# Tracing Russian Wood Imports

A partnership project between:




With contributions from
- Det Norske Veritas
- Greenpeace Russia
- Russian State Forest Administration

2001

# TRACING RUSSIAN WOOD IMPORTS

**A report on new ways to:**

- monitor imported wood deliveries
- implement sustainable management systems
- develop internet applications
- increase stakeholder involvement

**A partnership project between:**

- UPM-Kymmene (forest, pulp, paper)
- Otto Versand (mail-order business, e-commerce, logistics)
- Axel Springer Verlag (publishing and printing)

With contributions from:

- The Russian State Forest Administration
- Greenpeace Russia
- Det Norske Veritas

www.upm-kymmene.com/tracingimports

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# SUMMARY

**The aim of this report is to demonstrate exactly how UPM-Kymmene monitors wood imports from Russia.**

The degree to which the European public is interested in ecological problems varies from country to country. In many countries, environmental considerations now characterise consumer habits.
UPM-Kymmene has a business interest in implementing the principles of sustainability for the timber they use. Equally important are product quality, cost efficient processes, responsibility for operations and awareness of society's and shareholders views. The company combines this information with its expertise to make its' decisions.
About 85% of the wood used in UPM-Kymmene's Finnish mills is from Finland. Some 13% is imported from Russia. This trade is essential for the process of economic integration of this important European neighbour as well as for the creation of jobs in isolated regions of this large country. It is also important for meeting the increasing demand for roundwood consumption.
Creating transparency goes far beyond mere 'corporate communications'. It is not restricted to conveying selected messages to selected audiences. It is much more about showing how the company works. Stakeholders increasingly ask for information about the entire 'production history' of the product.
In order to make the paper chain more transparent, the mail order company Otto Versand (Germany) and the newspaper and magazine publisher Axel Springer Verlag (Germany) cooperated with the paper supplier UPM-Kymmene (Finland) to produce a report to show how UPM-Kymmene monitors wood delivered to the mills from Russia. This includes certified management systems as well as personal testimonies from those in charge of the monitoring work on site. For the first time, the internet is introduced as a medium for connecting the forest to the end-user.
The documentation gives a first hand overview of general conditions and forest management procedures in Russia. It also includes critical reviews of UPM-Kymmene's tracing system from two important Russian stakeholders, represented by the official State Forest Administration and Greenpeace Russia; and an assessment of the system by the independent auditor Det Norske Veritas (DNV).
Contributions were received from DNV on management systems and the future of checking sustainability, and from Dr Reinier de Man on the use of the internet for linking the forest to end-user.

This work is part of the efforts for improvement and innovation as well as the necessary dialogue on sustainability along the paper chain.

UPM-Kymmene's system will continue to be developed in the future towards a chain of custody system where the whole route of timber is followed from the forest through the mills to end products.

An interactive internet demonstration of the tracing system is shown at:
www.upm-kymmene.com/tracingimports

# 1 COMPANIES AND EXPERTS INVOLVED

The aim of the project is to increase cooperation and transparency in the paper chain from tree to magazine. The result is a partnership project between a paper supplier and two of ist key customers. Two stakeholders and an external auditor were also asked to contribute in order to bring a wider perspective and increased transparency.
UPM-Kymmene as the paper supplier has coordinated the implementation of the project.
Axel Springer Verlag and Otto Versand, key customers of UPM-Kymmene, have contributed their experience in communications and media to the project. Two stakeholders, Greenpeace Russia and the Russian State Forest Administration, were asked to review and comment on the project. Det Norske Veritas as an independent third party auditor, was asked to report on UPM-Kymmene's origin of wood tracing system.

## Companies

**UPM-Kymmene**
www.upm-kymmene.com

The UPM-Kymmene Group is, measured by turnover, one of the biggest forest industry enterprises in Europe and in the world. The company's headquarters are located in Helsinki, Finland. The Group's operations are divided into three business areas: UPM-Kymmene Printing Papers, UPM Converting and UPM-Kymmene Wood Products. Other operations consist of chemical pulp, forest and energy (Resources) and logistics and real estate units. Printing papers account for 60 % of the Group's EUR 9.6 billion turnover.
Protecting the environment is an important part of UPM-Kymmene's activities. The Group's environmental policy statement contains a commitment to the principles of sustainable development as set out by the International Chamber of Commerce. Much work has been done to develop the Group's environmental management systems, which now cover areas such as wood procurement, the use of recycled materials, emissions to air and water, and the use of energy.
At the end of 2000, UPM-Kymmene had 62,000 registered shareholders. The company's market capitalization at the end of the year was EUR 9.5 billion. UPM-Kymmene's shares are quoted on the Helsinki and New York stock exchanges.

**Axel Springer Verlag**
www.asv.de

Since it was founded in 1946 by the Hamburg publisher Axel Springer, the company has developed into the largest Newspaper publishing company in Europe. Axel Springer Verlag is now one of the leading international media companies, with headquarters in Berlin and Hamburg, state-of-the-art printing plants and distribution organisations. Publication of newspapers and magazines has traditionally been the core business. The focal points in the company's operations outside Germany are in Western and Eastern Europe. A strong position is held in the German-speaking book market following the merger of traditional book publishing companies. Other areas of the business include television productions, equity holdings in television and radio stations and the development of selected online activities to establish the company's strong print brands on the Internet and to exploit the potential for new business with Internet services and e-commerce.

**Otto Versand**
www.otto.de

With 83 companies in 23 countries and 37 purchasing offices in the major import markets, Otto Versand is a global player in the mail-order business – and with more than 71,000 employees it is also an important employer. The company's headquarters are located in Hamburg, Germany. Customers browse through more than 600 different catalogues worldwide each season and order their heart's desire – from drills to textiles and designer kitchens. In 1999/2000 the Otto trading group had a turnover of EUR 20.5 billion. More than 90 % of the worldwide mail-order turnover is achieved in the USA., Germany, Japan, Britain and France. With an expenditure of EUR 272 per customer, the Germans are in second place behind the USA with EUR 326 per customer.
All companies within the Group have the same goals. They offer their customers convincing ranges appropriate to the specific target groups, together with excellent service, they take advantage of synergies, and they always try to combine economy, ecology and social considerations, in the spirit of the principle of sustainability.

**Greenpeace Russia**
www.greenpeace.ru, www.greenpeace.org

Greenpeace Russia was established in 1992. The main activities of the organisation are environmental protection, creation of environmental awareness and ecological information services. Greenpeace Russia concentrates on four key areas: forests, nuclear power, toxicity / chemical pollution, and preservation of the Baikal lake.

Greenpeace Russia's activities are based on the following three principles:

- The protests: Greenpeace Russia holds protest actions to attract community attention to problems and the persons responsible for them.
- Non-violence: Greenpeace Russia's protest actions do not hurt anyone. All Greenpeace activities are peaceful.
- Independence: Greenpeace Russia does not belong to any political party. It does not accept financial support from governmental organisations, commercial structures or political parties.

**Russian State Forest Administration**
www.mnr.gov.ru

State Forest Management Enterprises are part of the Russian Forest Administration and are subordinated to the Ministry of Natural Resources. There are currently 13 State Forest Management Enterprises in Russia with a central office based in Moscow. These enterprises are responsible for carrying out the forest resource inventories and for creating forest use plans. Based on these plans the Foresty Centres, the leshozes, issue felling licenses to the logging companies. The North-West State Forest Management Enterprise is located in St. Petersburg and is headed by Director, Mr Vladimir Arkhipov. It operates in the regions of Leningrad, Novgorod, Pskov, Karelia, Murmansk, Arkangel, Komi, and Kaliningrad. It employs 400 people.
The forest management administration in Russia is currently undergoing reorganisation, and in the future there will be five State Forest Management Enterprises: East Russia, South Russia, the Volga region, Central Russia and North-West Russia. As a result of these changes the North-West State Forest Management Enterprise will be significantly larger.

**DNV Certification**
www.dnv.com, www.dnv.fi

Established in 1864, Det Norske Veritas is an independent foundation working with the objective of 'safeguarding life, property and the environment'. DNV has a total of 5,500 employees, and comprises a network of 300 exclusive offices in 100 countries. DNV's Head Office is in Oslo, Norway.
DNV Certification Oy/Ab is an independent daughter company of the Norwegian foundation operating in Finland. DNV Certification has been involved in certification services for 30 years, but most actively since the beginning of the 1990's.
Its main products are the ISO 9000 series (quality management systems), ISO 14001 standard (environmental management systems), OHSAS 18001 standard (occupational health and safety) as well as other industry-specific products like forest certification. DNV Certification has some 25 employees in Finland, and also subcontractors. Almost 1000 certifications were carried out in Finland during the year 2000.

# Experts

**Vladimir Arkhipov**
Vladimir Arkhipov was born 1953 in Kharkov, Ukraine. He graduated from the Forest Academy in St Petersburg (Leningrad). Since then he has worked for the North-West State Forest Management Enterprise in forest planning. Mr Arkhipov is now Director of the organisation.

**Kimmo Haarala**
Kimmo Haarala was born 1964 in Finland. He holds a Master of Science in Technology.
During his 12 year career he has been involved in quality and environmental management issues. He started at DNV Certification five years ago as an auditor where recent tasks have included leading the forest industry and associated businesses, and the development and maintenance of DNV's own quality management system.

**Olav Henriksén**
Olav Henriksén was born 1944 in Finland. He graduated in 1968 with an MSc in Forestry from Helsinki University. He has had a long career in the Finnish and International forestry industry. In the early 1990's, Olav was Director of Wood Imports. Nowadays he is Vice President for International Forestry Affairs.

**Alexey Jaroshenko**
Alexey Jaroshenko was born 1967 in Moscow, Russia. He graduated from Moscow State University with a PhD in Biology (Botany). Mr Jaroshenko is now Forestry Coordinator for Greenpeace Russia.

**Reinier de Man**
Reinier de Man graduated from the University of Amsterdam with a degree in Social Sciences in 1987. Following 12 years of experience at different universities, research institutes and a consulting bureau, Reinier de Man set up his own environmental management and policy consulting bureau, allowing him to combine a natural science expertise with his social science

background and experience in business consulting. In the last 10 years he has built up a combination of theoretical and practical knowledge and has become an opinion leader in the field of business co-operations for sustainability.

**Dr. Johannes Merck**
Johannes Merck, 43, graduated from the Freie Universität Berlin with degrees in history and law (MSc). In 1985 he began work as a research fellow in the German Bundestag (parliament) and later acted as personal assistant to parliamentarians in the local parliament of Hamburg. After obtaining a PhD in philosophy in 1989, Dr Merck became PR-Manager at Otto Versand. Since 1991 he has been responsible for the environmental and social policy of the company becoming Director in 1997. Dr Merck also manages the Michael Otto Foundation for Environmental Protection, and has founded (is Managing Director of) Systain GmbH, a consultancy specialising in the development and implementation of sustainability concepts.

**Florian Nehm**
Florian Nehm began his career as a journalist, working at DIE WELT. He earned his MSc in Economics at the Colorado State University after studying agriculture in Chile and Germany. He is now the Environmental Officer of the German magazine and newspaper publisher Axel Springer Verlag. The group is one of the leading promoters of transparency and optimisation of all processes of the Paper Chain having an impact on the environment - from forest management to paper recycling.

**Jukka Olkkonen**
Jukka Olkkonen was born 1948 in Finland. He graduated with an MSc in Forestry in 1973. Jukka has worked in wood procurement for Finnish forest industry companies. He made his first business trip to Russia (Soviet Union) in 1980 and started learning the Russian language in the late eighties. In this task he has made more than 100 trips to different parts of Russia, a large part of which were to audit the origin of imported wood. Special interests: photographing Finnish and Russian nature and people.

**Timo Panhelainen**
Timo Panhelainen was born 1946 in Finland. He graduated with an MSc in Forestry during the 1970's. Since then, Timo has worked in wood procurement for Finnish forestry companies and has over 20 years experience in managing wood imports from Russia. Timo is currently Director of UPM-Kymmene Forest's Wood Imports unit.

**Per Wiggo Richardsen**
Per Wiggo Richardsen (43) is a graduate of the University of Tromsø, Norway. He received a cand. scient. degree in 1987, majoring in computer science. His professional career started as a research scientist at FORUT (Foundation of applied research at the University of Tromsø). In 1992, he moved to Norsk Hydro, a major Norwegian industrial concern, and took up a position as Information Manager for the entire exploration and production division. Richardsen nowadays works as an Information Manager in the Corporate Communications Department at Det Norske Veritas, Oslo, Norway, a post he has held for the past three years.

**Päivi Salpakivi-Salomaa**
Päivi Salpakivi-Salomaa graduated with an MSc in Forestry from Helsinki University in 1982. Since then, Päivi has worked for Finnish forest industry companies in both silviculture and wood procurement. In the early 1990's Päivi started to work with environmental matters related to managing the company's forests and wood procurement, including wood imports. Päivi is nowadays Environment Manager for UPM-Kymmene Forest.

