



Stichting NLnet

Annual Report 2005

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1. Overview

NLnet stimulates network research and development in the domain of internet technology.

Open Source

NLnet actively stimulates the development of network technology and makes this technology freely available to the community in its broadest sense. The technology should support and contribute to a better functioning of networking.

To this purpose, a wide range of internet-related projects are currently being funded for which Open Source licensing conditions, and usually the General Public License (also known as GPL or GNU license), hold.

NLnet projects

The projects undertaken by Stichting NLnet can be divided into:

- *network technology research*: e.g. IIDS, a research group working on interactive intelligent distributed systems. Large scale, autonomous system management was the main focus in 2005. Application areas include distributed directory services and configuration services.
- *network technology development and engineering*: e.g. NLnet Labs, which focussed on secure DNS in 2005. Application areas include top-level domain services;
- *“productising” network technology, development and engineering* with a focus on concrete results: e.g. safe and robust network infrastructure configuration for schools (SchoolLan), a generic framework for storing and querying RDF and RDF Schema (Open Sesame), Open Source implementation of a SMIL2 multimedia player (Ambulant), adaptive web content replication (WinGlob), Open Source programming for high school students (Code Yard), secure and private peer-to-peer communication (Turtle), Parrot virtual machine for the upcoming Perl6, the GPL license revision for version 3 by FSF and many more;
- *sponsoring of other Open Source initiatives, educational initiatives or seminars* in the area of networking: e.g. ICT & schools (TQ-NL), *Open Source development* (FSF, FFII, OASE and ISC), *privacy and digital rights* (Bits of Freedom) and network oriented *technology conferences*.

These and other NLnet projects are described in more detail in chapter 3.

financing in 2005

In 2005 Stichting NLnet financed projects to the sum of € 1.156.060 (compared to € 1.1.051.593 in 2004). NLnet has budgeted € 1.750.000 for projects in 2006.

non-profit policy

As an organisation, Stichting NLnet does not derive any financial benefits from the undertaken projects or their results.

Projects new or extended in 2005

Turtle

The Turtle project (Vrije Universiteit) aims at developing and implementing a peer-to-peer architecture with built-in privacy protection measures based on a store-and-forward principle (friend-to-friend network infrastructure). It started in February 2005 and ends in March 2007. NLnet sponsors one full time person of the project team.

Parrot

The goal of the Parrot project is to design and implement a virtual machine for the upcoming Perl 6 language. Sponsored Parrot implementation work is done under supervision of the Perl Foundation. A part of the implementation efforts is sponsored by NLnet.

CodeYard

CodeYard is an initiative started by the Radboud University in Nijmegen (Holland) to stimulate Open Source software development by high school students. The project started in April 2005 and the NLnet sponsoring ends in September 2007. NLnet sponsors one full time person of the project team of three (part time) persons.

GPLv3

The Free Software Foundation (FSF) initiated a revision of the General Public License (Version 2). NLnet is the main sponsor of this drafting process of FSF USA and FSF Europe. The drafting process is supposed to end with the release of the GPLv3 license model in 2007.

Open Sesame II

Open Sesame II has been extended to February 2006 to include extra adaptation work for Java 5 at the end of the project.

Projects finalized in 2005

The Globule implementation project (September 2005).



2. Project policy

	<p>Stichting NLnet's primary goal is to stimulate new developments in network (internet) technology for managing and maintaining effective network operation, to improve existing technology, and to encourage new applications of existing technology.</p> <p>Stichting NLnet has chosen to do this by supporting non-proprietary network-oriented projects.</p>
<i>policy</i>	<p>Stichting NLnet's methods of contributing to the development of new network (internet) technology, improvement of existing technology, and new applications of existing network technology are:</p> <ul style="list-style-type: none">• subsidise (fully or partially) software development;• finance advanced scientific research into network technology, in co-operation with universities;• provide financial and organisational backing for dissemination and exchange of knowledge about internet technology through conferences, workshops and contests;• sponsor knowledge exchange seminars and conferences in order to stimulate dissemination and deployment of results, knowledge and experience.
<i>Open Source</i>	<p><i>All results of projects are made freely available to the community, usually with GNU GPL licensing,</i></p>
<i>public forum</i>	<p>and are presented, if possible, in one or more publications and/or at one or more suitable international conferences.</p> <p>The Governing Board decides whether a project proposal is of interest to and appropriate for Stichting NLnet, possibly after consulting the Advisory Board and/or other experts in relevant field(s).</p>
<i>project planning / support</i>	<p>Examination of experiences with the NLnet projects identified a need for:</p> <ul style="list-style-type: none">• more PR concerning the current activity of projects;• more propagation in the early stages of projects;• more guidance while the projects are in progress to enable better deployment;• more follow-up work after projects have ended. <p>This problem has been taken up in the policies and planning for new projects. Also the way in which projects are supported from NLnet has been changed accordingly.</p>

