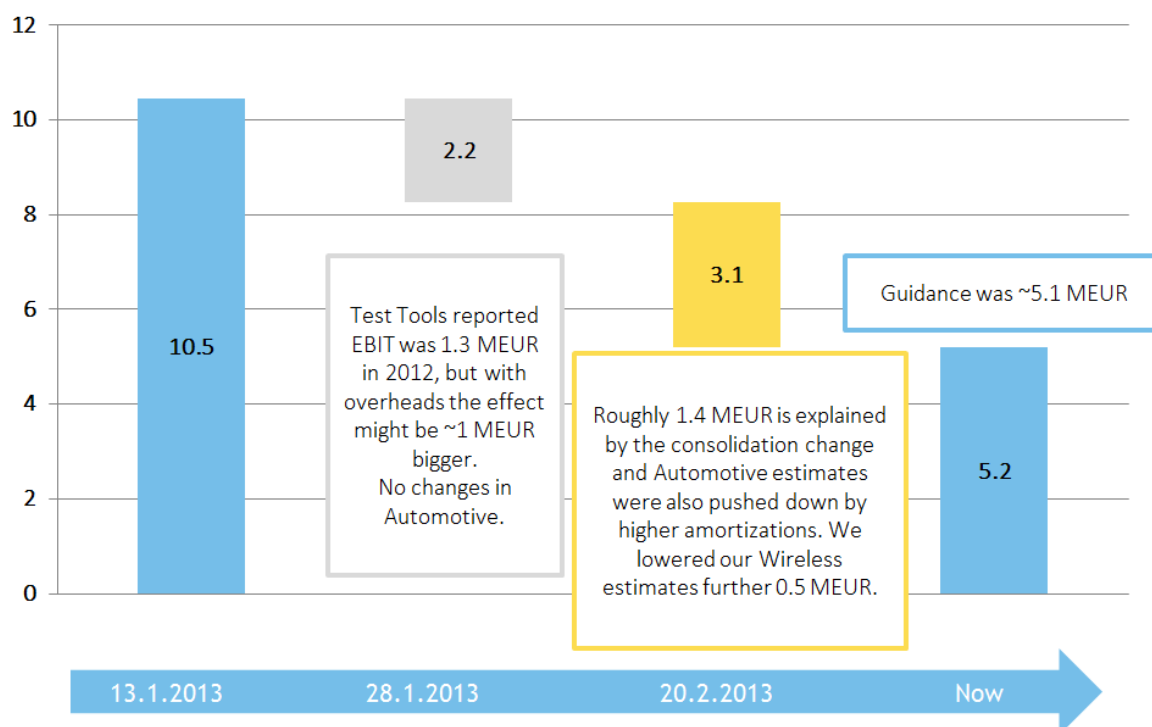


Graph 23. Net sales estimate revisions in the beginning of the year 2013.

We have adjusted our estimates for Wireless lower after Q4 report especially for the first part of the year. After the divestment of Test Tools business the cost structure of Wireless is too heavy especially considering the end of significant client relationship in the US due to client's financial trouble. Cost savings that are estimated to be around 2 MEUR in an annual level will be weighted towards the end of the year, where we expect some improvements.

First half of Wireless will probably be challenging, and EBIT will likely to close to break-even. It's naturally that profit contributions of Wireless will be limited in the medium term in the absence of Test Tools, which was probably the best performer of the Wireless business. Possible international breakthrough of Defense products might provide a positive surprise, but we are not counting on this at least in 2013 in our earnings estimates. Still, the biggest impact on our future estimates came from Automotive side, though nothing really changed in our underlying assumptions about the business. We have explained these changes in detail in the following chapter.

Estimate changes - Group EBIT 2013 (MEUR)



Graph 24. EBIT estimate revisions in the beginning of the year 2013.

Key Figures	Q1'11	Q2'11	Q3'11	Q4'11	FY'12	Q1'13E	Q2'13E	Q3'13E	Q4'13E	FY'13E	FY'14E
Net sales	45.0	43.6	44.3	52.6	185.4	47.7	46.2	47.1	55.6	196.7	218.4
Wireless	16.4	16.6	14.1	16.4	63.5	16.7	16.8	14.5	16.9	64.9	66.9
Automotive	28.7	27.0	30.2	36.2	122.1	31.0	29.4	32.6	38.7	131.8	151.5
EBITDA	2.4	1.1	4.0	2.3	9.8	1.6	2.8	2.4	5.1	11.9	15.5
Depreciation	-1.6	-1.8	-1.8	-2.1	-7.3	-1.8	-2.0	-1.9	-2.0	-7.7	-7.7
EBIT	0.8	-0.7	2.2	0.2	2.5	-0.2	0.8	0.5	3.1	4.2	7.8
EBIT excl. NRIs	1.1	0.2	1.0	4.2	6.5	0.8	0.8	0.5	3.1	5.2	7.8
Wireless	0.2	0.0	0.8	0.9	1.9	-0.1	0.0	0.0	0.7	0.6	1.5
Automotive	0.9	0.2	0.2	3.3	4.7	0.9	0.8	0.5	2.3	4.5	6.4
NRIs	-0.3	-0.9	1.2	-4.0	-4.0	-1.0	0.0	0.0	0.0	-1.0	0.0
Net financial items	-0.4	0.4	-0.2	-0.4	-0.5	0.0	0.0	-0.1	-0.1	-0.1	0.0
Pre-tax Profit	0.4	-0.3	2.0	-0.2	2.0	-0.2	0.8	0.4	3.0	4.1	7.9
Discontinuing operations	0.1	0.3	-0.1	0.9	1.2	23.0	0.0	0.0	0.0	23.0	0.0
Taxes	-0.1	-0.2	-0.1	0.6	0.1	0.0	-0.1	0.0	-0.3	-0.4	-0.8
Minorities	-0.2	-0.2	-0.2	-0.5	-1.0	0.0	0.0	0.0	0.0	0.0	0.0
Net earnings	0.3	-0.4	1.6	0.8	2.3	22.8	0.7	0.4	2.7	26.6	7.1
Net sales growth %	23.4 %	10.0 %	19.6 %	7.2 %	14.4 %	6.1 %	6.0 %	6.5 %	5.8 %	6.1 %	11.0 %
EBITDA %	5.4 %	2.5 %	9.0 %	4.3 %	5.3 %	3.3 %	6.1 %	5.0 %	9.1 %	6.0 %	7.1 %
EBIT %	1.9 %	-1.6 %	5.0 %	0.3 %	1.4 %	-0.5 %	1.8 %	1.0 %	5.5 %	2.1 %	3.6 %
EPS excl. NRIs	0.00	0.00	0.00	0.04	0.05	0.00	0.01	0.00	0.02	0.04	0.05
EPS only continuing	0.00	0.00	0.01	0.00	0.01	0.00	0.01	0.00	0.02	0.04	0.05

Table 9. Forecasted development of the key figures.

9. Valuation is relatively high, but still attractive

When valuing EB, one needs to consider both EB Automotive and EB Wireless. However, this is not quite enough. Companies with different businesses are typically valued with a discount, and like said, synergies between Wireless and Automotive are very limited at best. The Test Tools transaction showed that the company is more than willing to sell its businesses, if the right opportunity presents itself. In the end traditional multiples and DCF calculations should be considered with the sum of parts method, because investors have to buy in the whole entity currently. We have started the valuation from the view of business segments, but we believe that the group multiples have to support the result also. When it comes to DCF value, we regard it as more theoretical, but it also has to support to conclusion to make it valid. To make things more complicated, we can see acquisition potential both in Automotive and Wireless, like mentioned before. This "option" should carry some value also. All in all, we find EB to be high risk share, but it also has plenty of upside potential if things go right.

