

LIFE IN ■ Estonia

WINTER 2008/2009

Art is Global
and Emotional

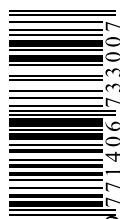
Cooperation
is the Key Word

Fish Skin –
A New Trend in
Fashion

**Puppets in
Politics**

2009 – A Year
of Innovation

ISSN 1406-7331



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Photo: Sven Tupits



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Puppets in politics is not a new phenomenon on television. In most developed democracies, top politicians have been cast in plaster or become 3D animations. In Estonia, a little bit of extra



spice is added by the fact that the political slapstick is broadcast by state television. The main man of the political farce show "The Soft and the Furry" is Hardi Volmer.

18 Helping Georgia

On 12 August 2008, four days after the Russian attack on Georgia on 8 August, a special Estonian Air flight carrying humanitarian assistance and emergency relief goods for Georgia landed in Yerevan's Zvartnots Airport. Martin Kamer, Second Secretary of the Estonian Embassy in Tbilisi, talks about the Estonian humanitarian assistance to the suffering Georgian people.



22 Science Centre AHHAA invents and urges others to invent

For eleven years, Tartu Observatory has focussed on innovation and science and the promotion of both, as well as on raising the awareness of young people. Tiu Sild, the head of the AH-HAA Science Centre believes that they have managed to bring dozens, or even hundreds, of young people to science through various shows and exhibitions.

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29 Innovations created by Estonians enjoyed by superpowers

Estonians are successfully participating in science projects of global importance, but the innovative opportunities offered by these projects remain permanently unavailable to us, due to our small population and poverty.

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Valle Feldmann, the representative of Enterprise Estonia in China, states that the lines from the popular bawdy folk song about the Estonian border touching the Great Wall of China are coming true. Economic relations are developing literally day by day.



37 A seemingly impossible task brought VKG Oil the Innovator 2008 award



VKG Oil received the Innovator 2008 award from Enterprise Estonia for the implementation of an innovative technology for separating resorcinols. The process that had seemed impossible at first turned out to be possible after all. Therefore, since last January, VKG Oil has been engaged in the industrial production of 2-methylresorcin, which is used in dark hair dyes and which gives the hair a reddish-brown tint

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Cooperation between companies will help build a more complex and competitive economy.

44 Great Britain invites Estonian companies

Susan Haird, Deputy Manager of UK Trade & Investment, has called upon Estonian companies to invest in Great Britain. The agency offers advice and assistance in getting your business started in the UK and in developing its activities outside the UK as well.

47 World-class ambulance vehicles manufactured in Estonia

If a Mercedes had "Made in Estonia" written on it, people would most probably burst out laughing. Still, for the first time in Estonia's motor manufacturing history, an ambulance which was rebuilt in a modern and high-class fashion was taken to, and offered for sale at, an international car fair in Germany. The vehicle itself, a Mercedes-Benz Sprinter, has been rebuilt as an ambulance by Silvi Autoehituse AS, a subsidiary of Silberauto.

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If you feel sorry for the crocodile and the python, but still desire something authentic and exotic, SkinNova has the solution for you: their tannery produces valuable skin that comes from... fish!

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With the Year of Innovation just around the corner, it is time to look at the practical results of the recently ended Year of Design.

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galleries in Estonia to organise proper auctions. Hanna Miller interviewed the founder and owner of the gallery, Pia Ausman.

73 Rakvere Aqva Hotel & Spa – one of the few wellness spas in Estonia

The Rakvere Aqva Hotel & Spa opened its doors in May 2008. Rakvere Aqva Spa's motto goes as follows: "A smile can change the world. We wish to give more. We wish for every person to be healthy and happy." So why not go to Rakvere and let the water and some leisure time bring joy and colour back into your everyday life!

78 Practical information for visitors



UN BALLO IN MASCHERA

An opera by Giuseppe Verdi in three acts

Sung in Italian, subtitles in Estonian and English

Premiere on February 13, 2009 at 7 p.m. at the Estonian National Opera

Performances:

February 15, 6 p.m. (subtitles in

Estonian and Finnish only!)

18 and 20 February, 7 p.m.

24 March, 7 p.m.

2, 18 and 24 April, 7 p.m.

20 May, 7 p.m.

9 June, 7 p.m.

Music Director and Conductor:

Arvo Volmer

Conductors: **Eri Klas, Jüri**

Alperen, Mihhail Gerts

Stage Director: **Arne Mikk**

Set Designer: **Ralf Forsström**
(Finland)

The opera is about passion, love, political intrigues, people stuck in the labyrinth of life and everything that an opera is usually about. The music by Verdi conveys it in such an authentic, human and timeless way that it makes it hard to believe that 150 years have passed since the world premiere of the opera. The complicated per-

son of Gustavus III of Sweden (1746–1792) and his assassination at a masked ball on March 16, 1792, has provided material for various interpretations and heated disputes. Nevertheless, it is love and deep feelings, superior to intrigues, that make the opera by Verdi memorable.

RESURRECTION

Symphony No. 2 in C minor by Gustav Mahler

April 11, 2009 at the Estonia Concert Hall at 7 p.m.



Conductor: **Arvo Volmer**

Soloists: **Monika-Evelin Liiv**
(Royal Opera House) and **Heli Veskus**

Along with the symphony No. 8, symphony No. 2 was the most well-known work by Mahler already during his lifetime. He told his friends about his work: „The first movement tells about a funeral and poses a question: is there life after death? The second movement is a reminiscence of the joyous events in the lives of the deceased. The third movement discusses the pointlessness of life. The fourth movement is all about one’s wish for release from meaningless life. The fifth movement returns to the doubts of the third movement and the questions of the first, and subsequently ends with a hope of resurrection.”

THE THREE MUSKETEERS

A ballet by David Nixon to the music by Malcolm Arnold

Premiere on April 23, 2009 at 7 p.m.

Performances:

25 and 29 April, 7 p.m.

8, 16 May, 7 p.m.

24 May, 12 p.m.

30 May, 7 p.m.

12 June, 7 p.m.

Conductors: **Jüri Alperen** or **Mihhail Gerts**

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Choreographer and Stage Director: **David Nixon** (Northern Ballet Theatre)
 Set Designer: **Charles Cusick Smith** (England)
 Costumes: **David Nixon** (Northern Ballet Theatre)
 Lighting Artists: **David Nixon** and **Tiit Urvik**
 Music arrangement and orchestration: **John Longstaff**

One for all and all for one! In cooperation with the creative team of the Northern Ballet Theatre, the ballet by David Nixon with its captivating music, thrilling scenes of sword fights, carefree humour typical of the musketeers and the romance radiating from beautiful duets will be brought

to the stage of the Estonian National Opera. The career of David Nixon as a stage director has taken him to many renowned theatres worldwide: Birmingham Royal Ballet, *Komische Oper*, German State Opera, Sydney City Ballet, etc.

ANDREA CHÉNIER

A concert performance of the opera by Umberto Giordano
 May 27, 2009 at 7 p.m. at the Estonia Concert Hall

Conductor: **Alexander Vedernikov** (Moscow Bolshoi Theatre)
 The title role is sung by **Emil Ivanov** (Bulgaria)

The opera by Giordano has become popular due to its majestic tenor part that provides a talented singer with an opportunity to show his vocal abilities. The music of the opera reflects the emotions of the era



of the Great French revolution by tracing the disappointment of the young poet Andrea Chénier in the ideas of the revolution and his falling in love with the Countess of Coigny, who has fled from the revolutionaries. What is the only thing that remains sacred and gives hope when everything else, including life, is destroyed in a political struggle for existence? Chénier's answer is: only love. In Estonia, the opera is conducted by the world-renowned conductor Alexander Vedernikov who in 2008 received the prestigious award of the BBC Music Magazine „The Best Conductor 2008”.

FESTIVAL „SUMMER NIGHT STARS“

On June 5 –13, the traditional festival *Summer Night Stars* will be held at the Estonian National Opera. The audience is rejoiced by acclaimed opera and ballet stars both from Estonia and abroad.



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EESTI KONTSERIT



Georg Friedrich Händel 250. year of death

Oratorio Messiah

ESTONIAN NATIONAL SYMPHONY ORCHESTRA
 ESTONIAN NATIONAL MALE CHOIR

Girls' choir ELLERHEIN

DEBORAH YORK (soprano, Great Britain)

CORNELIA SALJE (mezzo soprano, Germany)

ALBRECHT SACK (tenor, Germany)

HANS CHRISTOPH BEGEMANN (baritone, Germany)

Conductor **MARC ANDREAE** (Switzerland)

Sat 11 April at 19:00 Pärnu Concert Hall

Sun 12 April at 16:00 Vanemuine Concert Hall

Tue 14 April at 19:00 Tallinn St John's Church

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EESTI KONTSERIT

ERGO presents

XX Baroque Music Festival

30. I – 7. II 2009

Artistic director **Andres Mustonen**

Fri 30 January at 19:00 Estonia Concert Hall

Opening Concert

IN THE BEGINNING THERE WAS BACH...

Estonian National Symphony Orchestra

Estonian National Male Choir, Girls' Choir ELLERHEIN

Conductor **ANDRES MUSTONEN**

Sat 31 January at 17:00 Blackheads' Guild

Helsinki Baroque Ensemble

Estonian Philharmonic Chamber Choir

Conductor **FRIEDER BERNIUS** (Germany)

Sun 1 February at 16:00 Meder Hall

JOSÉ MIGUEL MORENO (baroque guitar and lute, Spain)

Sun 1 February at 18:00 Meder Hall

PATRICK DEMENGA (cello, Switzerland)

Tue 3 February at 19:00 Niguliste Church

Vocal ensemble **HUELGAS ENSEMBLE** (Belgium)

Artistic director **PAUL VAN NEVEL**

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Brain Hunt and Learning Village to represent Estonia at the pan-European entrepreneurship competition

From among five finalists, the Estonian jury of the “European Enterprise Awards” selected two projects to represent Estonia at the pan-European competition “European Enterprise Awards”. The winners of the Estonian round were The Learning Village (*Õppiv küla*), a project organised by the non-profit association Eesti Külaliikumine Kodukant, and Brain Hunt (*Ajujaht*), a project organised by BDA Consulting OÜ. The winners will compete for the title of the best European entrepreneurship project at the Entrepreneurship Week to be held in Prague in May.

In regard to Brain Hunt, the jury was impressed by its large-scale nature and thorough deliberation, as well as its international dimension. The jury also placed importance on the fact that resources of the private sector were also used in increasing entrepreneurship among young people.

In regard to The Learning Village, the jury was impressed by the way the project was aimed at regional development and making local residents more active in order to contribute to the development of entrepreneurship and civic initiative in rural areas. The pan-European competition European Enterprise Awards is being organised by the European Commission for the third time. The objective of the competition is to recognise and award the best initiatives aimed at promoting entrepreneurship.

Virtual Tallinn University opened

Tallinn University has introduced the project Virtual Tallinn University. It is an initiative whose aim is to make available recordings of different public lectures and discussions of lecturers and guests of the university, materials from seminars, summer schools and conferences, and other interesting information, in an Internet environment, for all interested persons.

Rein Raud, Rector of Tallinn University and one of the initiators of the project, believes that the virtual university will broaden the common borders of the academic environment. “This initiative is another addition by Tallinn University to further perform in the role of an intellectual centre. We believe that the ideas that are being explored in the university might also interest the society as a whole and help every person with an active mind, regardless of age and area of activity, to discuss further the modern world and past problems. Experience has shown that society needs this type of high-level intellectual debates,” commented Raud.

Tarmo Jüristo, who introduced the project, confirmed that the virtual university would lower the barrier between the university and society, due to the fact that access to the events in the university will be greater than through lectures at the university. Jüristo said that the aim of the virtual university is not to replace, but to supplement and intensify, the auditory work.

Tallinn Virtual University offers videos of conversations with Jaques Revel, Zygmunt Bauman, Ágnes Heller, John Berry, Anthony Giddens and many other prominent individuals for all interested persons. Internet broadcasts can be downloaded from the environ-

ment and, if there is interest, full-length videos are also available.

It is planned to supplement the environment with recordings of public lectures, conversations, and materials of seminars, summer schools and conferences at Tallinn University. The materials can

be found at the web site tlu.ee. At the moment, the environment mainly contains materials related to the humanities and social sciences; however, according to Tarmo Jüristo, the environment as a platform is open and hopefully will grow successfully in all areas. The Virtual Tallinn University environment is built on Toru technology and administered by Nagi OÜ. The videos of the Virtual University are located on the Toru video site and they can also be found through Toru searches.





Representatives of Enterprise Estonia Urmas Uska, Mart Vihmand and Madis Vööras at the IAC.

Estonia's first-time participation in the space trade show

Estonia currently has about twenty to thirty space sector companies that offer both products and services, ranging from the production of parabolic aerials, dozens of metres wide, for earth-based space stations to specific integral solutions. From 29 September to 3 October, 2008, the International Astronautics Conference (IAC) and trade show was held in Glasgow, Scotland, and for the first time Estonia was able to participate with its own joint display. Enterprise Estonia took part in the trade show, together with more noteworthy space sector companies, such as Vertex Estonia, Modesat, Clifton and Müomeetria. The display also included representatives from Interspectrum, Oskando, Englo, and the research institutions the Tartu Observatory and the Tallinn University of Technology. There are about twenty to thirty space sector companies in Estonia, which offer both products and services, ranging from the production of parabolic aerials, dozens of metres wide, for earth-based space stations to specific spectrometers, semiconductors and satellite positioning-related integral solutions. Estonia's display at the trade show was more successful than expected. In the main, this was probably due to the fact that Estonia took part at all in such an important gathering of the top players in the global space sector. As the trade show was aimed solely at delegates on four of the five conference days, expectations for the displays were very high. Estonia had to stand alongside such top players as ESA, JAXA, Virgin Galactics, United Space Alliance, EADS Astrium, SSTL etc. We displayed models of ELI's unmanned observation aircraft, Vertex Estonia's aerial, and Clifton's novel GaAs semiconductors.

Estonian mobile device management software wins first prize

Fromdistance MDM, the device management software developed by the Estonian software company AS Fromdistance, has won first prize in the device management and innovation competition organised by the Device Management Forum and Mobile Monday in London.

"It is a great honour for us to receive this award," said Jouko Vierumäki, the CEO and founder of AS Fromdistance. The Device Management Forum unites companies that have focused on the development, marketing and management of telecommunications equipment intended for end-users, and related services. The aim of the competition was to determine the most innovative device, service or software that also offered the greatest benefit for the stakeholders of the Device Management Forum – manufacturers of devices, network operators, software developers and distributors.

A million-kroon robot for the students of the Tallinn University of Technology

The Power Engineering Building of the Tallinn University of Technology has received an IRB industrial robot manufactured by ABB.

"In the future, robots will do the work, and people will create and build the robots," said Tõnu Lehtla, Dean of the Faculty of Power Engineering. "That is why our students must study robotics." In addition to the students of the Electrical Drives and Power Electronics degree programme, the students of the Computer and Systems Engineering and the Mechatronics degree programmes will also start to study and use the robot in practical classes. The main task of the robot is welding, but the robot can also be used to perform other production jobs, such as the servicing of workbenches, the packaging of products and so on. Usually, the robot is utilised for work which is dangerous, too difficult or monotonous, or when the work environment is hazardous to human health (unacceptable for living organisms).

The robot received from ABB will be a great addition to the production automation laboratory of the Electrical Drives and Power Electronics Institute at the Tallinn University of Technology. Until now, the laboratory has provided students with a mock-up model of an automatic production plant, including a numerically controlled workbench and two industrial robots.

Most innovative product of the year: an AS Tere yoghurt. Most innovative person of the year: Rainer Nõlvak

The most innovative product of the year 2008 is the Dr Hellus Omega-3 yoghurt range produced by AS Tere, and the most innovative person of the year 2008 is Rainer Nõlvak, the initiator and main organiser of the rubbish clearance campaign, "Teeme ära 2008", which was conducted throughout Estonia.

In addition to AS Tere, the competitors for the product/service category prize, as announced at INNOESTONIA 2008, the Third Estonian Annual Innovation Conference, included the Yoga Intelligent Building System, houses with combined walls manufactured by AS Ritsu, and the team game called *Spiooni Akadeemia* (Spy Academy), which was created by Ozoon.ee. The candidates for the title of the most innovative person were Mare Reiman, the product development specialist for AS Tere, who developed the Omega-3 yoghurt range, and Urmas Varblane, a professor of international business. The candidates were nominated by the readers and customers of InnoNews, the newsletter which is issued by the InnoEurope innovation centre, which was the competition's organiser. For the second time in two years, the InnoEurope innovation centre was able to select the most innovative product or service; last year, the category's winner was EMT MOBILE-ID. The most innovative person category was new this year.



Volta to produce lighting solution for Tallink office building with innovative façade

AS Volta and AS Merko have signed a contract according to which the soon-to-be-completed Tallink office building will be supplied with a Volta Lumen lighting solution for the building's façade.

The office building, which was designed by Meelis Press, built by AS Merko Ehitus, and which is to be completed in February, will be supplied with a façade lighting solution, in full colour, that will be unique not only in Estonia but also in the region as a whole. The uniqueness of the building lies first and foremost in the fact that as early as the design stage it was decided that the "paint job" for the building was to be carried out in an electronic manner by using LED lights.

Madis Reivik, head of the Volta Lumen Product Development Department, said that the company wishes to use the Volta Lumen brand in order to offer innovative and complete lighting solutions and lights for architectural use and general lighting, and also for private residences. Together with the design company Taikonaut, the company has produced several designer solutions for which, according to Reivik, potential marketing opportunities will be found both in Estonia and in neighbouring countries.

"Our mission is to do away with the common understanding of a light as a packaged mass-production item that starts functioning after a bulb has been fitted into its socket," Reivik said. "We want to offer architects and interior designers the opportunity to design complete lighting solutions that last for a lifetime, that are energy-efficient, and that are also entirely integrated into the construction, into the interior of a construction, or into the city surroundings. In order to be able to achieve this goal, the technological solutions offered by LED lights open up a completely new horizon of opportunities."

AS Volta operates in the electrical engineering and electronics

industry, but also functions in the realms of mechanical engineering and contracting. The company has been involved in the manufacture of lighting solutions which involve LED lights since 2006. In order to make a clearer and more noticeable distinction between the areas of activity, the brand name Volta Lumen was established at the beginning of this year.



Ain Hanschmidt, CEO of Infotrar, the majority owner of the Estonian Tallink shipping line.

An Estonian invention is making strides towards entering the international retail market

With support from the European Union, the company OÜ Müomeetria will start to develop a new version of the Myoton medical device, which has been created by Estonian scientists. The new version will be intended for everyday/home users and the company plans to launch the new version on markets all over the world.

The executive director, Andrus Oks, says that so far the diagnostic device, which measures various muscle properties, has been primarily used by doctors, international research institutions and top athletes, including the Olympic teams of Estonia and other countries. The device is based on a patented technology. It has been sold to dozens of countries worldwide with the help of international distributors.

The next generation device Myoton LITE will be created for everyday use by average people. It will be the same size as a mobile phone and will be cheaper than the model for professional users. OÜ Müomeetria will cooperate with the following partners in the development of the product: the research division of the Jyväskylä Central Hospital, the Italian company Diagnostic Support s.r.l., the University of Tartu and PDD Innovations Ltd (in a consulting role). All the rights related to the device are owned by the Estonian company OÜ Müomeetria.

"We believe that, in the future, Myoton LITE will be a sports accessory as widespread and common as the Polar and Suunto sports and monitoring watches, for example," explained Oks. "One of the main features of sports watches is that they monitor the heart rate

during exercise, whereas the Myoton LITE will allow users to monitor the impact of the exercise on muscles."

The device will help users to assess their muscle health, without needing special medical training. The results will be displayed on the screen of the device. The wireless connection allows users to transfer the data to a computer in order to create diagrams and analyses.

OÜ Müomeetria participated in the EU programme Eurostars, where several hundred European companies submitted their applications. OÜ Müomeetria, which had applied for 16.5 million kroons, was one of the companies chosen from among these applicants. "This signifies high international recognition of our previous activities and our plans for the future," said Oks.



International prize given to KÕU Internet Trolley idea

At this year's Golden Drum Festival, the largest advertising festival in Central and Eastern Europe, the Estonian advertising agency Age McCann won the gold medal, the Golden Drum prize, in the outdoor media category.

The agency received the prize for its creative solution in the form of an Internet trolley advertisement for the wireless Internet connection, KÕU. This is the most prestigious advertising prize an Estonian advertising agency has ever received.

"Eesti Energia is known in the advertising sphere as a company that is using more and more non-traditional marketing solutions," Janar Toomesso, the manager of Age McCann said of the marketing work carried out by the energy firm. According to Toomesso, the panel of judges in this year's festival, which consisted of global experts, gave the most desired prizes to interesting customised solutions and to works which created very surprising links between different areas.

Eesti Energia also received the prize of Nike with Wings, or the 'Client's Golden Drum', in the category of communication products and services. "We are happy to be cooperating with Age McCann and I believe that such a remarkable acknowledgement is also a strong message for other companies to encourage them to start using courageous marketing ideas," commented Margus Rink, a member of the management board of Eesti Energia.

The KÕU trolley is a mobile sales outlet that takes the Internet provided by Eesti Energia all over Estonia, even to places where there are no customer service offices, such as the towns of Haapsalu and Narva.



At this year's Golden Drum Festival, the Estonian advertising agency Age McCann won the gold medal for creative solution of an internet trolley advertisement for the wireless internet connection KÕU provided by Eesti Energia. Eesti Energia also received the prize of Nike with Wings.

Photo: Eesti Energia

Webmedia invests 3 million kroons in IT education

The software development company Webmedia signed cooperation agreements with the University of Tartu and the Tallinn University of Technology, on the basis of which the company will invest over 3 million kroons in raising the quality of IT education over two years. According to Taavi Kotka, Chair of the Board of Webmedia, other IT companies could join such an initiative. "Companies should overcome the complex that others will benefit from their investments in IT education," said Kotka. "Everyone will benefit from the higher level of know-how in the IT sector." According to the cooperation agreement, the members of the Webmedia staff will give lectures to IT students and lead lab workshops, also permitting access to the company infrastructure. The universities will offer the necessary basic and applied research, in-service training and consultation to their partner. In addition to the above-mentioned universities, Webmedia has a similar cooperation project with the Virumaa College of Tallinn University of Technology, where Webmedia staff members teach students. Webmedia invests approximately 200,000 kroons annually in their education efforts.