3. NLnet Projects in 2005

3.1 Projects

Ambulant/NxG *SMIL-3.0 standard*

The Ambulant Phase 2 project started in October 2004, as a follow-up to Ambulant I in cooperation with CWI in Amsterdam. The project will run until December 2006. It aims to contribute to the development of the SMIL 2.1, Timed Text DFXP and SMIL 3.0 specifications within the W3C framework, and simultaneously provide a reference implementation of these standards in the freely available Ambulant player (released under LGPL): a multi-profile, multi-platform, fully SMIL-conforming player for mobile and desktop systems running under a UNIX or Windows based OS. At the end of 2005 the Ambulant 1.6 player has been released. Ambulant is increasingly being used by third parties, e.g. in the AMIS software of DAISY (international consortium for deaf and blind people), FNB (Dutch Federation of libraries for blind people), BBC, Philips Medical and Passepartout and Urakawa, and will perhaps be incorporated in GNOME GStreamer.

NLnet subsidizes this two year SMIL “next generation” project for a maximum of € 150.000, while CWI provides self-financing of € 85.000. More details about the project can be obtained via <http://www.AMBULANTplayer.org>. Together with Ambulant Phase I, which started in 2003, the total of Ambulant sponsoring by NLnet up to 2005 was € 203.427.

Anti-SPAM

NLnet has tried in 2004 and 2005 to stimulate anti-spam initiatives in order to fight the enormous increase of SPAM in e-mail. An attempt to involve the Spamvrij.nl foundation in this work failed when Spamvrij.nl was shut down in late 2004. With Bits of Freedom (BoF) a plan for developing a “Best Practices” anti-spam policy document for Internet Service Providers in Holland, was made. Bits of Freedom was sponsored by NLnet to perform the necessary work. The projected sponsoring of NLnet is € 15.000. Due to manpower constraints at Bits of Freedom only limited progress was made in 2005, and most of the work has been postponed to 2006. Intensive discussions in 2005 to initiate other actions for anti-spam have not led to other initiatives.



Bits of Freedom
*watchdog digital rights
and privacy*

Stichting Bits of Freedom is a non-profit foundation based in Amsterdam, the Netherlands. BoF supports the privacy and digital rights for the community: <http://www.BoF.nl>. BoF has a close relationship to the European Digital Rights organisation: <http://www.EDRI.org>. Major topics of concern to Bits of Freedom are: copyright, the balance between law enforcement and privacy, freedom of speech and spam. Issues like copyright and spam are also of concern to NLnet.

Starting January 2005, the electronic bi-weekly newsletter of BoF is supported by NLnet with a donation of € 10.000 for 2005.

CAcert
free X.509 certificates

CAcert.org is a community initiative to provide a free X.509 digital certificate service. X.509 is used in network protocols like SSL, HTTPS etc., e-mail readers and browsers and security devices. CAcert is a non-profit association based in Sydney, Australia. NLnet provides support and donations to CAcert on an ad-hoc basis.

In 2005 NLnet has supported CAcert with PR work and organisation of CAcert Assurer and PGP signing support for various events: NLUUG conferences, USENIX/LISA conferences in the USA, Perl workshop and other developer meetings in Holland, HCC “dagen” in Utrecht, Holland. At the end of 2005, Holland maintained its second place on the list of top countries for number of listed Assurers. NLnet supports together with HCC and NLUUG the www.CAcert.nl website.

CodeYard
*high school students
writing OSS*

The CodeYard project aims to attract high school students to the production of Open Source Software (OSS). Students can use the infrastructure and expertise of the CodeYard project to produce OSS, which can be passed on to future generations of students. Ultimately this should lead to a wider use of OSS. CodeYard is an initiative of the Computer Science Department of the Radboud University Nijmegen. The project started in April 2005, and is scheduled to run for two full school years, i.e. until September 2007.

After setting up the infrastructure and the initial publicity in the fall of 2005, a significant intake of participating high schools and students occurred in early 2006. NLnet is the primary external sponsor for the project (in addition to internal funds from the RU), by sponsoring one full fte. For 2005 this amounted to € 38.355. Projected NLnet sponsoring for the full project is € 123.525.

More details can be found at <http://www.CodeYard.org>.