9.1. Sum of parts provides the basis for valuation

Notice that our valuations here are made by stand-alone businesses. When we discuss value in this chapter, we are referring to Enterprise Value (EV) unless stated otherwise. Even though we understand that there some advantages of being part of EB for example in financing and some very limited synergies, we believe that it's naturally to give a certain discount for the whole EB. After all, the two businesses are almost completely different.

Automotive has a bright future outlook and we are quite confident about its success in the future. We believe that the company should be valued with a small premium compared to its peers group median multiples, because it has clearly been on the winning side of the sector and it has major trends behind it. Also the successful joint venture with Audi makes it more attractive. However, the thing that makes the valuation difficult is the poor track-record of the segment when it comes to profitability. We have to estimate a somewhat normalized level for EBIT-% in order to be able to use EV/EBIT- and EV/EBITDA-multiples. In the other hand we could just state that we accept a higher multiple due to 1) higher growth rate and 2) better possibilities to improve profitability.

In the following table 10 one can see the valuation of most relevant peers of EB Automotive. Similar information is also presented in table 11, which also includes EBIT-% of the peers to give a general idea about the profitability of the sector. Median EV/EBITDA-multiple in the peer group is only 7 with this year's estimates, which we consider to be very modest. KPIT Cummins, which is listed in India, is valued with very low multiples. We believe that this is mostly due to the worries about the local accounting standards. Companies Alpine that are more involved with "bulk" business are deservedly valued with lower multiples. We would value EB Automotive closer to Mentor Graphics, which has an EV/EBITDA-multiple of 8.3. Even this sounds relatively low for us when thinking about the growth prospects as well as the margin expansion potential of EB Automotive. Considering these we would give EV/EBITDA-multiple of around 8-10 to EB Automotive. Even this is modest in our opinion, and already takes into account to poor track record in profitability.

Business segment peer groups

Estimates: Reuters consensus

	EV/EBITDA			EV/S			P/BV
	2012	2013e	2014e	2012	2013e	2014e	2013e
EB Automotive							
Softing AG	-	3.7	3.3	-	0.7	0.6	2.8
KPIT Cummins	7.4	5.8	5.1	1.1	0.9	0.8	2.9
Mentor Graphics	7.9	8.3	7.4	1.6	1.8	1.8	2.2
Alpine	3.1	4.4	3.2	0.2	0.2	0.2	0.7
Harman	5.0	7.0	5.5	0.5	0.7	0.6	2.0
Garmin	9.4	13.3	13.2	2.3	3.1	3.2	2.1
TomTom	5.6	7.6	7.3	0.9	0.9	0.9	0.9
MEDIAN	6.5	7.0	5.5	1.0	0.9	0.8	2.1

Table 10. Peer group of EB Automotive business segment. Source: Thomson Reuters 13/3/2013.

Our current EBIT estimate is roughly 4.5 MEUR. In 2012 Automotive's depreciation amounted to 4.3 MEUR, but this year's figure is challenging to estimate due to the changes in consolidation of e.solutions. In 2011 the depreciation of e.solutions was 0.3 MEUR, so we assume that this will cause only minor changes to depreciation and will probably be more compensated by the growth of the business segment. Therefore we estimate that Automotive's depreciation is around 4.3 MEUR in 2013, which would lead into EBITDA estimate of 8.8 MEUR. Automotive Business Segment's EBITDA was 9.0 million euros (FY'11: 6.0 MEUR), but it's important to notice that due to the consolidation changes these figures aren't comparable. Therefore the value of EB Automotive business segment would be around 70-88 MEUR (EV/EBITDA 8-10) with the current 2013 estimates.

If we then consider similar exercise with EV/EBIT-multiple, we shift our focus to table 11 and notice that median EV/EBIT-ratio is roughly 10. Since our estimate for EBIT is only 4.5 MEUR in 2013, it would give a significantly lower value for the business segment. However, when looking at the EBIT-% of the peers, we notice that EB Automotive's profitability is clearly lower than that median. Our EBIT-% estimate is only 3.4 % for 2013, which many times lower than the peer group median 8.0 %. Since there's no reason to expect EB Automotive's profitability to remain significantly lower than to average in the long-term, we have to either expect higher multiples or "moderate" the EBIT-%.

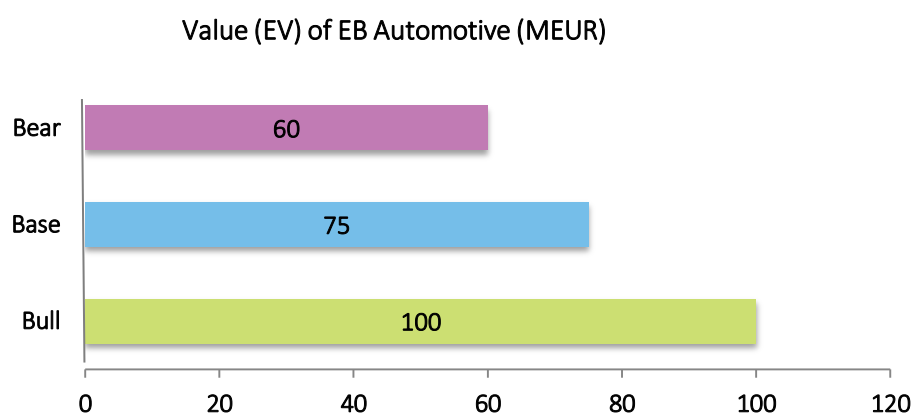
Business segment peer groups

Estimates: Reuters consensus

	EV/EBIT			EBIT-%		
	2012	2013e	2014e	2011	2012e	2013e
EB Automotive						
Softing AG	-	6.5	5.5	10 %	11 %	11 %
KPIT Cummins	9.1	6.8	6.0	12 %	13 %	14 %
Mentor Graphics	10.6	9.8	8.8	15 %	19 %	20 %
Alpine	6.6	5.2	4.7	3 %	3 %	4 %
Harman	6.9	10.4	7.5	7 %	6 %	8 %
Garmin	10.6	15.6	15.6	21 %	-1 %	-3 %
TomTom	15.9	36.6	23.8	6 %	3 %	5 %
MEDIAN	9.9	9.8	7.5	10.0 %	6.5 %	8.0 %

Table 11. Peer group of EB Automotive business segment. Source: Thomson Reuters 13/3/2013.