**Robert Taylor**
Robert Taylor was born 1972 in Scotland. He graduated from the Scottish School of Forestry in 1994 and qualified as a UK Chartered Forester in 1998. Robert has worked 7 years for UPM-Kymmene; five years in the UK specialising in plantation forestry and native woodland establishment, including projects specifically for conservation, recreation and the landscape; and two years in Finland where his main duties nowadays are dealing with international customer enquiries on issues such as forest certification, the origin of wood and old growth forests.

**Pavel Vladimirov**
Pavel Vladimirov was born 1977 in Russia. He graduated in Finland as a Forest Engineer rom Rovaniemi Polytechnic in 1999. Pavel currently works for UPM-Kymmene Forest. His ain duties are auditing the origin of imported wood from Russia. Last year more than 120 udits were carried out in 9 regions of the Russian Federation. Pavel also studies at the International elations Faculty of the Petrozavodsk State University.

# 2. FORESTRY IN RUSSIA TODAY

**An overview and comment by Timo Panhelainen and Jukka Olkkonen**

*"Russia has huge forest resources which are under-utilised in some areas and overutilised in others. The question of "Where and how to enhance sustainability?" is often asked, and social sustainability in rural areas is regarded as important"*

## 2.1 Forest Management

**Background**
Russia has more than 200 years of history in forestry and forest research. The year 1888 is generally taken to be the year when forest policy was introduced for the first time. Prior to 1917 about 40% of Russian forests were privately-owned and 60% belonged to the state. During the Soviet period all land was transferred into state ownership. Nowadays it is still stateowned but the system of administration has changed. New forest legislation for the Russian Federation came into force in 1997 when an updated Forest Act was published. The main principles are based on sustainable forest management.

**Forest Administration**
Forestry is nowadays subordinated to the Ministry of Natural Resources. Deputy Minister Juri A. Kukujev is responsible for forestry matters. The forest administration itself is again undergoing reorganisation, and the responsibility for its function is currently carried out by regional and local forest organisations. This system continues to work, and one way or another will remain after management restructuring. The forest lands have been allocated to the Leshozes, or Forestry Centres, of which there are 1800, and their civil servants carry out forest management in practice. Further information can be found on the Ministry of Natural Resources internet pages at www.mnr.gov.ru (currently in Russian only).

**Forest legislation**
Forest legislation in Russia has its origin in the 1700's, but current forest legislation was affirmed in 1993. It was updated in 1997 with the publication of the new Forest Act. According to the Forest Act all forests belong to the Russian Federation, but importantly the Forest Act also permits the transfer of forest ownership to its' subjects.
The Russian Federation, in conjunction with research institutes under its jurisdiction, has developed more than 70 normative documents related to forest management, forest protection and conservation and inventory. Since the period of economic transition began, new features have continually been added. One important addition is the Civil Code (1994) which defines forests as real estate. This means that they have a value or price, something they did not have before.
Under the new forest legislation individuals or companies can lease a forest area for a period of 1-5 years. It is also possible to make a longer term leasing agreement which covers up to 49 years. The Regional Committee for Natural Resources administers the lease. During the lease

period the leaseholder can carry out all forms of silviculture and thinnings or final fellings. The leaseholder must acquire a felling license for each harvesting site and following final fellings is obliged to attend to forest regeneration. Payment to the state is based on an agreed stumpage price. The lease also requires the lessee to build forest roads and provide other infrastructure such as stacking areas and forest depots.
Some harvesting companies operate without a forest lease contract. These companies buy felling licences at auctions or from local forest district offices (leshozes). The felling instruc-tions are clearly specified in the license and includes felling period, location, identification of site boundaries, felling volume and treatment of residues. Any violation of the instructions can result in a penalty to the feller.

**Land ownership structure**
The State owns all forests and other wooded land in Russia. The forest administration controls over 94% of the total forest land area and 91% of the total growing stock. Agricultural organisations (state farms, co-operatives) own 4% of forest land and the remainder is owned by the Ministry of the Environment, other Ministries, hunting enterprises and municipalities.

**Forest classification**
The forests of Russia are classified into three categories according to their location and economical significance.

*Group I*
Group I forests have restricted forest use, protective or recreational functions (e.g. they protect watersheds, the climate or soil, or they are located in the green zones of inhabited areas). The fellings in Group I forests are most often sanitation fellings or fellings preventing forest damage. Clear-fellings as a rule are prohibited. However, the local instruction varies and in practice small-size regeneration fellings or selective fellings are carried out. Group I forests make up 22% of Russia's forest area. Protected forest areas in Russia cover 7% of forest land. (IUCN categories I-IV cover 3%)

*Group II*
Group II forests are located in densely inhabited areas and/or in industrialised areas. The use of these forests for industrial purposes is strictly controlled. The maximum allowable cut per year must equal the annual growth. The felling of timber must not endanger forest development and post-felling reforestation is obligatory.

*Group III*
Group III forests form the timber reserve for the forest industries. Their main purpose is to secure wood supply for the mills and processing plants. Often these forests are located in sparsely inhabited areas. Previously there were no limitations on the size of clear-fellings, but nowadays the maximum size is 50 hectares. Figure 1 below shows the percentage share of Russian forests in each forest classification group.

**Forest resources**

Russia has the largest forest reserves in the world. They are equivalent to 22 % of the world's total forest resource. The forest administration is responsible for the management of 1180 million hectares of land, of which 851 million hectares are covered by forest. The productive forest area is 763 million hectares. This is 40 times more than in Finland and 80 times more than in Germany.

In Russia, the forest tree species are divided into three groups; conifers (e.g. Norway spruce, Scots pine and Larches), broadleaved softwoods (e.g. birch and aspen) and broadleaved hardwoods (e.g. oak and beech). Practically Russian forests are best described as mixed forests with conifers predominating. Predominantly conifer forests represent 51% of Russia's forests.

Mature and over mature stands are the most prevalent development classes (age-class) in Russian forests. Over 54% of the growing stock is classed as mature and over mature i.e. over 80 years old. There are several reasons for this, but the most important is the under-utilisation of the annual allowable cut. This means that forests are getting older, mean annual increment is reducing, and the risk of forest fires is increasing.

Net annual increment is around 1 284 million m3.

An annual allowable cut is calculated for the productive forest areas to ensure that the forests will be managed in a sustainable manner. The annual allowable cut since 1996 has been 486 million m3, but the actual harvested volume in recent years has been about 100 million m3 per year. This is only equivalent to double the volume harvested in Finland at the end of the 90´s.

The adoption of the principles of sustainable forestry resulted in a reduction of the annual allowable cut from 639 million m3 for the period 1988-1995, to 486 million m3 since 1996.

The main reasons for the reduction are:

- felling is no longer allowed in cedar forests (40 million ha).
- ending of final fellings in 11 different areas of Russia and the designation of these forests as specially protected areas (1.4 million m3).
- ending of final fellings in sub-tundra forests, and also riparian forests which protect valuable fish spawning grounds.
- establishment of National Parks, Nature Reserves and Specially Protected Areas (10.5 million m3).
- transfer of forests from one category to another of stricter use regimes (6.8 million m3).
- more accurate stand inventory and subsequently a more accurate allowable cut calculation.

However, despite the low rate of utilisation in comparison with the allowable cut over the whole country, overcutting can still occur in some areas.

In Soviet Russia 300-400 million m3 was harvested annually, but during the 90´s domestic demand for forest products reduced and the economic strength of the forest industry weakened. Therefore investment has been limited, technology and machinery are less developed and harvesting is generally more labour intensive.

*Table 1. Russia's forest resources*

| **Forest Resource** | **Unit of measure** | **Russia** |
|---|---|---|
| Total land area | million ha | 1 688.9 |
| Forest and other wooded land | million ha | 886.5 |
| - as % of total land area | % | 52 |
| Forest cover | million ha | 816.5 |
| - predominantly coniferous | million ha | 416.4 (51%) |
| - predominantly broadleaved | million ha | 66.9 (8%) |
| - mixed forests | million ha | 333.2 (41%) |
| Forest available for wood supply | million ha | 516.4 |
| - 40 years or less | million ha | 127.0 (25%) |
| - 41-80 years | million ha | 109.7 (21%) |
| - over 80 years | million ha | 279.6 (54%) |
| Mean volume of growing stock (forest and other wooded land) | m3/ha | 98.1 |
| Total growing stock (forest) | billion m3 | 85.5 |
| - available for wood supply | billion m3 | 60.9 (71%) |
| - not available for wood supply | billion m3 | 24.6 (29%) |
| Gross annual increment | million m3 | 1 803 |
| Net annual increment | million m3 | 1 284 |
| Allowable cut 1995- | million m3 | 486 |
| Annual fellings (1995) | million m3 | 150 |
| Protected forests and other wooded land (IUCN categories I to IV) | million ha | 24.8 |

***Source: UN-ECE/FAO Contribution to the Global Forest Resources Assessment 2000***

**Harvesting**

Final felling in mature forest stands is the predominant method of harvesting in Russia today. The share of thinnings is only a few percent. This is because the available technology, road infrastructure, and transportation and felling methods are more suited to final felling than thinning. There are three types of final felling carried out; clear-felling, continuous cover felling and light selective felling. The type of felling permitted depends on the forest group in question.

The whole tree and whole stem harvesting methods were the most commonly used in Soviet Russia, and it is still much used today. Forest tractors skid trees to the stacking area where they are delimbed prior to transport. Timber trucks then transport the delimbed stems to terminals/forest depots where they are cross-cut into different timber assortments. The timber is then converted on site or loaded to railway wagons for transport to domestic or export markets.

The level of mechanisation in forest operations is high, but the type of technology applied often means that productivity is low. In addition whole tree harvesting is unsuitable for thinnings.

More than 90 % of the wood imported to Finland from Russia is felled and processed using Russian labour and technology. Scandinavian technology (harvesters and forwarders) is used mainly near the Finnish border. Lack of financial capital is the main reason for the lack of investment and development of mechanised harvesting, although it is happening gradually. On the other hand, the labour-intensive methods used in forestry can often be the only way to provide work for people in some areas of the Russian countryside.

**Forest Regeneration**
Forest regeneration is implemented in accordance with a normative act titled “Basic instructions for forest regeneration in the Russian Federation”. There are three main regeneration methods used; natural regeneration, sowing and planting. Traditionally natural regeneration is the most common method used. The types of felling used to promote natural regeneration are seed tree felling, strip felling, continuous cover felling and use of the understorey.
The annual average proportion for each regeneration method over the period 1983-1993 was as follows:

| | |
|---|---|
| Natural regeneration | 38% |
| Natural regeneration enhanced by planting | 32% |
| Coppice | 2% |
| Planting or Sowing | 28% |

Since 1993 the share of planting and sowing in regeneration has increased and nowadays represents over 30 % of all regeneration areas. In some regions of European Russia it is even higher.
Artificial regeneration by planting or sowing is approved where natural regeneration with economically valuable species is not possible within a reasonable passage of time. Planting or sowing can also be used to compliment natural regeneration where necessary.

# 2.2 Forest conservation

## 2.2.1 An introduction

*This text by I.V. Chebakova provides an introduction to forest protection in Russia. It has been drawn from the following publication:*

National Parks of Russia, ISBN 5-88587-036-5
Biodiversity Conservation Centre
Author I.V.Chebakova

“The Russian concept for the creation of specially protected natural areas differs significantly from that in other countries. The basic unit in the Russian system is the Zapovednik, a strictly protected nature reserve belonging to category one in the system for classifying protected natural areas used by the IUCN (The World Conservation Union). The system of Russian Zapovedniks was created over a period of 80 years, resulting both in a unique system recognised throughout the world, and in firm understanding of the Zapovednik´s status as model natural areas preserved in their unchanged form. Their territories are closed to visitors, their natural ecosystems, vegetation and fauna are preserved and their natural processes are studied in conditions unaffected by humans.
Other countries began much later than Russia creating such reserves. The most popular and widespread type of specially protected territory is the National Park. These parks belong to category two in the IUCN system. Russia began to create national parks only in 1983 (when Sochinsky National Park and Losiny Ostrov National Parks were formed) National parks were a

new form of protected area for Russia. They were intended to fulfil a range of objectives, including preserving the natural and cultural heritage, developing tourism and creating appropriate methods of sustainable development for the parks. This new form of protected area allows the preservation of unique natural systems and sites that have historical and cultural significance. At the same time, national parks allow large numbers of people to visit the areas to see natural, historical and culturally significant sights, and to relax in picturesque surroundings.

The National Park´s territories include zones with different regimes of special protection that take into account the areas natural, historical and cultural significance, and also other features. As a result, the parks can have different land-use zoning plans, and can include Zapovednik zones with management regimes typical of Zapovedniks (such zones occupy from 7 % to 44 % of the land in Russian National Parks). National Parks are also surrounded by protective buffer zones where economic activity must be co-ordinated with the park authorities.
Russia has a total of 35 National Parks, two-thirds of them having been formed in the past eight years. The total area of the National Parks is 6.9 million hectares (0.4% of the total land area of Russia). Plans call for the creation of about 40 more parks covering a total area of 10 million hectares".