Free Software Foundation and GPLv3

The Free Software Foundation (FSF) is known for its efforts in the area of freely distributable software development, most notably the GNU software and licensing policy. The well known GNU Public License Version 2 (GNU GPL) and GNU Free Documentation License (GNU FDL) are used for many NLnet-sponsored projects. The Free Software Foundation Europe (FSFE) is concentrating on the European aspects of the FSF software philosophy.

After 15 years GPLv2 needs to be revised. NLnet is sponsoring the GPLv3 drafting process which should lead to the release of GPL Version 3 (and derivatives) in 2007. NLnet sponsors FSF USA with € 100.000 for its GPLv3 activities, divided over three phases of preparation, comment/review and release of the GPLv3. FSF Europe is sponsored with € 50.000 divided over two phases for the European side of the GPLv3 drafting process.

Continuing its support in previous years, Stichting NLnet has also made a donation of US\$ 18.000 to FSF USA and of € 10.000 to FSF Europe.

More details on FSF USA and FSF Europe can be found at <http://www.fsf.org> and <http://www.fsf-europe.org>.

Globule *webpage replication*

The Globule project at the Vrije Universiteit Amsterdam aims at developing a user-centric Content Delivery Network (CDN). Such a network consists as an overlay in which the nodes are owned by the end users rather than ISPs. In Globule, nodes transparently collaborate to provide strong guarantees with respect to performance and availability of Web documents. It has been implemented as a plugin module for the popular Apache2 Web server. WinGlob is a sub-project of Globule, which aims to make the Globule functionality available on the Windows platform and to add tools which allow easy installation and configuration of Globule by end users. The WinGlob project started in May 2004 and ended in September 2005. NLnet sponsored one full time person of the project team which was supervised by prof. Maarten van Steen.

results

A number of full releases for both Windows and Linux have been made available during the project, concluding with Globule 1.3 in May 2005. Despite publishing a couple of articles about this technology in popular journals like c't and Linux Magazine, and various promotional efforts, there has been very little interest from end users so far. A competition among students for testing and improving



Globule received virtually no response. WinGlob has not been given the opportunity to present itself at ApacheCon Europe in Stuttgart and EuroOScon in Amsterdam. Globule seems to be too complex for a wide audience. Research and development of Globule is continued by the Vrije Universiteit.

NLnet sponsored WinGlob in 2005 with € 23.293, which brings the total for the whole (one year) WinGlob project to € 69.879.

For more details see <http://www.globule.org>.

Interactive Intelligent Distributed Systems (IIDS)

network/agent research

In 1999, Stichting NLnet and the Faculty of Exact Sciences at the Vrije Universiteit Amsterdam (VU) agreed on a long-term collaboration in the field of Intelligent Interactive Distributed Systems (IIDS). Professor Frances Brazier heads the IIDS research group. The group's primary research directive is to devise a flexible, modifiable architecture for the development of large-scale interactive intelligent agent systems in a wide-scale distributed network. The research programme distinguishes three main lines of research:

- Middleware (i.e. AOS, AgentScape, Mansion) ,
- Services (i.e. Configuration Services, Directory Services) , and
- Distributed Applications (e.g. mobile co-operative information retrieval, financial transaction systems, file sharing systems, distributed design).

NLnet's research director Frances Brazier spends almost all of her time on the research group. At the end of 2005, the group financially supported by NLnet consisted of Frances Brazier (professor), Benno Overeinder (assistant professor), Pieter van Langen (adviser), Michel Oey (scientific programmer), four PhD students: David Mobach, Reza Haydarlou, David de Groot and Sander van Splunter (the latter two financed by the VU), Guido van 't Noordende (research assistant /programmer), Reinier Timmer (research assistant), and two student assistants (Reinout van Schouwen and Eric de Boer).

In 2005 a complete Java and C based version of the AgentScape software was released, including lease-based resource management and monitoring mechanisms.

The IIDS group works in close collaboration with professor Andy Tanenbaum and dr Elth Ogston. Both academic and industrial parties (e.g. Thales and IBM) are interested in the technology developed within IIDS. The

potential of more informal collaboration with these parties will be explored in 2006.

The inter-disciplinary project on identity and integrity management of semi-open agent systems, together with professor Anja Oskamp of the Computer and Law Institute at the VU, funded by the CvB of the VU, continued in 2005. In this project 3 PhD students study aspects of agent systems, identified in the context of the 2001-2003 NLnet-sponsored ALIAS project. Another spin-off of the same ALIAS project is the ACCESS project, awarded in the context of the ToKen programme funded by NWO and the Raad voor de Rechtspraak, to the IIDS group together with professor Anja Oskamp's group. This project explores the potential of agent technology for integrity management of the digital dossier in the Courts of Amsterdam and Rotterdam. This project started in October 2005.