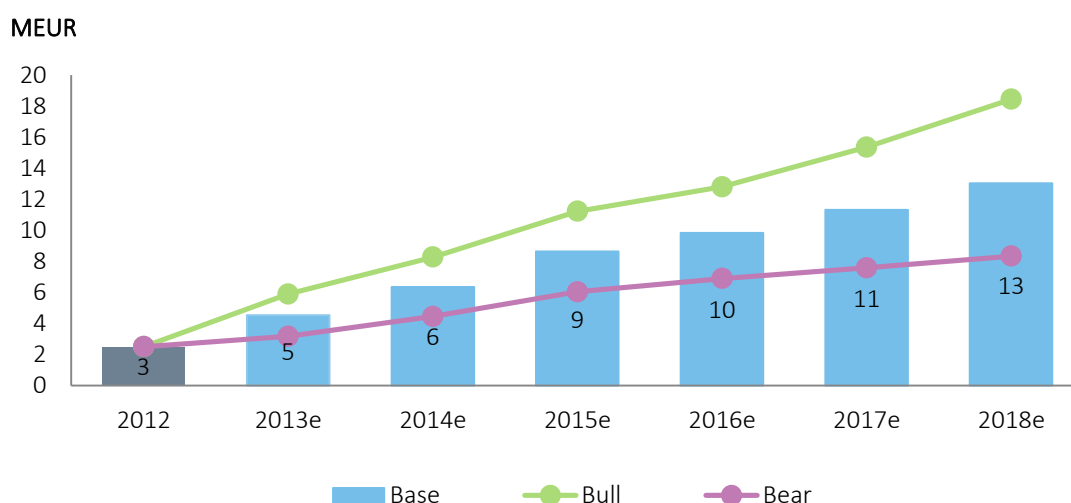
Similarly we would get a significant larger value if we would use the EV/Sales-multiples (included in table 10). Since EB Automotive's sales are estimated to be around 132 MEUR in 2013, with a median EV/S-multiple of 0.9 the value of the business would be almost 120 MEUR, which already too high in the current situation in our opinion. In the end we conclude that EBITDA-multiple is more relevant in this case. In conclusion, we believe that EB Automotive's value is currently roughly 75-80 MEUR. In the following graph we have given the value in different scenarios.



Graph 25. Our estimate of EB Automotive's current value (EV) in bear, base and bull scenarios.

Of course the value depends greatly on the future performance of the business segment, but around 75 MEUR would be reasonable value with our current base case. We believe that the profitability is the key factor in the value development currently, which is why we are focusing on it in our following scenarios. Due to currently low margins, the profitability improvements have two important drivers: margin expansion delivers results quickly and might also lead to multiple expansion, because investors might consider EB's Automotive business with more confidence after seeing results. Of course another key component here is the net sales growth-%, but here company's track record is much better and therefore it's probably less important at least in the short to medium term.

If a more positive scenario ("bull") would be considered, the value could increase to around 100 MEUR. This would require EBIT-% to increase around 1.5-2 percentage points more than estimated in the coming years. In the other hand, if the profitability wouldn't increase like we have estimated, the value could naturally be also significantly lower. After all, the multiple that we are currently using takes into account to expected profitability estimates. We have summarized our assumptions in the following graphs.



Graph 26. Rough forecast of EB Automotive's EBIT development in different scenarios.

	2013e	2014e	2015e	2016e	2017e	2018e
Positive Bull scenario						
EBIT-%	4.5 %	5.5 %	6.5 %	6.5 %	6.8 %	7.0 %
EBIT	6	8	11	13	15	18
Base case						
EBIT-%	3.4 %	4.2 %	5.0 %	5.0 %	5.2 %	5.4 %
EBIT	5	6	9	10	11	13
Negative Bear scenario						
EBIT-%	2.4 %	2.9 %	3.5 %	3.5 %	3.6 %	3.8 %
EBIT	3	4	6	7	8	8

Table 12. Rough forecast of EB Automotive's EBIT development in different scenarios. Estimates by Inderes.

It's also worth noting that valuations in M&A activity in this field are probably going to be much higher than those presented in tables 10 and 11. We don't expect that EB would sell Automotive business with these kinds of multiples, and probably also its possible acquisitions would be more expensive. Depending on synergies they might still be very good deals and create value for shareholders. The possible acquisition of EB Automotive would probably be the quickest way to unlock the full potential that we see, but this cannot be valued directly in our calculations.

Wireless is challenging to value for different reason than Automotive. We find the opportunity in defense sector very interesting; possible outcome of a breakthrough would be huge, but the probability of this is very small. Therefore it's very difficult to estimate the value of this; defense is kind of a startup company right now. We are reluctant to assign a significant value for this "option", and rather just considered it as a valuable bonus in addition to the current business model.

We don't find the core service business of Wireless very interesting. Even though it has been improving in recent quarters, its future outlook isn't too bright in our eyes especially due to the rising competition coming from mostly China. After Test Tools transaction to segment is more focused, but has very little operational leverage and its risk profile is relatively high in our opinion. Competition is probably going to increase even further due to pressure coming from developing countries, mostly Asia. Pricing power of Wireless is limited towards typically large clients. All in all, we believe that Wireless should be valued with reasonable low multiples. When looking at table 13 and 14, we see that the peers of Wireless have relatively high multiples at least compared to those in the automotive sector. While we believed that EB Automotive deserved higher valuation multiples than its peer group, with Wireless we assign a lower EV/EBITDA-multiple of 5.8 to the business. This is mostly due to the business sector and its situation than EB Wireless itself. It's also worth noting that there is a great variation also within the group. Sasken seems to be very cheap, while Spirent is valued highly. Etteplan is included only because somewhat similar investment profile and it's not involved in similar business.

Business segment peer groups

Estimates: Reuters consensus

	EV/EBITDA			EV/S			P/BV
	2012	2013e	2014e	2012	2013e	2014e	2013e
EB Wireless							
Sasken	1.1	3.9	3.8	0.2	0.6	0.6	0.6
HiQ	8.6	9.5	9.0	1.2	1.4	1.3	3.0
Spirent	9.9	8.8	8.2	2.8	2.4	2.3	3.0
Tieto	5.3	5.4	5.1	0.6	0.7	0.7	2.2
Affecto	6.2	5.4	5.1	0.6	0.7	0.7	1.3
Kongsberg	5.9	5.6	5.2	0.9	0.7	5.2	2.2
Etteplan	6.1	6.5	5.6	0.0	0.6	0.6	3.3
MEDIAN	6.1	5.6	5.2	0.6	0.7	0.7	2.2

Table 13. Peer group of EB Wireless business segment. Source: Thomson Reuters 13/3/2013.

To make matters more difficult, the year 2013 will most likely be a transformation year for Wireless after the Test Tools divestment. This makes estimating the profit development more challenging. We are currently estimating segment's EBIT to be around 0.6 MEUR, which is such a low figure that it makes using multiples very difficult. This estimate excludes the expected non-recurring expense of 1 MEUR in Q1. Our EBITDA estimate for 2013 is currently around 4 MEUR and next year's estimate is around one million more. Wireless business segment's EBITDA from continuing operations was EUR 0.7 million in 2012 (FY'11: -3.3 MEUR), but included 4 MEUR of non-recurring expenses.

It's difficult to estimate what kind of margins EB Wireless might be able to produce in "normalized" conditions, since it has been going through major changes during the past years (e.g. TerreStar case and Test Tools divestment). If we look at the peer group and table 14, we see major differences in EBIT margins. Sasken, HiQ and Spirent are all well in the double digits, while others are relatively close to 10 % in 2013 estimates. EB Wireless is nowhere near these kinds of margins, and at least our estimates are in a very modest level also in the future. The company has to prove itself when it comes to solid margins before we start forecasting them. However, there is significant potential for profit improvement, but currently it's difficult give value to this potential.