Taavi Kotka, Chair of the Board of Webmedia.

Webmedia listed among Top 50 fastest growing technology companies in Central Europe

Webmedia Group, the largest software development company in Estonia, occupied twenty-third place in the rankings of the fastest growing technology companies in Central Europe.

No other company from the Baltic States managed to find a place in the top fifty list compiled by Deloitte, an international consulting company. The ranking criterion is the increase in turnover by companies during the past five years, which in the case of Webmedia Group was 702%.

"For this accomplishment, I would like to express my deepest gratitude to our people in Estonia, Lithuania, Finland, Romania and Serbia, who, with their excellent work, have made such a

remarkable increase possible," said Priit Alamäe, the CEO of Webmedia Group. "During the past three years, we have invested in international business development and in the increase of our supply capacity, and we believe that we have now created a strong foundation which will help the rapid growth of Webmedia Group to continue just as successfully as in the past."

The first position in the rankings is held for the third year in a row by Blue Media, a software development company located in Poland. This year, for the first time in the history of the competition, technology companies from Romania and Croatia reached the top five of the rankings.


The Deloitte Technology Fast 50 in Central Europe is an annual prize given to the most rapidly growing technology companies in the region.

Puppets in politics



Having puppets in politics is not a new phenomenon on television. In most developed democracies, top politicians have been cast in plaster or become 3D animations. Nobody gets upset. Not even when the dialogue gets very heated. In Estonia, a little bit of extra spice is added by the fact that the political slapstick is broadcast by state television.

Text: Urmas Vahe, *Õhtuleht*
Photos: Sven Tupits



The invitation to produce and design a political slapstick show came quite unexpectedly for Hardi Volmer, a lifelong animation and puppet theatre man. “I guess I’m mostly known as a puppeteer. So it happened that, at a television party where some stronger beverages were consumed, I found Raivo Suviste, the chief producer of BEC, a large TV production company by Estonian standards, sitting next to me, and he popped the question, ‘Hardi, would you accept

a job which only you can do?’ I asked him to explain and I was immediately ready to jump on board. It was the offer of the century, truly created for me. It was even more exciting because the date of the first screening was already known, but not the end date. The latter was dependent on how much money Estonian Television had.”

In addition, I didn’t have to invent anything. The bicycle was already there. We ordered various series from the wide,

Hardi Volmer

Born 8 November 1957 in Pärnu

In 1985, he graduated from the Estonian Academy of Arts as a theatre designer. After graduation he began to work as a puppet animation producer and designer at "Tallinnfilm" studios, whilst continuing to freelance in most Estonian theatres and abroad. Hardi Volmer has produced and designed 13 stop-motion films in total, 7 of those together with Riho Unt. Hardi has been the director and designer of one short and two full-length feature films ("Firewater", 1994, and "All My Lenins", 1997) and three documentaries (incl. "Pärnography", 2005).

He also has 80 set designs, 20 specialised commercials and 10 music videos to his name. He has designed books and posters and written numerous song lyrics. For 25 years he was active as a singer in rock bands *Turist* and *Singer Vinger*.

Hardi has taught animation workshops in Estonia and abroad. He has been a jury member at theatre- and film festivals. He is also a member of the Tallinn City Council. In 1998, Hardi Volmer was awarded the Order of the White Star, Class IV.



wide world and tried to style our show accordingly. There were numerous role models. "We played tapes by Finns, Americans and Canadians. By the way, our Baltic neighbours do not have a similar show yet. The Latvians have come to film our filming from time to time, and so have the Finns. A similar show is currently broadcast on Finnish television."

"The most impressive version seemed to be the Russian

'Puppets'. They were using the most powerful technique of the time – 3D animation. For us, that was unattainably expensive. However, 'Puppets' came to a sudden end in Russia when the Georgian director committed suicide. The organisation fell apart. It all happened after the Soviet Union had collapsed and Russia was formally a democratic country. Probably the tragedy can be explained by some 'democratic' pressure of the time.

3D animation has great advantages. But the drawbacks are no less significant. Of course, the animation looks amazing, with a wonderful interplay of colour. But the characters are kind of lifeless. In addition to its high cost, 3D animation takes an incredibly long time to create. This would have inevitably destroyed one of our main conditions – the show had to stay in sync with current affairs and be as flexible as possible. Under no circumstances could there be a delay of over a week for an event to be portrayed on the show," Hardi Volmer says, listing the rules of the game laid down from the start.

An important question – body shape

How would the characters look on screen? This became the most important question of the next period. Should rag dolls be allowed to enter people's homes? Or should they go for the "java dolls," the main characters of medieval puppet shows, with hands, feet and heads tied with wire? Harlequins would have demanded incredible puppetry technique from the actors. They could have also used ordinary dolls, the kinds which girls play with. But this genre was also time-consuming and expensive.

"The French and the Russians offered completely mystical solutions. You could use a microscope and still not understand whether it was a puppet or a real person. The mimicry was exactly right, and the plasticity was perfect," says the Estonian animator. "We have stayed with quite a primitive version, where the body is an ordinary rag doll moved by an actor and the head is made of foam. That is quite unique in the world. But the puppets are very cute and very animated."

It is a characteristic of foam that it cannot be modelled very precisely. It is first cast in plaster and then baked in an oven. The results can be unexpected. Some rubber is stiffer and some foamier. The quality of the surface depends on how it happens to make contact with the plaster. After this, the head is covered with regular theatre make-up or foundation. As surfaces absorb those materials differently, the first attempt can be a total disaster. The puppet heads are actually quite full of spots and scabs. It can be seen on screen if you know where to look.



Hardi with the puppet of Ivari Padar, the Minister of Finance, which has been made by the puppet builders of the Estonian stop-motion studio Nukufilm.

The master can be found at home

Where such dolls could be made was a big question at first. The answer was more simple than anticipated.

“Visitors to the yachting regatta of the 1980 Moscow Olympics—which in itself was a big farce—were happy to get their hands on some souvenirs. There were only two available: the mascot of the Moscow Olympics, Misha the bear, and the mascot of the Tallinn Regatta, Vigri the seal

with a moustache. Both were made of the kind of foam which we needed. But the factory which produced those figures back then was long gone. As luck would have it, we found the head chemist of the factory, who had done an incredible number of tests with the foam figures, and he still had some chemicals stored in his cellar. It turned out that, for the Misha and Vigri mixtures, eleven different chemical compounds were needed, which all had to be mixed in

a certain order. The first tests were terrible. Sometimes the results were rock hard, sometimes just a strange concoction. In order to maintain some sort of stability, we engaged the help of the Finnish puppet master Ari Arvola, who was a dab hand at chemistry.

Times have really moved on since then. We have now reached the phase where the base mixture of the puppet heads comes from Austria as a single component. All we need to do is to mix a liquid with a powder and, voila, we have the mass. The baking and the painting are different things,” Hardi Volmer says, revealing the secret that even creating a foam head of a top politician is no joke.

The politicians and the actors are basically the same

“The Soft and the Furry” – this is the title of the Estonian show – is in its eighth season. About 220 episodes have reached the screen and there’s no end in sight. Estonian Television has decided to keep going, which must mean that it is interested in the show.

“The political elite will never disappear. Of course, some characters have disappeared, but only the three former presidents of Estonia are in the archive; in reality, two of them have already passed on. But they live on in the history museum of the show and still try to give advice to those still alive. However, this advice tends to be just squabbling between old men and hence not of much use. The most colourful types in current politics will not disappear either. Mart Laar, the former Prime Minister of two governments and Edgar Savisaar, the Head of the Centre Party, are still orbiting, no matter which direction the political winds are blowing from. Others momentarily disappear, only to return some time later. This means that it is worth taking the old puppets out of the drawer,” Hardi Volmer says, admiring the ability of our political elite to keep going, like weeds through limestone.

Some obstacles on the Estonian television landscape

The main man of the political farce show “The Soft and the Furry” is still Hardi Volmer. The text is written by other men: the old school comedian Toomas Kall and the up and coming Gert Kiiler. Each has his own style, but on the show the difference in style is not really noticeable.

Nobody has tried to censor the show, especially not from the higher ranks. If somebody says something harsh, it is the editor Karin Nurm, when young actors get a bit too naughty while improvising. But the actors enjoy the fact that their



The troupe at work.

Hardi with the puppet of the former President of Estonia, Arnold Rüütel, and the voice behind him, Indrek Sammul.



Minister of Finance, Ivari Padar, and Hardi Volmer preparing a scene.





main audience is MPs and Tallinn City Council members. “It is quite refreshing to know that the prototypes do not take it the wrong way. On the contrary, they follow the show with great interest, and that’s cool,” says one of the pillars of the show, actor Tiit Sukk, who plays two prime ministers and one president.

Hardi Volmer is saddened by the fact that there is a little mess on the Estonian television landscape as a whole. “It’s a real pity that Estonian Television is unable to use a single shot filmed by other channels. We are not allowed to use what has been recorded by competitors. Dear God, who could be a competitor of the only public broadcasting channel in Estonia! It’s not possible,” says Volmer, annoyed that he cannot make his show even more vibrant.

It is a soft version that we produce in Estonia

Hardi Volmer has seen similar shows from dozens of countries. “Compared to the others, the Estonian version is really soft. Elsewhere, they really smack you with irony and satire, so that you shake in front of the TV, wondering what’s next.”

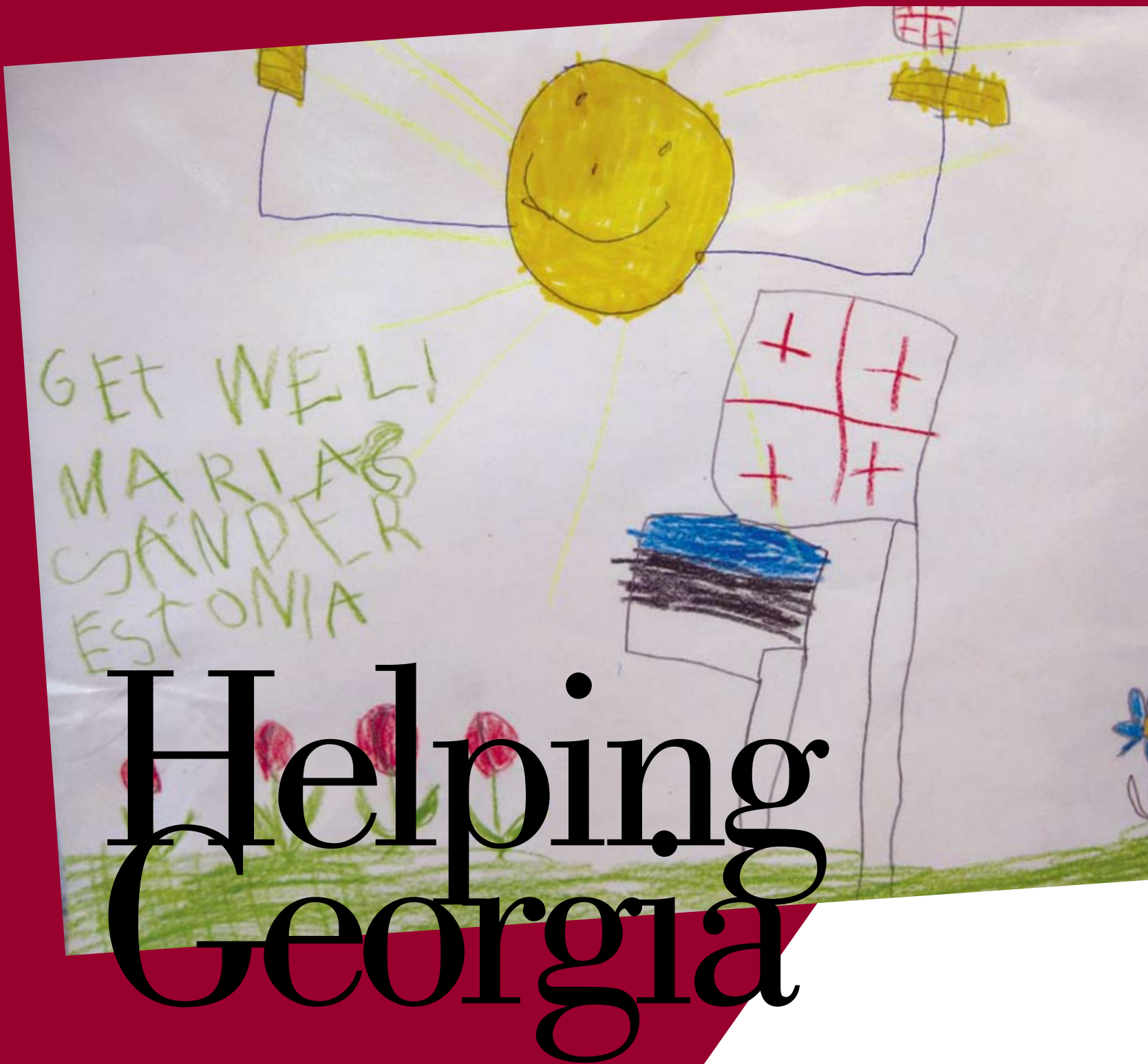
“In any case, it is a fun wake-up call on Friday mornings - the recording always begins at 8.30 for the six of us. This is the size of our team. We have to handle about twenty puppets and it is not unusual for one actor to be engaged

in conversation with two, or even three, puppets at once. When the Minister of Culture, Laine Jänes (rabbit in Estonian - ed.), engages in dialogue with the Rabbit, the official - it’s funny, isn’t it? But it requires extreme concentration from the actor,” says Tiit Sukk with satisfaction.

During its eight seasons, many puppets are in their third life, as the previous puppets have simply been worn out. “The only one still going from the first bunch is Ingrid Rüütel, the wife of the former president. We had some new puppets made, but it turned out that one minister had grown much taller than the others and we had to enlarge the rest of them as well. This has been the biggest generational change so far.

With a smirk, Hardi Volmer admits that to date no party has turned to the production group with the wish to have a member of their party on the show. “In the pre-election campaign, that would be like winning the lottery, whether the character makes you cry or laugh. We still have room for development.”

Hardi with his “actors”. The cast includes (from the left): Speaker of the Riigikogu Ene Ergma, Mayor of Tallinn Edgar Savisaar, Minister of Culture Laine Jänes, Vice-President of the European Commission Siim Kallas, Prime Minister Andrus Ansip, First Lady Evelin Ilves, President of the Republic of Estonia Toomas Henrik Ilves, Vice-Speaker of the Riigikogu Kristiina Ojuland, and Minister of Economic Affairs and Communications Juhan Parts.



Helping Georgia

Text: Martin Karner, *Second Secretary, Estonian Embassy in Tbilisi*
Photos: Ministry of Foreign Affairs

On 12 August 2008, four days after the Russian attack on Georgia on 8 August, a special Estonian Air flight carrying humanitarian assistance and emergency relief goods for Georgia landed in Yerevan's Zvartnots Airport. Flying to Tbilisi Airport was too risky due to the Russian air strikes

that, among other things, destroyed an air-control radar station close to Tbilisi Airport only a night before.

Flying back from Yerevan, the plane evacuated dozens of Estonians and EU citizens to Estonia. This was the beginning of the evacuation and relief efforts, co-ordinated by the Ministry of Foreign Affairs in Tallinn and carried out by the Embassy of Estonia in Tbilisi.

In August, when the weather is hottest in Georgia, people

usually spend their vacations in summer resorts across the Black Sea coast or seek refuge in mountains, where the air is cool and fresh. Ironically, Ambassador Toomas Lukk arrived in Georgia on the evening of 4 August, in the middle of the seemingly quiet summer season. By the end of the week, he saw Georgia torn in a rapidly escalating armed conflict.

Two diplomats immediately ended their vacations and travelled to Yerevan to help the Estonian people fleeing from Georgia. By then, the first arrivers had been met and accommodated by the Estonian honorary consul in Yerevan. Many more were on their way.

Both the ministry in Tallinn and the embassy in Tbilisi were working in 24 hour mode, collecting data about Estonian citizens on the ground, finding them possibilities to leave the country and providing financial assistance. The embassy was also serving as a shelter for those afraid of wider air raids.

In parallel with the evacuation effort, the first humanitarian aid had arrived, consisting of rescue and ambulance equipment and medicines. The Government of Estonia had gathered materials swiftly, allocating ca 1 million USD for initial emergency needs. The second shipment was delivered after 2 weeks and consisted mainly of foodstuffs and bedclothes, as well as some additional medical equipment lacking in the hospitals of Georgia.

At the end of the year a third shipment was necessary to cover the needs of babies, who were in need of diapers, clothes and baby food. On the Georgian side, there was good and close co-operation with local and international NGOs and ministries to distribute the shipments, which reached to more than 5,000 families in Tbilisi and in



A small portion of baby clothes donated by the Estonian people in November 2008.



Estonian diplomat in Tbilisi, Mr Martin Karner, and the representatives of local NGOs organizing the logistics of the second humanitarian aid shipment to Georgia, August 2008.



Estonian Rescue Board helped to organize the delivery of the first Estonian humanitarian aid shipment to Georgia, August 11, 2008.

regions. Additionally, the embassy supported a pregnant women's rehabilitation camp and later provided them with necessary items for their newborn children.

Among Estonians, a wide support had geared up for Georgia. Answering the call of the Ministry of Foreign Affairs and the Estonian Union of Child Welfare, people gathered toys, drawing materials and school supplies for the refugee children. A group of volunteers travelled to Tbilisi and assisted with the delivery of the humanitarian aid. Citizens actively donated money to the Red Cross and UNICEF. The Ministry of Foreign Affairs made a voluntary contribution of 1 million EEK through UNICEF to support children affected by the outburst of the conflict in South-Ossetia. The Ministry of Education then allocated 1 million EEK for the Georgian education sector.

In addition to humanitarian aid, two teams of experts were dispatched to Georgia immediately after the crisis. Hand in hand with UNICEF Georgia, Estonian experts responded to the urgent need for psychological crisis management, training more than 2,000 social workers, teachers and psychologists to help children overcome the shock and desperation caused by the destruction of their homes and lives. The experts also worked on a long-term country-wide strategy, consolidating and establishing a network of professional centres specialising in psychological help for refugees and other people in need.

In September, the Ministry of Foreign Affairs financed a team of demining experts who were assisting the Georgian specialists to clean the populated areas of Unexploded Ordinances, mainly "living" aircraft bombs.

As a sign of sincere support, schoolchildren in Pärnu County gathered money and sent heart-warming Christmas greetings to the refugee kids in Georgia, consisting of a chocolate and a self-made Christmas card. Ambassador Toomas Lukk distributed the cards and chocolates, witnessing the surprise and sheer gratitude on the kids' faces when they received a greeting from Estonia for Christmas. It was probably the only one this year.

The latest component of the Estonian humanitarian assistance will be reaching the conflict-affected children of Shida-Kartli region in February 2009. The children will get schoolbooks to continue their studies. This is a joint project of the Baltic countries, UNICEF and World Vision to alleviate one of the most urgent needs of the children in the region.



Estonian Ambassador to Georgia, H.E. Mr Toomas Lukk visiting Georgian children to raise their spirits.





Clothes donated by the Estonian people in Rakvere for the refugee children in Senaki, November 2008.

In coming months, the Estonian Embassy together with local partners will be involved in the rehabilitation works of the collective centres and other facilities for internally displaced people, contributing to improving the living conditions of the refugees.

In total, including private contributions, Estonian aid to Georgia amounts to more than 1.5 million USD. With three shipments of humanitarian aid, Estonia has provided around 40 tons of relief items to Georgia.

Aside from the relief effort, Georgia also remains one of the priority partner countries of Estonian development assistance. The priority sectors of mutual co-operation are good governance and democratisation, education, economic development and trade liberalisation as well as environment. A horizontal issue of Estonian development co-operation is information and communication technologies. Since 2006, the Foreign Ministry's resources for bilateral development aid to Georgia have gradually increased, adding up to ca 560,000 USD in 2008.

The Estonian Embassy in Tbilisi was opened in December of 2006.

Currently 7 people work at the embassy, out of which two are hired locally.

For more information please visit: www.tbilisi.vm.ee

Estonian Foreign Minister, H.E. Mr Urmas Paet visiting one of the refugee camps in Georgia, August 2008.





Science Centre AHHAA invents and urges others to invent

Text: Mirko Ojakivi, *Hei*
Photos: *Hei*

The earlier a young person develops an interest in the issues of the world, the greater the probability he/she will find his/her way to science and perhaps even become an inventor.



For eleven years, Tartu Observatory has focussed on innovation and science and the promotion of both, as well as on raising the awareness of young people. Tiiu Sild, the head of the AHHAA Science Centre believes that, in that period, they have managed to bring dozens, or even hundreds, of young people to science through various shows and exhibitions.

“Our main objective is actually to develop the young people’s choice of profession. We wish to increase the number of engineers and scientists in Estonia,” says Sild. Although

the head of AHHAA states one of the main objectives of the science centre in a straightforward manner, she adds that young people’s attitudes cannot be changed by forcing something on them.

“Our aim is to make young people think, to make them able to make their own choices,” Sild adds. AHHAA’s experience shows that young people are a very appreciative audience, while remaining extremely critical. This is what makes the dozen employees of AHHAA surpass themselves and be ever more creative on a daily basis. “If young people are



Tiiu Sild, the head of the AHHAA Science Centre.

bored at an exhibition, they will not refrain from saying so,” Sild says.

But, as a rule, young people like AHHAA’s exhibitions. For instance, a couple of years ago an Egyptian theme exhibition, “The Mystery of Ancient Egypt”, was on display in the basement of the main building of Tartu University. The display inspired one secondary school student from Narva so much that she went on to study history in university. Who knows – perhaps one day she will become a world-renowned Egyptologist?

There are probably numerous such positive examples, but the head of the AHHAA Centre admits that they have not really studied the wider impact of AHHAA’s activities.

In recent years, AHHAA has started organising two major exhibitions a year, while also holding dozens of smaller exhibitions all over Estonia. Preparations for every single exhibition start six months in advance. First of all, the topic of the exhibition is defined. “Then we sit down and start inventing. Or to be more precise, try to come up with exhibits,” Sild adds.