* * * * * *

## 2.2.2 Forest protection in Russia

The first nature protection areas in Russia were established during the 1920's. The objective at that time was for scientific purposes. In 1943 a classification system for forest use groups was introduced. Group I forests included all the different types of protection area and also forests in which there was some kind of constraint on forest management. The protection of forests developed further in the 1980's and 1990's, when for example all the existing national parks were established.

There are many types of protection area in Russia and they can be divided into the following main types:

Nature Reserve (zapovednik)
National Park (natsionalnij park)
Nature Park (prirodnii park)
Conservation area (zakaznik)
Natural Monument

According to the recently published WWF report " Insight into Europe's Forest Protection", using data from the UNEP-World Conservation Monitoring Centre (based on IUCN categories I-IV), Russia has more forest protected areas than all the other European countries put together - 134,500 square kilometres out of a total of 205,000. Furthermore, among the 50 largest forest protected areas, 39 are in Russia, 6 in Fennoscandia, and only 4 in southern Europe.

A protection areas size and significance determines if they are subordinated to the Russian Federation or to local administration.
The first priority in strictly protected areas is to preserve ecosystems which are in their original state, but these are often only a part of the whole protection area. Recreation is also an important

factor in planning protection, and in some places small scale forest management and sanitation fellings are permitted.
Such a diversity of protection area types means that comparisons with other countries' systems is difficult.
Protection area planning continues and many new areas are "on the table" in Russia. However the establishment of new areas is an open question for many reasons; currently lack of funding and the on-going restructuring of Russia's forest administration. In addition, the environmental authorities and forest administration have different views concerning the need for protection in certain areas.
The protection situation is not widely known in Russia. It is commonly thought that protection is non-existent, and that timber felling can be carried out anywhere. But the network of protection areas is actually quite good, also in an international context. The system works, and as the decision to protect has been given legal status, one can be sure that felling permits are not issued in protection areas; that simply is not possible.
The question of which and how much forests are protected is for the most part an internal matter for Russia. However, in Karelia for example, UPM-Kymmene along with other Finnish forest industry companies joined a "moratorium"*1 with the aim of giving more time to the local decision making process. This type of moratorium is viewed by the Finnish companies as a short term tool only, although it has now been in place for over four years with little progress in negotiations. It is worth noting that many protection areas in Russia have been established based on objectives other than the protection of old growth forests. Environmental NGO's are now demanding more protection for forests in their natural state and it looks like discussions on the matter will continue. For example, "The last of the last"*2 report by several environmental organisations demanded an extension of the moratorium to Arkangel and Komi covering millions of hectares. In Vologda discussions have already lead to an agreement between the forest authorities and environmental organisations, and a decision to protect has been made. This is a positive example of working towards consensus, even though the area in question, the ATLEKA reserve, was relatively small and a solution perhaps easier to find than elsewhere.

*[1] *The moratorium is an agreement where the main western buyers stopped purchasing wood from certain areas in the Republic of Karelia before nature values have been identified. The aim was to create a working group to identify the nature values of these areas and agree recommendations for protection.*

*[2] *The Last of the Last report was published by participant organisations of the Taiga Rescue Network in Fennoscandia (Norway, Sweden, Finland) and Russia. The report aims to provide background material and maps on the ecology, land use history and conservation status of the forest across the region. The report makes special reference to old-growth forests. Comments are available from the Forest Department of Finland's Ministry of Agriculture and Forestry.*

**ATLEKA**

At the meeting in Cherepovets the participants (State Forest Administration, Green-peace Russia, Logging companies and Scandinavian companies) discussed the estab-lishment of a protection area in Vologda region. It was decided that Greenpeace should prepare an expert report on the area. Greenpeace carried out the fieldwork dur-ing summer 2000.
The governor of Vologda region decided on 10.8.2000 to establish a State Nature Landscape Reserve named ATLEKA. The size of the reserve is 3370 hectares.

**IUCN Definition of forest protected area**
IUCN defines a protected area as "an area of land/or sea especially dedicated to the protection and maintenance of biological diversity, and of natural and associated cultural resources, and managed through legal or other effective means".

Six categories of protected areas are recognised:
I. Strict Nature Reserve/Wilderness Area - managed mainly for science and wilderness protection
II. National Park - ecosystem protection and recreation
III. National Monument - conservation of specific natural features
IV. Habitat/Species Management Area - conservation through management intervention
V. Protected Landscape - landscape/seascape conservation or recreation
VI. Management Resource Protected Area - sustainable use of natural resources

## 2.3 Dealing with different stakeholders

**Stakeholders in Russian forestry**
The Russian forest administration has been strong and it was previously more centralized than nowadays. The education level of its staff has been high. Most decisions concerning forestry have been made by civil servants and political decision-makers. When the green movement emerged to take part in the forest discussion, the whole concept of stakeholder discussion was something new. Like in all countries, history, the policy process, local values, location and value of forest resources, markets and public opinion are affecting the way in which forests are managed.
Finland has bought timber from Russia for many years, but in the past most dealings were with the Government departments responsible. Nowadays, UPM-Kymmene is in regular contact with a range of different stakeholders.

The main stakeholder groups that UPM-Kymmene deal with are:
- State Forest Administration
- State Environment Administration
- NGO's
- Towns and community organisations
- Harvesting companies, timber merchants and trading houses
- Local people

**Reaching for consensus**
The role of a foreign timber buyer in these discussions is not always easy, and in many cases we cannot directly intervene in decision making. However, because UPM-Kymmene buys 90% of its imported wood from harvesting companies, timber merchants and trading houses, UPM-Kymmene can indirectly influence operations through negotiations, contract agreements and the requirements of its origin of wood tracing system.
UPM-Kymmene's staff have regular contact and the opportunity to discuss with the above stakeholders groups via the daily working relationship, meetings, seminars, conferences and representation in work groups such as the forest certification work group. During the course of

these communications many issues can be discussed both formally and informally. Good examples already exist of stakeholder cooperation.
The attitude of harvesting companies towards UPM-Kymmene's tracing system and audits has varied. However, nobody has actually rejected it. The aim of the audit visit must be made clear straight from the beginning as there can be mistrust of foreign "inspectors", and sometimes it is difficult for people to understand what can be interesting about the origin of wood. In a remote forest working village the picture of the world is somewhat different to that in a city in central Europe.
Nowadays environmental quality is an emerging part of the business also in Russia.

**About forest certification**
As part of neighbourly co-operation between Finland and Russia, a joint certification work group was set up and has now started discussion on "harmonising" different certification systems. UPM-Kymmene is represented in this work group.
UPM-Kymmene also has its own forest certification guidelines which are applicable to ist operations throughout the world.

## FOREST CERTIFICATION GUIDELINES OF UPM-KYMMENE

By means of the forest certification process, UPM-Kymmene seeks to prove to customers that the wood raw material used in the Corporation's products originates in well managed forests.

The selection of the forest certification system must be based on local conditions and is individually decided upon in each country.

The system must fulfil the following requirements:

- The standard applied in the forest certification process is based on the principles of sustainable forest management. In Europe this refers to the six criteria of the Helsinki process.
- An internationally accepted accreditation procedure exists to approve the certifying organizations.
- The standard applied in the forest certification process is agreed upon by the different interested parties concerned through co-operation in an open, consensus-seeking process on a national level.
- The forest certification system is cost-efficient.
- The participation of forest industry and other forest owners is appropriate to the administrative work of the system.

UPM-Kymmene promotes efforts to create a worldwide umbrella-organisation which mutually recognises certification systems that fulfil the requirements presented above.

# 3 TRACING RUSSIAN WOOD IMPORTS

**by Päivi Salpakivi-Salomaa and Robert Taylor**

> *"Customers expect us to know the origin of the wood we use. They also need assurance that the wood does not come from protected areas. In 1996, UPM-Kymmene became the first forestry company in Finland to develop a system for tracing the origin of wood which could also be used to communicate information on our activities in Russia to our own staff, customers and other interested parties".*

## 3.1 Background

**Introduction**
Since the 1950's, UPM-Kymmene Forest has imported wood to Finland for reasons of availability and quality. The volume of imports is 3-4 million cubic metres annually, representing about 15% of the total wood raw material requirement of UPM-Kymmene's Finnish mills (see figure 2.). The majority of imported wood, about 90 %, comes from Russia. The other main sources are Estonia and Belarus (see figure 3.).
UPM-Kymmene Forest has a specialised imports department which is responsible for the procurement and transport of imported wood to UPM-Kymmene's Finnish mills. The imports department is based at Kouvola in eastern Finland and has a staff of around 15 people. Imports staff regularly visit Russia to plan, supervise and monitor delivery contracts.

**UPM-Kymmene's suppliers**
Wood imported from Russia comes from three main types of supplier; logging companies, timber merchants and trading houses (see figure 3.). UPM-Kymmene chooses its' suppliers on the basis of long-term business relationships, reliability and awareness of environmental responsibility.

The proportion of different supplier types trading in imports to UPM-Kymmene from Russia is as follows:

- UPM-Kymmene joint enterprises (roundwood + chip) 10%
- Finnish trading houses (from harvesting contractors or brokers) 30%
- Finnish timber merchants (from harvesting contractors or brokers) 10%
- Russian harvesting contractors 20%
- Russian timber processors (chips) 10%
- Russian timber merchants 20%

Since the 1960's, much of the trading has been bilateral based on a counter-trade agreement between the countries. In the Soviet Union only a few state companies were permitted to export and as result, some Finnish trading houses were running the operation in practice e.g. taking Finnish goods to Russia and correspondingly importing timber for the wood processing industry. Although the system has changed, these companies still have strong relations with Russian timber

suppliers and continue to handle a significant part of wood imports. Nowadays, other Finnish companies also practice import trading.
After the collapse of communism, the state harvesting companies were privatised. In addition, a large number of new harvesting companies were established. Some of these have exporteddirect, but most commonly they lack expertise, relations and the funding needed for foreign trade. As a result, a number of companies specialising in timber exports have been established in Russia. They deal with the customs formalities and other bureaucracy, and for example also fund the deposits needed to order rail carriages.

**UPM-Kymmene's Policy**
UPM-Kymmene requires its' suppliers to operate according to the nationally and internationally agreed principles of sustainable development through contract terms of agreement.
The Forest Division's own environmental policy further demands that:

- *"The Forest Division observes the legislation and statutory regulations of respective countries"*
- *" The Forest Division does not fell or accept wood which originates from statutory protected forests, forest areas included in nature conservation programmes or sites which have been notified by the authorities to be excluded from felling".*

UPM-Kymmene reserves the right not to purchase timber in specific areas, and to terminate deliveries from any area where special nature values have been identified.

## 3.2 Elements of the tracing system

**Basis of the system**
In 1996, UPM-Kymmene became the first forestry company to start developing an information system for tracing the origin of wood. It is part of an operating system which incorporates a Quality Assurance System according to ISO 9002, and an Environmental Management System according to ISO 14 001.
UPM-Kymmene has also been approved as a wood supplier in accordance with the European Union's EMAS (Eco Management and Audit Scheme) regulation.
One of the main objectives from the beginning was to create a system that could be utilised to communicate information about the Group's timber procurement from Russia, and Russian forestry in general, to our own staff, customers and other interested parties.
The development, implementation and running cost of the system is approximately 100,000 - 150,000 euros per year, depending on the accounting method, plus the annual salaries of two full-time employees, travel and other expenses.

The system consists of three main elements:
- a statement of origin
- database and GIS mapping program
- audits in the country of origin

**Statement of Origin**
A written statement of origin is required for each timber supply contract. If the statement is not provided within one month of the commencement of deliveries, UPM-Kymmene reserves the right to terminate the contract. There are three versions of the statement of origin according to the raw material to be imported and the mode of transport used. The information required is as follows:

*Pulpwood or logs, by road:*
- seller, or his representatives name and contact details
- contract number
- method of delivery
- sub-suppliers name and contact details
- estimated timber quantity in m3
- harvesting site location (Oblast, Leshoz and Lesnizestvo)

*(Information on the location of the forest must be provided by the sub-supplier)*

*Pulpwood or logs, by rail or water vessel:*
- seller, or his representatives name and contact details
- contract number
- method of delivery
- sub-suppliers name and contact details
- estimated timber quantity in m3
- loading terminal or port, including code number
- harvesting site location (Oblast, Leshoz)

*Chips by road, rail or water vessel:*
- seller, or his representatives name and contact details
- contract number
- supplier sawmill or plywood mill
- felling quantity in m3 (conifer or birch)
- method of delivery
- roundwood suppliers name and contact details
- origin of roundwood (Oblast and Leshoz)

In addition the Group expects the seller or his representative to possess at all times the necessary documents which confirm the origin of individual parcels of timber. The seller can also be asked to supply a more exact statement of origin, for example which provides the stands precise location and felling permit number. This is required when the loading terminal is located near a disputed area of nature concern.

**Database and GIS mapping program**

*Database*

The imports database contains information on all suppliers and delivery contracts. The database also records information from the statement of origin and audits.