At the beginning of 2005 the VU Faculty of Exact Sciences initiated a reorganisation of the whole Faculty. This reorganisation, which continued in 2006, severely delayed the hiring process for vacancies of late 2004.

results

IIDS research results have been presented and published at different venues including: IEEE/ICA05, SAACS05, 2005 IEEE/WIC, FLAIRS, LEA2005 (2 articles), EUMAS 2005 (2 articles). Details of the work and publications can be obtained from <http://www.iids.org>.

NLnet contributed € 367.737 in 2005 (€ 371.654 in 2004) to support the IIDS group, in addition to the extra time from Brazier (0.4 fte) invested directly.

See also <http://www.IIDS.org> for more detailed information.

NLnet Labs
*internet software
development*

Stichting NLnet Labs was established in late 1999 with a mission to further develop Open Source software for the internet and all other related scientific developments. The laboratory, a long-term development environment for up to six people, is fully financed by Stichting NLnet and was funded with € 385.250 in 2005 (€ 340.000 in 2004).

NLnet Labs is situated in Amsterdam in one of the Matrix buildings of the ASP (Amsterdam Science Park). Ted Lindgreen was the managing director till January 2006. Olaf Kolkman is Lindgreen's successor and is employed by NLnet Labs since September 2005.

Governing Board

At the end of 2005, the Governing Board consisted of Teus Hagen (chair, Stichting NLnet), Frances Brazier



- (secretary, Stichting NLnet), and Wytze van der Raay (treasurer, Stichting NLnet).
- DNSSEC* In 2005, NLnet Labs continued its work for the deployment of DNSSEC for large domains in several ways. Firstly by actively participating in a number of important fora like IETF, RIPE, ICANN and the DNSSEC deployment group. Secondly by developing secure aware tools: a DNS function library (*ldns*) for rapid development of DNS related programs plus a command line DNS query tool (*drill*). Thirdly by maintaining the Perl libraries Net::DNS and Net::DNS::SEC. And last but not least by its NSD work:
- NSD root server for DNS* In cooperation with RIPE a high performance DNS implementation, called NSD has been developed. This authoritative-only server is geared specifically to large and/or important authoritative name servers and does not contain any code from existing implementations. In May 2005 NSD 2.3 was released with support for AXFR zone transfers and DNSSEC support enabled by default. NSD runs on two root nameservers, a few percent of all TLD servers, and various other high-profile nameservers.
- IETF, ICANN, ISOC, RIPE* NLnet Labs is advising ICANN on DNS. Olaf Kolkman is co-chair of the IETF DNSEXT working group. Jaap Akkerhuis is a member of ICANN's security and stability advisory committee (SSAC), and also of the ENISA Permanent Stakeholders Group (PSG). Both Kolkman and Akkerhuis are also active participants in the DNSSEC Deployment working group.
- Distel testlab* NLnet Labs participates in a number of IETF working groups (DNSEXT, DNSOP and ENUM) and RIPE working groups (DNS, IPv6, routing and TechSec). The DISTEL testlab is a key component for running regression and performance tests for NSD. In 2005 work was started to perform experiments on zone signing for the .CA top level domain registry. The testlab is available to third parties that have interesting projects or measurements.
- See <http://www.NLnetLabs.nl> for more detailed information on the work and the availability of the software.
- Stichting NLnet Labs publishes its own annual report.

LogReport

log file analysis and reporting

Stichting LogReport Foundation has been dissolved on 30th of December 2004. The small financial surplus has been donated to the Debian project. Hosting of the LogReport server by NLnet Labs has been continued in 2005, with service support from volunteers. The total of NLnet sponsoring for LogReport has been € 296.834 in 5 years. More information can be found at <http://www.LogReport.org>.

Open Sesame

web RDF querying

Open Sesame is a project started by Aduna b.v. in March 2002 with the help of NLnet. The second part of Open Sesame started in January 2004 and ended in November 2005, with an extension planned to end in February 2006. This second part of the project puts emphasis on better usability of the software and wider deployment and cooperation with other development groups.

The main goal of Open Sesame is to develop a scalable, modular architecture for persistent storage and querying RDF and RDF Schema, the proposed W3C standard modelling languages for the Semantic Web. Key features of Open Sesame are: open source, available under LGPL, scalability, a query engine for RQL, portability, repository independence, extensibility, and separating communication from actual functionality by the use of protocol handlers. The target audience for Sesame is the RDF/Semantic Web community, e.g. SWAP (Semantic Web and Peer-to-Peer), a European Union project.