Business segment peer groups

Estimates: Reuters consensus

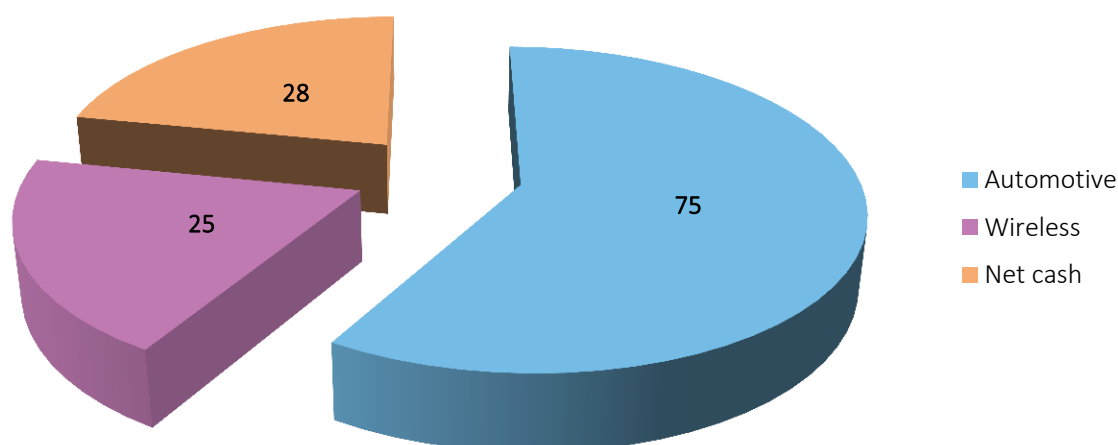
	EV/EBIT				EBIT-%	
	2012	2013e	2014e	2011	2012e	2013e
EB Wireless						
Sasken	1.2	4.0	3.9	15 %	14 %	15 %
HiQ	9.2	10.1	9.5	13 %	14 %	13 %
Spirent	10.9	10.0	8.9	26 %	24 %	25 %
Tieto	8.2	8.5	7.8	7 %	8 %	9 %
Affecto	8.1	8.5	7.8	7 %	9 %	10 %
Kongsberg	7.2	6.9	6.1	10 %	11 %	11 %
Etteplan	7.8	8.4	6.9	6 %	7 %	7 %
MEDIAN	8.1	8.5	7.8	10.0 %	10.6 %	11.4 %

Table 14. Peer group of EB Wireless business segment. Source: Thomson Reuters 13/3/2013.

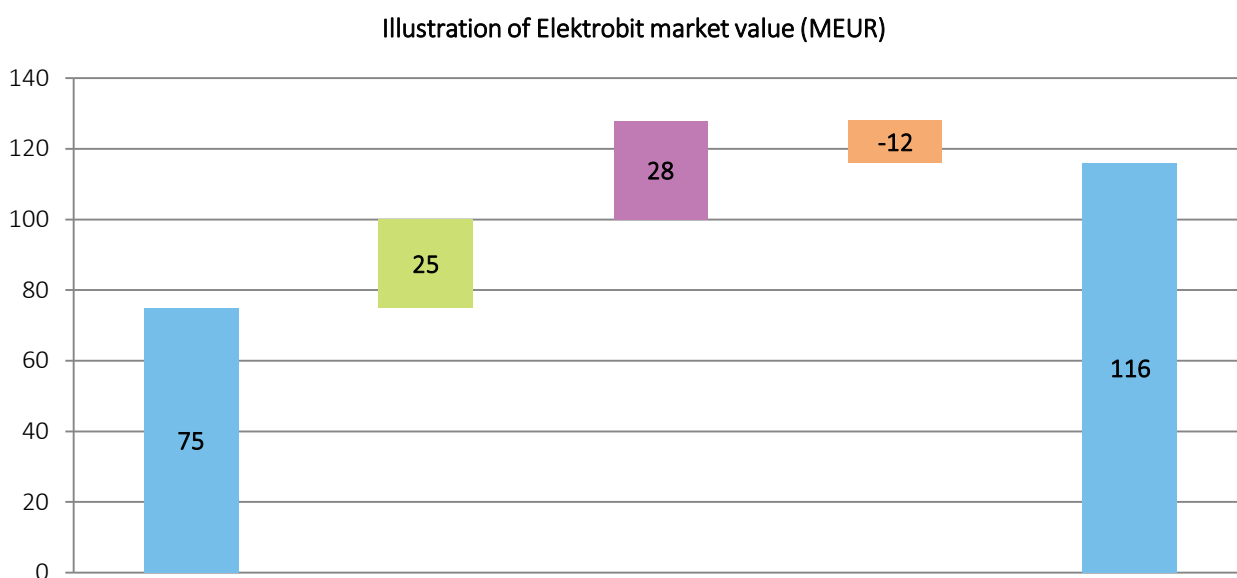
If we use the median EV/EBITDA-multiple (5.8) of Wireless's peer group with the 2013 EBITDA estimate of 4 MEUR, the value of the business segment would be slightly over 23 MEUR. In respect of 2014 figures, median of 5.5 and EBITDA estimates of 5 MEUR, the value would be around 27.5 MEUR. This might be relatively close to the value we would assign to the current Wireless business, which is very much in transformation and has relatively low visibility. We believe the value of Wireless to be around 25-30 MEUR currently.

This range (25-30 MEUR) probably sounds extremely low to many after the Test Tools transaction and its valuation. After all Test Tools had an EV of 31 MEUR with an EV/EBIT-multiple was over 20. However, we have to remind that there's a significant difference when it comes to service and product businesses. Also this value is based on stand-alone valuation, while there were significant synergies involved in the Test Tools deal. We don't believe that EB has any intentions to sell its Wireless business with EV/EBITDA-multiple below 6. If there would be a deal in the future, it would probably be with the much higher multiple. Still, in the current uncertain environment we find difficult to justify higher multiples in our valuation.

Elektrobit's market value is currently around 105 MEUR (share price 0.81 EUR). According to our estimates company's EV, which also considers the net debt of the company, is around 77 MEUR in the end of 2013. Like said, the company is going to receive a net cash flow of about 28 million euros in the first half of 2013 from the Test Tools transaction. Since the company's balance sheet was already strong, the net debt will clearly negative and explains why EV is clearly lower than market capitalization. We have illustrated our view of the values of these factors in the following graph 27, where the total MCAP would amount to 128 MEUR.

**Graph 27.** Our view of the factors behind the market capitalization of Elektrobit. Figures are millions of euros.

Since our target price is only 0.90 EUR, which would give a MCAP of around 116 MEUR, one might wonder why this is different from the estimated value of 128 MEUR. Our main explanation for this is that there has to be a certain discount, if the company has different business that cannot be separately invested in. One might want to buy into Automotive business with the value of 75 MEUR, but isn't interested in Wireless, or vice versa. Since this is a package deal, certain discount needs to be applied. This might be around 10 % in Elektrobit's case, which would already lead us to our target price. This idea is illustrated in the following graph 28.



Graph 27. Value bridge where the steps for EB's MCAP are Automotive, Wireless, net cash and the discount.

Also it's worth noting that our target price is given for the next 6 months, and the full value isn't necessarily realized during this period. For example in Elektrobit's case the Q1 result will probably be weak, and might postpone the realization of the investment case. The actual development will always differ from the forecasted one in some degree, which will lead into diversions in the values. On the other hand, since we are expecting significant profit improvement especially in Automotive, it's naturally that these are priced in using caution. Markets tend to accept higher valuation only after they have seen more concrete proofs, which is also true for us. This means that once the 2013 estimates are met and the outlook is still positive for 2014, the values go up logically.