The closer the exhibition’s opening date, the more the inventors at AHHAA have to outdo themselves. For instance, AHHAA inventor Tanel Linnas is currently extremely busy making a flight simulator. He cannot invent the flight simulator, because someone has already invented it – but Tanel still has a lot of inventing to do, as the simulator has to be completed in just one week and under ascetic conditions. This is because the AHHAA Science Centre does not have its own facilities – it currently leases premises at the Tartu Observatory and the area of the room assigned

for inventing is only about twenty square metres. AHHAA’s own building, at the back of the Aura Spa, should be completed by 2011 and that should solve the problems with space.

But ingenious ideas and inventions are also born in confined conditions. Tiiu Sild believes that the Science Centre could obtain a patent for quite a few exhibits. So far, the Centre has not applied for any patents, but neither has it lost anything because of that. According to Sild, science centres follow a common principle – share your exhibit ideas with others and others will share their ideas with

you. Thus, not all exhibits presented at AHHAA’s various exhibitions have been born in Estonia.

This spring, AHHAA, together with the Finnish Science Centre Heureka, will organise an exhibition on the topic of speed. Some of the exhibits will come from Finland, but the idea of the exhibition itself comes from the homeland of kangaroos and emus – Australia.

Today, people all over the world understand that young people are the ones to carry on life in the future and it is important to make them more inventive than today’s scientists and inventors by orders of magnitude. In many countries, creativity is sparked already in the classroom, but in Estonia schools are probably still too textbook- and fact-centred.

“With its exhibitions, AHHAA is, indeed, trying to immunise schoolchildren,” says Sild. Not that young people should forget the knowledge obtained at school when they view AHHAA’s exhibitions, but AHHAA wishes to show them that science is not boring and tedious, contrary to what they may feel at school. This is where interactive exhibits come in handy.

At AHHAA’s exhibitions, young people have been able to experiment with counter-turning bicycles, upside-down glasses or drunkard’s glasses. Imagine – a young person puts on these glasses and without having a drop to drink sees the world as hazily as a sloshed adult: a pure optical illusion, which among other things has a preventative effect.

But, according to Tiiu Sild, there is a new trend among science centres – to organise exhibitions where visitors are taken into an entirely different environment and become a

How AHHAA was born

A legend tells that at a meeting held over ten years ago, three Jaaks met and decided to start promoting science at the observatory on Toomemäe in Tartu (these three were Professors Jaak Aaviksoo, Jaak Jaaniste and Jaak Kikas). Indeed, on 1 September 1997, Tartu University launched a new research and development project – the hobby science centre, and this is when Tiiu Sild assumed her position as project manager. The overall task of the centre was to introduce science to a wider audience, to carry out one of the missions of the university – serving society. Of the 60 proposed names presented to the centre's naming

competition, Helle Jaaniste's name won and this is how the AHHAA Centre began.

In May 1998 AHHAA opened its first interactive science exhibition "Aha – what do the stars tell us?" at the university sports hall. That would not have been possible without the friendly assistance of the Finnish Heureka centre, which brought lots of equipment to Tartu back then. President Meri considered the event so important that he came to personally open the first Estonian science exhibition. The Tartu Art School had just finished AHHAA's first exhibit – the Giant's Breakfast. The centre held its first workshops and science shows, and the planetarium was very busy. Over a period of six weeks, the exhibition attracted 22,000 visitors.

AHHAA's exhibitions have had over 600,000 visitors. Some people just pop in at the exhibitions, but the number of AHHAA's fans has necessitated the construction of the Centre's own building, where exhibitions can be held all year round. At the moment, AHHAA is still renting premises for exhibitions all over Estonia and this is why exhibitions are open for such short periods.

AHHAA currently has 12 full-time employees and a couple of hundred helpers at events every year. The school students who acted as guides at the first AHHAA exhibition have already become PhD students or come to AHHAA's exhibitions with their own kids in tow.



AHHAA's own building will be completed in 2011.

part of the exhibition. The "Dialogue in Darkness", held at the Tartu Department Store in spring 2006, where every visitor became blind for 45 minutes, was one such immersive exhibition. Thousands of people had a unique experience thanks to AHHAA.

At the moment, Tartu Lõunakeskus, with its 4D cinema unique in the Baltic countries, offers an immersive experience where visitors can merge into the exhibition atmosphere.

"This cinema is actually unique in the whole world, as it is built from a former space simulator, with integrated special effects," Sild explains. During the film, the simulator moves and viewers receive a splash of water, one of the special effects. 3D glasses create the feeling of being part of the film. With the renovation of the Tallinn main square, Vabaduse Square, the Tallinn City Government plans to open a branch of the AHHAA Centre also in Tallinn.

Instead of the planned business area, exiting expositions and 4D cinema will be opened to the public in the atrium of the pedestrian area of the renovated square.

But how can you bring young people to science, and make them invent and learn from their inventions? Tiiu Sild thinks that to do this, young people first need to be "pushed along" and then "pulled along". By "pushing along", Sild means that first young people need to be equipped with knowledge and their interest must be kindled. "Pulling along would be, for instance, organising all kinds of competitions," she adds.

AHHAA, the Ministry of Education and Research and the Archimedes Foundation are now running a student inventors' competition. "The main thing is, however, that young people cannot be forced to do something. If we forced them, we wouldn't be any different from the educational system," claims Sild.

Heaven, or rather space, could help Estonian businesses

Text: Mirko Ojakivi, *Hei*

Photos: Kaidi Soo, *Tartu Observatory*

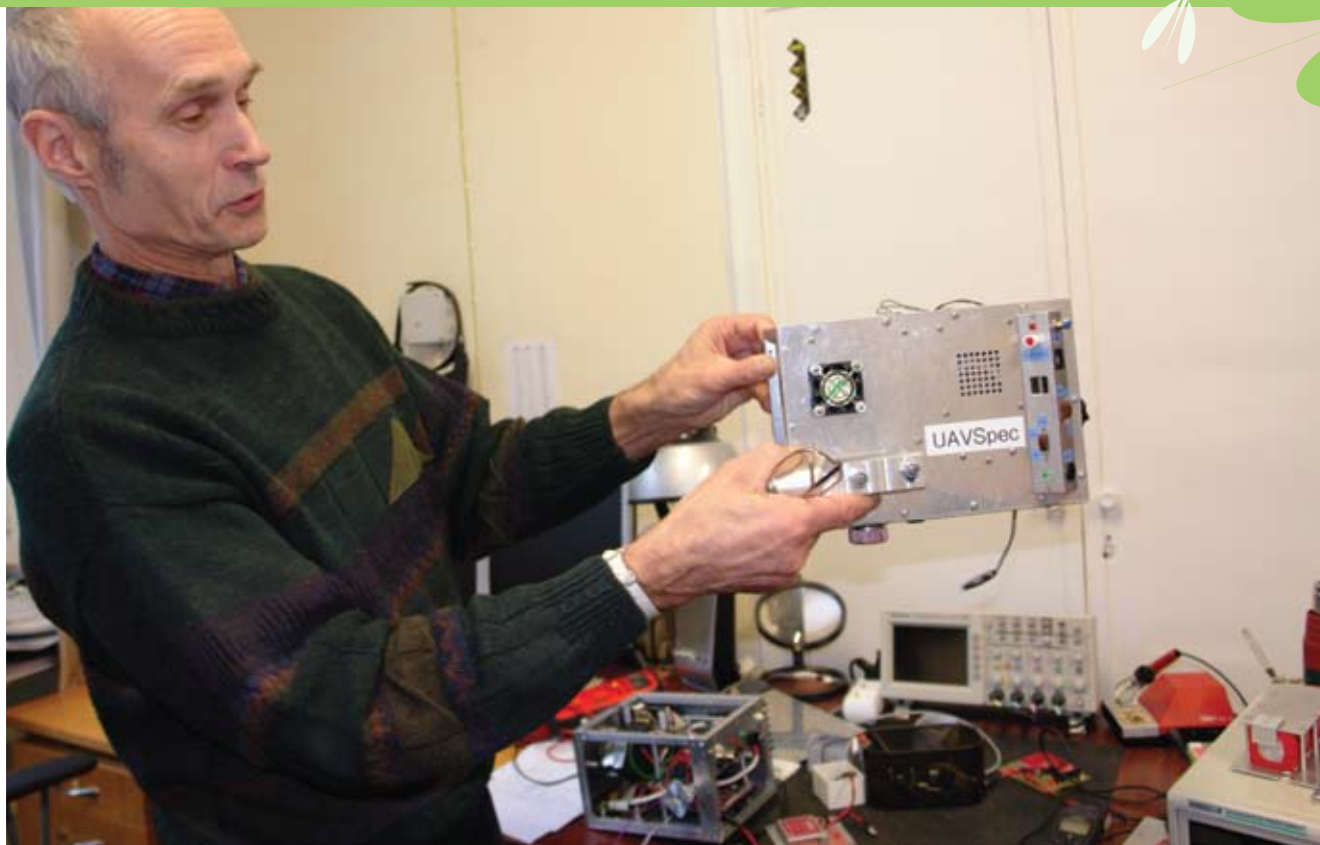
Although today no companies in Estonia could survive by placing all its bets on space projects, the space industry might have a great future in Estonia.

Like the late President Lennart Meri, Prime Minister Andrus Ansip sometimes likes to call to the heavens for aid. But calling to the heavens may have a point, because Estonia is again becoming a space country, and if scientists and entrepreneurs were to find each other, both companies and the society as a whole could benefit from space.

When, about four years ago, leading figures in the state, led by Toivo Maimets, the then Minister of Education and Research, and Ene Ergma, the then Chairwoman of Parliament, started speaking of Estonia as a future space country, this elicited many sneers. But, as Tartu Observatory atmospheric physicist Anu Reinart says, many people no longer remember that a number of decades ago Estonia was



Anu Reinart, Tartu Observatory atmospheric physicist deals with space every day.



Atmospheric physicist Andres Kuusk has given the world the method for remote-sensing of forests.

a space country to be reckoned with.

After all, scientists at the observatory at Tõravere, in Tartu County, have taken part in implementing secret, and less secret, space projects. According to Reinart, scientists in Tartu County made Sputnik components and all kinds of measuring instruments and other useful devices to be used in space. Half joking, we could say that the sweets factory Kalev supplied chewing gum to all the Soviet Union cosmonauts and saved Yuri Gagarin's colleagues from dental cavities. An integrated agricultural plant at Põltsamaa produced marmalade called Kosmos (Space), which helped feed the heroes exploring the Earth and the universe while in space.

Today, the public believes that there are no companies in Estonia equipping, or catering to, cosmonauts, astronauts or taikonauts. But, nevertheless, Estonia has a space work group, which works on establishing goals for, and evaluating, space-related research. Enterprise Estonia also offers financial support to entrepreneurs and scientists to develop space projects.

Since 2007, Enterprise Estonia has been the official representative of the Estonian state at the European Space Agency. But, still, what do Estonians want with space? Perhaps it would be easier for us to produce sauna hot-room platforms for Finland and broomsticks for Germany? At best, Estonia would be able to keep a plane or two in the air with the help of a Western country, but surely, we do not

have any business in space?!

Reinart deals with space every day. "Even if Estonians had no other reason to take an interest in space, purely to satisfy our curiosity would be sufficient motivation," suggests Reinart. After all, people explore the land and water, problems of the soul and rules of the economy. "Space is also a part of us and if we want to know why this or that is the way it is, we have to explore it," Reinart adds.

It is true indeed, that even if there is no work and no bread, you can still gaze up into the sky and count the clouds or planes passing by overhead, and dream. However, dreaming earns no money. The fact that exploring space is beneficial financially or for making life easier was recognised by humankind and Estonians more than half a century ago.

Some want to establish anti-missile systems in space in order to ensure peace in their countries, while others want to send up satellites to transmit TV images for entertainment purposes or to obtain information or to facilitate the operation of satellite phones. In our everyday life, we rely more and more on equipment in space. Measuring instruments on satellites allow us to constantly monitor changes in our living environment – on land, in the water and in the atmosphere. One of the companies to have recognised the usefulness of space for Estonia is the map producer and software developer Regio, which earns a steady profit by providing a GPS positioning service to help people find their way.

Main areas needing satellite monitoring support:

- limiting the loss of human lives and material assets caused by human activity-based, and natural, disasters;
- understanding the environmental factors affecting human health and welfare;
- understanding, forecasting and adapting to climate changes and the potential consequences thereof;
- improved management of water resources through better understanding of natural water circulation;
- improving weather forecasts;
- management and protection of inland, coastal and marine ecosystems;
- sustainable agriculture and protection against desertification;
- understanding and protecting biological diversity.

Reinart thinks there could be more companies in Estonia making money from space. After all, Estonians are an old space nation. Friedrich Georg Wilhelm Struve, Ernst Öpik and Jaan Einasto – these names mean a lot to any self-respecting astronomy fan.

But leaving traditions and curiosity aside, the investments made in space throughout the world are growing from year to year. This includes sending up new satellites or unmanned missions into space – to Venus and to Mars. For some reason, no one has wanted to focus on the Moon in recent decades. Reinart thinks that every kroon spent on space has a definite purpose.

For instance, the Moon and Mars are worth exploring to find out what mineral resources they have. “And of course, it cannot be denied that, in the longer perspective, we will need to resettle on another planet to save humankind. This, of course, is a bit of a science fiction issue,” Reinart smiles. Common logic says that working on space-related projects is costly, but Reinart says that this is merely a myth. “As scientists have already done a great deal, and smoothly functioning technologies and networks have been established in the space area, not everything is necessarily expensive.” Everything is easier and less costly when done together. Estonia is preparing to become a candidate to the European Space Agency. If all goes well, we will, in a few years, be sitting at the same table with big space players such as Italy, France and Germany.

“Although many European countries are capable of sending satellites into space, they wish to combine their strength in order to compete with such major powers as the United States, Russia and China,” Reinart says, explaining one of the underlying purposes of the European Space Agency. But, unlike the major powers, the members of the European Space Agency together pursue peaceful space objectives. What are Estonians doing today in the space area? This spring saw the launch of the Euro-funded project EstSpace, which is the first to remind Europe of Estonian scientists’ capability of participating in European space projects. Although we are not planning to send our own cosmonauts or astronauts into deep space, Estonian scientists have – besides studying the Universe – used space to observe the natural environment of Earth. In other words, Estonians have turned their attention downward – back to Earth. Estonians are involved in remote-sensing activities.

Atmospherics physicist Andres Kuusk says that, although satellites have become a rather convenient tool for both forecasting the weather and for monitoring what’s happening on the ground, scientists are still investing a lot in developing this area – the aim is to find ever more accurate measuring instruments and methods.

Kuusk’s contribution to the world is the method for the remote-sensing of forests. EstSpace has brought excitement back into the life of the scientists at Tõravere – the subsidy has allowed them to acquire a lot of new equipment, which among other things will help make Kuusk’s remote-sensing model even more effective in the nearest future.

In addition to modern measuring equipment and software, EstSpace has also given Estonian scientists new field measurement spectrometers – equipment for the spectral measurement of visible and near-infra-red solar radiation and ultraviolet radiation, and other equipment. Last summer, a mini-helicopter circled above Estonian forests. This unmanned, autopilot (remote-controlled) aircraft makes it possible to study the solar radiation reflecting from the forests and coastal areas with a 3-kilo spectrometer developed at the Tartu Observatory. If the measurements are successful and can, in the long-term, be matched with other data and modelled results, we will gain an understanding of the health of our environment.

But how is space related to the helicopter and the spectrometer the scientists at Tõravere have built for it? In essence, remote-sensing is a form of combined sensing, where a part of the data is obtained by using satellites, and the other, more accurate part is obtained by using the theoretical and test-based results from aircraft launched from the ground.



The unmanned autopilot mini-helicopter enables to study the solar radiation reflecting from the forests and coastal areas.

“This is, for instance, suitable for evaluating the yield of crop fields or the recovery of plant life destroyed in floods or fires. The fields in Estonia are small and farmers can evaluate the situation with their own eyes, but the methods developed here can successfully be applied in regions where the fields are a lot larger or access is restricted,” Reinart explains. Our damaged and polluted environment and the scarcity of natural resources is increasing famine and lack of drinking water in less-developed countries, which in turn may lead to political conflicts, which may even escalate into wars. “Today, remote-sensing is used to forecast, among other things, floods or the spread of malaria,” Reinart claims. Estonians are thus engaged in rather concrete activities.

Global warming has been the fashionable subject in recent years. Some scientists also talk of global cooling. Reinart thinks it is impossible to give a single definition to the currently ongoing climate change: “It is clear that there is global climate change going on, which affects every individual, as well as entire countries,” says Reinart. The natural environment and the course of the changes differ from region to region. The establishment of global monitoring networks, which will integrate the global images received from satellites and the data measured at individual points on Earth into a single system is currently the objective of the EU and European Space Agency initiative Global Monitoring for Environment and Security (GMES). GMES is Europe’s contribution to the global system.

“It would be naive to hope that Americans would set up the entire remote-sensing network. It would be even more naive to hope that they would start maintaining it and analysing the received data for the benefit of all of us,” Reinart says, describing Estonia’s involvement in remote-sensing. Just as Americans do not forecast the weather in Estonia, they will never monitor the condition of our forests and lakes. As an EU Member State, Estonia is already taking part in developing GMES. Now it is up to our corporate, institutional and public awareness as to how much of the investments and technological achievements we are able to put to good use.

Reinart says that, although the majority of the funds in space applications is in the field of telecommunications, remote sensing services have an established and ever more important role.

In conclusion, Estonia has been engaged in space research for decades. And Estonians have been trying to solve the mysteries of the Universe for centuries. In recent decades, however, Estonian entrepreneurs have not been thinking big enough to earn money from space-related activities. According to Reinart, Estonia has eager scientists and Estonia as a country has finally established relations with the best space countries of the world. “Finally, Estonia has created rather good preconditions for entrepreneurs: should a company wish to invest in the space area, we have both the scientists and the contacts,” Reinart adds.

Innovations created by Estonians enjoyed by superpowers

Text: Andres Reimer, *Hei*
Photos: Mihkel Kärmas

Estonians are successfully participating in science projects of global importance, but the innovative opportunities offered by these projects remain permanently unavailable to us, due to our small population and poverty.

A super-accelerator of small particles, which involves the work of our scientists, may provide an important stimulus in the creation of extremely fast passenger trains floating on magnetic cushions. But Estonian railway engineers will have to continue to concentrate their innovative capabilities on the improvement of old-fashioned trains moving on steel rails.

A super-accelerator of particles is under construction at the border of Switzerland and France: the fruits of this work are expected to be applied to everyday life only in a hundred years. "Estonia is not a member of the European Organization for Nuclear Research (CERN) and has no right to the results of the experiment but, all the same, our scientists are working in the team of this international sci-

ence project," says Martti Raidal, a scientist of the National Institute of Chemical Physics and Biophysics.

Raidal is working in this undertaking, which is considered the science project of the century, together with Andi Hektor and Mait Müntel.

In essence, the CERN accelerator is the world's biggest superconductor. This is a technology whose improvements may be used in the creation of magnetic cushion technology in metropolitan railways and for propelling trains that travel extremely fast. These systems, supplied with magnetic cushion energy, are very energy-intensive, but now it is possible to develop a system of revolutionarily greater efficiency.

Already medicine has started to use an organism illumination device based on the technology of CERN. Today, it is



Estonian scientists in CERN: Andi Hektor, Martti Raidal and Mait Müntel.

used, above all, in new mammographic systems for breast cancer detection. The new device makes it possible to examine people without radiation damage, because it doesn't use x-rays.

In addition, unique IT-solutions of CERN make it possible to analyse enormous amounts of information at relatively low cost. It is also used in the medical field when there is a need to start to analyse the genetic information gathered from people. The genes of one person contain about 1 GB of information. For example, the research and comparison of the genetic information of all Estonians requires computer capacity that would seem to be completely inaccessible.

Similarly, the world's movie producers need large information handling capacities: the companies with the largest investment capability regarding this matter are undoubtedly located in Hollywood.

Figuratively, a microscope 27 km tall has been built 100 metres below ground as a result of the efforts of scientists. This exceptional device is used to search for the smallest particles in nature. In order to find a particle, ten thousand computers in a common network all over the world are

used to analyse the information. Estonia contributes 410 computers to the research.

The CERN project is one of those science experiments in which scientists avoid measuring today's macroeconomic gain, explaining that there the best physicists in the world are producing the newest science ideas.

For example, Finland, which has advanced industry, joined CERN in order to get closer to world-class high technology. That is why the industry of Finland receives orders related to CERN.

"The question is: how many industrial firms are there in Estonia that would be capable of producing world-class high technology?" says Raidal.

The CERN accelerator is indeed the biggest in the world, but not the only one. For some time, a device with dimensions comparable to the European accelerator has also been operating in the United States.

According to Raidal, Estonia should, at all costs, participate in new international science projects. For example, in Jyväskylä, Finland, an experimental centre will be created in old mines, where it will be possible to carry out measure-



An ultra-fast train moving on magnetic cushions.

ments with as few external effects as possible. Another physics project beneficial to Estonia is related to space, where science experiments are carried out by satellites.

Estonia too small for a hyper-velocity train

“Ultra-fast trains moving on magnetic cushions will probably never run in Estonia, as there are too few passengers here, the distances are too short, and the technology is too expensive,” claims Indrek Süld, the signalling and communication director of Estonian Railways.

Süld, the man who recently managed the creation of the world’s most modern signalisation systems, is considered an inexorable inventor and innovator in the railway firm.

“It is impossible to operate a train between Tallinn and Tartu that would run at the speed of 600 km/h,” explains Süld. There would be problems even with equipment moving at 250 km/h, a goal for the route between Moscow and St. Petersburg, as a collaboration of Russian Railways and Siemens.

The problem is that if a train that travelled that fast

started off, for example, from Tallinn, it would require 20 minutes for acceleration, after which it would already have to start braking, which would take another 20 minutes. At best, we could talk about a hyper-velocity train between Tallinn and Riga, with an intermediate stop in Valga. It costs up to 1,500 kroons to travel 100 km by train on the fast railways of Germany. Such an amount is far beyond the budget of a normal Estonian.

