



Skriftlig eksamen efter 1. Semester/

Written exam after 1<sup>st</sup> semester

Virksomhedens Salgsgrundlag/

The basis for the company's sale

Trial exam 2009

6 hours

*Dette opgavesæt består af 4 opgaver, der indgår i bedømmelsen af den samlede opgavebesvarelse med følgende vejledende vægte.*

*This exam case consists of 4 assignments carrying the following weights in the total assessment of the paper*

Opgave/Assignment 1: 40%

Opgave/Assignment 2: 30%

Opgave/Assignment 3: 15%

Opgave/Assignment 4: 15%

**Opgaver (in English below):**

**Opgave 1:**

Du bedes gennemføre en analyse af AMBU's forretningsmodel og kompetencer med henblik på en vurdering af, om der er overensstemmelse mellem forretningsmodellen og kundegrundlaget.

**Opgave 2:**

På baggrund af din analyse af forretningsmodellen i spørgsmål 1 bedes du vurdere de organisatoriske og logistiske krav der stilles til AMBU for at de kan nå de opstillede mål beskrevet i GPS Four strategien (se appendix 1)

**Opgave 3:**

1.

Ambu A/S har en fabrik i Bonn i Tyskland ved navn Ambu GMBH. Ambu GMBH har den 16. november sendt et tilbud til et stort italiensk hospital i Rom vedrørende det nye produkt "aScopes". Tilbuddet har følgende ordlyd:

"Ambu GMBH skal herved tilbyde Dem 100 "aScopes" til en pris af 100 EUR pr stk. Acceptfrist 14 dage."

Ambu GMBH fortryder imidlertid tilbuddet og ønsker at trække det tilbage. De foretrækker nemlig at sælge de pågældende "aScopes" til en kunde fra Irak, da denne kunde vil betale en højere pris for varerne.

Kan Ambu tilbagekalde deres tilbud?

Du bedes analysere de relevante juridiske aspekter samt komme med en juridisk vurdering af, hvordan sagen bør afgøres.

2.

Ambu GMBH i Tyskland har den 1. oktober sendt et tilbud til et kinesisk hospital i Beijing i Kina ligeledes vedrørende "aScopes".

Tilbuddet har følgende ordlyd: "Ambu GMBH skal herved tilbyde Dem 50 "aScopes" til en pris af 100 EUR pr stk."

Den 15. november sender det kinesiske hospital en accept til Ambu GMBH. I mellemtiden har Ambu GMBH solgt varerne til en anden kunde og har for tiden ikke flere "aScopes" på lager til levering.

Er der indgået en bindende aftale mellem parterne?

Du bedes analysere de relevante juridiske aspekter samt komme med en juridisk vurdering af, hvordan sagen bør afgøres.

**Opgave 4:**

En forøget fokusering på omkostninger inden for health care sektoren har ført til effektivitet og optimering. En af de nyeste trends der er kommet frem er muligheden for at inkorporere en elektronisk chip i Single-use-produktet.

Aktivetsområde	Cost Driver	Driversats
Produktionsskift	Antal skift	90 EUR pr. skift
Materialehåndtering	Antal kondensatorer i stk.	2 EUR pr. kondensator
Automatisk produktion	Antal stk. chips	1 EUR pr. chip
Emballage og distribution	Antal ordrer	15 EUR pr. ordre

Produktionsafdelingen har undersøgt to Single-use-produkter, nemlig varianterne *Ambu Home* og *Ambu Classic*.

Kondensatorerne kræver 5 stk. til *Ambu Home* og 10 stk. til *Ambu Classic*. Prisen er hhv. 20 EUR og 40 EUR.

Produktionen er fuldautomatiseret og der produceres normalt 600 stk. *Ambu Home* og 300 *Ambu Classic* pr. setup. Produkterne leveres straks som enkeltordrer, når ordren indløber.

Der er modtaget en ordre fra Lokalhospitalet på 500 stk. *Ambu Home* og 250 stk. *Ambu Classic*.

1. Beregn omkostningen pr. enhed ved levering til Lokalhospitalet

Man får nu den ide, at man kan få indarbejdet sin egen chip. Pga. fuldautomatiseringen kræver det, at der skal laves et særlig produktions setup for hvert produkt.