Imports Unit staff are responsible for entering all information to the database.
During 2000, over one hundred different suppliers delivered wood to UPM-Kymmene from Russia. Each individual supplier's contact information is recorded in the database and includes business name, address, phone/fax, contact person. It is important that these details are correct, and also that they are kept upto date, to ensure that UPM-Kymmene knows exactly who is responsible for each delivery.
Delivery contract information is divided into 4 parts; basic information, contract detail, additional information and historical record. The delivery contract section also provides a direct link to any audit (see figure 5.) which has been undertaken and the relevant statement of origin.
The basic information includes the suppliers details, the contact person, the contract period and contract date of signature. Contract details include amongst others timber assortment, total purchased volume and unit price. The additional information section allows the supervisor to note issues not covered in the contract detail. The historical record provides valuable reference on contract amendments and price differences.

*GIS Mapping program*

Wood coming from Russia by rail is monitored with the help of a GIS mapping programme.
GIS (Geographic Information System) is a computer-based system for creating, storing, managing, and modelling geographically-controlled information. The advantages of a GIS include easy updates, sharing of the same data by different individuals and groups, customisation for each user's needs, and accessibility to both vector (lines, points, polygons) and raster (e.g., photographs, satellite images) data.
The original proposal for the imports GIS mapping programme was made by Jukka Olkkonen, Environment Manager of the Imports Unit, in February of 1998. The basic requirements of the program were identified by Jukka and in conjunction with UPM-Kymmene's Information Technology department, a suitable application called TuontiGIS (ImportsGIS) was designed during 1999.
UPM-Kymmene's TuontiGIS program allows detailed information about imported wood deliveries to be recorded, queried and displayed instantly on screen. It can then be presented as required to produce a variety of maps, charts or reports for management purposes. High quality maps can be output at the user's desk or centrally on large digital plotters.
Initially TuontiGIS only displayed information related to the origin and volume of timber delivered by rail. However, during 2000 functions were added which provided access to basic contract information, notes and photographs from sites where supplier audits had been carried out.
The GIS and database are interactive so that changes entered on the database automatically amend the map.
At present the GIS mapping programme covers wood delivered by rail. This represents the majority (75%) of all wood raw material imported from Russia. The system is currently being considered for extension to deliveries by road and water vessel.
UPM-Kymmene owns the TuontiGIS application and was responsible for its design and development. Updating and future development of the application will be carried out by the specialised staff of UPM-Kymmene Forest's Information Technology department.

*In practice*

All rail carriages arrive with a consignment note displaying the supplier and loading station's name and code number. This information is then saved to UPM-Kymmene's forest operating

system, which also records it on the Russian map. The mapping program allows us to reliably trace information on specific deliveries and collect statistics on all wood deliveries. The GIS is based on two maps - the base map which provides general information such as land, water, topography, built up areas, etc., and the function map which displays all regional boundaries, railway stations and audit locations.
As part of the function map, two different themes are available which provide an instant picture of delivery quantities and product assortments on a per station or regional basis. Figure 6 shows the delivered volume per region.

In addition, the information listed below can be accessed according to the user's chosen criteria for a selected time period.

- supplier
- sub-supplier
- contract number
- loading station's name and code number
- timber assortment
- volume (m3)

Figure 7 shows the delivery quantity and product assortment for each loading station.

The location of each audit is recorded as a red square (see figure 8.) in the GIS mapping program. By "clicking" on the audits' location, the user can view a brief version of the full audit.
The brief includes:

- contract number,
- supplier
- operational notes (full audit details on file)
- photographs

**Delivery-audits**
The long term aim of auditing is to make observations based on sound practice and to strengthen co-operation with the suppliers.
UPM-Kymmene's imports department staff mainly target delivery audits to imports from Russia. An agreed number are examined on the accuracy of the statement of origin and the procurement documents, and a number of sites from each supplier will be checked on the ground. In addition, notes and photographs are taken by the auditor to provide additional information on the method of operation used, and competence in environmental management. Photographs are an important part of the audit. They can often provide more information than pages of text, and importantly provide proof of actually making the site visit.
Audits can be made without prior notice but are more often carried out as part of a notified day visit. Post-felling audits can take place during the week, month or year after felling, and sometimes during the following year. Audits can also be carried out either during felling or before felling (once the supplier has received the felling licence).

In each year auditing is carried out on suppliers responsible for 80% of the annual total imported quantity. Regular suppliers are audited at least every second year, but the supplier will be audited automatically if the contract quantity exceeds 20,000 m3 in any one year.
Approximately 50-60 audits are carried out per year, and in connection with these 150-200

individual felling sites are checked.
As part of the audit, the operation is given a general classification of good, normal or poor according to the following criteria:

| | |
|---|---|
| Good: | Environmental matters actively addressed and legislation requirements exceeded |
| Normal: | Felling implementation fulfilled country of origin's legislation requirements |
| Poor: | Felling implementation was worse than the required code of practice |

The strong enforcement of Russian legislation by the appropriate authorities means that poor results rarely occur. However a poor classification can be given for example, when the soil and retention trees have been badly damaged during harvesting and extraction. Figure 10 shows how the audited sites were evaluated in year 2000.

*Figure 10. Evaluation of the audits in 2000*
UPM-Kymmene considers each poor observation and takes appropriate action. For example, deliveries can be discontinued if the supplier operates outwith the contract terms and conditions, such as delivering timber from a prohibited area. UPM-Kymmene has in the past restricted suppliers' deliveries.
A key part of the audit is also to provide the supplier with information about UPMKymmene's environmental policy and auditing procedure.

## 3.3 Verification

UPM-Kymmene Forest has an overall management system for wood procurement and silviculture which incorporates a Quality Assurance System according to ISO 9002 and an Environmental Management System according to ISO 14 001. An independent third party auditor, Det Norske Veritas awarded UPM-Kymmene Forest the ISO 9002 and ISO 14 001 certificates for wood procurement and forest management on 7.9.1998. Both internal and external audits are carried out on all parts of the UPM-Kymmene Forest management operating system over a three year period.
During 1999, the Finnish Environment Institute approved UPM-Kymmene as a wood supplier entering the national test register in accordance with the European Union's EMAS (Eco Management and Audit Scheme) regulation. The approval was based on the environmental statement made by the Forest Department. EMAS is a voluntary eco-management and auditing scheme of environmental issues for industrial enterprises.
In November 2000 Det Norske Veritas was asked to assess UPM-Kymmene Forest's system for tracing the origin of imported wood. The tracing system is based on a series of documents which are part of the overall management operating system.
The DNV assessment can be found in section 5.1. of this report.

# 4 TALES FROM RUSSIA

*"A unique and unusual insight into the experiences of our staff as they travel around Russia on their auditing trips"*
*Anni Fillippova at the table.*

## 4.1 The table

**by Jukka Olkkonen**

At the beginning of July 2000, I made an auditing trip to the Zapkarelles company work sites in the Republic of Karelia. At the same time I got to know the National Park of Tolvajärvi. When I was returning home, I stopped by Aunus, in the village of Alavois to photograph a beautiful river scene. On the shore there was a Karelian grandmother called Anni feeding her flock of geese. Soon out of the house came the host, Nikolai Filippov. It wasn't long before they asked me to their house for a cup of "tsaju" (tea). I of course was in a hurry to continue my trip, but I didn't want to refuse. Anyhow, the goods on the table were tasty to a hungry man. There wasn't only tea but also fish soup from the fresh fish of Laatokka lake.
I heard that Nikolai had been a driver for a local timber harvesting company (called Lespromhos) for over 40 years, and had been retired for a long time already. The Filippovs were very happy with what they had - the pension was adequate for the cost of everyday living. Anni especially, is a very devoted christian, an orthodox christain. In spring 2000 these 75-year olds, over 50 years married, were re-married to a christian marrige in an orthodox ceremony.
I took photographs of the Filippovs and in autumn I returned to visit them again. The house had been painted red with "Finnish paints". I received a hearty welcome and of course the table was wonderful again. We exchanged little gifts as is the custom here. I also received garden products to take away with me; onions, tomatoes etc. Anni and Nikolai wished me welcome to stay overnight at any time again in the future. One cannot find people more friendly and good humoured.

## 4.2 A real man

**by Pavel Vladimirov**

It was the last auditing trip of 2000. I had to audit 6 forest enterprises in the regions of Tver and Jaroslavl. I usually call our suppliers in advance to notify them of my visit. For all my auditing trips I try to minimize the travelling distances between the location of our suppliers and the hotels in the area. This was to be quite a normal trip.
But it was the 16th of October. Russians say, that winter comes "suddenly" to Russia. That´s the truth! It was very cold in the hotels. I put all my warm clothes on, got into my sleeping bag, but....it didn´t help. At 5 o'clock in the morning I woke up because of the cold. In addition to this, I have to add that there was no warm water at all! So, after 10 days of driving, and walking in the wet forest, I started to stink of a "real man". And it was a great pleasure to take a shower in Tikhvin.

## 4.3 Its good to be from Finland

**by Pavel Vladimirov**

The Road Traffic Police are a very important part of the Ministry of Interior. They do serious and indispensable work on the roads of Russia. Sometimes they meet interesting situations.
Once I was driving in the Leningrad region. It was 2 a.m. There was nobody on the road except me. Suddenly, 2 young police inspector's stopped me. "What's the problem?", I asked. "Is it speeding?".
"No, no, it´s O.K.", replied the policemen. "Give us your driving licence and car documents". They checked my car all over from top to bottom. There were no aberrations. One of them had a new idea about the carbon dioxide discharge level. It was also good.
They stayed trying to think if everything was in order. One of them walked around my car and said, " Why is your car so dirty? I can´t see your licence number. You know that it is a traffic offence. You have to pay for it. Where are you coming from?".
I wearily replied, " It´s raining, I have driven 400 km. I come from Finland". That was not one of my cleverest answers. The policemen started to smile, and said "Oh, that´s good!". After appropriate payment they let me go.

## 4.4 With style

**by Päivi Salpakivi-Salomaa**

It is an October morning. I am putting on my outdoor clothes which are a little muddy from the rain and work the day before. We pack ourselves into the car and meet the local representatives of the logging company at the crossroads on the main road. We drive one behind the other towards the sites to be checked during the day. The countryside in the region is rather low lying and flat. First we drive through cultivated areas and then deeper into the forest areas. The forests around the villages consist of birch stands that have evolved after the war, and which are therefore more or less the same age. There are only a few conifers along the miles of road.
After the dwellings along the main road, we see fewer and fewer villages. The buildings are made of wood, some of them are attractively decorated, but usually unpainted. On the outskirts of the villages, we see various domestic animals – cows, cats, dogs, chickens and pigs. On one of the minor roads we meet a man herding cattle on a horse. In Finland, many villages in the remote regions seem empty, as young people have moved away. Here the villages breathe life. We pass another village again. A couple of young women come out from a nearby house to the bus stop beside the road. We all turn our heads in amazement: they look just like models from a fashion magazine! Their clothes are of the latest fashion, and their make-up and hairdos are perfect. How is this possible in a rural village? Oh yes, we are in Russia.

## 4.5 Believe it or not

**by Päivi Salpakivi-Salomaa**

I do not usually dare to tell this story in Finland if I want to keep my reputation as a reliable person. It is a story that you should particularly avoid telling to Finnish hunters or other sportsmen. But it is a true one. I was familiarising myself with the cycle of natural forests in the Pechora-Ilych reserve in Komi at the foot of the Urals. The journey from the capital of Komi to

this reserve took 12 hours on the train and a day's drive. The road ended here. We made the rest of the journey along the river. We spent a week in the forest and our group was headed by a researcher who was writing a dissertation on fire ecology.

After the forestry issues were dealt with, we acquainted ourselves with the life of the village that we had used as our base. The village was situated in the trackless wilderness and was partially self-supporting. Large amounts of firewood had been cut in preparation for the freezing winter. There was a game research station near the village, and we were offered an opportunity to visit it.

For 40 years, experiments on the use of elk as a domestic animal had been carried out at the station. The adult elks were put out to pasture during the summer, but their calves were kept in the yard in the same way as we keep cow calves near the cowshed. The calves knew their names and gently licked our hands when we went to see them. The adult female elks were milked and the milk was considered healthy and useful as a remedy against certain illnesses. The elks had learned to come to the milking place at the right time – in the same way as Finnish cows when they are pastured in the forests.

# 5 STAKEHOLDER VIEWS ON UPM-KYMMENE'S SYSTEM

**An assessment by Det Norske Veritas (DNV), and comments by the Russian State Forest Administration and Greenpeace Russia.**

*An external auditor and two stakeholders were asked to contribute to the report in order to bring a wider perspective and increased transparency. Det Norske Veritas carried out an assessment of the system as part of their ongoing audit of UPM-Kymmene Forest's overall management operating system. The Russian State Forest Administration and Greenpeace Russia provided comment on the system in question and answer format.*

## 5.1 Det Norske Veritas

**by Kimmo Haarala**

**Background**

UPM-Kymmene Forest uses a quality and environment system certified by DNV Certification OY/AB. Tracing the origin of imported wood and ensuring that this is done smoothly is one part of the environmental system to which UPM-Kymmene Forest is committed. It has already been audited externally as follows: summer 1998, smooth operation of basic solutions; winter 1999, basic structures of the system (including implementation of changes made following a certification assessment); and winter 2000, the effectiveness of tracing the origin of wood in Russia.