9.1. Sum of parts is supported by multiples

Even though we put more weight on the sum-of-parts valuation, it has to be supported also by more traditional multiples both in absolute terms as well as in relation to peers. In table 15 we will take a look of Elektrobit Group and its peer group. Naturally the more accurate calculations have been made in the business areas, but the group still has to be also considered, since this is what the investors are buying into. We have tried to balance the different aspects of EB's business in the selected peer group in order to get the correct valuation levels, but this is naturally challenging. When looking at the 2013 multiples, EB's valuation is cheap with EBITDA (6.3 vs. median 7.9) multiple, but expensive with EBIT (18.4 vs. median 8.5). EB has relatively high depreciation and amortizations compared to the peer group, which makes comparisons more difficult. However, overall the valuations are mostly in-line with EB, which is important.

When looking at the P/E-ratios Elektrobit is priced with a significant premium compared to its peers. This is naturally due to the large amount of cash. In the current situation P/E-ratio is not a good way to value EB, since it ignores the overcapitalized balance sheet. Therefore EV-multiples should be used, until the cash situation balances out either through dividends or acquisitions. If company doesn't make any acquisitions, which it is almost certainly looking for, we believe that it will pay high dividends in the coming years. Dividend yields are not compared in the tables, but in this regards Elektrobit is cheap, if acquisitions aren't made.

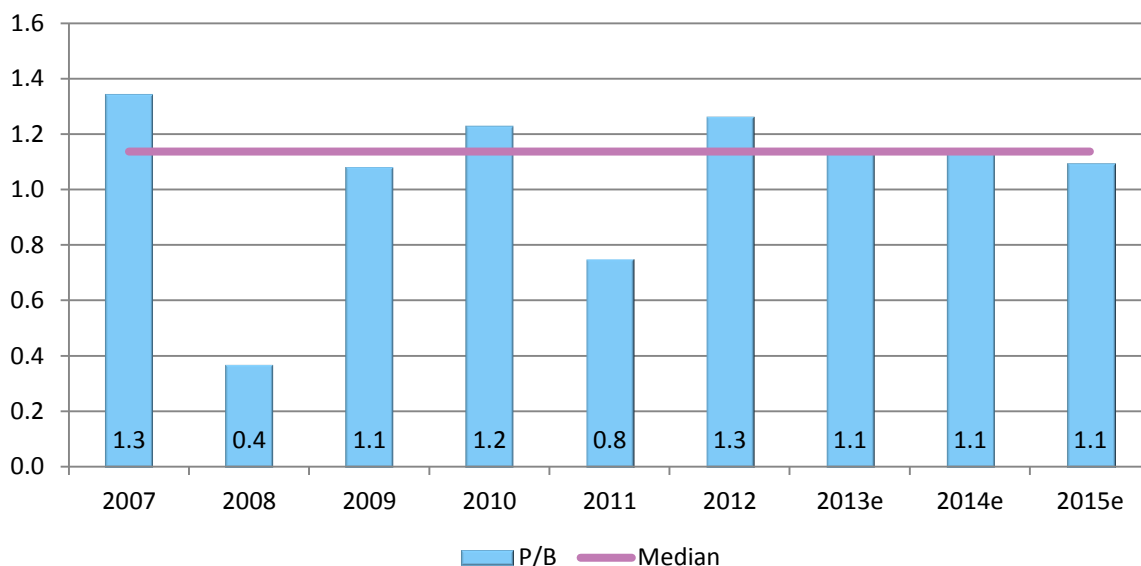
Peer group: Elektrobitt Group

Estimates: Reuters consensus

	Share price	MCAP	EV	EV/EBIT		EV/EBITDA		P/E		P/BV
				2013e	2014e	2013e	2014e	2013e	2014e	2013e
Sasken	133.75	40.3	40.6	4.0	3.9	2.5	3.9	6.7	6.6	0.61
HiQ	39.20	251.6	230.2	10.1	9.5	9.9	9.5	14.0	12.7	3.00
Spirent	149.50	1138.7	951.9	10.0	8.9	9.3	8.8	1056.5	934.4	2.95
Tieto	16.65	1212.8	1247.1	8.5	7.8	6.0	5.4	11.1	10.1	2.18
Affecto	3.90	85.1	96.0	8.5	7.8	8.0	6.1	9.0	7.5	1.27
Etteplan	3.25	67.0	90.3	8.4	6.9	7.9	6.5	11.0	9.8	3.27
Softing AG	8.17	52.6	39.5	6.9	5.9	4.6	4.0	13.4	11.2	2.91
KPIT Cummins	99.85	263.9	265.9	6.2	5.5	9.0	5.3	9.2	7.6	2.59
Mentor Graphics	17.67	1549.5	1570.7	9.9	8.9	10.1	8.4	12.7	11.4	1.93
Garmin	33.29	5386.4	5542.6	14.3	14.3	10.7	12.2	13.8	13.3	1.96
TomTom	3.15	692.5	1035.8	36.6	23.8	6.1	7.7	14.3	11.3	0.83
Alpine	919.00	529.4	307.2	5.1	4.6	2.6	4.3	42.7	16.0	0.64
Harman	44.41	2346.0	2122.0	10.5	7.6	6.0	7.1	16.0	11.5	1.97
MEDIAN				8.5	7.8	7.9	6.5	13.4	11.3	2.0

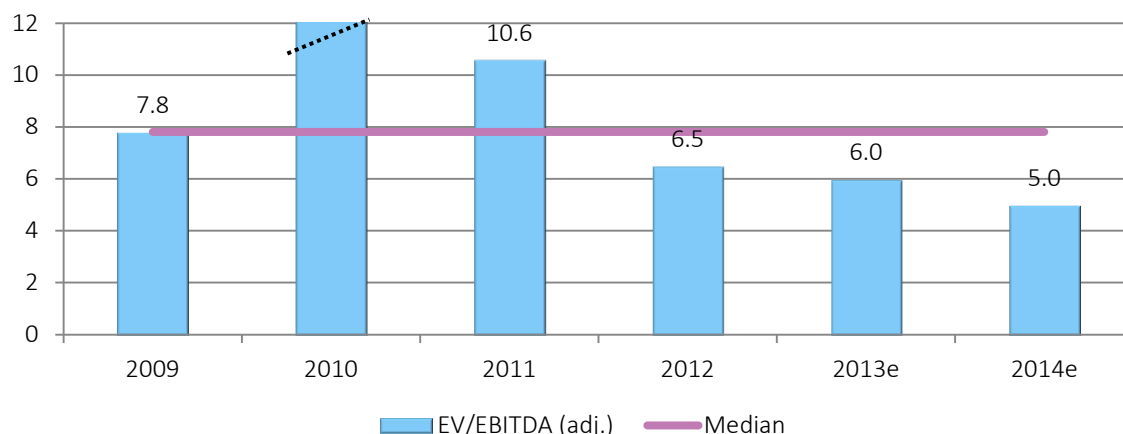
Table 15. Combined peer group of Elektrobitt Group. Source: Thomson Reuters 13/3/2013.

Looking at 2013 multiples and the track-record from last few years, current valuation is well in-line with historical median. This is especially true with the P/B-ratio presented in the graph 23.



Graph 23. Price of EB compared to company's book value. Estimates by Inderes. Share price used 0.81 EUR.

When backing the valuation with other historical multiples, we run into trouble because company's results have been anything but stable in the past. Therefore it's difficult to say what is actually the correct level for median. The median of 2009-2014 is 7.8, which seems at least reasonable. Notice that the EBITDA figures have been adjusted for non-recurring items that have also been common in the recent years. Regarding EV/EBITDA, the current level seems low compared to the historical levels seen in graph 24.



Graph 24. EB's valuation with EV/EBITDA multiple. Estimates by Inderes. Share price used 0.81 EUR.