The Open Sesame project has been extended until February 2006 to incorporate a number of API and implementation improvements enabled by the release of the Java 5 language.

results

An Open Sesame reference application called Elmo has been published in cooperation with the Vrije Universiteit. Elmo is a toolkit for developing Semantic Web applications using Sesame. It wraps Sesame, providing a dedicated API for a number of well known web ontologies including Dublin Core, RSS and FOAF. Elmo also offers a set of related tools, including a RDF crawler, a FOAF smusher and a FOAF validator.

Bibster which is based on Sesame and implements a peer-to-peer system for sharing citations has collected an award at the Cooperative Information Agents (CIA) workshop. Communication with the developer and user community was strongly improved by establishing a web based forum at <http://www.openRDF.org>. The number of participants



and contributions in the forum and the number of website visits all showed healthy growth trends.

Sesame is used in an increasing number of external projects, e.g. MKSearch, Piggy Bank, DOPE and INWISS. Also, Aduna uses Sesame for all its commercial products.

A number of improved versions of the Open Sesame software have been released throughout 2005 via SourceForge

(<http://www.sourceforge.net/projects/sesame>). The last Open Sesame release in 2005 was 2.0. The average number of software downloads per month in 2005 was 750, an increase of 185% of the 2004 figures.

Technical contributions to the project have been received from a.o. OntoText (Bulgaria), University of Karlsruhe, Oracle (Germany), MIT and Vrije Universiteit Amsterdam. Both the Sesame I project (of about 2.6 person years) and the Sesame II project (of about 1.4 person years) are fully sponsored by NLnet. In 2005, NLnet contributed € 81.035. Up to the end of 2005 NLnet sponsored Open Sesame with a total of € 302.951 in 4 years.

Parrot

*virtual machine for Perl 6
and other dynamic languages*

The overall design for Perl 6 (for which the development started in 2000) is nearing completion. One of the essential components for a Perl 6 production release is the Parrot virtual machine. Parrot is designed to execute bytecode for interpreted languages efficiently, and thus it will also be able to act as the run-time environment for many other dynamic languages, e.g. in internet browsers. The Perl Foundation defined a table of milestones (<http://www.perlfoundation.org/gc/grants/2005-p6-proposal.html>) for the implementation efforts. NLnet has agreed to provide full sponsoring for Parrot Milestone 1 (US\$ 35.000 for 2005) and Milestone 2 (US\$ 35.000). In 2005 Parrot 0.2.0 has been released.

SANE

OSS community forum

Stichting SANE organizes once every two years a conference targeted at system / network administrators and network engineers. The conferences have been organized until now in close cooperation with NLUUG, the Dutch UNIX users group, and the USENIX Association in the USA.

governing board

The Stichting SANE governing board consists of Bob Eskes (chair; former NLUUG board member), Jos Alsters (secretary; NLnet board member and former NLUUG board member) and Wytze van der Raay (treasurer; NLnet board member).

The foundation publishes its own yearly report.

NLnet has provided a financial guarantee and an interest-free loan for every conference until now, and has provided organisational and administrative support.

SANE2006 conference

In 2005 preparation has been started for SANE 2006, the fifth Systems Administration and Network Conference in Europe, which will be held on 15 - 19 May 2006 in Delft. The event will have a three-day tutorial program, followed by a two-day technical program. In addition, a poster session and a Free Software Bazaar will be held in conjunction.

Stichting NLnet supports SANE 2006 with a guarantee of € 40.000 and an interest-free loan of € 40.000 to Stichting SANE. The other sponsors of SANE 2006 are USENIX, SURFnet and NLUUG.

SchoolLan
network infrastructure

The SchoolLan project focuses on the development of a small, robust, and centralised network infrastructure targeted for primary schools.

SchoolLan initially started in 1999 as a technical concept and tools for configuration development by Stichting NLnet.

foundation

In order to boost the cooperative development efforts, NLnet decided in 2001 to create an interregional coordination centre: Stichting SchoolLan. Stichting SchoolLan has been fully sponsored by Stichting NLnet. The foundation streamlined the SchoolLan developments, facilitated the distribution of the SchoolLan software with a CD-rom and extensive documentation, and supported the local SchoolLan initiatives. See

<http://www.SchoolLan.nl/> for more information (in Dutch!). Lack of market penetration, and thus lack of economic viability, forced the close of SchoolLan's development and support office in August 2004. At the end of 2004 efforts were started to raise interest from commercial organisations to continue development and support of this Open Source technology, based on the SchoolLan CD release 5.2. By the end of 2004 four organisations had signed a GPL based agreement with Stichting SchoolLan to participate in a platform aimed at continuation of SchoolLan. In 2005 these activities have not proved to be successful enough for allowing continuation of SchoolLan on a long term base. There has been serious interest from Keigroep (a computer infrastructure support provider) and Stichting Prisma (a