In addition, there will probably never be enough passengers willing to travel to Valga-Valka in order to justify an investment of billions of kroons in hyper-velocity railway connections.

For the same reason, many other transport-related innovative solutions will also be inaccessible in Estonia. At this point, we could point out, for example, the idea of undersea tunnels to Finland or Saaremaa. According to Süld, the tunnel projects are discussed most vividly only before elections, when fascinating ideas allow politicians to shine in front of the people.

Estonian Railways is currently working on how to move the passenger trains of Estonia at a speed up to 160 km/h and without a driver. 120 km/h could be considered an intermediate goal. But in order to do this, the railway systems, which were created 100 years ago by Russian engineers, need to be combined with modern Western technology. Indeed, Estonian Railways has succeeded in this task.

In order to reach high velocities on traditional railways, it is necessary to guarantee very accurate train location and notification of train movements. The normal GPS system cannot be utilized with the high speeds and masses used on railways, as it guarantees an accuracy of only 5 metres. Alternatively, a traditional system based on wires is used, where counter plates the size of a small sheet of paper are installed on the rails at intervals of three metres; the plates are activated by passing trains.

This developmental work could be compared to the weapons industry. The barrel of a gun or cannon has basically remained the same since the First World War, but the efficiency has been continuously increased by modernizing the ammunition and the targeting device.

The Estonian border touching the Great Wall of China...

Text: Rein Sikk, *Eesti Päevaleht*
Photos: Enterprise Estonia

Valle Feldmann, the representative of Enterprise Estonia in China, states that the lines from the popular bawdy folk song about the Estonian border touching the Great Wall of China are coming true. Economic relations are developing literally day by day.

I started thinking what a person in Estonia knows about China, and I recalled the Great Wall of China, the Chinese sneakers that were, during the Soviet times, very well known here, and then the Beijing Olympic Games. In your opinion, what should an Estonian definitely know about China?

Most Estonians are afraid of China because, when they compare the relative sizes of the two countries, China does indeed look big and scary. One point three billion people...

But if we compare China to the European Union, it is not

so bad, as the ratio is one to two. The territory of China is twice as big as that of the European Union and China is two and a half times larger by population, and these numbers are not so far apart. In addition, there are twenty-three provinces in China, five autonomous regions, four direct-controlled municipalities and Hong Kong and Macao. In the European Union, there are 27 member states. So it all works out.

It is good that you mentioned the European Union, as I wonder why an Estonian should do business in China – a

Valle Feldmann, the representative of Enterprise Estonia in China, ...



...in the Port of Ningbo ...



...and in Hong Kong.



foreign country with an unfamiliar culture – when, instead, he or she can do business in the European Union, right here in Europe.

First, it is in the nature of Estonians to go everywhere and explore the world. But this world around us in Europe is unstable at the moment. Take the Finnish economy, for example, which weakened in the direction of Europe, but developed further in the direction of Russia and China. On this basis, the role of both Russia and China in the Estonian economy could be bigger. After all, China is becoming a

major power in the world. In twenty or thirty years, China will be the number one country in the world. And we must be prepared. We have to be represented there.

By the way, China is not that far – the route from Tallinn to China is the most direct one from Europe. And if we had our own airline going between Tallinn and China, which would fly one round-trip a day, for example, it would be great. So far, only Helsinki can do that. But from Tallinn the Chinese could travel to other European countries as well.

But still – a different culture, different mindset, different thinking.

Which differences? The people are mainly polite, benevolent and helpful, just like people everywhere. Actually, having worked there for two years, I would say it is hard to find any significant differences.

Well, in order for the representation of Enterprise Estonia to work in China, it had to be registered and it took me a whole year to do that! The Chinese bureaucracy is very flexible, which means that you do not get a direct yes or no answer, but you can always negotiate and bargain.

Does the joint red past of Estonia and China make it easier to communicate?

In China, people know Estonia, though one might not think so. You do not have to explain where Estonia is. In Chinese, Estonia is “Aisania” and people know it. The English name “Estonia” is not known. The first syllable of our name “Aisania” – “ai” – means “to love”, which is good.

It seems that the collapse of the Soviet Union has been explained enough for Estonia to be known. And it is known that we have good relations with China.

The question does indeed arise: Estonia is so small, why do business with us? But at the same time, we explain that when you start doing business in Estonia, the entire European Union is open, not to mention the fact that Russia is next to us. These are good arguments.

Enterprise Estonia has invested quite a lot of money in its activities in China. Why?

We have, indeed, contributed a lot to the relations with China. In November, the transport and logistics sector visited Nanjing, Shanghai and Hong Kong. Enterprise Estonia supported the undertaking with half a million kroons. This was supplemented by a similar amount when the Estonian Minister of Economic Affairs and Communications went to China with his business delegation in October 2007. We



support practically everyone who goes to China. We even support importers to prevent them from stumbling upon any crooks, because the losses to the Estonian economy could be larger than our support.

How many Estonian companies have discovered China?

There are dozens and dozens of importers. But the logistics and transport sector is particularly important, for example, the cooperation agreement between the Port of Tallinn and the Port of Ningbo, which is the fourth largest port in the world. A container terminal and a distribution centre for goods are planned to be built in Tallinn for the Chinese. The project has been approved by both the Estonian and the Chinese prime ministers. On the day after our discuss thrower Gert Kanter got a gold medal at the Beijing Olympic Games, the prime ministers of both countries met and approved the project. We can be proud of that.

So the Olympic win facilitated the economic relations.

Definitely. The port plan, when implemented, will radically change the economic environment in the Baltic Sea region, from where Chinese goods will be moving along to Russia

and elsewhere. This makes Estonia a considerable force. At the moment, no ocean ships come to the Baltic Sea, but such an opportunity will raise the interest of all countries located on the Baltic Sea.

So, which port in Europe could the future Tallinn be compared to?

Well, we will never compete with Rotterdam and Hamburg. We will remain a port with local importance, but our importance will significantly increase. Indeed, we do not have the best of relations with Russia and goods are not moving very well between Estonia and Russia. But if we have a large distribution centre here and we get into trouble in Russia, China would be there to support us. We wouldn't have to be nervous, because it would be up to the Chinese to organise how Chinese goods would get to Russia fast via Tallinn.

And it is cheaper for China to transport goods by sea rather than by rail?

It is several times cheaper. The Port of Tallinn, by the way, has already been working with China for a long time. The Chinese came here to examine things and found that the

Economic relations between Estonia and China

The interest of China in Estonia is due to the favourable geographical location of Estonia, good transport conditions and a strong scientific-technical potential; the Chinese have expressed their interest in cooperation in the transit, timber, fishing and construction material industries and in the processing of oil shale.

The interest of Estonia in China is due to the investment potential of China, the opportunity to do subcontracting work, the enormous size of the Chinese market and the availability of goods at competitive prices and of improving quality.

According to Enterprise Estonia, more than 500 companies are engaged in importing from China; there are a couple of hundred exporters.

Klementi and Baltika, which are two of the largest clothing industries in

Estonia, produce a third of their products in China, by subcontracting. The laminated timber factory AS Scandi Floori Kurista exports 90% of its products to China.

In the first five years of this century, the trade turnover with China increased by almost a factor of 19; export increased by about a factor of seven and imports by a factor of 29. Lately, of the European Union member states, the trade of China with Estonia has been increasing the fastest.

Estonia is annually visited by 500-1,000 tourists from China; they mainly stay in Tallinn, but have also started visiting other regions in Estonia, such as Ida-Viru and Lääne-Viru Counties.

Source: the Estonian Embassy in Beijing

top port candidate in the region was Tallinn, followed by Gdańsk in Poland.

So when can the digging begin?

In the conditions of the financial crisis, no-one dares to make specific forecasts. But a year will pass by fast even, if the project slows down a bit.

The crisis lowers the price of construction.

It does, and the Port of Tallinn will continue promoting itself in China. Of course, if at the moment a Chinese person comes to our largest port, he or she will ask: "Excuse me, where is the port?" But this will change, too...

What else is worth mentioning about Estonia-China projects?

The number of Chinese students in Estonia is increasing very fast. At the moment, there is a Chinese student in almost all Estonian higher education schools. Education is an Estonian export which has a very high profit margin. First, having Chinese students here helps support the Estonian higher education schools, as the Chinese pay to study here. Second, it introduces Estonia to the Chinese. Of course, some of them will leave, but that's to be expected.

Why is education acquired here attractive to Chinese students? Why should Estonia matter to a student coming from Asia?

At first sight, it doesn't. Mostly, they choose the United Kingdom and then France. But as there are so many Chinese students wishing to study in Europe, they go everywhere. Plus, studying in Estonia is several times cheaper than in the UK.

True, our universities are not listed among the world's best,

but the number of Chinese students in Estonia is increasing, and it may be even four or five-fold in a couple of years. And the potential number of Chinese students in the future, say five thousand, will help to raise the interest of local people in China and the Chinese language.

Delegations from our higher education schools have been to China and are active. Several Estonian universities even have their own representatives in China.

In addition, our IT sector is represented in China. Representatives of the well-known Internet telephone firm Skype established their company in China. First, they wanted to bring Chinese specialists here, but when it turned out that bringing a labour force from China was too complicated, they established the company there. Other information technology companies have also visited China to explore the situation. This is the main step when thinking about doing business with China – you must first visit it.

Why?

China is such a different world that you have to visit it. And if after being there and communicating with the people you still have the wish to do business, then you should start. I have met people who do not like this environment, starting with the food, population and cultural environment. You have to experience it to understand it. When doing business with China, the emotional aspect is very important.

And you need patience as well. The patient nature of Estonians is similar to that of the Chinese. The Finns are also good at doing business with China due to their calm nature. There are more than six hundred Finns in Shanghai and they are very successful. All major Finnish companies, including Nokia, are represented there and are expanding.

So our slow nature can be an asset for us in China?

The greatest achievement and the greatest mistake

Valle Feldmann, how long will you stay in China?

I went to work in China at the beginning of 2007 and my contract lasts until the end of 2010. When, in 2006, I was offered this position, the answer had to be given quickly and I said yes, as it looked so appealing. I have worked at the Ministry of Foreign Affairs, the news agency BNS and have also been active in recruitment and consultancy companies.

Did you have to have a good command of Chinese before you went to China?

No, not at all. I am studying it, but my everyday language is English, as the Chinese prefer to communicate in English with white people. So, a language barrier is definitely not a hindrance to an entrepreneur.

What does your everyday work in China involve?

The establishment of contacts and networks, and the organisation of the visits of delegations. Lately, a couple of Estonian delegations a month have been visiting China and this takes up a lot of time. I really like that one can negotiate anything in China and that all prices can be bargained on. It makes the work special.

What is your greatest achievement and greatest mistake?

When I went to China, I thought I would learn the language in half a year, but I was really wrong there. As everyone wants to speak English with me, it has made me lazy. The greatest achievement has been the seminar, organised in the framework of the Chinese mission, for our transport sector (Hong Kong, Ningbo and Dalian) in October 2007. After the visit, the Port of Tallinn and the Port of Ningbo entered into a cooperation agreement for the establishment of a container terminal and distribution centre in Estonia.



Exactly. In China, there is no need to rush things: more haste, less speed, as the Estonian proverb goes. And the results will be there.

Our entrepreneurs have also visited tourism fairs in China...

... and we really want Chinese tourists here. However, the Chinese do not visit Europe that much yet. Still – at the moment, each year a hundred thousand Chinese tourists visit Finland, which is not a small number. And due to Estonia joining the Schengen area, the number of Chinese in Estonia will also increase.

What could fascinate a Chinese person about Estonia?

A Chinese person first goes to Hong Kong and Macao, then Asia and the USA, and then Europe. Only a few come to northern Europe. But as the Chinese are such a populous nation, the small percentage who come here are a great number for us.

Estonia is visited through Helsinki, St. Petersburg and Hungary. Of course, all European states are beautiful, but if a person has already visited other places in Europe, they want to see something else as well, something northern, for example. And if they come, then it is on a package tour that passes through several countries. There is not much in Estonia that would really fascinate Chinese tourists, but we are a small and decent European Union member state, with our Tallinn Old Town and nature. This is a strength.

A seemingly impossible task brought VKG Oil the Innovator 2008 award

Text: Kristiina Viiron, *Hei*

Photos: Terje Lepp, *Eesti Päevaleht*

When Anatoly Tshepelevitsh started working in VKG Oil AS as the Project Manager of the Development Department five years ago, Jaanus Purga, a Member of the Board gave him the task of finding a method for separating 2-methylresorcin, a valuable and highly demanded raw material used in the cosmetics and pharmaceutical industry, from the water-soluble phenols generated in the course of the thermal treatment of oil shale.

To be honest, the newly appointed Project Manager did not have much faith in the possibility of finding a solution, because such a method of separation had not yet been discovered





The laboratory is conducting tests on methods to separate various other resorcin. Nadezhda Merkulova is keeping an eye on the process.

in the world, and 2-methylresorcin is generally generated in the course of a chemical synthesis.

This year, however, VKG Oil received the Innovator 2008 award from Enterprise Estonia for the implementation of an innovative technology for separating resorcin. The process that had seemed impossible at first turned out to be possible after all. Therefore, since last January, VKG Oil has been engaged in the industrial production of 2-methylresorcin, which is used in dark hair dyes and which gives the hair a reddish-brown tint.

“It was a difficult task, but we gave it a try and eventually succeeded,” says Anatoly Tshepelevitsh, who spent many long days in the company’s laboratory trying to come up with a method for separating 2-methylresorcin. The truth is that the first two to ten grams of the substance were not particularly pure, their purity level being only 30%, but what they did do was prove that the initial task – to separate 2-methylresorcin – had been fulfilled. The next step was to find a way to separate 100% pure samples of the substance.

“In order to get purer and larger samples of the substance I needed to understand which parameters were influencing the process,” Tshepelevitsh explains. “I had to find out what to do first - to distil or to crystallize. And if I was to crystallize, I had to figure out which dilutions to use.”

Pondering and trying out different methods, Tshepelevitsh spent long hours and often even weekends in the laboratory. When the first test batches were produced, his working days were often no shorter than thirty hours – the excitement made it impossible for him to stop in mid-run - and the result was well worth the effort. Tshepelevitsh learned how to separate highly pure 2-methylresorcin in only a couple of months.

The laboratory soon produced its first 300 kilograms of the substance, sold it to Asian countries and the buyers were very pleased with the purchase.

From the point of view of the company’s financial development, the achievement was highly significant – the price of pure fine chemicals is tens and even hundreds of times higher than the price of oil shale. Moreover,

fine chemistry is actually a true bonus because 2-methylresorcin and other similar resorcin are separated from the water-soluble phenols generated in the course of the thermal treatment of oil shale, or, in other words, from the residual products of the oil industry.

A task that seemed impossible

Enterprise Estonia, to whom VKG Oil submitted an application for the financial aid they needed for the development of the industrial technology to separate 2-methylresorcin, was sceptical about the aim of the company at first, regarding it as an excessively optimistic goal. Summary water-soluble phenols contain only approximately 2% of 2-methylresorcin, and both the separation and the concentration of the substance to a high level of purity was considered technically impossible. The company, however, was able to prove otherwise, on the basis of the test results achieved in its own laboratories and, therefore, the company received a positive answer from Enterprise Estonia.

“We devised a technological plan and



Anatoly Tshepelevitsh, the Project Manager of VKG Oil AS, received the Innovator 2008 award from Enterprise Estonia for the implementation of an innovative technology for separating resorcin.

now we are producing 2-methylresorcin in large quantities, up to two tons a month,” Tshepelevitsh says. The company invested approximately 20 million kroons in the development of the production process and the construction of the technological equipment. Other methods for separating resorcin have been developed in VKG Oil’s laboratories, among them the method for separating 5-methylresorcin, which is used in the cosmetics and analytics industry and which, similarly to 2-methylresorcin, is also being produced for sale.

The laboratory is also conducting tests on methods to separate various other resorcin. For example, the company has succeeded in separating a couple of kilograms of highly pure 2,4-dimethylresorcin, which is used in the dyeing of furs. There is also hope that in the near future the company will be able to separate highly pure 4-methylresorcin, which is used in the pharmaceutical industry and in hair dyes, and which is an extremely valuable substance.

At the moment, the company is only theoretically ready for the mass industrial production of these substances,

as the installation of the equipment needed for the production of phenols has not yet been completed.

New appliance being installed

These days, Anatoly does not work in the laboratory as often as he used to; instead, it is Nadezhda Merkulova who is bustling about on the premises. The days of the Project Manager are filled with designing and constructing the new industrial appliance and organising the supply of the necessary equipment. “My job is to make sure we know what kind of supplies are needed and from whom they can be purchased. The process involves more than 80 machines, which need to be connected to one another by tubes”, Tshepelevitsh explains. In other words – everything achieved in the laboratory needs to be industrially manufacturable and, naturally, work must be undertaken in a productive manner as well.

The company hopes that it will be able to put the new equipment into use during the next year, that the production of the substance will become more economical and that the manufactur-

ing costs of the product will become lower, since, in addition to 2-methylresorcin, the company will start separating other resorcin as well.

Today, the company is already producing 2-methylresorcin for a “bargain price”, but the manufacturing costs of the first small batches were many times higher than the actual selling price. From a financial perspective, the development of fine chemistry is a very lucrative undertaking, since buyers pay a high price for the products – 35 Euros per kilogram.

VKG Oil sells its products of fine chemistry mainly through dealers. Therefore, the 2-methylresorcin found in the brownish hair dye produced by L’Oréal might be produced in Kohtla-Järve, since many manufacturers of cosmetic products buy their raw materials from dealers.

In future, the company plans to find ways to sell its products directly to customers, although this is not an easy goal for an Estonian company. It is a remarkable achievement if customers even agree to consider an offer and, in this particular aspect at least, things are looking promising.

Estonian companies forced to cooperate

Text: Mikk Salu, *Hei*

Photos:

Marko Mumm, *Eesti Päevaleht*;

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Cooperation between companies will help build a more complex and competitive economy

“First, we need one fool who will start doing it for free,” says Urmas Varblane, a professor at Tartu University. The discussion is about how to make Estonian companies cooperate better with each other and the positive example Varblane is referring to is the long-standing leading figure of the Federation of Estonian Engineering Industry, Aleksei Hõbemägi (81). The engineering industry, and Hõbemägi individually, set the example of how to break through the barrier of distrust and start cooperating.

Theory is one thing – practice another

In January 2008, the Estonian Development Fund presented the report “The current situation and future outlook of the competitiveness of the Estonian economy”, prepared in cooperation by many researchers, led by Professor Varblane. This is the most thorough and practical piece of work done on the economic situation in Estonia. Various forms of the word “cooperation” are used a total of 49 times in the 70-page report. One of the main conclusions of that report is that companies do not cooperate sufficiently and that cooperation improves competitiveness and efficiency.

But theory is one thing – practice another. Erkki Raasuke, the head of Swedbank in the Baltic States, discussed the

development of Estonian companies in a recent interview and stated that improved mutual cooperation is an easy way to increase competitiveness. “Companies operating in the same sector have a lot to gain from improved mutual cooperation. They can purchase together, enter foreign markets together, and learn from each other. There are good examples of how so much more could be done with relatively little effort,” said Raasuke.

A short while later, Priit Perens, the head of Swedbank Estonia, was asked about his boss’s comments on cooperation, in the context of what Swedbank is doing to increase cooperation, and the gist of his reply was: “Well... we are hoping that other companies will cooperate more with us.”



Professor Varblane knows that cooperation improves competitiveness and efficiency.

This is the reality. In principle, people realise that cooperation will bring benefits, but the practical implementation is difficult. When I say to Professor Varblane that it is always easy to point to enterprises who are not working hard enough and then ask how things are in academic circles, the professor honestly admits: “Exactly, cooperation between universities is also very difficult.”

There are many reasons for the lack of cooperation. One explanation is certainly the 50 years of occupation, which broke down social ties and sowed distrust. More recent times have also not been very favourable for increasing cooperation. Fifteen years ago, the first to succeed in the brand-new business environment were those who were able to overcome any obstacles alone, not counting on anyone else. Individual ability to succeed was a concrete competitive advantage and this turned into a life lesson. Siim Sikkut, an economic expert at the Development Fund, points out one simple reason: “It is simply because no one has started doing it. We need someone to take the first step.”

There are many possible forms of cooperation. The first option is common procurements, where concrete benefits are quite obvious. If we take 30 small companies building

log cabins, then they would be quoted one price when purchasing raw material from the timber market individually, but a completely different price when purchasing jointly. They would achieve an entirely different level of negotiating power and get a more favourable price. The same applies to the printing industry and paper procurement, and the metal industry and metal procurement. Small and medium-sized companies (in global terms, all the companies in Estonia are in this class) can thus create an economy of scale, which is the advantage employed by large international corporations.

Cooperation can similarly be used when entering foreign markets, by pooling marketing and advertising expenses. The most obvious example is jointly financing a showroom at trade shows. But the same applies to gathering and processing information together: training courses, and joint cooperation with educational institutions or the IT and logistics companies servicing that sector. This definitely includes innovation, which otherwise is very complicated and costly – it can be achieved together. Even equipment and machinery can be used jointly. When one company is using a piece of equipment only on a half-time basis,

Finnish export power

In 1524, the Turkish sultan Sulem I cancelled the ban on coffee drinking imposed in the Arab world by conservative imams. Later, coffee was brought to Europe both by Turkish invaders and merchants. It is clear that the coffee tradition in Turkey is very special. Three thousand kilometres to the north, there is the small country of Finland, the culinary inability of which has been the laughing stock of both Italian and French heads of state. Nevertheless, if you travel to Turkey, you will find cafes of the Finnish Paulig coffee outlet chain Robert's Coffee. This is one example that Finland is not just about Nokia and that there are no overly complicated export markets, only unskilled exporters. Last year, the Turkish President visited Estonia with an entourage of businessmen. The Turks were surprised that the Estonian entrepreneurs were only mildly interested in meeting them.

it would be advantageous to rent it out for half the time, regardless of the fact that this would mean renting to a competitor. In the end, both companies win.