2. Beregn hvor meget denne nye ide vil udløse af omkostninger.

**I besvarelsen forventes det, at du inddrager metodemæssige overvejelser**

**Assignments:**

**Assignment 1:**

Please conduct an analysis of AMBU's business model and competences with the aim of assessing whether there is agreement between the business model and the customer base.

**Assignment 2:**

Based on your analysis of the business model in question 1 please assess the organizational and logistical requirements facing AMBU if they are to reach the objectives stated in the GPS Four strategy (please refer to appendix 1)

**Assignment 3:**

1.

Ambu A/S has a factory in Bonn, Germany called Ambu GMBH. On the 16<sup>th</sup> November Ambu GMBH sent an offer to a big Italian hospital in Rome concerning their new product the "aScopes".

The offer reads as follows:

"Ambu GMBH hereby is offering you to buy a 100 "aScopes" at a price of 100 EUR a piece. Time limit for acceptance is 14 days."

Ambu GMBH regrets the offer and wants to retract it. They prefer to sell the "aScopes" to another customer from Iraq, since this customer is willing to pay a higher price for the goods.

Is it possible for Ambu GMBH to revoke their offer?

Please analyze the relevant legal aspects and provide a solution to the legal problems.

2.

On the 1<sup>st</sup> October Ambu GMBH in Germany sent an offer concerning "aScopes" to a Chinese hospital in Beijing.

The offer reads as follows:

"Ambu GMBH hereby offers you 50 "aScopes" at a price of 100 EUR a piece."

On the 15<sup>th</sup> November the Chinese hospital sends an acceptance to Ambu GMBH.

In the meantime, Ambu GMBH has sold the "aScopes" to another customer. They cannot deliver the goods, since they have no "aScopes" in stock.

Has a binding contract been concluded?

Please analyze the relevant legal aspects and provide a solution to the legal problems.

**Assignment 4:**

Increased focus on cost within the health care sector has generally led to efficiency and optimization. One of the latest trends is that it is becoming possible to incorporate an electronic chip into the single-use product. Recent research shows relations between activities and cost-drivers in the development and production of new single-use products. 4 Activity Centres have been established.

Activity Centre	Cost Driver	Cost per driver Unit
Production set-up	Number of set-ups	90 EUR per set-up
Handling of materials	Number of condensators	2 EUR per condensator
Automatic production	Number of chips	1 EUR per chip
Packing and shipping	Number of orders	15 EUR per order

The production department has analyzed two single-use-products, *Ambu Home* and *Ambu Classic*

The condensators require 5 units for *Ambu Home* and 10 units for *Ambu Classic*. The price is 20 EUR and 40 EUR.

The production is fully automatic and the production per setup is 600 units *Ambu Home* and 300 units *Ambu Classic* per setup. The products are delivered immediately on receipt of single orders.

We have received an order from the local hospital for 500 units *Ambu Home* and 250 units *Ambu Classic*.

1. Calculate the cost per product on delivery to the local hospital

Now the idea of incorporating one's own chip in the single-use-product arises. Due to the automatic production this requires a separate production set-up for each product.

2. Calculate the cost of this new single-use-product.

**You are expected to include methodological considerations in your paper**

## About Ambu<sup>1</sup>

Ambu develops, produces and markets diagnostic and life-supporting equipment and solutions to hospitals and rescue services. Ambu's largest business areas are Respiratory Care, Cardiology and Neurology in which the most important products are ventilation products for artificial respiration and single-use electrodes for ECG<sup>2</sup> tests and neurophysiological mappings.

Approx. 98% of the Group's products are sold on export markets through Ambu's foreign sales companies or distributors.

The total number of employees is approximately 1600 of whom 350 work in Denmark and 1250 in countries outside Denmark.

## Ambu's history

### Saving lives

Ambu A/S was founded in 1937 in Denmark by engineer Dr. Holger Hesse, Ph.D. who had the ambition of building a business dedicated to product developments which would contribute to the saving of human lives.

He began by setting up Testa-Laboratorium, a company specialising in the production of a highly original haemoglobinometer to measure blood haemoglobin levels by means of a colour scale.

A partnership in 1953 between Dr. Hesse and Prof. Henning Ruben combined the former's engineering skills and the latter's wide knowledge of anaesthesia. Their collaboration led to the development of a unique range of products for use at the accident site.

### The Ambu Bag

The first of these - a self-inflating resuscitator marketed under the name 'Ambu' - was launched in 1953. The resuscitator was considered to be a milestone in emergency medical technique and quickly became established internationally. The name Ambu did as well, and was subsequently chosen as the new company name.