This time we focused on assessing how well the origin of wood is traced in Russia.

**The UPM-Kymmene system for tracing the origin of wood**

UPM-Kymmene is committed to the moratorium on logging in Karelia and Murmansk. Extending the system of tracing the origin of wood is nevertheless not restricted to these areas and is used regardless of the origin of imported wood.

Statistically, the system of tracing the origin of wood has been steadily expanding as this mode of operation has become more familiar to suppliers. This is clearly indicated by the fact that 72% of deliveries in 1999 were accompanied by a statement of origin and the figure so far this year is about 99%. With regard to wood volume, the corresponding figures are 98% in 1999 and, this year, practically 100%.

UPM-Kymmene checks the authenticity of statements of origin by auditing wood suppliers at their end. In 1999, UPM-Kymmene audited 52 wood suppliers and 195 logging sites. The corresponding figures so far in 2000 are 44 wood suppliers and 152 logging sites. It must be noted that these figures do not include the remainder of the year. According to UPMKymmene assessments and reports, no wood has been delivered from protected areas or from areas undergoing environmental assessment (the 'green quadrants').

**Assessment made by DNV in November 2000**
As part of the ongoing assessment, DNV checked how the origin of wood has been traced during the period from the 6-10th November, 2000. This assessment focused on rail transport and delivery. This focus was chosen because wood deliveries by rail account for a large proportion of the imported volume. Furthermore, interim terminals at railway stations and the operations taking place, are where the problems occur when assessing how well the tracing has been done.
The assessment made was based on document checks, site visits and interviews with people connected with selected supply contracts.
The area chosen for this assessment is the Novgorod Region, a major area for UPMKymmene with regard to imported volume.
The Novgorod Region has protected areas where logging is restricted or banned outright. These include, for example, national parks and shore areas near lakes and streams. Felling areas in Novgorod were chosen for auditing because at the time of assessment UPM-Kymmene had not carried out any of its own field checks in the region.

**Assessment targets**
The assessments aimed at the most comprehensive possible sample in the Novgorod Region. The areas selected were:

- west of Novgorod (towards Estonia and Latvia)
- the Okulovka region
- the Pestovo region

The audit also included inspection of the Valdai National Park and logging done there.

**Programme**
The programme for the inspection was as follows:

| | | |
|---|---|---|
| 6.11 | UPM-Kymmene Forest Imports Unit office | Document check |
| 7.11 | Novgorod | Assessment of felling area and logging company |
| 8.11 | Pestovo | Assessment of felling areas, logging companies, logging terminals and railway stations |
| 9.11 | Valdai National Park/Okulovka | Assessment of felling area and logging company |
| 10.11 | Pestovo | Assessment of logging company |

**Tracing the origin of wood in practice**
UPM-Kymmene considers the origin of wood to be properly traced when it has access to statements of origin from the suppliers, and when the wood suppliers (logging companies) have logging permits for all logging sites.
According to UPM-Kymmene's system, statements of origin should contain correct information on: the seller, or his representatives, name and contact details; contract number; delivery method; sub-suppliers name and contact details; estimated timber volume; loading terminal or port (including code number), and harvesting site location (Oblast, Leshoz). The accuracy of the statements of origin, relevant to the selected sites and suppliers, was examined.

Logging permits confirm that logging sites are not in protected areas. The logging companies checked were asked to provide the logging permits for the selected sites. In addition to the logging permits (which are in fact sufficient for tracing the origin of wood), many logging entrepreneurs had quadrant maps for relevant areas showing the predominant tree species and protected areas. However, not all companies had such maps, because they were not provided by the forestry authorities.
It is essential to check bills of freight when auditing logging terminals and railway stations because these state the supplier and loading station information which is entered to UPMKymmene's system. All carriages of timber should have a bill of freight.
Tracing the origin of wood in practice was assessed at logging sites, logging terminals and railway stations. The assessments showed no non-conformities in procedures for tracing the origin of wood.

**Other matters assessed**
UPM-Kymmene Forest's field assessments also include matters other than those used to trace the origin of wood, such as whether the country's relevant laws or sound forestry practices are observed. Assessments showed no deficiencies in meeting the legal requirements.

**Logging sites**
Logging was carried out in accordance with logging permits and technical work instructions. Logging conformed with all the relevant regulations.
The logging sites assessed were all final fellings, in which practices are changing; natural regeneration is increasingly encouraged by leaving undergrowth intact in stands of spruce. At certain sites, an exemplary job of preservation was being carried out.

**Valdai National Park**
The Valdai National Park is a highland of approx. 185,000 hectares with areas at different levels of protection. This affects the amount of logging permitted in each area. Total annual volumes are low and the wood is used only by locals; none of the wood is harvested for commercial purposes.

**Social aspect of logging**
Logging in the Novgorod Region is a significant source of livelihood for many people, especially in peripheral areas where there is no industry and where logging is practically the only source of livelihood besides farming and the service sector. This is why logging is often a practical necessity in the current infrastructure.
Logging employs a significant number of people in the Novgorod Region. A logging company fells some 15,000 to 20,000 cubic metres a year. This employs about 30 people, which, given the average size of families in the region, provides income for about 100 people. This makes logging an important source of employment in Russia.
When employees of the logging companies assessed were interviewed, the points most frequently raised were that:

- companies want to observe the law and regulations
- they were happy to have work
- they wanted to have work in the future aswell.

**Summary**
Assessments showed that at the moment UPM-Kymmene's subcontractors are complying with the company's system for tracing the origin of wood.
The next assessment in UPM-Kymmene's environmental system will be made in spring 2001.

Helsinki, November 15, 2000
Kimmo Haarala
Head of auditing

## 5.2 Russian State Forest Administration

**by Vladimir Arkhipov**

***What do you think in general of Finnish companies and especially UPM-Kymmene as acbuyer of Russian timber? What is UPM-Kymmene's impact on Russian forestry and thecenvironment?***
The procurement of timber from Russia by Finnish companies is of mutual benefit, but it iscnot balanced enough. The over supply of Russian wood gives the Finns an opportunity to controlcdemand within the country.
Finnish companies do not yet fundamentally influence Russian forest silviculture and ecology. However, there are positive developments taking place. The influence of Finns will grow because the market is ecologically sensitive and affects Finnish buyers - the buyers demandcinformation on the origin of timber. The effect of Finnish companies on forestry and ecology will especially grow if they locate part of their production capacity in Russia, and practically demonstrate how sustainable forestry is practised according to the circumstances of Russia. The fact that Finns do not buy aspen has an indirect effect on forestry and ecology; in other words, harvesting companies leave aspen on site for cost reasons mainly.

***What kind of co-operation would you like to see with the Finnish forest industry?***
Relationships between Finnish and Russian companies must be built on the basis of the relationship between the respective governments. Within this framework, the general code of practice and guarantees have to be agreed. They must also take in to account the strategic benefits to both parties. The co-operation has to be fair to both parties. Pricing policy has to be flexible and able to react quicker to fluctuations in Russia's economic circumstances. It must also take more account of the advantages to both parties. Reduced roundwood prices will lead to some Russian harvesting company's breaking both forest and environment regulations as they try to reduce costs and achieve at least a minimal profit.

***Sensitive users of printing paper and paper producers would like to know with some accuracy about the origin of wood used, in order to provide environmental guarantees to the end-users of magazines and catalogues.***
***You are familiar with UPM-Kymmene's system of tracing the origin of imported wood.Whatare the strengths and weaknesses of this system? What should the elements of such a system be?***

Your origin of wood tracing system is quite vulnerable. This applies to the statement of origin forms completed by suppliers, the authenticity check and the on-site audits.
This problem could be dealt with systematically by lifting the required standard level of your chosen co-operation partners, through the use of forest certification, and by modernising your tracking and checking system. For a start, your risk in buying timber which has been felled contrary to ecological guidelines, can be reduced by making agreements with the big forest lease-holders, who can then be required to provide national forest certificates guaranteeing the legality of the origin of timber.

***UPM-Kymmene has participated in the forestry, environment and certification dialogue in Russia - what impact does this have on forestry in Russia.***
Co-operation in forestry, ecology and certification is of course useful. Joint projects such as "Landscape-ecological forest planning in Karelia" promotes the accession of the principles of sustainable forestry, which now has good possibilities to extend across Russia.

***How do you regard UPM-Kymmene's approach to the forest conservation question in Russia? One of the goals of these efforts is to assure paper buyers that no wood from existing protection areas is used.***
Your role in the protection of Russia's forests has to be in open and honest dialogue with the Russian parties. We are ready for that. In relation to this, it is our opinion that Russia's forest laws are accurate enough and are ecologically demanding. The proportion of forests where felling is completely prohibited, or restricted, is larger in Northwest Russia than in Finland. Also, we cannot accept being unilaterally dictated to, without taking account of economical and social factors, where we can fell mature forest and where we cannot, even though our own legislation permits it.

***NGO's in Russia have published claims for the protection of forest areas that are not under official protection or official plans. How do you evaluate the possibilities of reaching lasting consensus between the various stakeholders (forest service, local population, logging companies, forest workers, NGO's)?***
Civic organisation driven objectives are perhaps too narrow, and they do not always match the economical, ecological and social benefits of the local people, local government and State. Therefore, consideration of these organisations' proposals has to be made separately and on a case specific basis according to each requirement. Some proposals we can approve, others we can discuss, but some have to be rejected completely. The likelihood of achieving a compromise depends on the rationality of the parties, the correct organisation of the discussion process, and the ability to seek alternative solutions.

***Credible information about the environmental conditions of forestry is important for end users of wood products.***

- ***What elements are necessary in order to produce a credible information chain for wood from Russia?***
- ***How would you describe the activities of Russian NGO's regarding forestry?***
- ***How objective is the flow of information about procedures in Russian forestry to the media and NGO's in Russia, and outside Russia?***

Information on Russian forestry environmental matters is transparent and there should be no problems obtaining information. Publication of this information must be strictly in line with general European requirements. Providing this kind of information must be the responsibility of all European countries, not only Russia.
Generally speaking the information provided by Russian NGO's about forestry is relatively objective but insufficient in parts. In their publications there is a lack of thorough analysis concerning the cause and effects of the forest sector.

## 5.3 Greenpeace Russia

**by Alexey Jaroshenko**

***Sensitive users of printing paper and paper producers would like to know with some accuracy about the origin of wood used, in order to provide environmental guarantees to the end-users of magazines and catalogues.***

***You are familiar with UPM-Kymmene's system of tracing the origin of imported wood.What are the strengths and weaknesses of this system? What should the elements of such a system be?***

Developing a system to trace the origin of timber in Russia is necessary not only to make your company's suppliers more ecologically responsible but also to phase out illegal and semilegal (provided with all appropriate papers but logged with violation of laws) wood. UPMKymmene's system is a very important factor in itself because it facilitates development of the legally logged timber market and environmentalization of forest managers supplying timber to UPM-Kymmene. On many occasions, the ecological policy of your company encourages Russian companies to maintain a more environment-friendly forest management.
Unfortunately, we also have to say that your system has certain drawbacks. In particular, we are much concerned about the lack of transparency in it. It seems more an exception than a rule that the public participates in supplier checks your company arranges. As a rule, we, same as other non-governmental organisations, have only substituted information on what timber suppliers UPM-Kymmene has in Russia. That's why it is so difficult for us to assess how many of your suppliers really enforce the ecological policies of your company.
This lack of transparency may cause especially serious troubles when UPM-Kymmene buys timber from former local units (leskhozes) of the Federal Forestry Service (these have been recently incorporated into the system of the Ministry of Natural Resources). Since leskhozes control their felling operations themselves and there is no real system of independent control over their activities, the greater part of forest felling operations they undertake, violate the existing rules (according to our estimates, the share of such operations is 90%). After the leskhozes have been transferred to the Ministry of Natural Resources, the number of violations has but grown. Usually, leskhozes undertake high-grading cuttings passing them off as sanitary cuttings or thinnings, which results in degradation of forest quality and production capacity in whole regions. According to the information we have, leskhozes directly supply 4% of timber UPM-Kymmene receives in total from Russia; indirect supplies, i.e. when timber goes through different intermediaries, can exceed 20%.

***UPM-Kymmene has participated in the forestry, environment and certification dialogue in Russia- what impact does this have on the forestry in Russia. What is the value of UPMKymmene tracing system to the stakeholder dialogue.***

UPM-Kymmene's participation in the dialogue between wood-working industry and nongovernmental environmental organisations is very valuable and, to a large extent, helps cope with lots of environmental protection challenges. I would like to pay special attention to the recent establishment of the Atleka nature reserve in the Vologda Region, which became possible only thanks to this dialogue (this was the first case in the modern history of Russia when a nature reserve was created in a territory of long-term lease of forest fund).