Exporting is the most common example where companies see the benefits of cooperation. This understanding has spread also on the state level, e.g. the export subsidy from Enterprise Estonia, offered under the title of joint market-

Hanno Lindpere, an Ernst&Young partner in Estonia.



ing, which forces companies to cooperate. Cooperation and clustering are terms whose frequency in the vocabulary of politicians, heads of business organisations and experts has increased multi-fold over the last two years. The first concrete programmes have been established, money allocated, and dedicated people employed. And again, it is not just about the money saved, but also about uniting knowledge, skills and trust.

Ernst & Young is an international business consultancy company with 135,000 employees. There are not many countries in the world where they are not represented. They have a huge amount of knowledge, information and experience at their disposal. If you want to enter a foreign market, ask them for advice. But, as always, good advice does not come cheap and is often difficult to understand and apply on one's own. Hanno Lindpere, an Ernst & Young partner in Estonia, says that there are many large companies among their clients. "And I'm getting instructions from Stockholm or London," says Lindpere. "But I would like to give the same kind of instructions. I would like to see more international groups growing out of Estonia, where we could play a more substantial role."

The Estonian market is small. Business can often be conducted on an intuitive basis - all the necessary information and advice comes from a couple of friends, a couple of business partners and a couple of customers. And it works. But if you want to go outside Estonia, the amount of information multiplies, and systems become so complicated that you lack the skills and finances to chew your way through it all on your own. "I can't recall any incidents from my personal practice of companies asking for export advice from us, either jointly or through professional associations. That advice is otherwise unavailable, incomprehensible or too expensive," Tarmo Toiger, leading consultant at Ernst & Young adds.

Cooperation as voluntary protectionism

Over the years, I have interviewed dozens of Estonian exporters. The natural foreign markets for them are Latvia and Lithuania, followed by Ukraine, Russia and lately also the Balkan countries. That is a rational choice. But right next to us are the very rich Scandinavian and Western European countries. With a few exceptions, we are mostly linked to them through subcontracted work. The companies' explanations of why it is difficult to enter these markets are quite similar: "These are mature markets. Everything is closely linked there."



It is this “everything is closely linked” that is a sign of a complicated economy willing to cooperate. In this context, it even fulfils a certain protectionist function. There are dozens of visible and invisible threads, cooperation and partnerships connecting individual companies both within the same sector and across sectors. This creates stability, development and protection.

Subcontracting often receives unwarranted criticism, although the question lies in the content of this term.



“Final production, especially of large complex machinery, has become so demanding that one company is usually not capable of producing on its own,” says Aleksei Hõbemägi from the Federation of Engineering Industry. In practice, the dilemma is: you’re either a subcontractor who can be shoved aside like a building block when the need arises, or a member of a network, in which case pushing you aside would tear connecting seams in other places.

Furniture producers to jointly manage production capacities

Priit Tamm, *Estonian Furniture Industry Association, AS Standard*

Furniture producers have been cooperating, mostly in the area of managing capacities. Results include, for example, the fact that they sometimes receive orders (particularly export orders) they would not be able to fulfil at their own individual output levels. Thus, they offer these projects up for participation by other companies.

We are currently developing this further. We are preparing a database of individual producers’ capacities and equipment in order to expand this kind of cooperation even further.

In the custom furniture business, we currently have about 20 companies cooperating in some way. But if we consider the fact that there are about 370 companies in Estonia with “production of furniture” as their registered core business, at least half of them could definitely be members of cooperation networks. So there is surely room for development.

Joint marketing and export activities are another matter. Seventy per cent of our business is exported. The experience of other countries also shows that marketing and export activities are performed cooperatively, and definitely jointly with the state. Speaking of cooperation, we have to honestly admit that the quality level of many Estonian furniture producers does not yet meet export requirements.

Some time in the future we may be able to talk about joint raw material procurements or, for example, joint use and procurement of equipment but, at the moment, we simply aren’t ready.

Ultra-expensive equipment can be purchased jointly

Jüri Riives, *Federation of Estonian Engineering Industry, Eesti Talleks*

It is indeed true that our companies are not very willing to cooperate, and I imagine that they are even less willing in other sectors. I am quite familiar with the Finnish engineering industry and know a little about the German engineering industry. Cooperation there is on an entirely different level.

And they are not really performing any miracles. This involves event marketing, jointly looking for new markets, and cooperation with the state. Joint development, joint innovation and the joint procurement of new technologies.

Perhaps the most advanced cooperation in Estonia can be seen in the areas of training, obtaining information and exploring foreign markets. We have been to trade shows together, held joint training courses and organised joint trips to e.g. Germany. A good example here is the Estonian tool manufacturers, who are most visibly moving towards cluster-like cooperation.

But the near future could bring news about joint raw material procurements and joint acquisition of equipment. I know that a few things are currently in the works. Modern engineering equipment is very expensive. For example, an automatic welding centre may well cost 12 million EEK.

But in regards to such 10-20 million EEK equipment, the problem is not only in the lack of individual financial purchasing power. I can say with 100% certainty that such machinery would be used at less than half capacity for at least the first year and a half. We do not yet have the customers and the product portfolio to put such equipment to maximum use. Therefore, it would be less risky to purchase jointly, build one’s own product line, become familiar the machine and then – when the need grows greater – procure it just for the company itself.

Great Britain invites Estonian companies

Text: Erik Aru, *Hei*

Photos: Terje Lepp, Rene Suurkaev, *Eesti Päevaleht*

Susan Haird, Deputy Manager of UK Trade & Investment, has called upon Estonian companies to invest in Great Britain. The agency offers advice and assistance in getting your business started in the UK and in developing its activities outside the UK as well. There is also an over hundred per cent income tax benefit for research and development activity.

You have paid visits to several companies over here. What are your first impressions?

My first impression is that Estonia has a very lively economy, which has been growing rapidly for years. I am aware that, recently, it has somewhat slowed down. But you have very enterprising, innovative, world-class companies. The ones I have seen have really left an impression on me, and I believe Estonia and the United Kingdom have excellent opportunities to do business together.

Which sectors seem the most interesting ones to you?

In my opinion, and that of the staff of the British Embassy in Estonia, if we look at the strong characteristics of the Estonian economy and the government's desire to move towards a more knowledge-based economy, the strong sectors are biology and ICT. And in the UK, both biology and ICT are on a very strong footing. I think Estonian companies have excellent opportunities to find partners in the UK, to expand there and to do great business. Areas such as e-healthcare, e-government and other e-solutions are incredibly developed in Estonia. I think you have many world-class companies which could really do very well in the UK. Our export to Estonia is divided between many sectors, but again biology, ICT, the environment and education are fields which offer many opportunities to gain mutual benefit from trade and investment.

There is a lot of talk in Estonia about whether and how to

select the priority areas for government investment. What is the situation like in the UK?

Our approach to economic investment is two-fold. On the one hand, the UK government believes very strongly in the advantages of the market economy and tries to create the right macro-economic conditions to enable businesses to thrive. This applies to British companies being successful nationally and becoming international, as well as creating the right climate to attract foreign investment. Of course the UK is the target of a lot of foreign direct investment, the second biggest after the United States and the first in Europe. The key is to create the right macro economic climate for doing business. We think we have the best business environment – an excellent scientific basis, a stable inflation rate, a good tax system and so forth.

On the other hand, what does my organisation do? There are two things: we help companies which are based in the UK to enter the global market and we help to attract foreign investment into the country. As a part of this, we market Great Britain as a great place to do business. And to come back to your question, this involves us selecting a number of sectors. At the moment, we have selected five sectors internationally and soon two more will follow.

We believe that the UK has a good reputation which we can rely on internationally, in order to develop British export and cooperation with British companies, and to help attract investment into Britain. Those five sectors are financial services, ICT, biology, energy and the creative industries. Soon



high-tech heavy industry and everything linked to climate change will be added to those areas.

Hence, internationally, we have selected five sectors, soon to be seven. And it seems to me that it does not resemble the 1960s approach, where they tried to identify the winners.

Many people would argue that no one is clever enough to select the right sectors and you should not play with the market. What is your response to them?

I think there is a significant difference in dimension, isn't there? We do not make an effort to select winners and change the market. But we help companies to cooperate nationally and internationally. Therefore, the sector marketing strategies which I talked about have been created in cooperation with the representatives of enterprise, developed together with companies. We link up companies, help them to identify the sales arguments in their sector in the UK and assist in promoting their strengths internationally. We believe that if we manage to create the right umbrella for a sector, then companies can thrive under it. It seems to me that this is not as easy as doing nothing, but at the same time it does not alter the market significantly. It is collaboration with companies in order to make the whole larger than the sum of its parts.

Have you already helped some Estonian companies to get started in the UK?

Indeed, we have helped a few Estonian companies to set up their businesses and to grow in the UK. And one of them has not only expanded to the UK but it is also entering the US market from its British base. And the companies which invest in the UK can access the services of my organisation, which have been created to help them grow internationally. Not only can we help Estonian companies to come to the UK and to start up and grow their businesses, to organise research and development activities, we can also help them internationally. We have a staff network in 99 countries which would help the Estonian companies active in the UK

to take their business to any one of those markets. Through us, they can participate in trade missions, participate in trade fairs under the UKTI umbrella, accompany ministers on foreign tours, and order market research or other kinds of assistance which they may need from embassies, representations or consulates.

You have helped very different companies to enter the UK market – a hair salon, an investment bank...

And a medical appliances manufacturer, all sorts of companies – for us everyone is welcome. One Estonian company is involved in the pilot project of mobile parking in Reading. Skype, of course, is represented.

But I think that Great Britain is a very natural partner for Estonian companies. Of course, you all speak English. It is legendary how easy it is to do business in the UK. We are located between time zones – Asia there, USA there, Middle East there. There are great flight connections with the whole world. There is a very skilled labour force. If Estonian companies want to find research and development partners in the UK, we can link them up with universities which do research in very specific fields. If they need partners, we have a worldwide partnership scheme to help find partners in the UK. There are very many ways in which we can help them to start up and grow their businesses.

How is your help structured? Is it mainly consultation or do you also help with financing?

If a company wants to invest in Great Britain, at first we can make an offer on the basis of its wishes and requirements. We can make recommendations about where in the UK would be a comfortable location for them. We cooperate very closely with nine regional development agencies in England and three in Scotland, Wales and Northern Ireland. In cooperation with them, we can make very specific recommendations about the location, we can direct them to service companies, to lawyers and accountants, we can

Very positive interaction

Last year the hair salon chain salon+, which until then had been active only in the Baltic States, opened its first salon in the centre of London. The idea came from the company's partners in the UK, who had an appropriate location in the heart of the capital in mind. As the chain was successful in the Baltics, the British partners believed that the same concept could be used to open a salon in London. According to Helena Lõhmus, the manager of the chain of hairdressing salons Salon+, UKTI contacted the company and offered its assistance. "This interaction has been really positive," said Lõhmus. Salon+ received consultation about the peculiarities of British legislation, as well as advice regarding job contracts and taxation.



offer consultations on taxes and labour rights, and so on. In certain circumstances we can also provide financial support in setting up a company. If the company is already located in the UK, all our services are available to them and some of them include financial support. For example, they might meet the requirements for receiving support to visit foreign fairs and foreign missions. They can use our services at great discount prices – their cost does not reflect the market price. Therefore, it is a combination of expert consultation and, in some cases, financial support.

What is the situation with research and development cooperation? Of course, you offer advice as you have already mentioned, but is there also a financial side?

Let me start by explaining how it works in the home market and then expand it to abroad. We have a tax benefits system (up to a 150% income tax benefit – *ed.*) to support research and development activity in the UK. Of course, we have world-class universities, high level research and development activity, and many companies which have sprung from universities. On the foreign side, we have recruited twenty RDA specialists in the last year. What they can do together with Estonian companies is to find out where in the UK they do research and development work relevant to that particular company, and encourage that company to set up in the UK. It does not include financing activities in Tallinn; its aim is to grow research and development activity in Great Britain, as you probably guessed.

Your description of Estonian companies was very positive. Did you detect any problems?

You can hardly expect the team here to introduce me to problematic companies! It seems to me that in many small countries the key is for businesses to have the right kind of ambitions at the right time. In a small market, you have to be almost born global if you want to be very successful. By this, I do not mean only looking to the other Baltic States or Scandinavia, but from early on thinking about how to reach the UK market and the US market, because innovative companies are the most well off and the bigger the turnover related to RDA and inno-

vation costs, the more competitive the company is.

Therefore, I think that the recommendation to many small businesses is to look up and have the widest possible horizon – at the right moment, when it corresponds to your opportunities. I am not saying that a company should do it so fast that it fails and goes bankrupt. But very early, when it's ready, it should seek global partners, and try to invest abroad. I sense that there is world-class talent, world-class intellectual property and really high-flying ideas here. The question is how to turn those into a truly global company.

The second question involves acquiring the necessary capital to get going from the start. Without that, things will be complicated, won't they?

London is a great market for acquiring capital. If you have difficulties acquiring capital here, then looking to a large centre like London could be a great idea – there are many venture capitalists there.

It may be a national peculiarity. One Estonian banker once said that this is how Estonians see the world: the sea to the north, the sea to the west, Russia in the east – that's worse than the sea – and, therefore, we must go to Latvia.

I would recommend making the leap straight to Great Britain – that is my message. I believe that our economies are well suited and our people are well suited. The skills of our labour force are on similar levels and I believe there are many opportunities for joint business.

World-class ambulance vehicles manufactured in Estonia



Text: Ille Grün-Ots

Photos: Rauno Volmar, Eesti Päevaleht

If a car had “Made in Estonia” written on it, people would certainly think that it was yet another advertisement for a sock or sausage factory. You know, as if the image of the actual socks or sausages, which was initially placed next to the sentence, had simply worn off. If a Mercedes had “Made in Estonia” written on it, people would most probably burst out laughing. No such thing has been written on any Mercedes models. Only in modestly small print and with the help of an LED light can one see the word “Silwi” on top of the fender of the vehicle.

The vehicle itself, a Mercedes-Benz Sprinter, has been rebuilt as an ambulance in no place other than Estonia, by Silvi Autoehituse AS, a subsidiary of Silberauto. And, for the first time in Estonia’s motor manufacturing history, an ambulance which was rebuilt in such a modern and high-class fashion was taken to, and offered for sale at, an international car fair in Germany.

The first Estonian car manufacturer at the Hanover Fair

“The first thing they asked us was: ‘Have you used an Italian design?’” says Väino Kaldoja, the Chairman of the Executive Board of Silberauto, with some amusement. “To me, this was the best compliment ever - a design that was created by young men from Estonia considered equal to Italian design,” says Kaldoja, expressing his extreme satisfaction with the accomplishments and generously praising Ingmar Sandström, the company’s young Estonian designer. The other members of the team - the electronics engineers, the



builders, the IT specialists, etc - are praised as well.

In reality, Estonian design is a very serious player in the field, but most people in the world are simply unaware of it. Here, Kaldoja points out an interesting analogy... involving hens: "There are those hens that constantly cluck but never lay eggs. There are those hens that lay eggs and cluck as well. And there are also those hens that lay eggs but do not cluck at all. A typical Estonian, however, is similar to a hen that lays an egg, measures it nine times to make sure it is exactly what it was intended to be, and then has the strength to call out cluck! cluck! twice... and that's it. But, on the basis of this tiny little squeak, the rest of the world ought to know that Estonians have, in fact, pulled off something resembling a wonder of the world." Kaldoja suggests that had, for instance, the Italians accomplished anything similar to what had been achieved by Estonians, they would have started beating their drum long ago, so that the whole world would have heard them. "If we did things in the same way, things would most certainly be much better in Estonia," Kaldoja is convinced.

The IAA car exhibition (*Internationale Automobil Ausstellung*), which was organised by the German Auto Industry Association (VDA), takes place in Germany once a year, focusing alternately on cars and utility vehicles. In 2008, the exhibition was organised in Hanover from 25 September until 2 October, and the focus was on utility vehicles. Next year's exhibition in Frankfurt will focus on cars.

The Hanover exhibition was the largest of its kind in the world, welcoming more than 300,000 visitors. Utility and special vehicles were exhibited by 20,684 companies from all over the world, and all of the leading car makers were represented, including Mercedes-Benz, Volkswagen and Scania.

Erki Siitan, the bus and special vehicle sales manager for Silberauto, says that it was Enterprise Estonia to whom the company was the most grateful for the opportunity to be able to get its ambulances to the exhibition in the first place: "It was Enterprise Estonia that proposed that we

enter the exhibition and it was also they who partially paid for the exhibition spot." Siitan admits that the company had been thinking about participating in the exhibition for quite some time: "Until now, we thought that we had not yet evolved far enough to have a real say in Europe. But it became apparent that we could actually do that. Enterprise Estonia, in fact, has also supported us in the past. With their help, we also visited Düsseldorf, but the medical technology exhibition held there was too specific - x-ray equipment and the like - and there were practically no vehicles represented, so we had no chance of standing out among the other exhibitors. This year in Hanover, however, we managed to get a last minute spot in the hall for special vehicles and this was certainly the best place for us." Siitan seems to be right, since the rescue service providers of various countries were interested in the ambulances and, so far, explicit offers by both European and Asian companies have been made, which backs up the claim. And, what is more, the vehicle exhibited in Hanover had been made on the basis of an earlier order from a Finnish customer.

With a slight grin, Siitan says, "Which country do you think almost a majority of the visitors to our web site who have ended up there after the exhibition come from? From China!" It seems to be a typical copy-paste attempt by the Chinese. Kaldoja adds: "They were swarming around us in groups at the exhibition."

The ambulance as a symbol of cutting edge design and technology

The ambulance in question, which was manufactured by Silwi Autoohituse AS, is a reanimobile built on the basis of the Mercedes-Benz Sprinter 318 CDI - an entirely modern and hi-tech special vehicle, both on the outside and on the inside.

The vehicle has an integrated computer system with Internet access, including screens for the paramedic or doctor as well as for the driver and, what is more, the doctor can control any of the functions of the computer by using a touch screen. There is also a sat-nav unit which makes it



possible to determine the location of the vehicle, as well as that of the person in need of medical attention. “Should the electronic medical history project come to fruition in the future, doctors will immediately be able to find the information regarding patients on the Internet,” says Siitan, expressing a hopeful view of the future.

According to Siitan, in order to turn a regular van into a top-notch ambulance, the designer team had to spend many days in the Tallinn Emergency Medical Service’s vehicles, talking to the doctors of the Tallinn Children’s Hospital, among others (in fact, a year ago the first ambulance of the type mentioned above was built for this particular hospital), in order to find out why one object or another needed to be located exactly where it was located and how to make it easier to rapidly get hold of these objects, etc.

Tõnis Raamets, the Production Manager of Silwi Autoehituse AS talks about the vehicle in more detail. In the course of the rebuilding process, the company found Mercedes’ 3D-files to be very helpful - this means that the people involved no longer had to walk around the car, measuring it with a ruler. All the necessary data has already been entered into a computer, and the process of designing, planning and even working out minor details takes place in the computer - even the automatic workbench receives its programming for creating the planned changes from the computer.

As we mentioned above, the exterior design of the vehicle has also been created by Silwi. “Even the most minor details - such as the alarm lights with LED lamps in them and the interior lighting solution - have been manufactured by us but, of course, the LED lamps are mass produced. And the design and manufacture of the stickers are also our own creation,” Raamets explains.

Where the interior of the ambulance is concerned, Siitan points to the flexible and ergonomic end results. “The interior is made of thermoplastic, which is first subjected to heat and then shaped by using a vacuum. We make the moulds ourselves and Silwi is responsible for the vacuum treatment as well.”

What also stand out are the ultramodern storage compartments, which have all been supplied with sliding doors. The old and experienced players in the field, such as the Germans, who have been manufacturing ambulances for decades, have still not managed to go beyond the idea of using old-fashioned cupboards with regular doors. A modern ambulance also includes a “thermal cupboard” to keep medicine warm that needs to be kept warm, and a refrigerator for medicines that cannot bear regular room temperatures.

Rainer Tamm, the project manager for Silwi Autoehituse’s electronic devices, also points out that if there is a problem in the ambulance’s electrical systems, the mobile phone numbers which are inserted into the system will automatically receive a message. After that, the same telephone number can be used as a remote control device for making the most basic rearrangements to the system. Basically, the entire electrical system of the vehicle has been built on the same principles used in modern “intelligent houses” - if necessary, all the processes can be controlled from one central location. The vehicle has seven control blocks that switch different power consuming items on and off, and all of the control work can be done via a single touch screen. “For instance, you can make the lights brighter or darker, regulate the speed of the ventilator - whatever you feel you need to do,” says Tamm, pointing out only a couple of the functions available.

A total of 80-90% of everything that has been done in the course of the rebuilding of the vehicle has been done by Silwi. This means that the company has cutting edge technology for the processing of metals, plastic and wood at its disposal. The company has its own laser press machine, something which only a select few Estonian companies can lay claim to. The electronic devices used by the company are remarkable as well. For welding purposes, Silwi uses a robot - something that is rather unique in Estonia.

However, Kaldoja believes that skilled people are more important than the robot; he cherishes the people who have contributed whole-heartedly to make the undertaking

CV for the Silwi ambulance vehicle

- **Base vehicle:**
Mercedes-Benz Sprinter 318 CDI
- **Axle to axle:**
3665mm
- **Measures of the interior:**
length 3265mm, width 1780mm, height 1940mm
- **Gross laden weight:**
3500kg
- **Engine:**
2148cm³ (110kw) or 2987cm³ (135kw turbo diesel)



a success, who have learned how to use the equipment and programmes in the course of their work and today are capable of handling high-class technology: “We consider the group of young men who started from scratch and who are now well aware of what product development is all about to be the true treasures of our company. Having something like that is quite rare for an Estonian company, although even Estonia’s president, Toomas-Hendrik Ilves, has suggested that if it is our sincere wish to keep our economy functioning, we should engage in product development.”

Why, for God’s sake, would anybody build cars in Estonia?

This is a question many of us would probably like to ask. But it has been tried before. At one point, in a factory located in Tartu, Russian lorries were turned into bread lorries and buses of the same origin were turned into usable buses. Years ago, there was an attempt to build a Formula 1 car and, if I remember correctly, a small road car was also put together a couple of years ago.

Most probably, the manufacturing of world-class quality vehicles will not be launched in Estonia, for there is neither economic justification nor the financial opportunities to do such a thing. And, in fact, Silberauto could just as easily continue selling imported cars and engage in the maintenance

of the cars which are sold, and not burden itself with coming up with new ideas or with the construction of the fruits of its imagination.