Today, Ambu resuscitators are in use all over the world - in hospitals, by ambulance services - in fact, in every emergency medical environment.

Ambu has also been active in pioneering the concept of 'early resuscitation through rescuers'. In any emergency situation, the patient must be provided with prompt and highly skilled care between the incident site and hospital emergency department. With that in mind, Ambu initiated a new training concept which was implemented using the first training manikins between 1957 and 1959.

This training concept embraced the techniques of establishment of open airway, mouth-to-mouth ventilation and cardiac chest compression. From the beginning, all Ambu manikins incorporated a unique hygienic system which safely protected trainees from the risk of cross-infection.

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<sup>1</sup> Except from the articles in the appendices the case material is based on extracts from [www.ambu.com](http://www.ambu.com) and Ambu's annual report 2007/2008

<sup>2</sup> **Electrocardiography (ECG or EKG)** is a interpretation of the electrical activity of the heart over time captured and externally recorded by skin electrodes

During the 1970s and '80s, a major corporate expansion took place at Ambu. The establishment of a worldwide distribution network and sales companies consolidated Ambu's position as a major influence in immediate medical care and training.

### **Medicotest**

In 2001, Ambu acquired Medicotest, a leading electrode company.

The story of Medicotest is a textbook example of entrepreneurship. In 1971 Medicotest A/S was founded by engineer Jan Rasmussen with the following aim:

“To develop and produce disposable ECG electrodes providing the most reliable transmission of low voltage signals between the human body and an amplifier”.

In other words, Jan Rasmussen saw a need for an electrode which was better than the ones on the market at that time. The solution was the unique off-set design which still characterises the Ambu Blue Sensor products today.

True to the entrepreneurial spirit, his product development activities took place on his dining room table for a couple of years until he moved them to a 100m<sup>2</sup> cellar. In this period the design and ideas were tested in many hospitals under various conditions.

The main partner during this process was the University Hospital of Copenhagen with whom this longstanding relationship still exists.

### **Mission & Vision**

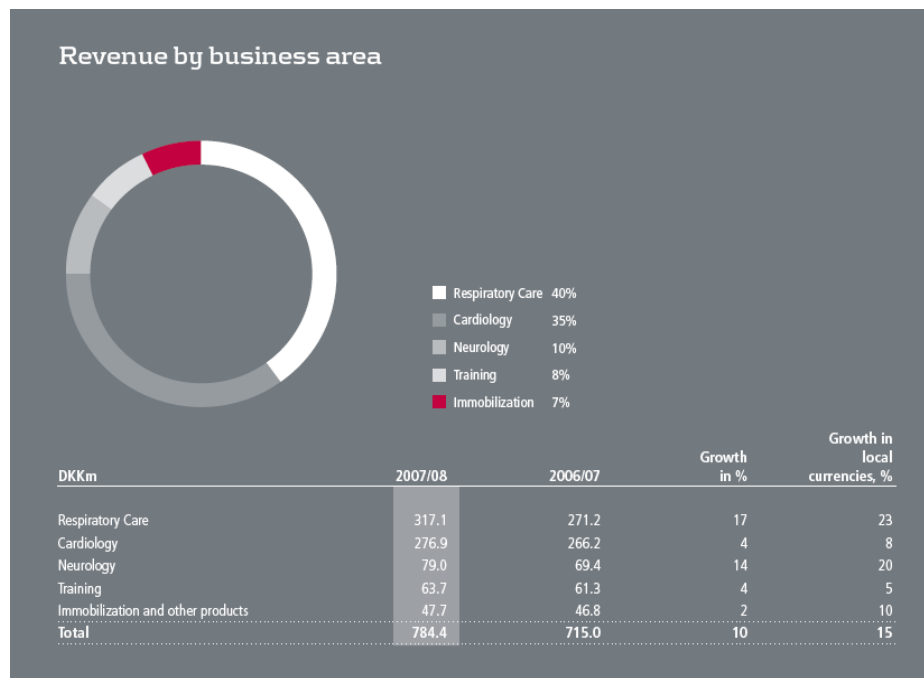
<b>Our Mission</b>	Ambu markets innovative diagnostic and life-supporting devices that provide genuine value and ultimately improve the quality of patient care.
<b>Our Vision</b>	Based on a deeper understanding of our customers' needs and behaviours, we will constantly exceed their expectations and build strong long-lasting relations.
<b>Values</b>	<p>Ambu has identified a set of corporate values for our business activities. We have four core values:</p> <p><i><b>Taking charge</b></i> We take initiatives and accept responsibility for our actions. We have the courage to take action.</p> <p><i><b>Open-minded</b></i> We are receptive to new ideas and respect diversity. We view change as a learning opportunity.</p> <p><i><b>Team player</b></i> We work together to promote a sense of belonging based on fun and personal development. We work together to achieve shared goals.</p> <p><i><b>Innovative</b></i> We make room for and encourage innovation and creative thinking. We seek out, develop and utilize new, different and value-creating solutions.</p>