9.2. Cash flow analysis (DCF) indicates significant upside

We use the DCF valuation more as a reality check than the absolute truth, but it also confirms our basic case about the valuation. Elektrobit's share is currently clearly undervalued, if the company can reach our expectations.

DCF Valuation (MEUR)	2012	2013e	2014e	2015e	2016e	2017e	2018e	2019e	2020e	2021e	2022e	TERM
EBIT (operating profit)	3	4	8	11	12	14	16	17	17	17	18	
+ Depreciation	7	8	8	7	8	9	10	10	11	11	12	
- Paid taxes	-1	0	-1	-1	-1	-3	-4	-4	-4	-4	-4	
- Tax, financial expenses	0	0	0	0	0	0	0	0	0	0	0	
+ Tax, financial income	0	0	0	0	0	0	0	0	0	0	0	
- Change in working capital	-3	2	-3	-3	-4	-3	-3	-3	-2	-2	-2	
Operating cash flow	6	14	12	14	15	17	18	21	22	22	24	
+ Change in other long-term liabilities	1	0	-1	0	0	0	0	0	0	0	0	
- Gross capex	-10	-2	-6	-9	-10	-11	-12	-12	-12	-13	-13	
Free operating cash flow	-3	12	6	4	5	6	7	8	10	10	11	
Other items	12	23	0	0	0	0	0	0	0	0	0	
FREE CASH FLOW TO FIRM	9	35	6	4	5	6	7	8	10	10	11	198
Discounted FCFF		33	5	3	4	4	4	5	5	5	5	87
Sum of discounted FCFF		159	126	121	118	114	110	106	101	96	92	87
- Interest-bearing debt		-18										
+ Cash and cash equivalents		16										
+ Market value of associated companies		0										
- Market value of minorities		-3										
- Previous year dividend correction		0										
Value of equity, DCF		153										
Enterprise Value DCF		159										

Cost of capital (WACC)

Tax rate, WACC	24.5 %
Target debt ratio D/(D+E)	20.0 %
Cost of debt	5.5 %
Equity beta	1.20
Market risk premium	4.8 %
Liquidity premium	0.3 %
Riskfree interest rate	4.0 %
Cost of equity	10.0 %
Weighted Average Cost of Capital (WACC)	8.8 %

Table 12. DCF value of Elektrobit would support much higher target price also.

10. The biggest risks and possibilities

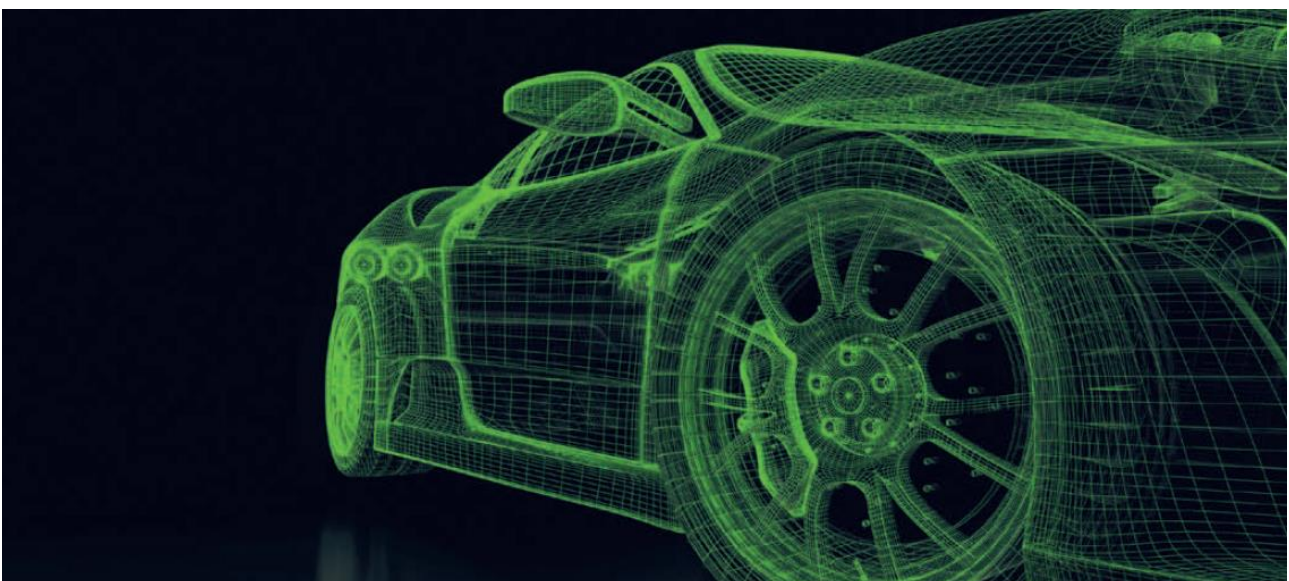
In this chapter we will discuss some risks as well as opportunities further. However, the most topics have been covered already earlier. Perhaps the most important risk factor is relatively high dependence on few big clients. This is the case especially in Wireless as TerreStar case demonstrated. In Automotive segment ten biggest clients account for around 60 % of sales. Still, the risk is significant also in Automotive, since the end-client might be the same even though EB's official client might be tier 1 supplier. When considering this, one OEM might account for around 30 % of sales, making risk of losing it very big.

In both business areas EB is a small company and its resources are limited compared with many competitors. It's also small compared to most of its clients, which puts pressure on the company's pricing power. This combination makes EB quite vulnerable for radical changes in the business areas. However, it also makes company and its business segments potential acquisitions, which isn't a negative thing for shareholders providing that the "price is right".

Both EB's business segments have assets that are interesting for many companies. Automotive software industry has strong growth drivers and high entry-barriers, which makes EB's position on this segment very valuable and interesting for many companies. We would be surprised if EB Automotive wouldn't be an acquisition target for some companies, even though we don't have any concrete suggestions for this. If Automotive were to be sold, which is purely speculation at this point, the price could be very considerable compared to the current market value of Elektrobit. The potential upside in this case is very large, and therefore it's an interesting possibility for investors.

In Wireless we don't see the industry in general so attractive, but if EB would gain some share in the defense product market, it might be one an interesting target for behemoths of the defense industry. However, we would see a strategic partnership more logical in this field, not necessary a direct acquisition. A solid strategic partnership could be very positive for EB also, because it would benefit greatly from the sales network that a large partner could provide.

EB has been receiving relatively large amount of government grants in the past years, for example 1.8 MEUR in 2012 and 1.1 MEUR in 2011. Though these are insignificant compared to net sales of the company, they are very important when considering EBIT due to currently low margins. Such grants are uncertain in the future, but we have expected them to continue close to similar levels also in the next few years. This isn't necessary one of the biggest threats, but still worth mentioning since it could put pressure on the margins.



Picture 13. Biggest possibilities of EB are found in the Automotive sector. Source: Elektrobit's annual report 2012.