“We at Silwi started from scratch,” Kaldoja says. “This is a genuine Estonian business, there are no foreign investors or anything else of the sort, and we ourselves have invested the 30 million Estonian kroons needed to keep the business running. We have done everything ourselves, from the very first step onwards. And since the basic precondition for know-how is experience, I do believe that we are on the right track. ‘Let us be Estonians, but let us also become Europeans!’- this was the favourite saying of our late former president, Lennart Meri. Today, I would rephrase it in the following manner: ‘Let us be Europeans, but let us also remain Estonians!’ In other words, it is essential for us to find our place in the global economic and political environment but, at the same time, we must not think that

money does not have a home. It does! The money invested in undertakings situated here in Estonia and the money made in Estonia is Estonian money and the future of all of us depends on it.”

Today, Silwi is giving serious consideration to its probable scenarios for future development. On the global scale, the company is but a minor player in the field, in terms of product development. Should the company start an industrial manufacturing process or, in other words, should it start realising its ideas in quantities which are also considered large in the global market? Kaldoja himself comments on this idea: “To a certain point, we are ready for industrial manufacturing, but from that particular point onwards we need the support of society itself: does our country consider such a branch of the economy to be relevant or not? Today, the proportion of investments made by Silberauto, as compared to those made by the Republic of Estonia, are 60 to 1 in favour of Silberauto.”

Not only ambulances

The building of ambulances is not the only thing listed among the products offered by Silwi Autoehituse AS. There are also a number of different, “specialty” buses that cannot be bought directly from the Mercedes-Benz factory - Silwi needs to rebuild each of these buses individually, and on its

own, according to the wishes of the customer. A Mercedes-Benz Sprinter or Vito is used as the base vehicle. All of the rebuilding projects conform to the strict regulations of the original car manufacturer and of the European Union, and the vehicles have a manufacturer's warranty.

Silwi Autoehituse AS, a company that has nine years of experience in the field, builds utility vehicles, such as mini

buses, school buses, general public transport buses, and special ambulances, for the police and for rescue services, as well as the superstructures for lorries - vans, transporters and refrigerator lorries. Until now, Mercedes-Benz models have mainly been used as base vehicles but, upon the request of the customer, the company can also rebuild vehicles made by any other car manufacturer.

School buses and buses for the disabled

According to Tõnis Raamets, the Finns are the most eager to order school buses built by Silwi: "Finnish laws require school buses to also have seats for the disabled." Another major customer is the Republic of Lithuania. The school buses used there need to have at least two seats for the disabled. And since the Lithuanian school bus network is very highly developed, the rebuilt Mercedes buses are purchased in larger quantities; the last order, for instance, was for fifty vehicles. A few buses adjusted to accommodate wheelchairs have been made for Estonian customers as well.

Buses for the disabled have seats with a quick fastening function and the option for fastening wheelchairs. The buses are also supplied with either a lifter or a removable ramp.

TV broadcasting buses

These buses are ordered by FinnSat Oy from Finland, but the end user is Levira Ltd, an Estonian company. According to Raamets, the most expensive part of such buses is the telecommunications equipment, for which Silwi makes the necessary adjustments to the interior furnishing and to the construction of the buses. The buses also have satellite communications systems that enable HD broadcasts to be made all over the world.

Postal buses

Raamets states that, at first, a banking bus was built to provide banking services for the people living in the countryside. The 'post bus' is a more advanced model of such a bus - in addition to numerous bank offices, a number of post offices have been closed and there was an urgent need for a

post office on wheels. In the course of the rebuilding process, a genuine miniature post office has been created: there is a separate room for the customer service worker, a separate room for the parcels, and also a safe. "One woman can easily handle such a bus - and that's exactly the way things are done at the moment," says Raamets, complimenting the postal workers for their exemplary efforts.

In the banking bus and post office on wheels, people can make bank transactions, send letters and collect pensions at any location in Estonia.

Police buses

In general, the police buses are alarm vehicles, with seats for a maximum of five team members and with storage compartments for special equipment. A police bus also has a lockable chamber for transporting offenders, with a partition installed between the chamber and the passenger seats.

Local government on wheels?!

Due to the local government reforms (the merging of rural authorities, etc), a new and interesting idea has been proposed by Lääne County: to make its local government mobile. According to Erki Siitan, a representative of the rural authority can drive personally to the remotest locations within the authority's boundaries, using a bus rebuilt especially for that purpose, so that people can take care of the things that need to be taken care of. The bus has Internet access. In addition, the bus can transport pre-ordered food and basic commodities to the homes of people. "In other words, the rural authority centre and the shop can drive to the doorsteps of people's homes," Siitan says, only half-jokingly.

The rescue board's bus HQ

Currently, negotiations are underway with an Austrian company to start building commando or headquarters buses intended for the use of the rescue board.

A workshop on four wheels

The idea of the workshop is as follows: the bus has been supplied and rebuilt in such a manner that the bus can be driven straight to where the customer is located and vehicles can be repaired on the spot. According to Raamets, the ability to drive the workshop bus to where the customer is located is, in some cases, absolutely essential. Raamets gives an example: "One of our major customers is Eesti Põlevkivi Ltd. And if there is a large vehicle stuck in an underground location, it cannot be removed very easily, which is why carrying out repair work on the spot becomes unavoidable."

Cupboards, tables and vehicle interior finishing touches

In addition to the rebuilding of cars and buses, Silwi Autoehituse AS produces a variety of other products according to the wishes of its customers - the modern technology that is used provides the opportunity to carry out such customised work. The company produces metal furniture - lockers for work clothes, metal benches, work tables and stands - but it also produces warehouse furnishing products (shelf systems) and advertising products (taxi signs, souvenirs etc).

Woodwork is not an unknown territory for Silwi either - the company produces wooden tables, chairs, stands etc, both for workshops and vehicles. In addition, the wall and roof finishing work for vehicles is carried out.

Salmon-skin belt and pikeperch-skin wallet



Boots and a bag made of fish skin in Iida Design fashion-parlour in Tallinn.

The products of the fish-skin company SkinNova, which is based in Pärnu, are used by fashion companies in Estonia and Finland. Salmon skin, which is produced by SkinNova, is used to make ultra-expensive men's shoes by one of the most established names in the British footwear industry - John Lobb - whose products are worn by Charles, Prince of Wales and his father, Prince Philip.

Text: Ille Grün-Ots

Photos: Arno Mikkor, *Eesti Päevaleht*;
Tiit Blaas, *Eesti Ekspress*

If you want to look rich and successful, wearing crocodile-skin shoes and a wristwatch strap to go with them seems to be the common approach. It would also be pretty good if your wallet and other accessories could also be made of crocodile skin. Snakeskin would do just as well.

Unfortunately, this means killing the relevant reptile.

Actually, and not infrequently, the fashion industry does use ordinary animal skin instead of authentic reptile skin, specially treating it and pressing the scale pattern on it.

If you feel sorry for the crocodile and the python, but still desire something authentic and exotic, SkinNova in Pärnu has the solution for you: their tannery produces valuable skin that comes from... fish! And this skin has not been

specially skinned from fish, but is a surplus product from the fishing industry, and until now mostly ended up in a landfill site.

Fish skin is not entirely alien to old Estonians

SkinNova was founded in 2006. In order to start the treatment of fish skin, the company applied for and received 160,000 EEK of European structural funds under the Business Start-up Grant Programme. "We ourselves had to invest several times more," admits Marina Kaas, one of the owners of SkinNova and the vice president of EVEA (Estonian Association of SMEs).

"Tanning fish skin and making various things out of it is not actually something that is entirely unheard of. Icelanders, for instance, have been making things from fish skin for centuries, although the technology has completely changed," says Kaas, clearly not considering the fish-skin business to be anything mind-bogglingly special. It is also known that in Japan shark skin was used to wrap tsukamakis (sword handles).

Fish skin is not entirely alien to Estonians either. "Before WWII, many people wore fish-skin shoes in Estonia - there are quite a few of those who remember that, 'Hey, my mum had shoes like this!' I can't be completely sure myself, but I think that back then they used cod skin, just like in Iceland. There are many historical sources containing references to the peoples in the far north and far east of Russia as "people in fish skin", Kaas concludes, adding more examples from history to back up her claim.

Marina Kaas is satisfied with the company's development so far. "We have achieved quite good results in regard to the quality of our skins. And this is also compared to foreign competitors, of whom there actually are not many. There are a couple of companies in Europe, and the odd few in South America and south-east Asia. But they use different species of fish to make fish-skin products. We mainly use the skins of local fish species from the Baltic Sea, such as salmon, trout, pikeperch and pike.

Both experts and lab tests confirm that those skins which are produced in Estonia are very good in their physical qualities and look rather nice. Fish skin is many times stronger than animal skin, and it is very friction resistant, not really afraid of water and does not lose colour.

Treated fish skin can also be dry-cleaned using methods meant for cleaning leather. The choices for finishing are practically unlimited and we keep discovering new exciting effects on a daily basis."

Marina Kaas thinks it is important that the tanning and finishing chemicals that are used pose as small a hazard to the environment and human health as possible. Therefore, in recent years, the company has developed their technology in that area. "Our main concern is our lack of ability to organise extensive international sales, which requires investments on a similar scale to those already made in production," Kaas says, pointing out a bottleneck in the company's operations.

Fish skin does not stink!

Mati Pedar, one of the founders of SkinNova, has over ten years of fish-skin tanning experience. But according to Kaas, the quality of skin takes you only halfway to success and a major effort must be made to promote the material, as until recently fish skin has not been widely known and used in the fashion industry. Treated fish skin can actually be used for any application where leather is used: footwear, clothes, wallets and handbags, belts, furniture, car upholstery etc. And the entire object does not have to be fish skin - using only a few fish-skin components is sufficient.

"Fish skin - nature-friendly luxury," is the motto of SkinNova. "It rather superbly summarises the specific essence of fish skin. On the one hand, fish skin is as exotic as the skin of reptiles (although considerably more affordable). On the other hand, it does not have as great an effect on the environment as the killing of reptiles for their skin," Kaas explains, and she adds that a lot of effort is still needed to create an image for this material and introduce it into widespread use. "One common prejudice is that fish skin surely stinks of fish. But everyone who sniffs it says that it smells just like tanned leather. Another factor limiting the use of fish skin in mass industry is its size and shape. The pattern and outline of every skin is slightly different, just as in the case of reptiles. Fully automated fitting would, indeed, be problematic with this material." This is why Estonian fish skin has so far been used mainly in design and handicraft products. For instance, the famous St James Street company of handmade shoes, John Lobb, in London makes exclusive men's shoes from SkinNova's salmon-skin. As a side note, we should add that John Lobb's customers also have to part with at least 2,290 pounds sterling (over 45,000 kroons) for shoes made from animal skin.

The Tallinn fashion parlour Iida Design produces fish-skin women's boots, bags and clothes, and the Finnish-Estonian designer team Minna Peltomäki and Galina Riiks make beautiful fish-skin bags. Smaller Estonian leather studios have already made a number of waistcoats, trousers and

Marina Kaas showing the product example of SkinNova.



women's clothes. But fish skin can be used more widely in the fashion industry: the well-known Finnish footwear producer Aaltonen has already produced and successfully sold the first batches of women's footwear with decorative elements made from Estonian salmon skin and pikeperch skin. In cooperation with the leather goods producer AS Kolm from Tartu, a collection of business gifts has been produced, as well as the first women's handbags, and a sample batch of men's belts have been manufactured in Germany. "Those who have seen and felt fish skin and then smelled and tried to use it are usually satisfied with it," says Kaas. Since the beginning of its operations, SkinNova has been cooperating with the fashion design and leather art chairs of the Estonian Academy of Fine Arts. "Artists at the Academy provide great mental support and we are working on both fronts to make fish skin a real fashion hit in Estonia. The use of fish skin is among the master's degree subjects this year," says Kaas, quite hopefully.

Fish-skin apron is appropriate when grilling fish

SkinNova fish skins are made to the quality of leather products, footwear and clothing and can be purchased as single skins or panels. The company's own patented method is used to make transparent leather which can be used in interior design or for making book-covers, printed advertising media, business cards and other such products.

In addition to raw materials, SkinNova has also completed its own finished product collection. The company's Internet shop offers fish-skin gifts, accessories, bags, and so on. There is even an apron for fish grillers. New products are added constantly, especially now, in the lead-up to Christmas.

The prices for fish-skin products are not astronomical (let us forget John Lobb's products for a minute), especially if we consider that the products are handmade and every item is unique. For instance, the most inexpensive business card holder costs only 153 EEK (about 10 EUR). The afore-mentioned apron (salmon skin on a linen lining) is a relatively exclusive item of clothing and costs 2,732 EEK (175 EUR).



Design is not only a decoration on a cup, but also a verb

Text: Kristiina Viiron, *Hei*
Photos: Terje Lepp, *Eesti Päevaleht*

“Design is purely about innovation and it is so easy to apply,” says Ruth-Helene Melioranski, the head of the non-profit organisation *MTÜ Eesti Disainikeskus* (the Design Centre of Estonia).

With the Year of Innovation just around the corner, it is time to look at the practical outcomes of the recently ended Year of Design. Melioranski can list a number of undertakings that were initiated during the Year of Design and which are still in progress today.



The collection of cushions glowing in the dark “Light&Stripes” by Mare Kelpman won the Bruno in the product design category.

The non-profit organisation, *MTÜ Eesti Disainikeskus*, which was established in the spring by the Estonian Academy of Arts, the Tallinn University of Technology, the Estonian Association of Designers, and the Estonian Institute of Design, is a direct outcome of the Year of Design and continues the activities launched last year: the organising of exhibitions,

seminars and think tank sessions, and the publishing of Tallinn’s design map. Melioranski is happy that the interest of entrepreneurs, the public sector and other groups in design has increased substantially since the Year of Design ended. “More and more people are contacting designers,” she says. “Companies are starting to realise that in order to remain competi-



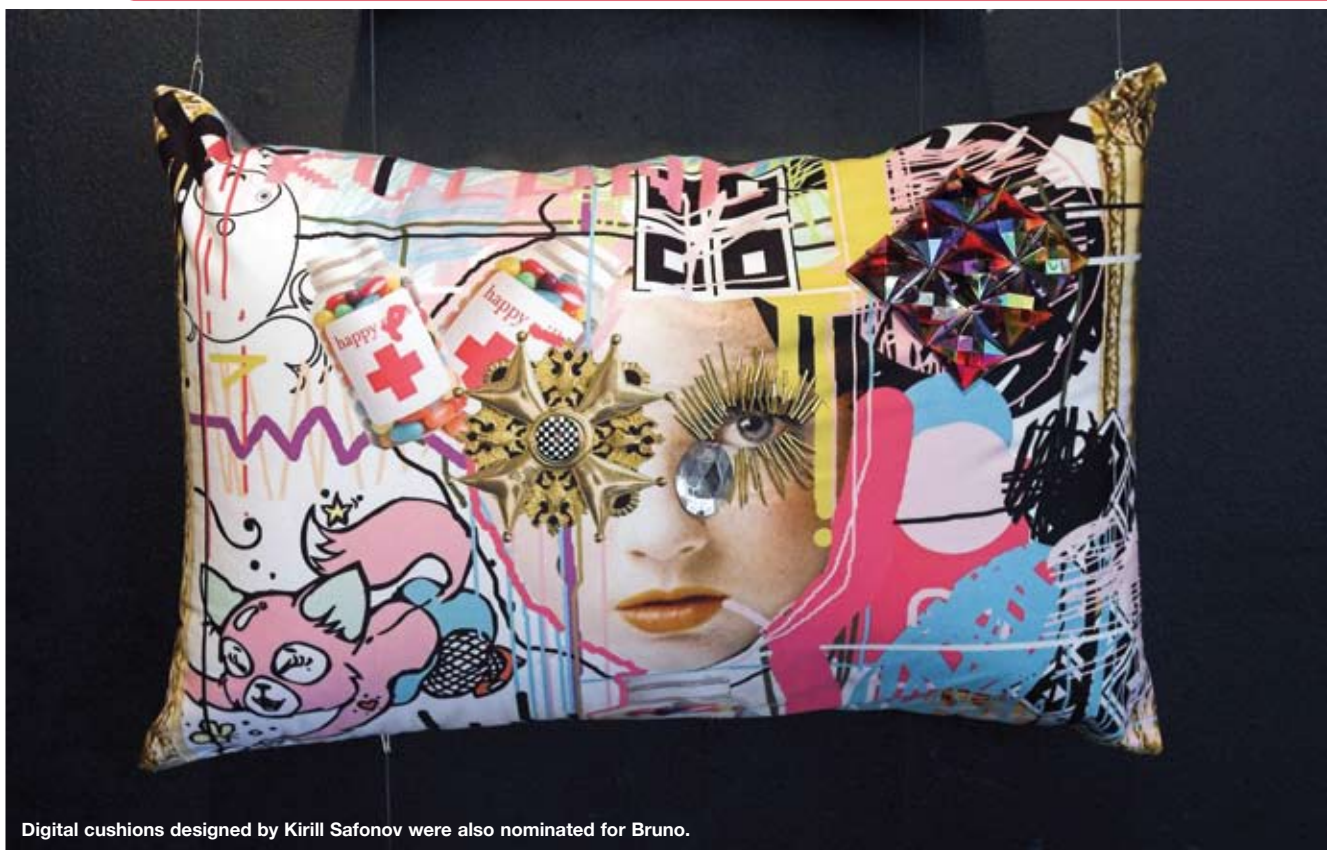
tive they need to engage in product development, in which design has an important role to play. One of the possible solutions to overcome difficulties is by using the help of design, even if the approach is applied to minor details, such as packaging.”

Melioranski tells the story of a manufacturer of ecological eggs who was unsuccessful in marketing its products

business cards and website homepages. Furniture and other elements of interior design can also be used, as can unique Estonian products.

It can be said that domestic product development truly is the means of survival necessary in the current economic situation because, by engaging only in cheap sub-contracting, companies are unable to compete with the cheap

by *MTÜ Disainikeskus*, which targeted entrepreneurs. The aim of these sessions is to provide multi-faceted design advice for companies. “We discuss different subjects at the think tank sessions and focus on very different target groups,” says Melioranski. The subjects that have been discussed this autumn, under the guidance of a lecturer, include the creation of an



Digital cushions designed by Kirill Safonov were also nominated for Bruno.

because the eggs did not have proper packaging. With the help of a designer, new and informative packaging was created and, today, the product can be bought both in shops selling ecological products as well as in supermarkets. People buy more eggs than the hens are capable of laying. “In essence, packaging is only a minor expense but, with its help, the company was able to stand out among its competitors,” Melioranski says. Other methods that can be used for differentiating one’s company from others include logos,

labour force of Asian countries. The clothing industry is a good example. While the profit figures of Baltika, the owner of numerous renowned trademarks, such as Monton and Mosaic, are increasing rapidly, Kreenholm - which decided to focus solely on a cheap labour force and subcontracting - is barely making ends meet.

The think tank sessions and the design map

Many people have been interested in the think tank sessions organized

identity, various aspects of copyright and issues regarding terms of reference of the design process. Participation in the think tank sessions is free, the undertaking is sponsored by Enterprise Estonia and next year the discussions will be held at the Estonian Academy of Arts.

In December 2008, an updated issue of Tallinn’s design map was published, which introduces interesting public interiors, and hotels and shops selling designer products.

The exhibition introducing the thir-



Fresh owners of Bruno 2008: development director of byRoller, Margus Triibmann, designer Mare Kelpman, managing director of ByRoller, Leena Politanov, and designer Tarmo Luisk.

ty best examples of Estonian design, which was exhibited in every county of the country during the Year of Design, will continue touring as well. Today, the exhibition is available even in Turkish and will soon open in Ankara. The Estonian version of the exhibition has not yet completed its journey through Estonia either; at the moment, it is on display in the Estonian Information Technology College.

The Bruno awards delighted the jury

At the same time they announced the beginning of the Year of Design, the Estonian Association of Designers started giving Bruno awards to the country's designers for their remarkable work. The competition is held every two years and was named after Bruno Tomberg, the Head of the Design Department of the Tallinn Institute of Art, who presented the first design award of Estonia in the 1980s. In October, the Brunos were handed out for the second time.

“Since we are an association for professionals in the field, it was our aim to acknowledge the good results of the designers and motivate them to do good things,” explains Ilona Gurjanova, the Chair of the Estonian Association of Designers. “The Bruno has become popular,” she says, adding that this year, 51 pieces of work were submitted to the competition, 40 of which were selected as candidates for the award. The Brunos were handed out in three categories: the best product design (the award went to Mare Kelpman for cushions that glow in the dark), the best design project (the award went to Tarmo Luisk for the LED stick light) and exemplary design management (the award went to byRoller, a company that manufactures LED lights and urban furniture).

What the international jury of the competition took first and foremost into account in choosing the winners was innovativeness, economic features and the recyclability of the designer products. Gurjanova comments: “The

jury told us that the only people who do not believe in Estonian design are probably Estonians themselves” for, according to her, the foreign experts were very pleasantly surprised at the artistic level of the pieces of work submitted by candidates for the Bruno awards.

Compared to the competition of 2006, the products competing for this year's Bruno awards were more industrial and realistically manufacturable, probably due to the creators' interest in finding ways of keeping our economy functioning.

Design management still has a long way to go

Although the Year of Design has increased companies' awareness of the importance of design, Estonia still lacks proper design management. Proof of this can be found in the number of companies that competed for the award in this particular category - there were only five such companies. “In autumn, Enterprise Estonia granted



This year's Bruno nominees included also a bath designed by Sven Sõrmus.

us the funds we needed to start organizing training courses for designers and design managers in order to start carrying out design audits in companies and, together with *Kutsekoda* (The Estonian Qualification Authority), we are also planning to create a professional standard for design auditors,” says Gurjanova, who expressed the hope that things would get better and commented on the fact that the training of designers and design managers is, in fact, currently in progress. The “pilot audits” carried out following the example of the Finnish DesignStart programme have been conducted in six companies in the Tallinn Technology Park (the Tehnopol). The aim of a short-term audit is to determine the weakest link in the design management of a company. Such a link might be the unsatisfactory level of product or service design, of communications

companies needed new packaging for their products. The CEOs of the companies realised that design can help them to create additional value only if it is governed by a unified design management system and if it is regarded as a strategic priority.