In the future, UPM-Kymmene's help might be needed in establishing a dialogue between non-governmental organisations and regional and local administrations. Unfortunately, such a dialogue between non-governmental organisations and the authorities has not become a tradition, yet, as the authorities usually consider NGOs as their blood enemies. Since UPMKymmene is one of the largest buyers of timber, many regions will listen to their opinion. So UPM-Kymmene will really be of great help in organising a dialogue between NGOs and authorities.

***How objective is the information provided by UPM-Kymmene's system of tracing the origin of wood?***

Unfortunately, it is difficult for us to judge how objective this system is in the whole of Russia. It is quite objective for the North-Western region, but, nevertheless, it overestimates a little the extent of ecological responsibility of timber logging companies. It does not identify certain problems related to forestry organisation in general (exhaustion of forest resources resulting from cuttings that target first of all best forest stands, low reforestation quality, absence of young and middle-age forest care; underdeveloped system of nature reserves; domination of large-scale – up to 50 ha – clear cuttings and other issues).

***What are you thoughts about protection areas and how do you regard UPM-Kymmene's approach to the forest conservation question in Russia? One of the goals of these efforts is to assure paper buyers that no wood from existing protection areas is used.***

The modern system of nature reserves in Russia has been based on the leftover principle, i.e. nature reserves used to include those forest stands that the industry was less interested in. That's why, lots of unique natural objects remained out of the nature reserve system that, in the opposite, includes a great number of worthless lands. That's why it is necessary today to protect both existing nature reserves and other high conservation-value natural objects. In the forest zone most valuable territories are represented by almost undisturbed by economic activities taiga landscapes that still develop naturally and are true models of wild nature. It is especially important to protect the largest of such areas, which can provide a base for the stable ecological frame of the whole European North (in the European part of Russia there are over 20 such large forest territories (with the area of over 50 thousand ha each); the majority of these areas is located along Urals or tundra boundary.

***NGO's in Russia have published claims for the protection of forest areas that are not under official protection or official plans. How do you evaluate the changes in reaching lasting consensus between the various stakeholders (forest service, local population, logging companies, forest workers, NGO's)?***

Such consensus can be reached only through a constant dialogue with the authorities, forestry service, population, wood-logging companies and other stakeholders. Unfortunately, in most cases the authorities not only refuse to discuss forest conservation issues with nongovernmental

organisations, but also stand in the way of such a dialogue between the NGO's and forestry industry. After the reformation of the forestry service started, the situation has only become worse, and today it is not clear who in the state forestry agencies is open to a dialogue with NGOs (a greater part of the Ministry of Natural Resources officials are still busy dividing positions in the new organisation instead of solving existing problems).
However, I have noticed certain progress in reaching such a consensus. For example, a forest management consultative group has recently been established in Karelia. This group consists of representatives of all stakeholders including the 'greens'. The Atleka nature reserve is another good example of how productive the dialogue between the authorities and the 'greens' might be.

***Credible information about the environmental conditions of forestry is important for end users of wood products.***
***What elements are necessary in order to produce such a credible information chain for wood from Russia?***
To acquire a reliable information about timber you buy in Russia, it is necessary to, first of all, solve two problems (that have not received enough attention so far); it's essential to:

- make the system of tracing the origin of timber more open and accessible for non-governmental organisations and independent experts and provide a more or less open access to the information about your Russian partners;
- make the sub purchaser system of your company less complicated, make supply chains shorter, avoid cases when timber comes to UPM-Kymmene through a chain of 2 to 5 intermediaries (today very often the supplier himself does not know who his end-buyer is, which gives us reasons to doubt that the buyer always knows his suppliers).

***How would you describe the activities of Russian NGO's regarding forestry?***
First of all, we believe that it is necessary to abandon extensive use of last primary taiga forests in favour of intensive sustainable forestry on lands that have been used in forestry for a long time as well as on abandoned agricultural lands. At the present time the typical 'shifting forestry' dominates in Russia and more than a half of all timber logged in Russia is logged through this shifting forestry that implies that large taiga areas are cut and then abandoned for a very long time and nobody seems to care what will grow there after all and when. The lack of efficient reforestation and forest planting pushes the forest industry farther into taiga areas that have been inaccessible before, threatening the integrity of the last existing undisturbed ancient taiga forests. Besides that, the exhaustion of forest resources by logging enterprises has resulted in that more than 1,200 settlements in the Russian taiga zone have become jobless and deprived of all means of subsistence.
We also believe that it is necessary to protect unique reference areas of wild taiga nature that still exist undisturbed in certain parts of Russia. I am first of all referring to the largest non-populated taiga areas with no economic infrastructure within. Thanks to the remote location of these areas (they are usually situated in northern parts of European Russia and Siberia), the part they play in timber supply is usually very insignificant.
Besides that, we believe it is necessary to develop a mechanism that will allow for participation of the public in forest policy and planning (and first of all participation of local residents), including independent forest monitoring. Today local residents can't influence the way forests are used.
How we cope with these basic issues determines our fields of activity.

***How objective is the flow of information about procedures in Russian forestry to the media and NGO's in Russia and outside Russia?***

Unfortunately, very often we can't call this information objective. A greater part of publications about the situation with forests and forest management in Russia is based on official statistics and data provided by official organisations that are very often eager to conceal the existing problems or find someone else to blame. As a rule, journalists and forestry experts who write about activities of the 'greens', do not see fit to ask our opinion.

# 6 AN AUDITORS VIEWPOINT

## 6.1 Management systems

**by Kimmo Haarala**

*"A management system must conform with its requirements at all times. If the requirements are not met, the company may lose its certificate, and this does happen from time to time."*

**Management systems in general**

The number of management systems concerning quality and the environment have been growing fast on the global market in recent years. This is clearly shown by DNV figures. At the end of 2000, there were about 30,000 quality system certificates (ISO 9000), and an annual growth rate of about 15%, and 2,000 environmental system certificates (ISO 14001), with an annual growth rate of about 40%.

In short, it can be argued that corporate management systems are widely used and certified all over the world.

**External assessment (certification) of management systems**

The purpose of management system certification is to ensure that the management system used by a company or organisation conforms with the requirements laid down in the standard. There are two types of requirement: the minimum requirements stated in the standard and other requirements which a company or organisation has stipulated as part of its management system.

In practice, external assessment means that operating instructions and files are checked on paper or screen and that practical work is evaluated. Nowadays, the focus is on evaluating practical work and the files created in the process. These files are subsequently used to ascertain the effectiveness of the system.

External assessment is an ongoing process. That is, it is not enough to fulfil the requirements at the certification stage; the system must conform with them at all times. Whether this is so is assessed regularly (at least once a year). If the requirements are not met, the company or organisation loses its certificate, and this does occur from time to time.

Certification is regulated by certain standards specific to the field. Each country has a body which supervises fulfilment of these standards. This is known as accrediting, and its purpose is to ensure that the assessment has been properly done. This means that the assessors must have expertise in the field and be able to conduct assessments in a professional fashion. They must also be able to define and manage the assessment processes (contract, assessment, reporting) and ascertain that the body which actually conducts the assessment has a properly functioning management system.

**Development of management systems**

The oldest management system standards are those concerning quality: the first were drawn up in the 1950s by defence establishments to lay down regulations for their suppliers. This has given quality standards a certain stability to this day.

Current standards emphasise continuous improvement (and quality standards are changing in this respect, too). This means that companies must improve their operations all the time. In

environmental systems, for example, it is not enough to reach a certain level and be satisfied with it; new areas must be developed to further improve environmental aspects.

**Extent and structure of management systems**

The same management system standards are used by different types of organisation. The same environmental standard, for example, may be used by a hospital and an organisation that buys wood, which means that standards must be modified for each environment. This does not mean that some of the basic requirements can be ignored (unless the requirement simply has nothing to do with that particular field).

There are also great differences in the size of organisations: the smallest organisation with a certified management system may employ only a few people, whereas some organisations have several thousand staff.

**Wood purchasing organisations and their management systems**

Most wood purchasing organisations in Finland have built up a certified management system, typically one that fulfils the requirements of both a quality system standard and an environmental system standard.

It is typical of these systems that the organisation has wide and diverse operations and several branches, and uses subcontractors to do most of the actual production work. These aspects make planning such systems slightly more complex, but still perfectly possible.

One thing typical of environmental systems in wood purchasing organisations is that the group or organisation has other commitments, such as commitments to moratoriums. This is the case with, for example, UPM-Kymmene. Their commitment requires the company to have an effective way of tracing the origin of its wood. If the wood cannot be traced, it is impossible to be committed to the moratorium.

**Future outlook concerning origin tracing**

Tracing the origin of products in various ways clearly seems to be the current trend. The need arises from greater awareness among customers and their desire to know that this aspect of the product chain is properly handled.

The food industry (and especially the origin of meat) is an example of where this type of demand is growing rapidly.

Similar activities are also extending to other processes in which customer demands are increasing. One example is the social accountability standard (SA 8000), which is used by manufacturers and importers to trace a product's manufacturing process down to the individual production unit or supplier, ensuring that they operate using certain minimum criteria.

## 6.2 The future of checking sustainabilty

**by Per Wiggo Richardsen**

*"In some business areas identifying the exact origin of goods is a matter of necessity. Traceability requirements in the timber industry can give customers confidence that the raw material in products comes from sustainable sources"*

**Understanding and managing the ecological biography of raw materials is of growing importance for accepted product qualities. Companies need to know their probable weaknesses.**

Do you remember the debate over the Brent Spar oil platform back in 1995? It is still a good example of environmental standards that involved an independent third party. Public opinion - represented by Greenpeace - contrasted with the views of the owner, represented by Shell. DNV, as an advisory, independent third party, was asked to make a credible contribution to the basis for determining the platform's fate.

The main objective of DNV (Det Norske Veritas) is to safeguard life, property and the environment. We help companies manage their risks, thereby increasing their productivity and avoiding injury to people or damage to property or the environment. Being able to managing risks and thereby help to achieve these goals can take different forms - such as inspection, advisory services and certification.

**Increasing demand for ethical accountability**

When formal management systems were originally introduced in the late 50's the focus was solely on product quality. By implementing Quality Management Systems, the customer was to feel confident that the product had correct quality, as specified and promised and according to customer's expectations. These systems have been developed and expanded over time, and now range from taking care of the environment, information security, occupational health and safety, food safety and individual employee's social working conditions to greenhouse gas systems.

DNV has made an active contribution to developing standards within new areas where management systems can be applied. SA 8000 (Social Accountability) is one of these developments. This standard is voluntary and made to address and eliminate inhuman labour practice.With the objective of ensuring ethical souring of goods and services, it can be applied to any size of organisation or business across all industries. As consumers and retailers, especially in Western Europe and North America, are increasingly purchasing goods from “social responsible” suppliers and manufacturers, the standard now has started to pay an important role in the global trade market.

The growing concern among consumers about the safety of food is one of the greatest challenges facing the food industry today. An effective Food Safety Management System is one way of preventing incidents and a systematic approach to prevent, or at least minimise, the possibility of unsafe food.

**Open international trade**

As international trade continues to grow, so too does the need for widely accepted documentation confirming that services, products and organisations comply with the requirements placed on them. Such confirmations can be certification by an independent third party.

The growing importance of product certification, a commitment to improve quality and environmental standards, and a willingness to embrace the certification world in all its forms, will become even more important for a wide range of firms, markets and surroundings. For the principal players in the industries, it is important to focus on creating trust and confidence in DNV’s certification procedures. Only by keeping this in mind, firms can contribute to a more open and international trade.

**The "be cautious" principle**

We believe that implementation of management systems will pay an even more important role in the future. The Exxon Valdez and Chernobyl Nuclear Power Plant accidents, benzene in water and dioxin in eggs, damaging of natural forests and uncertainty about the environmental impact of the condemnation of the Brent Spar Oil Rig are incidents which haven given rise to more attention to risks.

Society, and both professional and industrial bodies expect a higher degree of confidence in product and service supplies and a reduction in quality, environmental and safety risks. To meet these expectations management systems and a systematic way of thinking and working must lead to a global approach to solve this challenge.

In the near future we expect that the environmental impact of oil rig condemnation is evaluated during the design and construction phase, that a safe operation of a ship will be considered during the design, construction and operation phase of the ship, and that environmental impact is considered for all harvesting and supplies of wood for the sawmills, pulp and paper industry.

Since environmental system certification of forest industry was introduced in Norway two years ago we have experienced a considerable improvement in knowledge, attitude and practice. The "be cautious" principle has to a large extent been implemented and the natural resource management, forest treatment and timber harvesting is carried out in accordance with recognised standards and customers' requirements and expectations. Similar improvements have been experienced in other business areas.