INTERIM FIGURES

MEUR	2012Q1	2012Q2	2012Q3	2012Q4	2012	2013Q1e	2013Q2e	2013Q3e	2013Q4e	2013e	2014e	2015e
Net sales	45	44	44	53	185	48	46	47	56	197	218	242
EBITDA	2	1	4	2	10	2	3	2	5	12	15	18
EBITDA margin (%)	5.4	2.5	9.0	4.3	5.3	3.3	6.1	5.0	9.1	6.0	7.1	7.4
EBIT	1	-1	2	0	3	0	1	0	3	4	8	11
EBIT margin (%)	1.9	-1.6	5.0	0.3	1.4	-0.5	1.8	1.0	5.5	2.1	3.6	4.4
Net financial items	0	0	0	0	0	0	0	0	0	0	0	0
Pre-tax profit	0	0	2	0	2	0	1	0	3	4	8	11
Tax	0	0	0	1	0	0	0	0	0	0	-1	-1
Tax rate (%)	23.8	-85.2	6.9	316.7	-5.0	0.0	10.0	10.0	10.0	10.6	10.0	10.0
Net profit	0	0	2	1	2	23	1	0	3	27	7	10
EPS	0.00	0.00	0.01	0.01	0.02	0.18	0.01	0.00	0.02	0.21	0.05	0.07
EPS adjusted (diluted no. of shares)	0.00	0.00	0.00	0.04	0.05	0.18	0.01	0.00	0.02	0.21	0.05	0.07
Dividend per share	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.05	0.05	0.05
SALES, MEUR												
Wireless	16	17	14	16	64	17	17	15	17	65	67	70
Automotive	29	27	30	36	122	31	29	33	39	132	152	173
Others	0	0	0	0	0	0	0	0	0	0	0	0
Total	45	44	44	53	185	48	46	47	56	197	218	242
SALES GROWTH, Y/Y %												
Wireless	28.9	-1.7	5.9	-21.8	-0.6	1.0	1.0	3.7	3.3	2.2	3.0	4.0
Automotive	21.5	19.0	26.3	29.0	24.2	8.0	9.0	8.0	7.0	7.9	15.0	14.0
Others	-171.4	-99.8	-84.9	0.0	0.0	-100.1	0.0	-100.3	-100.2	-100.2	0.0	0.0
Total	23.4	10.0	19.6	7.2	14.4	5.7	6.0	6.7	5.9	6.1	11.0	10.9
EBIT, MEUR												
Wireless	0	0	1	1	2	0	0	0	1	1	1	2
Automotive	1	0	0	3	5	1	1	1	2	5	6	9
NRIs	0	-1	1	-4	-4	-1	0	0	0	-1	0	0
Total	1	-1	2	0	3	0	1	0	3	4	8	11
EBIT margin, %												
Wireless	1.2	0.0	5.7	5.5	3.0	-0.5	0.0	-0.3	4.5	1.0	2.2	3.0
Automotive	3.3	0.9	0.6	9.1	3.8	2.8	2.8	1.6	6.0	3.4	4.2	5.0
Total	1.9	-1.6	5.0	0.3	1.4	-0.5	1.8	1.0	5.5	2.1	3.6	4.4

Note: 2012 figures have been restated after the Test Tools divestment. 2013 figures are not comparable due to an accounting change.

INCOME STATEMENT, MEUR	2008	2009	2010	2011	2012	2013e	2014e	2015e
Sales	172	154	162	162	185	197	218	242
Sales growth (%)	19.3	-10.7	5.2	0.2	14.4	6.1	11.0	10.9
Costs	-197	-145	-171	-157	-176	-185	-203	-224
Reported EBITDA	-24	8	-9	5	10	12	15	18
Extraordinary items in EBITDA	0	0	0	0	0	0	0	0
EBITDA margin (%)	-14.1	5.4	-5.4	2.9	5.3	6.0	7.1	7.4
Depreciation	-16	-10	-8	-9	-7	-8	-8	-7
EBITA	-41	-1	-17	-4	3	4	8	11
Goodwill amortization / writedown	-2	0	0	0	0	0	0	0
Reported EBIT	-43	-1	-17	-4	3	4	8	11
EBIT margin (%)	-24.8	-0.9	-10.7	-2.5	1.4	2.1	3.6	4.4
Net financials	-5	-1	-1	0	0	0	0	0
Pre-tax profit	-47	-2	-19	-4	2	4	8	11
Extraordinary items	0	0	0	0	0	0	0	0
Taxes	-2	-1	3	-1	0	0	-1	-1
Minority shares	0	0	0	0	-1	0	0	0
Net profit	-49	-2	-16	-5	2	27	7	10
BALANCE SHEET, MEUR								
Assets								
Fixed assets	28	21	23	25	28	22	20	22
Goodwill	18	19	19	19	19	19	19	19
Inventory	3	2	2	2	0	1	1	1
Receivables	62	59	61	59	79	73	81	90
Liquid funds	69	59	21	10	16	41	40	38
Total assets	181	160	124	115	143	156	162	171
Liabilities								
Equity	115	113	72	67	69	94	95	98
Deferred taxes	3	2	1	1	1	1	1	1
Interest bearing debt	22	17	13	9	18	10	10	10
Non-interest bearing current liabilities	36	26	33	35	46	47	52	58
Other interest free debt	1	0	1	1	6	1	1	1
Total liabilities	181	160	124	115	143	156	162	171
CASH FLOW, MEUR								
+ EBITDA	-24	8	-9	5	10	12	15	18
- Net financial items	-5	-1	-1	0	0	0	0	0
- Taxes	-2	-1	3	-1	0	0	-1	-1
- Increase in Net Working Capital	24	-7	6	3	-3	2	-3	-3
+/- Other	0	1	0	0	12	23	0	0
= Cash flow from operations	-7	1	-1	7	19	37	12	14
- Capex	9	-2	-10	-12	-10	-2	-6	-9
- Acquisitions	0	0	0	0	0	0	0	0
+ Divestments	0	0	0	0	0	0	0	0
= Net cash flow	2	-1	-11	-5	9	35	6	4
+/- Change in interest-bearing debt	-10	-6	-4	-4	9	-8	0	0
+/- New issues/buybacks	2	0	1	0	0	0	0	0
- Paid dividend	-3	0	-26	0	0	-1	-6	-6
+/- Change in loan receivables	4	-2	2	-2	1	0	0	0
Change in cash	-5	-9	-37	-10	19	25	-1	-2

Note: 2012 figures have been restated after the Test Tools divestment. 2013 figures are not comparable due to an accounting change.