### Ambu's five business areas

Ambu develops, produces and markets professional, diagnostic, life-supporting and training equipment to hospitals and rescue services.

The five business areas are:

Respiratory Care	Bags and masks for artificial respiration performed on patients.
Cardiology	Single-use electrodes for mappings of the cardiac rhythm - ECGs - and for the treatment of cardiac arrest - defibrillation
Neurology	Single-use electrodes for diagnosis of diseases in nerves, muscles and brain.
Training	Manikins for basic and advanced first aid training
Immobilization	Includes collars that support neck and head in case of injuries or minimize the risk of such injuries.



### Products and customer segments

Ambu's primary focus is single-use products, and only equipment and multiple-use products which support the single-use products are offered. The goal is to offer differentiated products to well-defined customer segments which primarily comprise hospitals (anaesthesia, cardiology, neurophysiology and purchasing departments), emergency services and also to an increasing extent outpatient surgery centres, which is a growth market as more and more operations, especially in the USA, are being carried out at such centres rather than at hospitals.



## **Developments in business areas**

All the business areas in which Ambu is operating are seeing market growth. The estimated market growth is 5%, but within a number of product segments growth is somewhat higher than this. Market growth within Ambu's business areas is, among other things, driven by an increase in the use of single-use products and stronger focus on early diagnosis. Within several of Ambu's product areas, it is deemed possible for Ambu to generate growth in excess of the market growth – provided that Ambu is able to identify customer requirements and develop innovative products to meet such requirements. The primary target group for Ambu's products is hospitals, while the secondary target group is the pre-hospital sector. In future, focus will also be on outpatient surgery centres which, especially in the USA, are a growth market.

Focus on the most important customers has been further intensified in 2007/08, while sales efforts have also become more focused within the individual product groups with a view to creating more broadly based growth. This has had a positive impact on revenue in general and has led to solid growth rates in most of Ambu's markets and within most of the product groups. Within marketing, greater focus has been directed at product portfolio management, and this will contribute to increasing sales of existing products as well as revenue from the projects in the development portfolio. Marketing has also prepared product strategies for the individual business areas with a view to creating a clearer focus within the organization and thereby more success within both the marketing and the sales organisation.

## **Product development and new products**

### *Changes within development*

It is an important aim for Ambu to be able to market more brand new products, and also to ensure the speedier development of these products. To achieve these aims, the past year has seen the introduction of significant changes in the development department and to the product development model. In the development department, a new organisational unit called New Platform Innovation has been established; the new unit is responsible for developing brand new products within the existing business areas. The ambition of this group is to launch a brand new product every year from 2008/09. The existing development group is maintained, but will in future focus on developing new products for the existing product families and on developing new generations of existing products. These development units are based in Denmark, and what the activities have in common is that they require close customer contact and close collaboration with the marketing function.

Local development units are also gradually being set up in connection with the production units in Malaysia and China. These local units focus on developing product variants, including new sizes of existing products, and on improving existing products. At the same time, the local units ensure faster development at reduced costs.

The development unit in China has been going the longest and has carried out an increasing number of tasks in the past year, including an update of the programme of silicone ventilation bags which is currently in progress. Experience has been gained in China which will be applied in connection with the establishment of the development unit in Malaysia – this is being set up and is expected to launch the first projects in April 2009. As a result of the changes within development, the individual units will be focusing more on specific jobs, leading to more and faster and more efficient development processes. At the same time, considerable work has gone into ensuring faster and more expedient documentation activities.

### **Strategic focus 2008/2009**

Ambu has in recent years focused on strengthening the company and on creating a basis for further growth. This has primarily been through important initiatives within product development, sales and optimising production.