**Identifying the precise origin of goods**

In some business areas traceability has proved to be a matter of necessity. Traceability requirements in the food and beverage, and in the timber industry, gives customers and consumers confidence that the products are produced and supplied by companies you can trust, in accordance with appropriate rules, regulations and standards. The implementation of timber Chain-of-Custody certification has an impact on more actors in the business and gives more attention to environmental issues. In the future, systems and methods for traceability will also be of vital importance to be able to trace and investigate the cause of accidents and incidents. DNV has recently developed a new method for identification marking by using DNA technology. This method may be used for tracing environmental pollution.

**Methods for tractability**

ChemTAG is a Norwegian company partly owned by DNV. Their technology is a biotechnological method for tagging of different substances. The method is being internationally patented, and based on the use of non-toxic and environmentally friendly DNA-fragments - so-called C-TAGTM. The C-TAGTM are produced in a 100% synthetic process, which does not involve genetic manipulation in any way. An alphanumeric text is encoded into the C-TAGTM. These C-TAGTM markers can be produced in almost unlimited numbers, and may be defined to contain large amounts of data/information. The markers are inserted into or applied to products and leave a unique tag. The markers cannot be removed, cannot be copied by third parties, have no influence on or can damage the tagged product, and can only be identified and read by using ChemTAG's decoding methodology.

**About the new Social Accountability Standards SA 8000**

This standard is based on the principles of the 11 Conventions of the International Labour Organisation, the Universal Declaration of Human Rights, the United Nations Convention on the

Rights of the Child, and the management process used by the international quality and environmental standards ISO 9000 and 14000.

**SA 8000 stipulates nine requirements:**

- Minimum age
- Prohibition of forced labour
- Basic standards for Occupational Health and Safety
- Freedom of Association and the Right to Organise
- Prohibition of Discrimination Prohibts discrimination on the basis of race, caste, nationality, religion, disability, gender, sexual orientation, union membership or political affiliation
- Prohibition of Disciplinary Practices
- Minimum Hours of Work
- Minimum Wages
- Defined Management Systems

# 7 INTERNET AS THE MEDIA LINKING THE FOREST TO THE END-USER

**An overview of possible approaches by**
**Dr. Renier de Man,**
**Dr. Johannes Merck and**
**Florian Nehm**

## 7.1 Introduction

This part of the report was written as an input to the study on Tracing the Origin of Russian Wood prepared by UPM-Kymmene, Otto Versand and Axel Springer Verlag.
The idea is that the Internet, or more precisely Information and Communication Technology (ICT) could be a medium for ”linking the forest to the end-user”. Internet could be used as a communication tool that enables the consumer (and more generally: all stakeholders) to have an insight into the paper chain from tree to magazine and to verify for himself/herself that the paper chain is acceptable from an ecological point of view. ICT would be the medium to make the paper chain transparent. As communication ideally works in two directions, ICT could not only make the paper chain more transparent to the stake-holders but also make the stake-holders more transparent to the economic actors in the paper chain.
These ideas are still very general and imprecise and should be worked out in greater detail. This short study takes two first steps:

- first, we clarify the problem of necessary transparency in the paper chain.
- second, we go into the different ICT applications that could create the transparency that is needed in the paper chain.

## 7.2 Transparency trust in production chains

In the development from the traditional ‘shareholder model’ towards the increasingly important ‘stakeholder model’ of business, creating transparency has become a central business goal. Especially large companies with high public visibility have learnt that it is in the end also in their own business interest to make their ‘internal’ processes more transparent to the outside world.
Shell, for example, will never return to the good old days before the Brent Spar events. Creating transparency goes much beyond simple ‘corporate communication’. It is not restricted to conveying selected messages to selected audiences. It is much more about disclosure of the way the company works, not only the positive aspects but also the problems.[1]
Transparency not only relates to internal standards, business processes, technical specifications of products and processes, it increasingly refers to the entire value creation chain. Consumers and other stakeholders (such as NGOs) put increasing pressure on business to disclose their value

[1] John Elikington, *Cannibals with Forks – the triple bottom line of 21st century business*, Capstone, Oxford 1997. Chapter 7: Transparency.

creation chains. These stakeholders increasingly ask for product information that goes beyond information on the contents of the product. They ask for information on the entire 'production history' of the product.
Below we give some examples that relate to health, social and environmental issues.

- NGOs and consumers successfully demanded textile companies to disclose social realities of textile production (clean clothes campaign) and to take effective action to improve the workers' social situation in Third World countries.
- Consumers and their organisations call for more transparency in food-related chains. The present BSE crisis will increase pressure on food industry to prove, that shows that the system is under control.
- Consumers and NGO's ask for transparency on the environmental burdens of products in the entire production chain. Unilever has worked with WWF to create a system of 'Marine Stewardship'. The systems enables to link fish products directly to records on specific fish catches.
- Norske Skog, Otto Versand, Axel Springer Verlag and Norwegian forest owner associations have developed elements of a system that links the paper end-product (a magazine and a catalogue) and the paper end-user to the individual forest owner.
- Similar work on creating (ecological and social) transparency in value creation chains in underway for cotton and palm oil. Co-operation between business and NGOs play a key role in these projects.

As these examples illustrate, there is a tendency that trust is being created by private control mechanisms, which often include active stakeholder participation, rather than by classic public regulation.
The reasons for that are obvious. Production systems are international and do not fit nicely to the frameworks of national policy making and legislation structures. Moreover, important parts of production systems, notably where raw materials are produced or where labour intensive production takes place, are in countries with relatively low social and ecological standards and/or rather ineffective implementation of government policy.
Stakeholders expect that business performs systematically above local standards and implements its private forms of regulation and control. Trust in products and production systems in this case does not derive from trust in the standards and control systems of state regulators but rather on the quality of business' self-regulation, as is also true in the case of Russian wood imports.

But self-regulation cannot be trusted, if there are no trustworthy external verifiers who can give guarantees that the system does what it should do. In order to create trust, the business actor should organise trust by having an external party verify his control system and to allow stakeholders to have a rather detailed insight into how the system works. What is needed is an effective mix of:

- <u>Independent Certification:</u>
  Certification of the management system by an independent accredited certifier;
- <u>Stakeholder Involvement</u>
  The critical stakeholder (e.g. an NGO) should be able to create trust on the basis of his reputation.
- <u>Non-hierarchical access</u>
  The possibility for any citizen or consumer to get into contact with those who manage or control the system, to ask questions and get answers (without being frustrated by hierarchy

and bureaucratic structures) and to see with his/her own eyes how the system is working in practice.

## 7.3 Improving trust in the use of forests

Forestry is a central issue in the environmental and sustainability debate. Central issues are the world-wide quantitative decline of (primary) forests and loss of the forests' ecological quality. Paper is often seen by critical NGO's as one of the major users of wood.[2]
Wood exporting countries, paper producers and users have a strong business interest in implementing sustainable forestry standards for the timber/paper they purchase, showing to their stakeholders that there is not necessarily a link between forest degradation and paper production/ use. This shows the need for making the paper production chain transparent and overseeable for interested stakeholders and sceptical consumers.

**New Monitoring Systems**
Monitoring systems are being installed or optimized by innovative paper companies. They are meant to minimise the risk of getting wood from protected forests or forests that are in the focus of a debate about being protected, etc. But these systems face major challenges:

- due to the complexity of the fibre flows, direct control of timber sources and related forestry issues is mostly restricted to saw logs and are face difficulties when applied to all chemical pulp and wood chip inputs;
- even then control is mostly indirect and depends on the control systems and the management culture in forest owner organisations. This is the case even if forests and/or management systems are been certified.
- the chain of custody issue: because of mixing many different inputs in the production of paper, it is difficult to link particular paper outputs to particular wood inputs. A tree to paper roll chain of custody is very difficult[3] and as a rule its costs cannot be justified.

**New way in product communication**
If we ask the general question what role "Internet could play as the medium in linking the forest to the end-user", we are actually addressing two questions:

- first: how can we use ICT for improving the control systems so that the responsible business and forestry actors are really in control;
- second: how can we use ICT to disclose the internal business processes (including the mentioned control systems) to a wide range of stakeholders in a way that genuine trust in paper and the paper chain is being created.

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[2] See the Worldwatch publications:
Abramovitz, J.N, Taking a Stand: Cultivating a New Relationship with the World's Forests, Worldwatch Institute, Washington, April 1998.
Abramovitz, J.N., A.T. Mattoon, Paper Cuts: Recovering the Paper Landscape, Worldwatch Paper 149, Worldwatch Institute, Washington, December 1999, downloaded from.

[3] only possible in particular cases, e.g. when all timber is directly transported from the forest owner to the paper mill as was the case in the Norske Skog / Axel Springer / Otto OPTI project.

Before we can address these questions we have to go into the characteristics Internet (or more general: ICT). After that we see how Internet's characteristics can be optimally combined with building both control and communication systems for the paper chain.

## 7.4 An Instrument for creating trust in a production chain

We have to distinguish between two aspects of Internet. We are talking about a particular subset of Information and Communication Technology (ICT).
Internet is both an Information Technology and a Communication Technology.

### 7.4.1 Internet as an information technology for management and Control

Internet contains technical possibilities to

- store information;
- transport information (with the speed of light over the entire globe);
- make real-time information available on-line
- search with high speed in very large databases
- present information in many different forms (tables, graphs, etc.).
- allow for systems research and scenario building on the basis of large online databases;
- link completely different types of information easily: e.g. statistical information with pictures, stories, films, etc.

The information technology characteristics are important for building effective and efficient management and control systems along a particular value creation chain. To mention a few examples:

- Internet can be used as a tool for 'mass customisation', i.e. adapting the particular product exactly to the wishes of an individual customer by sending the relevant parameters from the customer to the manufacturer.
- Creating systems of tracing and back-tracking, so that at any point of time it is visible where or in what stage a particular product item is. Today it is not only used for obvious applications such as express mail services but also for reducing risks in the nutrition chain (e.g. meat production[4]) or to exclude socially unacceptable practices in the diamond industry[5].

[4] Trace-back systems in the meat industry usually employ some sort of a unique animal identification number that is then systematically used in the entire chain until the end-product. On the basis of this number, it is easy to trace-back from the supermarket product until the animal. A good example is 'Peter's Farm'. The client can type in a unique number from the package at (see figure 11) and then find out from what farm the animal came and gets some details on the farm and the farmer family. A more radical system uses the animal DNA-code to realise traceability: „the product is its own label", as the Irish IdentiGEN company puts it, see )

[5] Conlict Diamonds, Possibilities for fhe Identification, Certification and Control of Diamonds A Briefing Document by Global Witness. June 2000.

- Internet can help provide detailed geographical (remote sense) data (Geographical Information Systems, GIS) for management and control purposes at relatively low costs. Particularly important are satellite data that provide data that are detailed enough to allow as an input to precision agriculture and forest management, etc. Such data can also be used for control and inspection purposes: to check the size and character of specific logging sites, etc.
- In the forestry sector, one of the developments is made by Global Forest Watch (an initiative of the World Resource Institute, Washington D.C.): ”an international data and mapping network that combines on-the-ground knowledge with digital technology to provide accurate information about the world's forests”.[6]

### 7.4.2 Internet as a communication technology for creating trust

Internet gives the possibility to organise communication efficiently, i.e. to enable communication that is:

- two-sided and interactive,
- non-hierarchical,
- open: not restricted to particular participants,
- not influenced by geographical or ethnic barriers.

Internet as a communications technology for creating trust in companies, products and value creation chains is not being widely used to its full potential at present. On the contrary, most company web-sites are not much more than electronic versions of company brochures. They do make financial data, annual reports and press conference papers available but they do not really stimulate communication with all the characteristics mentioned above.

**Two-sided interactive communication**
A company internet site usually restricts its communication possibilities to requesting product information or product support, buy products or services. When it comes to other aspects, there are little possibilities to get into contact with the company and its people. Real two-sided communication would mean such things as discussion forums on the company’s social and environmental responsibilities, participation in market-driven product development processes, etc.

**Open, non-hierarchical communication**
The most important characteristic of internet is its non-hierarchical structure. It has a strong power of breaking through traditional lines of authority and central control. Here lies the real innovative potential of internet for stakeholder communication including real opportunities and risks. Communicating with the ‘outer world’ the internet way means

- decentralised at many levels of the organisation with access to the competent people in the company.

[6] FAO Databases on Forestry and Paper:

- Slow and incidental official communication between organisations (e.g. between top management and NGO leaders) is to a large extent being replaced by a continuous exchange of ideas between people in continuously developing networks between members of different organisations, who more than often play roles that are quite different from what their formal positions suggest. The intensity of exchange between NGO experts and their industrial counterparts that is now taking place by e-mail was unthinkable only some 15 years ago.
- Internet communication has removed almost all geographical barriers (at least for those who speak English and have Internet access). Communication structures that traditionally were restricted to participants in one country are now open to virtually all participant in the world. This can have far reaching consequences for example for communication in a value creation chain. An internet-based communication platform could be organised for the textile and cotton chain, for example. In this case, it would not be difficult to organise communication links between textile consumers in Finland or Germany and farmer co-operations in India, for example.
- Non-hierarchical communication in value creation chains implies an important revolution in the very rules of doing business. Traditionally communication structures in a value creation chain reflect two simple rules: (1) communication is taking place between subsequent steps of the production chain only, e.g. between the purchase department of company A and the sales department of A's supplier B; (2) Product Information is basically flowing downstream, whereas there is an upstream flow of demands, specifications and standards to be obeyed. Non-hierarchical internet-based communication tends to challenge the basis of this system: (1) communication can be organised easily between steps in the production chain that are separated by other steps, e.g. between the cotton growing and the end-market textile business; (2) there are good possibilities to organise down-stream communication processes, e.g. from a forest owner association to the end-user, as easily as upstream communication.