KEY FIGURES	2009	2010	2011	2012	2013e	2014e	2015e
M-cap	122	87	49	84	105	105	105
Net debt	-42	-7	-1	3	-31	-30	-28
Enterprise value	80	81	49	90	77	77	79
Sales	154	162	162	185	197	218	242
EBITDA	8	-9	5	10	12	15	18
EBIT	-1	-17	-4	3	4	8	11
Pre-tax	-2	-19	-4	2	4	8	11
Earnings	-2	-16	-5	2	27	7	10
Book value	112	71	66	67	92	93	96
Valuation multiples							
EV/sales	0.5	0.5	0.3	0.5	0.4	0.4	0.3
EV/EBITDA	9.6	-9.2	10.6	9.2	6.5	5.0	4.4
EV/EBITA	-58.2	-4.7	-12.2	35.8	18.4	9.9	7.4
EV/EBIT	-58.2	-4.7	-12.2	35.8	18.4	9.9	7.4
EV/operating cash flow	-595.0	-189.9	7.0	15.0	5.5	6.5	5.8
EV/cash earnings	13.1	-10.1	15.1	10.9	6.8	5.2	4.7
P/E	-61.8	-5.4	-9.4	36.4	3.9	14.8	10.8
P/E (adj.)	-215.7	-12.4	-9.4	13.2	3.8	14.8	10.8
P/B	1.1	1.2	0.8	1.3	1.1	1.1	1.1
P/sales	0.8	0.5	0.3	0.5	0.5	0.5	0.4
P/CF	-907.8	-203.6	6.9	14.1	7.6	8.9	7.7
Target EV/EBIT	-40.5	-4.7	-18.0	32.0	21.2	11.3	8.5
Target P/E	-102.9	-8.0	-13.7	18.9	4.2	16.4	12.0
Target P/B	0.8	1.1	1.2	1.7	1.3	1.3	1.2
Per share measures							
Number of shares	129 413	129 413	129 413	129 413	129 413	129 413	129 413
Number of shares (diluted)	129 413	129 413	129 413	129 413	129 513	129 413	129 413
EPS	-0.02	-0.12	-0.04	0.02	0.21	0.05	0.07
EPS (adj.)	0.00	-0.05	-0.04	0.05	0.21	0.05	0.07
Cash EPS	0.05	-0.06	0.03	0.06	0.09	0.11	0.13
Operating cash flow per share	0.00	0.00	0.05	0.05	0.11	0.09	0.11
Capital employed per share	0.54	0.50	0.51	0.55	0.49	0.50	0.54
Book value per share	0.87	0.54	0.51	0.51	0.71	0.71	0.74
Book value excl. goodwill	0.73	0.40	0.36	0.37	0.56	0.57	0.59
Dividend per share	0.20	0.00	0.00	0.01	0.05	0.05	0.05
Dividend payout ratio, %	-1 313.8	0.0	0.0	56.0	24.3	91.3	66.9
Dividend yield, %	21.3	0.0	0.0	1.2	6.2	6.2	6.2
Efficiency measures							
ROE	-1.7	-17.6	-7.7	3.5	33.6	7.7	10.3
ROCE	-0.1	-15.0	-4.7	3.4	4.8	7.9	10.5
Financial ratios							
Capex/sales, %	1.5	6.3	7.2	5.4	1.0	2.6	3.8
Capex/depreciation excl. goodwill, %	21.9	120.4	125.5	137.7	25.6	73.3	130.1
Net debt/EBITDA, book-weighted	-5.1	0.8	-0.2	0.3	-2.6	-2.0	-1.6
Debt/equity, market-weighted	0.1	0.2	0.2	0.2	0.1	0.1	0.1
Equity ratio, book-weighted	70.4	57.8	58.2	48.4	60.4	58.8	57.6
Gearing	-0.4	-0.1	0.0	0.0	-0.3	-0.3	-0.3
Number of employees, average	1 589	1 561	1 553	1 870	1 919	2 112	2 322
Sales per employee, EUR	96 790	103 652	104 411	99 160	102 483	103 418	104 353
EBIT per employee, EUR	-862	-11 083	-2 595	1 342	2 166	3 710	4 619

Note: 2012 figures have been restated after the Test Tools divestment. 2013 figures are not comparable due to an accounting change.

VALUATION RESULTS		BASE CASE DETAILS		VALUATION ASSUMPTIONS		ASSUMPTIONS FOR WACC	
Current share price	0.81	PV of Free Cash Flow	72	Long-term growth, %	3.2	Risk-free interest rate, %	4.00
DCF share value	1.19	PV of Horizon value	87	WACC, %	8.8	Market risk premium, %	4.8
Share price potential, %	46.4	Unconsolidated equity	-3	Spread, %	0.5	Debt risk premium, %	1.5
Maximum value	1.3	Marketable securities	16	Minimum WACC, %	8.3	Equity beta coefficient	1.20
Minimum value	1.1	Debt - dividend	-18	Maximum WACC, %	9.3	Target debt ratio, %	20
Horizon value, %	54.7	Value of stock	153	Nr of shares, Mn	129.4	Effective tax rate, %	25

DCF valuation, mEUR	2012	2013e	2014e	2015e	2016e	2017e	2018e	2019e	2020e	2021e	2022e	Horizon
Net sales	185	197	218	242	269	293	317	336	349	363	375	387
Sales growth, %	14.4	6.1	11.0	10.9	11.1	9.0	8.0	6.0	4.0	4.0	3.2	3.2
Operating income (EBIT)	3	4	8	11	12	14	16	17	17	17	18	18
EBIT margin, %	1.4	2.1	3.6	4.4	4.5	4.8	5.0	5.0	4.8	4.7	4.7	4.7
+ Depreciation+amort.	7	8	8	7	8	9	10	10	11	11	12	
- Income taxes	-1	0	-1	-1	-1	-3	-4	-4	-4	-4	-4	
- Change in NWC	-3	2	-3	-3	-4	-3	-3	-3	-2	-2	-2	
NWC / Sales, %	15.4	13.3	13.3	13.3	13.3	13.3	13.3	13.3	13.3	13.3	13.3	
+ Change in other liabs	1	0	0	0	0	0	0	0	0	0	0	
- Capital Expenditure	-10	-2	-6	-9	-10	-11	-12	-12	-12	-13	-13	-13
Investments / Sales, %	5.4	1.0	2.6	3.8	3.8	3.7	3.7	3.6	3.5	3.5	3.4	3.4
- Other items	12	23	0	0	0	0	0	0	0	0	0	
= Unlevered Free CF (FCF)	9	35	6	4	5	6	7	8	10	10	11	198
= Discounted FCF (DFCF)		33	5	3	4	4	4	5	5	5	5	87

= DFCF min WACC	33	5	3	4	4	4	5	5	5	5	100
= DFCF max WACC	33	5	3	4	4	4	5	5	4	5	76

COMPANY DESCRIPTION:

EB develops advanced technology and transforms it into enriching end user experiences. It specializes in demanding embedded software and hardware solutions for the automotive industry and wireless technologies.

Company's technical core competences are in automotive-grade software, wireless technologies, solutions and system and software architecture.

EB Automotive Business Segment offers an extensive range of standard software products and professional tools that support the whole process of the in-car software development.

EB Wireless Business Segment turns the next generation wireless technologies into state of the art products, services and solutions.

OWNERSHIP STRUCTURE	SHARES	MEUR	%
Hulkko Juha	27 435 556	22.223	21.2%
Hildén Kai	10 870 692	8.805	8.4%
Veikkolainen Erkki	9 447 149	7.652	7.3%
Halonen Eero	7 764 780	6.289	6.0%
Harju Jukka, CEO	7 505 954	6.080	5.8%
Fortel Invest Oy	7 247 128	5.870	5.6%
Laine Seppo	2 200 021	1.782	1.7%
Mariatorp Oy	1 941 195	1.572	1.5%
Fennia Life Insurance Company Ltd.	1 941 195	1.572	1.5%
eQ Pikkujätkäläiset	1 811 782	1.468	1.4%
Ten largest	78 165 452	63.314	60%
Residual	51 247 548	41.511	40%
Total	129 413 000	104.825	100%

EARNINGS CALENDAR

April 26, 2013	Q1 report
August 08, 2013	Q2 report
November 07, 2013	Q3 report

COMPANY MISCELLANEOUS

CEO: Jukka Harju	Tutkijantie 8, FIN-90590 OULU
CFO: Veli-Pekka Paloranta	Tel: +358 40 344 2000
IR: investor.relations@elektrobit.com	

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Recommendations of Inderes are divided in the following categories and given based on the estimated upside potential of the share in the next 6 months. Note that possible dividends are also included in the potential.

Recommendation	Upside potential*
Buy	> 15 %
Accumulate	5 - 15 %
Reduce	-5 - 5 %
Sell	< -5 %

* Potential regarding to 6 month target price

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