The capital to become the city for all

It will soon become clear whether the Estonian Association of Designers, in co-operation with Tehnopol, the city of Tallinn and the city of Turku, will receive funding from the INTERREG programme for their project entitled “Cities For All”, which will last for three years. Its aim is to make Tallinn follow certain humane criteria by the time the

and graphic design, of the design of the working environment, or in other words the working premises, of the environment for providing the service etc. In addition to the written recommendations given in order to improve the situation, a practical assignment, the “design first aid project”, was also carried out. Some companies needed to update their visual identity by the creation of a unified stylebook; IT-companies needed new designs for their user interfaces; some

city receives the title of the Capital of Culture (in 2011) and make it possible for everyone to be able to take part in the events organized as part of the cultural programme of the Capital of Culture, whether they are in wheelchairs or pushing baby strollers. In order to avoid mistakes, the plan is to design a comprehensible information system for public transportation; the ideas for intelligent products proposed in 2007 will be developed further and joint efforts will be made to make moving around in the city comfortable, safe and pleasant for tourists of culture of all ages, as well as for the local people. Gurjanova says: “Hopefully, the Year of Design clarified the meaning of design for people and made them realise that design is not only a decoration on a cup, but also a verb.”



Printed and embroidered hosiery by Kirill Safonov and Mariana Kolesnik.

SELECTION OF ESTONIAN PAINTINGS SOLD AT HAUS GALLERY AUCTIONS

KONRAD MÄGI
(1878 - 1925)



Capri Landscape
1922-1923. Oil on canvas. 58.5 x 67.5 cm

Starting price 530 000 EEK
Ending price 2 000 000 EEK

KONSTANTIN SÜVALO
(1884 – 1964)



Avenue in Winter
Early 1920s. Oil on canvas. 48.5 x 54 cm

Starting price 34 000 EEK
Ending price 123 000 EEK

ALEKSANDER VARDI
(1901 – 1983)



Notre Dame de Paris
1937. Oil on canvas. 46 x 61 cm

Starting price 62 000 EEK
Ending price 183 000 EEK

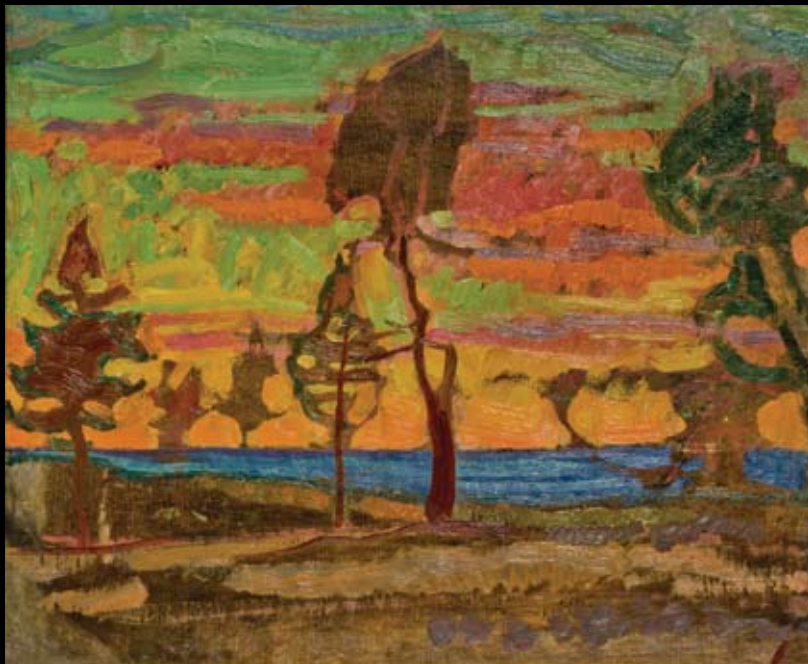
ADO VABBE
(1892 – 1961)



By the Lakeside
1945. Oil on canvas. 43.8 x 55.5 cm

Starting price 54 000 EEK
Endingprice 282 000 EEK

NIKOLAI TRIIK
(1884 - 1940)



Finnish Landscape
1914. Oil on canvas. 37.2 x 45 cm

Starting price 460 000 EEK
Ending price 460 000 EEK

ANDRUS JOHANI
(1906 – 1941)



View of Paris with a Bridge over the Seine.
1937. Oil, canvas, veneer. 41.5 x 33 cm

Starting price 63 000 EEK
Ending price 410 000 EEK

JUHAN PÜTTSEPP
(1898 – 1975)



Evening
1955. Oil on canvas. 45 x 55 cm

Starting price 36 000 EEK
Ending price 116 000 EEK

EERIK HAAMER
(1908 - 1994)



Washers of the Sheep
1943. Oil on veneer. 38.8 x 48.2 cm

Starting price 127 000 EEK
Ending price 127 000 EEK

Art is global and emotional



Text: Hanna Miller
Photos: Sven Tupits,
 Stanislav Stepashko

Open since 1997, the Haus Galerii/Haus Gallery is one of the best known art galleries in Estonia. Besides its central space in the Old Town of Tallinn, the gallery owns another young and contemporary art venue called the ArtDepoo, which is situated in Kalamaja - a seaside neighbourhood of unique wooden architecture, where many young intellectuals live today.

The best person to offer insight into the gallery is its founder and owner Piia Ausman.

Haus Gallery has three interconnected exposition spaces in the Old Town, two storage facilities and four office rooms. This means that each gallery specialist has his/her own office. Although old, the renovated building has all the necessary facilities, including a kitchen for preparing snacks and coffee. In total, we have 350 square metres of space in the Old Town.

The ArtDepoo is dedicated to young and contemporary art, in other words to what is happening here and now. Its activities are not limited to Estonia. After all, young artists today operate in a completely different environment, moving around freely in the world, studying or working



Ants Laikmaa (1866-1942)
 Shed for Nets
 1913-1915. Pastel, paper, cardboard. 24 x 29.7 cm

for some time in Europe or even further away. When it comes to contemporary young art, we can no longer draw the customary conservative state borders. I would not like visitors to the ArtDepoo to ask, “Why an exhibition by a Latvian, Russian, Swede or Finn?” It is a natural process. At the same time, we remain close to the vicinity of Estonia, which we know how to relate to. As an exhibition space, the ArtDepoo is perfect for contemporary art – a 100-square-metre hall with an interior balcony and a 6.5 metre-high ceiling and good lighting. Together with the storage and office space, there are 150 square metres.

In addition to the work in our main space, we cooperate with the two largest banks in Estonia. We curate the art gallery of the SEB bank and organise regular exhibitions. Swedbank consults with us when offering art investment services to its customers.

In my opinion, the Haus Gallery outshines many a gallery,

whether in Vienna, Berlin, London or Paris. The true worth of a gallery cannot be measured in square metres, but by its content. Where do you position your gallery on the Estonian art market today?

It is a relatively small market, which creates certain difficulties. In order to attract customers, compromises are sometimes made and this means losing one’s “own line”. Our priority is the top quality of the art we offer - we need to be able to justify selling it. Secondly, we are dedicated to Estonian art from its beginnings to the current day. We maintain and also demonstrate the continuity in Estonian art, and the continuous impact of this continuity. We deal with Estonian art in its entirety, and we want to keep to this line.

The Haus Gallery has a permanent exhibition of older Estonian art classics and modern classics, and there are regular personal shows in one of the three rooms. However, not just anybody can have an exhibition here. We cooper-



Piia Ausman

Born on 15 January 1969

- Graduated with a theatre specialty from the Viljandi Cultural Academy in 1995.
- In 1997, she founded the Gallery Haus and, in 2005, the gallery ArtDepoo.
- Founder, owner and director of the Gallery Haus (in 1997) and the gallery Artdepoo (in 2005).

She has also written books for children and families.

Published up to now:

- 2001: collection of poems "Galeristi pühapäev" ("Sunday of a Gallerist")
- 2007: children and family book "Tähtsad asjad" ("Important Things"), which was selected one of Estonia's 25 most beautiful books of the year
- 2008: family book "Kapterid avastavad maailma" ("Captains are Discovering the World")

ate with currently active Estonian artists, who we work with in the gallery, or we exhibit a selection from some private collection or organise exhibitions of the heritage of Estonian classic artists who have already passed on. In a nutshell, whereas Haus exhibits older and modern classics, the ArtDepoo shows contemporary works.

Although we deal with Estonian art throughout Estonian art history, we nonetheless differentiate between contemporary and classic art in our exhibitions and our auctions. We were one of the first galleries in Estonia to organise proper auctions. Perhaps the gallery is best known for its traditional art auctions. Although our auctions take place twice a year, in spring and in autumn, there are, in fact, more of them. Our autumn auction really consists of two auctions – paintings from the older period, and graphic art and drawing of the older period. The spring auction is really three separate events – the already mentioned two areas, plus contemporary Estonian art. The auctions are always accompanied by professional catalogues.

We also ensure that our activities attract media coverage, in other words reach the audience. Our shows are not just exhibitions – we work with our artists and the audience. Hence, it is also about art education.

The activities of your gallery are not limited to art sales and auctions. Both the Haus Gallery and the ArtDepoo hold other arts events.

We have already talked about our regular exhibition activities, but often there are spontaneous events as well. We have not said no to book presentations or company receptions at the gallery, in order to bring their people from their everyday environment to a different one in the middle of art.



We have also tried to develop some club activities, to link art and music, and art and gourmet food – in this way top range cooking has added some spice to painting. There are also art events in the ArtDepoo – discussions, meetings with artists, topical debates and much more.

Where do you get ideas for your gallery work? Do you have links with galleries abroad and do you gain experience from foreign colleagues?

One has to make one's own life interesting. Our gallery specialists have visited Basel, London and other places, but we do not have a systematic relationship with a foreign partner. In fact, galleries do not really jump at the opportunity to cooperate with other galleries; they are more likely to try it on their own and talk directly to their artists and the audience. Of course, there are contacts with foreign colleagues in Finland, Latvia, Lithuania and Byelorussia, as well as with Christie's. The ArtDepoo has more project-based coopera-



tion than the Haus Gallery.

Obviously, on my private trips, I visit art galleries. However, I have to admit that I see a lot of tourist-oriented stuff instead of strong and meaningful art. I probably have a trained eye and I am difficult to surprise. There is not much which really raises my interest. Even in the countries with a rich art tradition, I feel there is a senseless accumulation, borders diffuse and become hazy, and the aim remains unclear. There are loads of aggressive and destructive stuff. I don't, for example, feel the need to watch a video about puking in order to be convinced of the young author's attempt to improve the world. It no longer surprises, inspires or convinces, and it just feels stereotypical and exhausted. On the other hand, contemporary art language has become very similar - it is hard to notice national borders today. Perhaps only what happens in a closed system - such as Byelorussian art - still stands out as nationally unique. It is not easy to find art of value.

Your gallery is probably visited by people from outside Estonia, especially during the tourism season. Is it worthwhile for foreigners to buy Estonian art?

A foreign visitor who just "happens" to come by, probably visits other galleries as well. The average tourist doesn't usually come by. My experience tells me that the foreigners who do come to us are usually startled and study the display for a very long time. It provides telling feedback for us. It surprises them that we have so much space, that the exposition is very much thought through. Even the staff from Christie's have been pleasantly surprised.

People from abroad are much more likely to bravely make an emotional purchase than locals. There is a lot of strong and good classical art in Estonia. As in our gallery we focus on value which lasts through time, people do not get cheated here, even if they do make a purchase based on impulse - it is good value for money. It is surprising, even unbelievable, for many foreigners that our classics are, to a large extent, based on the strong art tradition of old Europe,



Henn Roode (1924 - 1974). *View of the City. (Abstraction).* 1970 (EKM collections)

especially the French school. Just think how many of our classic artists studied and worked in Paris, and drew inspiration and gained experience from French art. Their aim was not to copy but to develop what they experienced through their own vision. Perhaps foreigners find in our art what they have been looking for in the art of their own countries. The source of art is, nonetheless, one and it crosses borders. The region is not important. Borders and barriers should be forgotten in art.

So I would encourage foreigners to buy Estonian art. Our art is interesting due to our complicated past, perhaps even more interesting than the creations born in welfare societies. The times forced our artists to search for solutions and a means of expression. Estonian art has nothing to be ashamed of.

As we cannot list all the famous names here, which period of Estonian art do you recommend people to buy?

Most definitely the 1960s, 70s and 80s. It was a very strong



era in art. Our modern classics, the gold reserve of Estonia, date back to this period. During those years, many of our most well-known artists came into the arena. They left a unique imprint on time.

What should I do if I'm interested in buying some Estonian art, but I am not in Estonia?

The physical location is not an obstacle. Our homepage (www.haus.ee) has a lot of information, but to those with a serious interest we offer access to our complete Internet catalogue. Just contact us by phone, e-mail or post. The catalogue covers both the collections of the Haus Gallery and the ArtDepoo. We are always willing to give more information, to consult and to work on it until the work is sent to the addressee.

The current global economic situation is not the best one. How do you see the situation in the art market?

I would put it this way: art does not lose value over time;



Henn Roode. Sea. 1974 (EKM collections)

• **The most expensive work sold to date at a Haus Gallery auction (2007):**

Konrad Mägi's "The Landscape of Capri", 2 million EEK (127,823 EUR)

• **The most expensive work sold at an Estonian auction (2008):**

Johan Köler's painting "Tatar Lady in the garden of Mshatka manor" was sold for 2.7 million EEK at a Vaal Gallery auction.

• **Some Estonian artists who have studied and worked in Paris:**

Eduard Wiiralt, Konrad Mägi, Jaan Koort, Adamson-Erik, Andrus Johani, Ado Vabbe, Arkadio Laigo, Aleksander Vardi and Jaan Grünberg

• **1960-1980 and contemporary classics:** Ülo Sooster, Henn Roode, Olav Maran, Lepo Mikko, Enn Põldroos, Olev Subbi, Jüri Arrak, Andres Tolts, Peeter Mudist, Tiit Pääsuke, Tõnis Vint, Toomas Vint, Jaan Elken, Malle Leis, Nikolai Kormashov, Aili Vint, Kristiina Kaasik, Leonhard Lapin and many others.

As it is impossible to include a complete list of the best of Estonian art throughout time on these pages, we recommend you visit the homepage of the Estonian Art Museum, which offers a superb overview, with colour reproductions of Estonian art, covering all eras and techniques.

See <http://digikogu.ekm.ee/eng> and <http://www.ekm.ee/eng/ekm.php>

what loses value was cheap in the first place, or over-exploited. Even wars have not put art out of existence. Money has not disappeared from the world; people are just more care-

ful and modest in dealing with money. They consider their purchases more carefully. At the same time, there are those who are not so affected by the current situation. They, in turn, have more chances to negotiate the price.

This crash may have a certain cleansing effect. Those who have built a stable foundation will survive. I think there will always be people who buy art, and good art will be valued even more highly.

What is the future vision for your gallery?

The future largely depends on today. I would like people to handle art in a much more emotional, less calculating way, so that art will be "for art's sake". I would like Estonian art to circulate more freely and more widely and that this movement would be free of prejudice, so that we would not have to spend so much effort on proving our background. I understand it is safer to deal with the art in one's own country; what is foreign and less known makes one cautious. I wish to see more open-mindedness. After all, we are part of the cultural space of Europe; national and ethnic borders are not decisive. Also, there are artists who have not crossed those borders with their fame yet. In the ArtDepoo, we also try to proceed from this assumption. Identity is important. The inner energy, a spark, must be maintained in a gallery. If we only start to see money in art, we lose it. Art is, most of all, an emotional value. It enriches.



Rakvere Aqva Hotel & Spa – one of the few wellness spas in Estonia

Text: Ille Grün-Ots

Photos: Aqva Hotel&Spa, Ille Grün-Ots

The history of Estonian health resorts dates back two centuries. The first Estonian mud treatment spas were founded in the 1820s. Today, Estonian spas are no longer just treatment institutions, but also leisure centres, where, in addition to health boosting procedures, one can enjoy wellness services, take up various healthy hobbies or simply rest and spend some quality time. The first spa of its kind was the Georg Ots Spa Hotel in Kuressaare, which opened in 2004. The Rakvere Aqva Hotel & Spa opened its doors four years later, in May 2008.

The idea of building a spa in Rakvere came from young local businessmen, who did not spare any money or effort in turning their brainchild into reality. It took a couple of years for the plan to ripen and another year to build the spa. Monika Sooneste, Managing Director of Aqva Spa, says that the preparatory work involved visiting around forty different spas. Unfortunately, the opening of the spa coincided with a time when the Estonian economy started to “go off”. “The construction took place at the most expensive time, and the opening could not have taken place at a worse time, as the

economy started to race downwards,” says Sooneste, with a laugh. But she is not complaining: “After all, we have no previous economic history, and so far things have improved every month.” She explains that the Aqva Spa building is a true wellness spa, as opposed to a treatment spa. “It is divided into zones. The active and wet zone is the water and sauna centre, the active and dry zone is the Alessandro spa (hand and foot treatment), together with the hairdressing salon, and then there is the quiet zone, which offers both wet and dry wellness treatments – the Emeraude Spa (body treatments).”

The watery history of Rakvere begins with Aqva Spa

Before Aqva Spa was built, Rakvere, with its population of 17,000 (with more shopping space per person than in many big European cities), did not even have a pool, let alone a spa. This was a strange situation, even in a small country like Estonia. Locals used to go swimming ten kilometres away in Vinni, and even schoolchildren had to take their compulsory swimming classes there. Now children’s swimming lessons take place at the Aqva



Spa, financed by the City of Rakvere. The spa has a pretty impressive location in Rakvere, by the side of the cobbled street which connects the main square with the ancient castle. The castle is not just an ancient ruin, but also a local hotspot, offering thematic medieval activities for all ages. It is a great way to spend spare time: a day in the castle, followed by spa pleasures, or the other way around. In addition, Rakvere has a reputable theatre company and the hotel can also book theatre tickets when you book your room.

Surprisingly purple, flowing water and white Italian pebbles

It is clear that Aqva involves water. Upon entering the spa foyer, you immediately see a flowing water curtain, which ends in a small pool lined with white pebbles. “Those were brought

from Italy,” says Monika. It makes a great first impression.

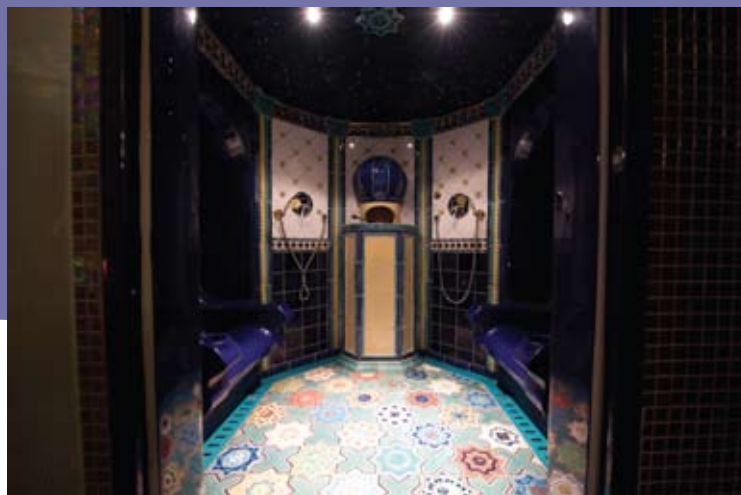
It is easy to get it wrong with purple, as it can look cheap. But here they have captured a special nuance of the shade which is very impressive. The purple colour dominates in the interior design. Staff uniforms are also in the

same shade. “The owners first played with the idea of black and orange, but then they found purple and I believe it was the best choice,” says Monika.

Eastern massage by Philipinos

It is no longer an exception, but rather





a rule, in Estonia for ethnic restaurants to hire a chef from a particular region. Some Indian or Italian chefs have lived in Estonia for over a decade. For the past month and a half, Aqva Spa has employed massage therapists from the Philippines, who have experience in working at the top spas in Macau. Visitors can enjoy different foot massages and whole body massages from specialists from Shanghai and Thailand.

Only an hour away from Tallinn

The Rakvere Aqva Spa has an advantage when it comes to its distance from the capital. It is 99 kilometres from Tallinn to Rakvere. The distance to other spa resorts is much greater: 128 km to Pärnu, 218 km to Kuressaare, and 173 km to Toila. In addition, the road from Tallinn to Rakvere is in good condition. It does not really take

that long and it is really worthwhile. As the Russian border is not that far away, Aqva Spa is also open to the Russian market. Even in the middle

of the week, you can spot some license plates from St Petersburg in the parking lot.

What's on offer at the Aqva Hotel & Spa?

Hotel

There are hotel rooms for every taste and price on the second and third floors of the complex, ranging from single rooms to suites, and rooms for disabled customers which have easy access for wheelchairs. The rooms for the disabled and the family rooms are also meant for people with allergies, as they have no carpets.

The whole complex is smoke-free. There is, however, a separate smoking area on the ground floor of the building. "There are always some smokers among customers. If all the smokers blocked the entrance, it would not be the best situation," says Monika Sooneste, explaining why they invested in the super effective ventilation of the smoking area. Indeed, just half a metre away from the area, there is no cigarette smell and, even when the door is opened, no cloud of smoke bursts out.

A lot of attention has been paid to the well-being of families with children at the Aqva Spa. Almost all hotel rooms have arm chairs which can be opened into extra beds. There are also interconnected rooms, which keep the fam-



ily together while offering some privacy for children. The prices are also flexible: an extra bed does not cost the full price. Aqva Spa also has seminar rooms: a smaller one (for 20-25 people) and a larger one (up to 100 people), with all the necessary technological equipment. “They are quite popular”, claims Sooneste, adding, “it is work and pleasure under one roof.”

Water and sauna centre

There is a 25-metre swimming pool with six lanes, where even the more committed sportsmen can do their training, and various attractions: a wave pool, an against-the-current lane, different massaging water streams, an outside pool (which you can enter from inside), Jacuzzis, the Black Hole sliding tube with light effects, and a children’s pool.