<i>Governing Board</i>	<p>regional foundation for schools with its own SchoolLan service provision), but this was not enough for a long term continuation. It is expected that the foundation will be closed in 2006.</p> <p>The Governing Board of Stichting SchoolLan consists of Teus Hagen (chair, Stichting NLnet), Wytze van der Raay (treasurer, Stichting NLnet), and Kees Keijzers (secretary, University of Nijmegen).</p> <p>Stichting NLnet has registered the trademark SchoolLan in the Benelux to prevent misuse by other parties.</p> <p>The SchoolLan web and software development tree is hosted on the NLnet web server.</p> <p>In 2005 NLnet spent € 683 on the SchoolLan project. In total NLnet has sponsored SchoolLan with € 778.777 over a period of 7 years.</p>
Turtle <i>P2P anonymous sharing</i>	<p>Turtle aims at the creation of a Open Source software based peer-to-peer (P2P) infrastructure for easy and safe sharing of sensitive information while maintaining anonymity for both data sender and receiver. The project is done at the Vrije Universiteit in Amsterdam and is supervised by prof. Andy Tanenbaum. It started in February 2005 and is ending in March 2007. NLnet is sponsoring one full time person for 2 years for a total of € 134.000 (in 2005 € 50.000). At the end of 2005 Turtle was approaching it's first alpha release.</p> <p>More information about Turtle can be found at http://www.turtle4privacy.org.</p>

3.2 Other activities in 2005

Stichting NLnet is continually in pursuit of new projects. To this purpose, NLnet maintains relations with organisations such as USENIX, NLUUG, RIPE, ISOC and Ministry of Economic Affairs. Relations with universities are another potential source of projects.

software development hackathons

Stichting NLnet is providing sponsoring for software developer gatherings which focus on network technology OSS developments. As such NLnet provided sponsorship to the KDE-PIM developers meeting in May 2005 for an amount of € 2.000.

Another activity somewhat in this area was NLnet's support of € 500 for a visit of Simon Josefsson

(Stockholm, Sweden) to the IPR-wg during IETF 64 in Vancouver, to express concerns about various problems with copying permissions for RFCs and other IETF contributions.

Firefox

Firefox is an OSS-based internet browser. A Dutch group of Firefox supporters initiated promotional activities to create more awareness of Firefox, in particular amongst Windows system end users. NLnet has agreed to contribute € 4.000 to a full-page Firefox advertisement in Spits! (a popular free newspaper), which will finally appear in 2006 after quite some delay.

Blue Ribbon (LOAP)

Carl Malamud has received a sponsorship of US\$ 6.000 from NLnet for his efforts to initiate a book with reports of experts about “the future of DNS”. The book has been delayed severely. By the end of 2005 the goal was changed into a movie of interviews with experts in the field of DNS, which is supposed to appear in 2006. NLnet is one of the sponsors for this movie.

OASE

Open Source and business relations with some small high-tech companies and the Ministry of Economic Affairs were established by Stichting NLnet. Teus Hagen takes part in an Open Source specialist panel for OASE, an Open Source stimulation project from Syntens (Ministry of Economic Affairs) for mid-size and small businesses.

ThinkQuest → TQ-NL

Stichting ThinkQuest Nederland's mission as a non-profit organisation is to increase innovative educational use of the Internet by supporting the development of new applications. Stichting ThinkQuest changed its operational name in 2005 to TQ-NL to avoid confusion with the ThinkQuest website contests, which have been transferred completely to Kennisnet in 2004. In 2005 the foundation also initiated a new programme for ICT and Education for the period 2006 – 2009. Scope and selection criteria have been decided, and the first subsidy round will start in January 2006. All details can be found on the new website of TQ-NL: <http://www.stichtingTQ.nl>. Frances Brazier chairs the Board of Stichting ThinkQuest.

donations

NLnet provides donations on a regular basis to a number of non-profit organisations whose activities are in line with the NLnet non-profit free use of software philosophy. Stichting NLnet donations in 2005 which fit into this category include:
FSF US (free software distribution and usage) US\$18.000,



FSF Europe (free software usage and distribution focussed on Europe) € 10.0000,
FFII (anti-software patents in Europe) € 5.000,
ISOC (Internet Society) US\$ 2.500.