Ambu has attained an attractive market position within a number of product areas – especially thanks to its competences within the development of innovative single-use products – and is growing faster than the market.

Based on such solid foundations, the objective is now to accelerate the development of the company, in terms of both growth and earnings. The main elements in this strategy are:

- The launch of significantly more new and differentiated products than has been the case so far
- The acquisition of new products and activities
- Increased focus on growing markets and product areas
- Enlarging the sales force and further focusing of sales efforts

### ***Innovation***

Ambu must be able to develop innovative products at a sufficiently high rate for the basis for growth and satisfactory earnings to be maintained and improved. Ambu has been working consciously to do just that in recent years, and now these efforts will become even more focused and intensified, both via Ambu's own development activities and via the acquisition of products.

There are a number of products in the pipeline which will be launched in 2008/09. They will start contributing revenue in 2008/09, but will contribute considerably more in 2009/10. Moreover, Ambu has identified two new product areas which will be assessed in further detail in the coming period.

### ***Acquisitions***

Ambu will continue to scan the market for potential acquisitions. Focus is both on the acquisition of small companies – or product lines – and possibly larger candidates.

According to the criteria for acquisitions, candidates must be capable of becoming part of a consolidation process within the existing product programme, or they must give obvious synergies between existing and acquired products.

**Stronger focus on growth markets and bigger sales force**

Ambu's main markets are Europe and the USA, and the sales companies in these regions will increase revenue by streamlining their sales efforts and by employing more salespeople.

In the coming two years, Ambu will also increase its sales efforts in selected high-growth markets. Ambu has for some time been studying and working on the market in China, which is characterised by high economic growth and a developed health system, and where investments have for some years been made in the health sector. Ambu is now setting up a sales office in this market, as well as expanding its network of distributors. At the same time, sales efforts in selected countries in Eastern Europe will be intensified through an expansion of the distribution networks in these countries.

### ***Financial targets***

The target for the coming two financial years is growth which is substantially above the market growth as well as an increase in the EBIT margin. In 2008/09, the EBIT margin will, however, not be improved as investments will be made in the sales force so as to create a basis for further growth.

Also, there must be an increase in Ambu's cash flow, among other things through optimising Ambu's working capital.

### **Global market developments**

The global demand for medico-technical products is increasing, and this trend is expected to continue in the coming years. Market growth is spurred primarily by the ageing population, a considerable increase in lifestyle diseases, the introduction of new technologies and improved diagnoses and treatments as well as the establishment of health care systems in, for example, Eastern Europe and Asia. Demand within Ambu's business areas is not impacted to any significant extent by the current lower growth in the world economy. However, a serious recession in important economies could change this.

Technological advances are continuously being made within Ambu's business areas, and the needs for treatment are being met by ever better and more effective products. One of the latest trends is that it is becoming possible to incorporate electronics into single-use products, among other things because of the ever lower prices of electronic components. This development is opening up new business opportunities for companies like Ambu that focus on developing products which distinguish themselves from other products on the market.

The customer segments served by Ambu are showing considerable interest in newly developed products and the services which accompany them. Suppliers which are able to offer a combination of high-quality products, guidance and training stand a good chance of creating customer loyalty and thereby winning their share of the growing market. Within Ambu's business areas, there is a clear link between a company's ability to innovate and its growth potential.

Increased focus on costs within the health care sector has generally led to efficiency and optimisation measures in the purchasing of hospital articles. At the hospitals, a centralised and professional purchasing function decides an increasing proportion of purchases, which means that for sales to be efficient, a number of stakeholders over and above the actual users must be handled. There is also a tendency that the product portfolio has to be of a certain minimum size for suppliers to gain access to the purchasing functions, and the number of suppliers is continuously being reduced. Consequently, having a broad product programme is becoming increasingly important.

In a number of countries, an ever greater share of purchases is subject to public tenders or organised by purchasing organisations. This is a global trend, and it is therefore important to address the purchasing organizations directly and enter into agreements with them to achieve the desired market share within individual product areas.

The competitive situation within Ambu's business areas is complex. Thus, the picture varies considerably, both within the different product categories and within the individual markets. Generally, Ambu does not have one major competitor, but a few large competitors as well as several small ones within the individual business areas, and Ambu's product portfolios are composed in such a way that it prevents direct comparisons with individual competitors. There are generally

two types of competitors within all business areas: The large-scale one-stop-shopping companies which are broadly based internationally, and the specialist companies – geographically or at product level.