## 7.5 Internet for creating trust in the paper chain

The way information is presented in the internet needs to take into account the specific 'closeness' of the user to the production process.
Information systems that embrace more than one element of the forestry and paper chain are yet the exception, not the rule. But their importance will grow in the near future.

**Forest related information**
Main information items are:
- General information on relevant forests and their condition; scientific assessments, etc.
- Information on forest owner associations and other relevant forest organisations, their policies, their management, etc.
- Information on logging concessions;
- Information on forestry standards and their implementation;
- Information on relevant public authorities, their goals and their working processes;
- Information on relevant NGOs who work with the forestry issue in different countries, their work, their organisation structure, their projects, etc.
- Information flowchart of the Paper Chain:

There is a huge amount of information available on the Internet on most items. Especially NGOs and sustainable forestry initiatives (such as FSC, PEFC, levende skog, etc.) provide a lot of details on standards, certification schemes etc. On some items information quality is poor: for general international forestry data there is virtually only one source, the FAO forestry database[7] that is being built up in the framework of the Global Forest Watch Project. There is also information that is hardly available online, such as detailed logging information in some countries.
As this general forestry information is all collected and stored outside direct control of actors in the paper chain, paper companies cannot do much more than organising the available internet sources in a way that make them accessible to the user. This is mainly the creation of appropriate links to other organisations and their databases. The paper company information service should of course focus on the forests the paper company is being linked to through its production and select those information sources that are relevant.
Although the change is not revolutionary from a technical point of view, there can be an important change in the way paper companies organise their web-sites. In the future, they would pay more attention to make relevant information sources outside their own 'territory' available to the user.

**Information on the Control System**
This information service is a central responsibility of the paper producer in interaction with his business partners. It is information that makes convincingly clear to both actors in the value creation chain and external stakeholders that there is effective control on the ecological quality of the wood used for paper production and the related forests.

- In the first place there should be a clear explanation of how the system of management and control works both at an analytical and at amore emotional level. It should be made clear what does what in the system. The description of the system may be in different forms, suitable for different audiences on different levels of abstraction, for example:
- classical text and diagrams including organisation structures, information flows, procedures, etc.
- stories that show how the system works on the level of people doing the jobs: for example stories on the work of the person who goes into the forest for checking logging activities. Authenticity value may be increased by regularly updating these stories. This approach may even be more attractive if it allows for two way communication (discussion forums, e-mail addresses, mobile phone numbers, etc.), see below.
- There should be room for representing the view of stakeholders (e.g. environmental NGOs), either by giving them room for presenting themselves or to link to their relevant home pages.
- Internet techniques could be also used for linking company-specific data on logging with external geographical forestry data, such as GIS forest data bases.

[7] 7 FAO Databases on Forestry and Paper.

## 7.6 How to develop a concrete internet application?

In the text above, we have given arguments for new forms of transparency and stakeholder participation and applied those argument to the paper and forestry sector. We concluded that the Internet has a strong potential for supporting the creation of transparency in the forestry and paper chain. We have developed first ideas. Most of them have not yet been fully tested in practice.
The question is how to proceed from this point into developing concrete internet application. Apart from solving a number of technical questions, the most important questions are about costs and benefits.
The first step should be an assessment of the ideas presented here (to which many other ideas may be added) in terms of:

- expected benefits for all business partners involved: efficiency, effectiveness, public acceptance, image, etc.,
- technical feasibility,
- expected costs.

In the interest of wood exporters, paper makers and users, this issue should soon become subject of innovative pilot projects.

# 8 APPENDIX

## 8.1 European sustainable forest management criteria

UPM-Kymmene is committed to the principles of sustainability as defined and agreed by European Forestry Ministers at Helsinki in 1993. The definition and criteria are part of the General Guidelines for the Sustainable Management of Forests in Europe and the General Guidelines for the Conservation of the Biodiversity of European Forests.

## Definition

*"The stewardship and use of forests and forest lands in a way, and at a rate, that maintains their biodiversity, productivity, regeneration capacity, vitality and their potential to fulfil, now and in the future, relevant ecological, economic and social functions, at local, national and global levels, and that does not cause damage to other ecosystems"*

## Criteria:

- Maintenance and appropriate enhancement of forest resources and their contribution to global carbon cycles
- Maintenance of forest ecosystem health and vitality
- Maintenance and encouragement of productive functions of forests (wood and non-wood)
- Maintenance, conservation and appropriate enhancement of biological biodiversity in forest ecosystems
- Maintenance and appropriate enhancement of protective functions in forest management (notably soil and water)
- Maintenance of other socio-economic functions and conditions

## 8.2 UPM-Kymmene Forest Operating and Environment Policy

**General principles**
The majority of UPM-Kymmene's production is based on a renewable resource, wood. In accordance with its environmental policy, the Group uses its own initiative and actively takes care of environmental protection and management in all its activities.
UPM-Kymmene Forest is responsible for the procurement of wood raw material for the Group's domestic mills and for the utilisation and management of Group owned forests in Finland. The Forest Division takes its share of responsibility for preserving the environment and for following the principles of sustainable development. The aim in forest management and wood procurement is to minimize the load on nature and the environment. Biodiversity and the functions of the forest ecosystem are maintained in accordance with internationally and nationally approved principles.

The Forest Division observes the legislation and statutory regulations of respective countries.

**Wood procurement**
In all its operations, the Forest Division takes into consideration the economic, ecological and social sustainability of forest utilisation. The Forest Division requires that its external suppliers operate according to the principles of sustainable development. The Forest Division monitors the origin of the wood it receives. The Forest Division does not fell or accept wood which originates from statutory protected forests, forest areas included in nature conservation programmes or sites which have been notified by the authorities to be excluded from felling.

**Company forests**
The Forest Division manages and utilises the Group's own forests so that they produce highquality wood in an effective, sustainable and economical manner. The Forest Division also takes into account other forest-related ecological, cultural and social values as well as the environmental impacts of forestry.

**Implementation of the environmental policy**
The management of the Forest Division annually reviews operations and the level of environmental protection. The management also establishes operational and environmental objectives, and monitors their implementation on an annual basis. The Forest Division's head office, procurement regions and districts set targets for achieving these objectives and they are realised as part of the planning, implementation and monitoring of all operations.

**Development**
The Forest Division continuously improves its operations, environmental protection and the quality of environmental management. The Forest Division actively co-operates with the authorities, researchers, customers and other interested groups in order to take account of the latest information available. The Forest Division trains its personnel and contractors to ensure they are all familiar with the Division's operating principles and objectives related to wood procurement, forest management and the environment, and also that they are committed to following them.

**Environmental communications**
The Forest Division on its own initiative openly communicates on environmental issues with employees, customers and other interest groups. The Forest Division's operational and environmental policy is available at all Forest Division offices.

*22nd November 2000*

## 8.3 Letter of Commitment

*This commitment was originally given to German printing houses*
*on the 26th of April year 1996.*
The UPM-Kymmene Group undertakes a commitment not to purchase from Russia wood that originates from nature conservation areas, whether already existing or designated as such by the responsible authorities. In order to ensure that this commitment is adhered to, UPMKymmene will deal only with reliable suppliers, whose logging operations are in compliance with the legislation currently in force and under the supervision of state authorities.
UPM-Kymmene has, furthermore, developed a system for verifying the origin of imported wood, based on a written notification of the logging site required from the seller of the wood. On the basis of this notification, UPM-Kymmene conducts inspections of the terrain in question. The inspections are carried out by specially trained forestry officers of UPM-Kymmene. UPM-Kymmene will continue to implement this inspection procedure and give special attention to its development.
UPM-Kymmene´s wood procurement contracts contain stipulations, binding on the seller, requiring compliance with environmental standards. If it appears, in the course of an inspection or otherwise, that the supplier in question has broken any regulations concerning environmental protection, no further wood will be accepted from the supplier, and he may forfeit his right to conclude wood procurement contracts with UPM-Kymmene.

Dr. Heikki Sara
Senior Vice President
UPM-Kymmene Resources

## 8.4 Imported wood statement of origin
## 8.5 Imported wood delivery audit
## 8.6 Imported wood delivery audit harvesting site check
## 8.7 Vocabulary

The definitions of the following terms have been used on the basis of those found in the ISO standards for the quality and environmental systems used by UPM-Kymmene. Additional definitions are based on the European Union's EMAS regulation and the Finnish Forest Certification Scheme.

**accreditation**: a procedure in which the qualifications of a certification body are assessed and verified.

**accreditation body**: an organisation that assesses the qualifications and capabilities of certifiers to operate independently and reliably, verifies their competence, and controls their operation.

**audit**: a systematic and independent examination to determine whether activities and related results comply with planned arrangements and whether these arrangements are implemented effectively and are suitable to achieve objectives.

**audit criteria**: Policies, practices, procedures or requirements against which the auditor compares collected audit evidence about the subject matter.
**audit evidence**: verifiable information, records or statements of fact.

**audit findings**: results of the evaluation of the collected audit evidence compared with the agreed audit criteria.

**auditor**: a person who has the qualification to perform audits.

**audit report**: a report on observations on the compliance of operations with the criteria. The report focuses on information and non-conformities.

**certified forest**: a forest to which an independent certification body has granted certification.

**chain of custody of wood**: All the changes of custodianship of forest products, and products thereof, during the transportation, processing and distribution chain from the forest to the enduse.

**criterion**: requirement against which conformity assessment is made.

**environmental policy**: an organisations overall aims and principles of action with respect to the environment.

**environmental management system**: the part of the overall management system that includes the organisational structure, planning activities, responsibilities, practices, procedures, processes and resources for developing, implementing, achieving, reviewing and maintaining the environmental policy

**forest certification**: a procedure to assess the quality of forest management in relation to the criteria of a forest management standard.

**GIS**: GIS (Geographic Information System) is a computer-based system for creating, storing, managing, and modelling geographically-controlled information.

**interested party**: an individual or group concerned with or affected by the operation of an organisation.

**lead auditor**: a person qualified to manage and perform audits.

**non-conformity**: the non-fulfilment of specific requirements.

**organisation**: company, corporation, firm, enterprise, authority or institution, or part or combination thereof, whether incorporated or not, public or private, that has its own functions and
administration.

**monitoring audit**: a periodic audit to verify that operations confirm with specified criteria.

**origin of wood**: source of raw wood material, raw wood material type, product or similar.

**quality assurance system**: the part of the overall management system that includes quality planning, quality control, quality assurance, and quality improvement.
**statement of origin**: information on the source of timber supplied including: the seller, or his representatives, name and contact details; contract number; delivery method; sub-suppliers name and contact details; estimated timber volume; loading terminal or port (including code number), and harvesting site location

**sustainable forest management**: management of forests in accordance with the principles and criteria for sustainable forest management agreed by European ministers at Helsinki in 1993.

**verification**: confirmation by examination of evidence that a product, process or service fulfils specified requirements.

## 8.8 Sources of further information

| Title | Author/source |
|---|---|
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PROJECT SITE ON THE INTERNET: http://www.upm-kymmene.com/tracingimports

# AN EPILOGUE

**by**

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**Welcome to**
**www.upm-kymmene.com/tracingimports !**

UPM-Kymmene is a globally active company of the forest based industry. The Group ownsproduction plants in 14 countries, including Finland, Germany, Great Britain, France the United States, Canada and China. Our main products are sawn timber, pulp, and paper. Almost 33 000 people work in the Group. The turnover in 2000 was EUR 9.5 billion.

We take our social, ecological and economic responsibilities seriously. We believe in the principles of sustainable development and make every effort to influence environmental issues in the entire production chain - from raw material procurement up to the reuse and disposal of products.

With the innovative project documented in this report, we respond to environmentally committed customers and NGO's. They need to know more about the tracing of imported wood and the ecological standards of forestry. We want to listen to critical views and discuss the future direction of further developments.

Our joint goal is to promote the transparency of forest based products like printing paper. The work, although long and challenging, is for all of us a rewarding learning process. In this way our tracing system will of course be continuously improved. The new and very detailed web site in the internet www.upm-kymmene.com/tracingimports will keep you informed.

**Elegy (A day worker, heavily laden with logs)**
A day worker, heavily laden with logs
Makes his way along the street.
I watch him with calm eyes: My mind
No longer vexed by the old sorrows;
But I will not forget those days
Of thinking, Lord, how blessed he is!

12 December 1841
N.M.YAZYKOV
1803-1846.