4. Stichting NLnet organisation

	<p>NLnet's history started in April 1982 with the announcement of a major initiative to develop and provide network services in Europe.</p>
<i>NLnet birth date</i>	<p>Stichting NLnet was formally established as a "stichting" (Dutch for foundation) on February 27, 1989 and is situated in Amerongen, the Netherlands. It is registered at the Chamber of Commerce, Amsterdam under number 41208365. Since 1999, Stichting NLnet has had a non-profit tax status (so-called Article 24 status, "algemeen nut status").</p>
<i>funding</i>	<p>In November 1994, NLnet Holding BV was formed by the foundation in order to create a commercial base for its internet activities. The sale of NLnet's Internet Service Provider (ISP) activities to WorldCom/UUnet (now part of Verizon) in 1997 provided Stichting NLnet with the means to actively stimulate the development of network technology and to make this freely available to the community in its broadest sense.</p>
<i>NLnet foundations</i>	<p>To be able to maintain a clear separation between Stichting NLnet's funding operations and the project technology related operations, Stichting NLnet has created separate legal entities for some of its more specialized projects, such as 2000's Stichting NLnet Labs and Stichting LogReport (closed in 2005) and 2001's Stichting SchoolLan (will be closed in 2006). These foundations, directed in full or in part by Stichting NLnet, have obtained a full non-profit tax status.</p>
<i>Governing Board</i>	<p>The Governing Board of Stichting NLnet consists of:</p> <ul style="list-style-type: none">• <i>chair</i>: Teus Hagen (end of term May 1, 2007);• <i>treasurer</i>: Wytze van der Raay (end of term May 1, 2007);• <i>secretary</i>: Frances Brazier (end of term May 1, 2007);• <i>member</i>: Jos Alsters (end of term May 1, 2007);• <i>member</i>: Hans Onvlee (end of term January 21, 2007).
<i>Advisory Board</i>	<p>An Advisory Board of three people supports the Governing Board of Stichting NLnet:</p> <ul style="list-style-type: none">• <i>advisor on technology</i>: Paul De Bra, full professor, University of Eindhoven;• <i>advisor on legal affairs</i>: Anne-Marie Kemna, lawyer, Van Diepen Van der Kroef Advocaten;• <i>advisor on finances</i>: Erik Esseling, director, Esseling Beheer b.v..



For external (financial and legal) advice and consultancy, Stichting NLnet is supported by: Van Diepen van der Kroef (legal advice), PriceWaterhouseCoopers (accountancy and salary affairs), and Attica Vermogensbeheer (investment management).

operations

For daily operations, a Board of Directors has been selected from the Governing Board:

general director: Teus Hagen

financial director: Wytze van der Raay

research director: Frances Brazier

Frances Brazier holds a part-time position (two days per week) as full professor at the Vrije Universiteit (IIDS research group) in Amsterdam.

webmaster

NLnet's website www.nlnet.nl is maintained by Mark Overmeer (MARKOV Solutions) in close cooperation with the Board of Directors and the project leaders.

5. Finances

Stichting NLnet finances its projects and activities primarily from the revenues obtained from its invested capital. If possible, subsidies from the government and/or third parties will also be used for project activities, but to date this has not been the case.

5.1 Fiscal status

Stichting NLnet has not been running a commercial company since mid 1994 and does not plan to do so in the future. Therefore, the foundation is not subject to Value Added Tax (BTW in Dutch) or company tax (vennootschapsbelasting in Dutch).

As of March 9, 1999, Stichting NLnet has been classified, at its request, by the Dutch tax office (Department Registratie en Successie) as an entity with general benefit objectives within the meaning of the Successiewet 1956 (article 24 sub 4).

In addition to this, Stichting NLnet obtained a so-called place of residence declaration (woonplaatsverklaring) from the Dutch tax office for companies on June 8, 1999. This declaration enables the foundation to reclaim part of the foreign taxes withheld on foreign dividends. In September 2001, a request was filed with the tax office to be exempt for source tax withheld on USA dividends, according to article 36 of the Double Taxation Convention between the USA and the Netherlands. This request was granted on January 16, 2002.

5.2 Administration

Salary administration has been contracted to the Financial Management Solutions group of PricewaterhouseCoopers in Rotterdam.

PricewaterhouseCoopers has been charged with compiling and auditing Stichting NLnet's Annual Accounts in 2005. The accountancy report is a separate document with this annual report.