Within all product segments there are typically one or two dominant players. Ambu's strategy therefore involves trying to ensure that Ambu is one of these dominant players, or that the company's products stand out from those of its competitors. The market structure is contributing to a dynamic environment in which the individual companies are constantly being encouraged to develop their competitive edge by increasing their development and sales activities and streamlining production. Ambu is experiencing a high level of loyalty among those customers which the company has served for several years, and via its sales organisation Ambu is dedicating efforts to forging closer customer relations so it can more effectively identify and meet customer requirements.

The price of the individual products is always an important factor and will continue to be so in future because of intensifying competition, consolidation among customers, increasing professionalisation of purchasing functions, more tendering etc. Consequently, cost control, economies of scale and product differentiation are factors which are coming to play an ever more important role.

### **Outlook**

Growth within the medico-technical industry is expected to continue in the coming years, and growth is expected within the areas in which Ambu operates. The general market growth is deemed to remain in the region of approx. 5% a year. In 2008/09, market growth is, however, expected to be impacted to a minor extent by developments in the world economy.

In 2008/09 focus will – based on Ambu's strategy – be on accelerating the development of the company, in terms of both growth and earnings.

This will be achieved through:

- The launch of new and improved products. There are several products in the pipeline which are planned for launching in the coming year.
- The acquisition of new products and activities. Ambu will work actively to identify potential product lines for acquisition which supplement the company's product portfolio within the existing product areas, while also searching the market with a view to identifying attractive candidates for acquisition in the form of companies both large and small.
- Increased sales efforts in growing markets and product areas. In the course of 2008/09, Ambu will set up its own sales office in China, and the network of distributors will be extended in selected markets in Eastern Europe.
- Further focusing of sales efforts and expansion of the sales force. Ambu expects to take on more salespeople in both Europe and the USA.
- Continued optimisation of production, including the extension of the factory in Malaysia with a view to moving some of the remaining Danish production.
- Focus on the profitability of the individual products which Ambu itself produces.

Ambu is deemed to be well geared to increase its market share, and the focused sales efforts combined with the launch of new and interesting products will ensure the efficient exploitation of this potential. Focus will primarily be directed at major core customers and the forging of closer relations with this customer segment.

## Appendix 1:

### Company Announcement no. 1-2009/10 - New strategy strengthens Ambu's global position

**Ambu today announces a new four-year strategy known as GPS Four. The implementation of the strategy will involve all parts of the organisation and aims to create a significantly stronger Ambu with significantly higher revenue and earnings. This will be achieved by strengthening of innovation and product development as well as through improvement in efficiency. Acquisitions to strengthen Ambu's product portfolio and market share are likely important elements in Ambu's new strategy.**

*"In GPS Four we have an ambitious strategy and a strong tool which can ensure that we maintain our direction and focus – and that implementation is efficient. And the objectives are clear: GPS Four will further speed up our product development, strengthen sales and increase efficiency. By developing innovative and differentiated single-use products, we will contribute to ensuring that hospitals worldwide can be managed more efficiently, while at the same time improving the treatment of patients. In this way, we can grow more than the market and also increase earnings year on year. With our new strategy, we believe that we can create a significantly stronger and truly global company,"* says Lars Marcher, President & CEO of Ambu A/S.

GPS Four sets out a number of ambitious targets for the next four years.

GPS stands for:

#### Global:

Ambu wants to be a truly global company. This will be realised by 2013 by Ambu having achieved considerable competitive advantages based on the company's global sales approach, developing our production facilities in Asia and through improving efficiency.

#### Positioning:

Ambu will, by 2013, be a focused and leading supplier of medico-technical single-use products for hospitals and the rescue services.

#### Systems:

Ambu will, by 2013, have achieved significant improvements in efficiency through the implementation of global IT systems which support and strengthen sales, production, innovation and financial reporting.