A water centre would not be complete without a sauna. The sauna centre has seven saunas: a steam sauna, aroma steam sauna, sanarium, Finnish sauna, citrus Finnish sauna, steam and salt sauna and infrared sauna. In addition there is a refreshing cold water pool and cold and hot water baths for

feet, a warm relaxing bench and a Jacuzzi.

For hotel residents, access to the water centre is unlimited and they can enter the dressing rooms straight from the hotel area. Hence, you can get into your swim suit in your hotel room and walk there in your robe.

Emeraude Spa

Upon entering the wellness spa, the visitor is met by quiet, soothing music, a pleasant aroma and a smiling staff member. In the treatment rooms (18 in total, each with its own name), there is pleasant, dim and cosy light, many candles and a calming green tone. Some closed doors have a box of pearls attached to them – this is a sign that someone in there is enjoying their treatment.

The Aqva Spa is the only one in Estonia to offer treatments with the products of Phytoceane (the special ingredient is the coral seaweed *Jania rubens*, which is being used for the first time in the Estonian beauty industry). The treatment does not just involve products, but is an exclusive complex of products, where the activity has been determined as well; even the interior design is a part of the concept. There are warm towels in special cupboards, and on some massage tables it feels like you are levitating. “Spa-brand rituals, facial treatments, body treatments with water, on a warm stone table and in a Thermo spa, different massages, Sabbia Med spa ritual (light therapy: you lay on a sandy beach, the sun rises, shines and sets – the circle of light in nature in a much faster way than in real life; it is also suitable for children), Rasulbas... For example, there are also treatment packages which are specially meant for pregnant women,” says Monika Sooneste, listing the various treatments on offer. She takes a smooth pink piece of granite in her hand, “With this we offer a special body sculpting massage.”

One room has a bath tub which is obviously meant for two. Magnetic waves, underwater lighting and music... “This is for the romantics. We serve sparkling wine and fruit in the bath, and of course there are many candles all around. Also, in the other rooms, we have tried to create the opportunity to attend treatments as a couple. Otherwise, you would come to the spa together but only meet each other in the evening; during the day everyone would be doing their own thing”, Sooneste explains.

The newest thing in Emeraude are the Eastern massages—for which they hired specialists from the Philippines—including Thai massage, Shanghai massage and soon also Ajur Veda massage. “It is great exercise without having to move a muscle,” is the way Sooneste explains Thai massages.



Alessandro Spa

This spa (nail, hand and foot treatments) also has its own concept, which is to say that all Alessandro spas in Europe look exactly the same – black-and-white. “Last year, four spas were opened in Europe, two in Germany, one in Paris and one here in Rakvere. But one cannot be found in any of our neighbouring states,” says Sooneste proudly. Four times a year, the decorations of such spas change all over Europe at the same time.

The most popular product ranges of the top German brand Alessandro are the Flex Gel System, Soft Gel System and Natural Nail Gel System (nail modelling and cover gel of natural nails), HandsUp! (systemic hand treatment), Nail Spa Control (nail spa), Uomo (men’s manicure) and Pedix (Wellness foot treatment).

Next to the spa is the Lanza Hair Studio, where, in addition to a cut and colouring, you can also get hair treatment.

Cafe Arabella and a la carte restaurant Mezzo

“Cafe Arabella seems to be a place with a good aura,” says Monika. In addition to every child’s dream menu (pan-

cakes, pizza, meat ball soup, ice cream, chips, kebabs etc.), the cafe has a children’s corner where kids can feel like true pirates: there is an aquarium in the shape of an Illuminator, with a steering wheel. The drawing and colouring table is especially popular. “Kids sit here for hours and colour and draw, even those kids whose parents say that they do not really do it at home,” notes Monika. Aqva Spa does not have a separate babysitting service, but outside nannies can be hired.

As opposed to many so-called spas, where the dining area is more of a diner, Mezzo is a top quality restaurant which also offers breakfast to hotel guests. Head Chef Ave Jääger has done a great job. The first thing she came up with when she joined the staff was the special house water, which is offered everywhere in the building. Orange slices, pomegranate seeds, cucumber and lime – everything can be tasted and their coexistence is pleasant and interesting.

Rakvere Aqva Spa’s motto goes as follows:

“A smile can change the world. We wish to give more. We wish for every person to be healthy and happy.” So why not go to Rakvere and let the water and some leisure time bring joy and colour back into your everyday life!

Practical information for visitors



For more travel details, please consult the sources below:

www.visitestonia.com
(Estonian Tourist Board),
www.esto.info,
www.estonica.com,
www.riik.ee/en

Tourist information centres are located in all larger towns.

The Tourist Information in Tallinn is located right in the heart of Old Town - at 4 Kullassepa street no more than 10 steps from the Town Hall Square (telephone: + 372 6457 777, e-mail: turismiinfo@tallinnlv.ee). A wide selection of maps, brochures and publications in several languages (largest selection in English) can be found at local bookstores and tourist information centres.

Visa

Citizens of the EU, the United States, Australia and New Zealand and a number of other countries do not need a visa for Estonia. For detailed information on visa requirements and entry rules, please consult the Ministry of Foreign Affairs website at www.vm.ee/eng and the Estonian Border Guard website at www.pv.ee/eng/index.html.

Arrival

By plane: Recently renovated, the Tallinn airport, just 3 km from the city centre, is welcoming, modern and user-friendly. Among other amenities,

travellers have access to a WiFi area (wireless fidelity) in the transit zone. The airport's 24-hour customer service telephone is +372 6058 888.

The easiest way to get to town is by taxi. A ten-minute ride to the city centre costs approximately 60 Estonian kroons. A hotel transfer minibus meets all incoming flights and takes visitors to downtown hotels for just 25 kroons (€1.60 or \$1.90). City bus #2 connects between the airport, the centre and the harbour. The bus schedule is posted at the bus stops in these places, and tickets can be purchased from the driver (15 kroons, €0.95 or \$1.16 USD per ride).

Regional airports are located in Kuressaare (Island of Saaremaa), Kärdla (Island of Hiiumaa), Pärnu and Tartu; these provide no regular international connections. A regular helicopter connection is available between Tallinn and Helsinki, with the centre-to-centre "hop" made in 20 minutes.

By ship:

With over 6 million passengers annually, the Port of Tallinn is undoubtedly

Estonia's main gateway. Large passenger ferries arrive from and depart for Helsinki and Stockholm regularly. The 85-km Tallinn-Helsinki line is served by ferries that make the journey in 3.5 hours; hydrofoils and catamarans make the trip on 1.5 hours and operate Between April to November or December, depending on weather conditions. Travellers should note that different ferry lines depart from different terminals and harbours. The City Port with its four terminals is a 10-15 minute walk from Tallinn Old Town; the Paldiski-Kapellskär line uses the Port of Paldiski, about 50 km from Tallinn.

By car:

Border checkpoints greet travellers entering or departing the country by way of the Estonian-Latvian border points at Ikla (the Tallinn-Riga highway) and Valga, as well as on the Estonian-Russian border at Narva (the Tallinn-St. Petersburg highway), Luhamaa, Koidula and Murati. When travelling to Estonia from Latvia by car, visitors can drive through the Latvian border but must stop for a passport and customs check on the Estonian side. On the Estonian-Russian border, all traffic is subject to border formalities on both sides.

By bus:

Not only is travel by bus the fastest and most convenient mode of international public transportation in the Baltic states, it also offers excellent

value for your money: Tickets to Riga and St Petersburg are available for 200 kroons (€12.80, \$15.50) and 350 kroons (€22.30, \$27.13) to Vilnius. The trip from Riga to Tallinn takes approximately five hours and there are four daily departures; Tallinn to Vilnius is ten hours, with two departures daily; to St Petersburg is eight hours with five daily departures. Regular connections also service Germany, Kaliningrad, Moscow and Kiev. A useful tip: Regular passenger buses have priority at the border checkpoints, so travel is smooth. For more information and timetables, please contact Eurolines at tel. +372 6800 909 or visit their website at www.eurolines.ee/eng/index.html.

By train:

There are only two international trains: one to St. Petersburg and one to Moscow. Both are overnight trains.

Customs

We suggest travellers consult with the Estonian Customs Board (tel. +372 6967 435 or www.customs.ee) for details. If you plan to carry currency valued at more than 80,000 Estonian kroons (foreign currency in cash, Estonian kroons,

traveller's cheques), you are required to declare the amount upon entry into and departure from Estonia. The limit on import of alcoholic beverages from outside the EU is one litre for beverages over 22% alcohol content, and two litres for beverages up to 22%, and two litres for wine. Import of tobacco and tobacco products from non-EU countries is limited to 200 cigarettes or 100 cigarillos or 50 cigars or 250 g of tobacco products. Counterfeit goods, including pirated CDs, video and audio tapes, are prohibited by law. A special export permit is required for specimens of plants and animals of endangered species, protected species and hunting trophies (please contact the Nature Conservation Department, Ministry of the Environment for details). Articles of cultural value produced in Estonia more than 50 years ago also require special permits (please contact the National Heritage Board).

Getting Around Estonia

Inter-city public transportation

Public buses are the easiest, cheapest and most convenient solution for visiting Tartu, Pärnu or any other of the larger towns. Buses from Tallinn to Tartu depart every 15-30 minutes, to Pärnu every hour. On weekdays, seats to these destinations are almost always available even immediately before departure (watch out for special events). For weekend travel or trips to more remote locations with fewer connections, it is advisable to buy tickets in advance. It is possible to travel Estonia border-to border for approximately 100 kroons (€6.40, \$7.75). The Tallinn Bus Terminal is located at Lastekodu 46. The timetable is also available online at www.bussireisid.ee/index.php and ticket information is available at telephone +372 6800 900.



Travelling by car

Travellers hoping to see more of the country and the rural areas it would be best advised to travel by car. The roads are quite good and traffic is light. Crossing Estonia from north to south or west to east by car takes approximately three to four hours. All major car rental agencies have offices in Tallinn. It is also possible to rent the car in Estonia and drop it off at a rental agency in Latvia or Lithuania, or vice versa; however, rental agencies do not permit rented cars to be taken into Russia. The speed limit in rural areas is 90 km/h and in cities 50 km/h. In some areas the highway speed limit is increased during the summer months. Headlights and seatbelts (front and back) must be on at all times. Driving under the influence of alcohol or other intoxicating substances is punishable by law. The Sober Team Leader campaign has been in effect in recent years during major festivities. The service makes it possible to call a volunteer for a safe and sober ride home.

Local transport

Taxis: Taxis must clearly display their fares, driver's taxi service licenses, and a meter. The initial charge for entering a cab ranges from 15 to 25 kroons. Different taxi companies have different rates, but the average charge per kilometre is 7 kroons. In Tallinn, a short ride within the city centre usually costs around 50 kroons. A ride to the sub-





urbs may cost about 100 kroons. There is no additional charge for ordering the taxi by phone, and it usually takes the cab just five to ten minutes to arrive. All taxi drivers must give you a receipt (in Estonian, ask for "Kviitung, palun"). Locals usually give the exact fare and no tip. As in most major cities, some dishonest drivers attempt to overcharge unsuspecting passengers. If in doubt, note the taxi company and license plate number.

Public transportation: Tallinn has a public transport network of buses, trams and trolley-buses. Other Estonian towns have buses. Schedules are posted at bus stops. Tickets are available at newsstands (the yellow and blue "R-kiosks") and from the driver. A pre-purchased ticket (10 kroons, €0.64, \$0.76) must be validated upon boarding and is valid for one ride. A pre-purchased one-hour ticket costs 15 kroons and two-hour ticket 18 kroons. Check the time schedule for Tallinn bus lines for any bus stop at www.tallinn.ee/eng

Accommodations

All major hotels in Tallinn have been newly built or completely renovated in recent years. Despite annual additions to the number of hotels and rooms, it can nonetheless be difficult to find a hotel room on short notice (particularly over the week-end). For the best selection, we urge visitors to Tallinn and the rest of Estonia to book hotel rooms in advance. For more details, see

the Tourist Board website at www.estonica.com.

Money

The Estonian kroon is pegged to the euro (1 euro=15.6466 kroons; 1 kroon=100 cents). Currency exchange services are offered at banks and at exchange stands. Neither

charge commission, and no major differences should exist in the rates. Banks are open on workdays from 9:00-17:00 or 9:00-18:00. Select branch offices also open on Saturdays from 10:00-15:00. Many large shopping centres include a bank office that is usually open seven days a week. Major credit cards are widely accepted. Large credit card transactions usually prompt the staff to request an ID; the threshold varies by shop but it usually starts around 200 kroons. The sales staff will note your passport or driver's license number on the receipt. Travellers' cheques are not accepted in shops and should be exchanged for cash at a bank. ATMs (automated teller machines or cash points) are conveniently located around town; instructions are in English, Russian and Estonian.

Telephones

The country code of Estonia is 372. Dial 00 for outbound international calls. Public payphones only accept prepaid phone cards, which can be purchased at newsstands. As with ATMs, phone instructions are offered in English, Russian and Estonian.

Emergencies

112 is the emergency number for ambulance, police and fire department. The police can also be reached directly at 110. Emergency numbers can be dialled free of charge and without a phone card from any public telephone. Select

pharmacies are open 24-hours-a-day in many major towns. The one in Tallinn is located at Pärnu mnt 10 (opposite the Estonian Drama Theatre); the one in Tartu is located in the Town Hall building (Town Hall Square).

National Holidays

Estonians celebrate January 1 as New Year's Day, a rather slow and quiet day as people recover from the festivities. Shops open late and banks are closed. February 24, Independence Day, is celebrated with a parade of the Estonian Defence Forces at Vabaduse väljak (Freedom Square). May 1 is a bank holiday, similar to Good Friday and May Day. June 23 is Victory Day in commemoration of the 1919 Battle of Võnnu, and June 24 is St. John's Day (Midsummer). June 23 is the biggest holiday of the year as Estonians celebrate Midsummer Eve: It is said that even grass does not grow in Estonia at that time. August 20 is the Day of Restoration of Independence (1991). December 25 (Christmas Day) and December 26 (Boxing Day) are usually spent at home with families.

Food

Traditional Estonian cuisine consists of simple peasant food, such as cottage cheese, potatoes and bread, all of which are still important components of the local diet. The Estonian dark bread is





the main staple missed by Estonians abroad. Typical Estonian dishes do not feature prominently on restaurant menus, and traditional home cooking is more likely to appear at small eateries in remote areas. Still, a few establishments have made Estonian specialties their niche; to sample Estonian cuisine, try the Kuldsed Notsu Kõrts, Vanaema juures (At Grandmother's), Eesti Maja (The Estonian House) and Kolu Tavern (Open Air Museum) in Tallinn, and the highly recommended Lümända söögimaja on the Island of Saaremaa.

Of meat dishes, pork is the favourite and most common in Estonia; Baltic herring is the most common local fish. A typical, heavy Estonian meal is a pork steak with sauerkraut and potatoes. Soups are also a mainstay in the local diet, with tasty samplings ranging from broth with dumplings and meatballs to delectable vegetable purees.

At local restaurants, appetizer prices start at approximately 40 kroons (€2.55, \$3.10) and main courses start from about 80 kroons (€5.11, \$6.20). A three-course restaurant meal with coffee will usually cost upwards of 200 kroons (€12.70, \$15.50). A glass of house wine or beer is usually 30-40 kroons (€1.90-2.55, \$2.32-3.10). Cafeterias offer main course for 30-45 kroons (€1.90-2.88, \$2.32-3.40) and 100 kroons (€6.40, \$7.75) will buy a full meal. Pleased customers usually leave a tip of 10% of the bill.

Drinks

The main drinks in Estonia are beer, wine and vodka. While many young

city residents opt for beer or wine, the older generation and rural folk tend to prefer vodka. In the 1930s Estonian vodka made it into the Guinness Book of Records as the strongest vodka in the world (96 °). Local brands of beer enjoy a very strong market position in Estonia. The two main breweries are Saku and A. Le Coq. Saku is Tallinn-based, and its corporate colour is navy blue while, A. Le Coq is brewed in Tartu, and its colour is red. There are also many smaller breweries. A full list of Estonian beers is posted at www.BeerGuide.ee. One glass of beer at bars or restaurants costs 25-30 kroons. A bottle of beer sells at supermarkets for 9-10 kroons.

Spirits also include some traditional liqueurs. The famous Vana Tallinn (Old Tallinn) has a 45 ° alcohol content, and is coincidentally made from 45 ingredients - the recipe is known only to a handful of people. Indeed, the legendary 19th-century kristallkummel (caraway liqueur) has made its long-awaited comeback.

Estonian wines, made from currants or other local berries, are rather sweet. Wine lovers usually prefer imported wine, of which there is an ever-increasing selection at stores and vinoteks. A very popular and refreshing non-alcoholic drink is kali, made of bread, malt, rye or oats flour and yeast; it has a characteristically dark brown colour. It was with this drink that the Estonians forced the Coca-Cola company into submission, or at least into a business deal. Kali was enjoying phenomenal sales, while Coke was not selling up to

expectations. It was then that Coca-Cola decided to broaden its horizons by buying one of the local kali trademarks in order to make a profit on the stubborn Estonians

Entertainment

The entertainment scene in Estonia is vibrant year-round, providing visitors and locals alike with a long list to choose from. Concerts, festivals, theatre, street raves, DJ competitions – Estonia has it all. It is not by chance that both Tallinn and Tartu have their own opera and ballet theatre. Tickets are an excellent value for the money; concert tickets start around 80 kroons, and best seats at the opera are yours for as little as 200 kroons. For more information on the concert schedule see www.concert.ee; the programme for the national opera is posted at www.opera.ee. Tickets can be bought at the box offices or via ticket agencies located in the larger department stores. A useful site for information on cultural events is www.culturepoint.ee.

Even the most sceptical museum-goer is bound to find something intriguing in Estonia's large selection of museums, which feature everything from history, art, photography to toys, chocolate, musical instruments, even wax figures and many other topics. Most museums are closed on Tuesdays and many on Mondays as well. It is advisable to have cash on hand as many museums do not accept credit cards.

Tallinn is also bustling well into the night with booming and blooming club scene. Clubs are usually open and packed



with energised vibes from Thursday to Sunday, with Friday and Saturday drawing the liveliest of crowds. In addition to local and resident DJs, clubs frequently present guest performers from London, the US and other club hubs. For those looking for a more mellow night on the town, Tallinn's street are brimming with pubs, vinoteks and bar-restaurants, many of which offer live music even on weekdays. Rather take in a movie? Films in cinemas are shown in the original language with subtitles.

Shops

Souvenir shops in Tallinn and most other tourist locations are open seven days a week, 10:00-18:00 or 19:00. Big supermarkets and hypermarkets are open seven days a week from 9:00-21:00 or 10:00-22:00. Department stores close a few hours earlier on Sundays or, in smaller towns, may be closed on Sundays. Smaller food shops may have shorter opening hours. Some 24-hour shops can be found as well. Other shops usually open at 9:00 or 10:00 and close at 18:00 or 19:00; they often close early on Saturdays and are closed on Sundays. The majority of shops accept credit cards, with the exception of smaller stores and stores in rural areas.

Souvenirs

Souvenir and shopping preferences vary hugely but there are certain souvenir gifts that have gladdened many a heart. Estonian handicraft comes in many forms. There are woollen sweaters and mittens with local ethnic patterns, linen sheets and tablecloths, crocheted shawls and veils, colourful woven rugs, hand-made jewellery and glassware, baskets, and an array of wooden spoons and butterknives made from juniper. Fine and applied art for show and purchase is on display at art galleries around the country, featuring graphics, glass, ceramics, hand-painted silk scarves and

leatherwork. Various herbal teas from wild plants are available at pharmacies. Local honey – pure or flavoured, e.g. ginger, is another delicious treat. In rural areas, you may find hand-milled flour. And those who keep coming back swear by the Estonian black rye bread. To bring home local spirits, popular choices include Vana Tallinn or kristallküm-mel liqueur or local beer. And there is no place better than Estonia to buy Estonian music.

Crime

Although common sense is advisable in all destinations, Estonia gives no particular reason to be excessively worried. Do not walk the unlit and abandoned areas alone at night. Do not leave bags or items of value in the car, as not to tempt car thieves or robbers. Pickpockets may operate at crowded tourist destinations in Tallinn, so make sure your wallet and documents are stored safely.

Language

Estonian is not widely spoken in the world, so Estonians do not expect short-term visitors to master the local language. Still, local people are thrilled and pleased to hear a foreigner say "Tere!" (Hi!) or "Aitäh (Thank you) in Estonian. Knowledge of foreign languages is naturally a must for hotel staff and numerous other professions in the service sector. Many people are fluent in English, particularly the younger urban generation, and a great number of people also speak Finnish, due to Finnish TV, Finland's close proximity to Estonia and the great number of Finnish tourists. German is less widely spoken in Estonia, although previous generations have often studied German, not English, at school. Russian-language use has dropped to a point where older people no longer speak the language well and the younger generation have already chosen other languages to learn

at school. Studying French has become more popular over the last few years but the number of people who speak French is still quite small. An English-Estonian dictionary is available online at www.ibs.ee/dict.

Estonians

Estonians are typical Nordic people – they are reserved, not too talkative and speak rather monotonously, with very little intonation. All this may give one the impression of coldness bordering on rudeness. But rest assured, this is not the case, and the speaker may actually be extremely well-meaning, even excited. There are several well-known Estonian sayings, such as "Think first, then speak", "Weigh everything carefully nine times before making a move", and "Talking is silver, silence is gold". It is, therefore, no wonder that the people are not very good at small-talk, do not waste too much time on grand introductions, and usually come straight to the point. This is why Estonians' English may sometimes sound shockingly direct. There is, however, often a subtle irony involved in Estonians' utterances - delivered with a serious face and just the slightest twinkle of the eye.

Estonians are relatively individualistic. There is a saying that five Estonians mean six parties. Even though people agree on the final objective, they insist on reaching it in their own ways. Estonians also value their privacy. In the old days, it was said that the neighbour's house was close enough if you could see the smoke from the chimney. Modern, tight-packed urbanites flock to remote countryside on the weekends to enjoy more space and privacy.

Even though guests at birthday parties and concerts are rather quiet and subdued in the onset, they warm up eventually and turn into a direct opposite of their day-character, as you are likely to see in Tallinn's clubs.

TALLINN

just a few hours away



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- < Customer Service on +372 640 1163
- < Estonian Air offices and representatives
- < Travel agencies



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