The objectives are by 2013, to have achieved the following:

- Significantly higher revenue
- An increasing EBIT margin of up to 15%
- Leaner operations and thereby a reduction in net working capital
- A position as an innovative company

The objectives will be met by:

- Increasing Ambu's ability to develop new and differentiated single-use products for the company's core markets

- Streamlining Ambu's production by centralising production in Asia and introducing considerable cost reductions
- Improving logistics and delivery systems
- Intensifying global sales efforts
- Investing in global IT systems
- Investing in employee development
- Making acquisitions

### **Ambu's four focus areas**

Based on profitable growth, increased innovation and improved efficiency, Ambu will, in the coming four years leading up to 2013, make the most of both existing and new market opportunities. Particular focus will be on the following four areas – the four GPS coordinates:

#### ***GPS1: Products***

In the coming four years, Ambu will launch significantly more products. The development of new products and product updates will take place in Denmark as well as in China and Malaysia.

The aim is for 30% of revenue to be generated by new products in 2013 and for approx. 5% of revenue to be invested in innovation.

Ambu's five business areas will be redefined and reduced to three:

1. Respiratory Care
2. Cardiology
3. Neurology
4. Training
5. Immobilization



1. *Airway Management*
2. *Patient Monitoring & Diagnostics*
3. *Emergency Care*

#### ***GPS2: Markets***

Ambu will strengthen its position in the USA, EMEA and Asia.

The sales organisations will be strengthened in general, among other things through the appointment of new and skilled salespeople and the efficient use of sales tools, including intensified marketing and more sales campaigns aimed at winning market share.

The American market, which is the largest market for health care products in the world, holds considerable growth potential, and Ambu will continue to increase its penetration of this market. Ambu will therefore be making more investments, among other things in IT, a new inventory management system, sales and marketing resources and the launch of differentiated products. At the same time, Ambu will actively look into possibilities for acquiring products and entering into partnerships.

In the markets in Europe, the Middle East and Africa (EMEA), Ambu will continue to increase the efficiency of sales.

In the coming period, collaboration with distributors in Eastern Europe and collaboration with existing distributors will be developed.

In the coming four years, Ambu will expand its own representation and enter into partnership agreements in Asia.

***GPS3: Efficiency***

In all parts of the organisation, projects will be implemented which are aimed at improving business processes and increasing efficiency.

The implementation of new IT systems has already been initiated.

With a view to cutting costs and increasing efficiency, it has also been decided to move all production to China and Malaysia. China will thus become a new competence centre for spray moulding, while Malaysia will become a competence centre for electrodes and electronic single-use products.

***GPS4: Acquisitions***

The aim is still, by the end of 2013, to have made one or more major acquisitions which can increase Ambu's market share within single-use products for hospitals, clinics and rescue services.

Appendix 2:

Article from [www.borsen.dk](http://www.borsen.dk) 021009:

### **Ambu makes a new attempt to reach the billion**

*The Producer of hospital and ambulance equipment has for the third time in 7 years launched a strategy meant to increase the company's sales to above 1 billion DKK and the operating margin to about 15 per cent.*

BY TOM FROVST

Medicinal equipment

Will Ambu be third time lucky? Lars Marcher, the company CEO during the latest years, has just presented a strategy, which regarding general objectives is not far from the objectives of the former CEO K.E.Birk's three year strategies from 2002 and 2005.

Before 2013 Ambu is to sell for more than 1 bill. DKK, and the company's operating margin is to reach 15 per cent, The top manager of the company has, however, confidence that the objectives can be reached since Ambu has overtaken the competitors in a crisis stricken market during the latest year.

He already began implementing a number of strategic initiatives when taking up the position a year ago, and during the first nine months of the fiscal year Ambu grew 10 per cent while most competitors had a flat development.

»It is a year since we started this up, and we are still healthy and going strong. Competition is increasing and prices are consequently under pressure. We are going to compensate for that by enhancing the efficiency correspondingly or more, so that the margin improvement will be evenly spread over the next 4 years«, says Lars Marcher.

He has already implemented outsourcing to the low cost countries in Asia and has now decided that the remainder of the production in Denmark is to move to Malaysia and China. This means that well over 100 jobs are disappearing in Denmark, and the savings in cost are substantial.

»On one electrode we shall save in the order of 10 øre, and we are producing about 300 million a year. That is the direct effect of the wages«, says Lars Marcher.

### **Will invest in IT**

Furthermore he intends to invest in IT-systems that can improve and make the work processes more efficient in all branches of the organization, just as the number of business areas has been cut from 5 to 3 of app. the same size. The business area focusing on equipment for respiratory care is, however, the primary area since it is a large market with considerable growth potential, especially in the US. A tool is more targeted research and development of new products. Lars Marcher acknowledges that the 5 per cent of the sales spent on innovation has been too widely spread.

»Now we are turning the boat towards areas that have true potential for our products. So we are using the same amount, but we spend it on fewer things. There has been a lot of development in Ambu but no blockbuster candidates. We want to develop with more concentration on blockbuster candidates« says Lars Marcher, and points out that Ambu should develop more products like the



recently approved aScope, which is an intubation cup with a market potential of 1 billion DKK. On top of the organic growth, which is to bring the company's sales from the expected 850 mill DKK this year to sales of more than 1 billion DKK in 2013, Lars Macher wants to make a major acquisition.

»An acquisition will give us market dominance and considerable synergy in the form of distribution, operating and infrastructure,« says Lars Marcher, acknowledging that the huge fall in values in the market makes acquisitions difficult at the moment.

»We really want to succeed in making an acquisition, but the other party also has to be willing to dance. The problem today is the same as in the housing market where it is hard to accept prices that have decreased by 30 per cent or more«, says Lars Marcher.

### **Can you use shares in Ambu as bait?**

»That is easily done. You often see a share component in a deal so that there is an »upside« for both parties«, says Lars Marcher.

The latest acquisitions and mergers within the trade have shown deals at prices of the double of the turnover, or 7 times the operating profit.(ebitda).

### Appendix 3:

Article from Børsen 070909

Ambu sees billion market in new venture

A new single-use intubation scope can make everyday life easier for anaesthetic doctors and mean considerable sales growth for Ambu, Lars Macher, chief executive, estimates.

BY TOM FROVST

Hospital equipment

Ambu, producing equipment for hospitals and ambulance services, will later this year launch a new product, a so-called intubation scope, which according to Lars Macher, company CEO, has a market potential of 1 billion DKK, conservatively estimated.

The new video scope, called aScope, is a single-use product made to ease the investments of the hospitals as well as reduce the danger of infection and the time consumption compared to the present multiple-use solutions, demanding both repairs and cleaning. The new apparatus will cost the hospitals 1,500-2,000 DKK per operation compared to the current cost of 10-15,000 DKK per operation.

Ambu has previously been successful in converting more expensive multiple-use products with cheaper single-use solutions, for instance the Larynx mask, which is also being used to liberate the respiratory passages. 4 years after the introduction of the product Ambu has converted 80 pct. of the market from multiple-use products to single-use products. If they succeed with the new product this may double Ambu's current sales.

»No-one knows if we succeed with this product, but it gives an indication that the conversion in itself is to a high degree realistic«, says Lars Marcher.

### Enormous potential

The existing market is in the size of 4.5 billion DKK according to Ambu, and the estimate of a market potential of 1 billion DKK has been made in the expectation of use in connection with 50,000 operations. Analysts, however, estimate that there is potential for the use of the product in connection with far more operations around the world.

»The decisive of Ambu's success will be whether they can convince the anaesthetic doctors to use the one-stop solution instead of a capital investment, and whether Ambu can bundle the product together with the Larynx mask,« says Peter Hugrefte Ankersen, share analyst in the investment bank ABG Sundal Collier.

The scopes, existing in the market today, require a huge investment on the part of the hospitals. Consequently small hospitals and clinics seldom have a scope, and even in large hospitals with many operating theatres availability is sometimes a challenge. The existing scopes are multiple-use products, and it is a problem that the anaesthetic doctor cannot use it if it is already being used during another operation, is waiting to be cleaned, or is broken and waiting to be repaired.

## Well received

Ambu will increase the availability with its new single-use product, and it has so far been well received by the anaesthetic doctors, having had the possibility of testing the product.

»Our estimate of the sales of the first year is that there will be a small effect on our business and then it will escalate over the next 2-4 years«, says Lars Marcher.

He points out that it is important to get the leading anaesthetic doctors to use and accept the product as their acceptance will spread like rings in water, creating demand, just as they in fact are the ones that decide whether the product will be bought by the hospital.

Ambu will use its existing sales force to launch the product and points out that the product seen from an earnings perspective is situated in the best part of the company's product portfolio.

»And since it is a more expensive product than we normally sell it is obvious that the absolute earnings will be considerably higher«, says Lars Marcher.

The company presented the aScope at a fair in Italy in June and expects to be able to launch it on the market at the end of 2009. The company is increasing its production capacity at its factory in Malaysia to make room for the production of the new product of which Ambu has already produced a couple of thousands.