5.3 Cost of activities in 2005 and budget for 2006

The cost of Stichting NLnet's activities in 2005 is summarised and compared with numbers for 2004 below:

	2005	2004
Cost of projects	1.156.060	1.051.593
Cost of staff	346.919	343.628
Depreciation of inventory & equipment	2.622	6.593
Other costs	57.740	47.539
Total	1.563.341	1.449.353

A specification of the “Cost of projects” item in relation to the original budget and to previous years follows:

Project	Cost 2005	Budget 2005	Cost 2004	Cost 2003	Total cost until 2005
A-A-P	0	0	0	50.454	102.701
AGFL	0	0	0	0	113.768
AHA!	0	0	0	40.613	169.978
ALIAS	0	0	0	7.102	158.321
Ambulant	74.680	75.000	78.747	50.000	203.427
Anti-Spam	5.000	0	0	0	5.000
Atom-Based Routing	0	0	0	50.051	65.585
Bits of Freedom	10.000	10.000	6.000	0	16.000
CAcert.org	106	0	12.895	1.006	14.007
CodeYard	38.335	0	0	0	38.335
cp2pc	0	0	0	1.402	61.900
DLZ	0	0	5.035	12.505	51.467
EuroBSDCon	0	0	0	-30	2.812
FFII anti-software patents	5.000	0	0	5.000	10.000
Free Software Foundation	13.887	12.500	12.044	0	78.259
FSF Europe	10.000	10.000	10.000	0	25.000
Globule	23.293	30.000	46.586	0	69.879
GPLv3	55.000	0	0	0	55.000
Hackathon OpenBSD	0	0	0	8.741	8.741
HAL2001	0	0	0	0	10.000
IIDS	367.737	400.000	371.654	335.373	1.814.117

Project	Cost 2005	Budget 2005	Cost 2004	Cost 2003	Total cost until 2005
ISC/BIND V9	0	0	0	0	347.562
ISOC	1.930	0	0	0	1.930
KDE-PIM	2.000	0	0	0	2.000
LCC	0	0	0	0	45.791
LOAP	4.607	0	0	0	4.607
LogReport	0	0	1.725	43.259	296.834
Mail::Box	0	0	0	22.252	44.149
MAPS	0	0	0	0	22.077
NILO	0	0	0	0	16.832
NLnet Labs	385.250	447.000	340.000	360.000	1.788.415
Open Sesame	81.035	85.000	49.124	60.554	302.951
Parrot	27.017	0	0	0	27.017
ReX	0	0	0	16.832	57.982
SANE	0	0	0	0	5.000
SchoolLan	683	110.000	117.783	222.171	778.777
SIRS	0	0	0	0	356.218
ThinkQuest	0	0	0	0	226.890
TimeWalker	0	0	0	0	150.000
Turtle	50.000	0	0	0	50.000
Twinsite	0	0	0	0	4.538
YAPC::Europe 2001	0	0	0	0	1.990
Other	500	0	0	0	2.826
New projects	0	680.500	0	0	0
Total	1.156.060	1.750.000	1.051.593	1.287.286	7.608.683

The provisional budget for 2006, as approved by the board, is as follows:

	Budget 2006
Cost of projects	1.750.000
Cost of staff	376.000
Depreciation of inventory & equipment	3.000
Other costs	157.600
Total	2.286.600



The specification of the “Cost of projects” item, expanded with an extrapolation to 2006 for multi-year projects, is as follows:

Project	Budget 2006	Budget 2007
Ambulant	56.250	
Bits of Freedom	15.000	
CAcert.org	p.m.	
CodeYard	51.250	34.000
Free Software Foundation	15.000	15.000
FSF Europe	10.000	10.000
GPLv3	95.000	
ISOC	2.200	2.200
IIDS	450.000	460.000
NLnet Labs	420.000	430.000
OpenCDI	60.000	
Open Sesame	5.000	
Parrot	30.000	
Turtle	60.000	
New projects	480.300	898.800
Total	1.750.000	1.850.000

5.4 Investment policy

On January 1, 2005, Stichting NLnet had a capital of 25,5 million euro at its disposal. The majority of this capital, namely 24,4 million euro was invested under an investment management agreement with Attica Vermogensbeheer B.V., with funds held at Effectenbank Stroeve in Amsterdam as the custodian. Attica Vermogensbeheer was selected as NLnet's second investment manager in July 2001, and has become NLnet's single investment manager in November 2002. They are following an alternative investment management strategy, based on alternative investments like market-neutral funds and long-short funds (also known by the more generic name hedge funds) and geared towards positive, low-volatility net returns. Attica is charged with obtaining a positive net investment result in absolute terms, where

the quality of the results is measured by comparing both the return and the risk (expressed as volatility) with those of a composite benchmark.

The composite benchmark consists of the weighted average of a number of financial indices:

Weight	Index
55%	MSCI Europe Index
15%	MSCI USA Index
20%	EFFAS EMU Government Bond Index (maturity > 1 year)
10%	EFFAS USA Government Bond Index (maturity > 1 year)

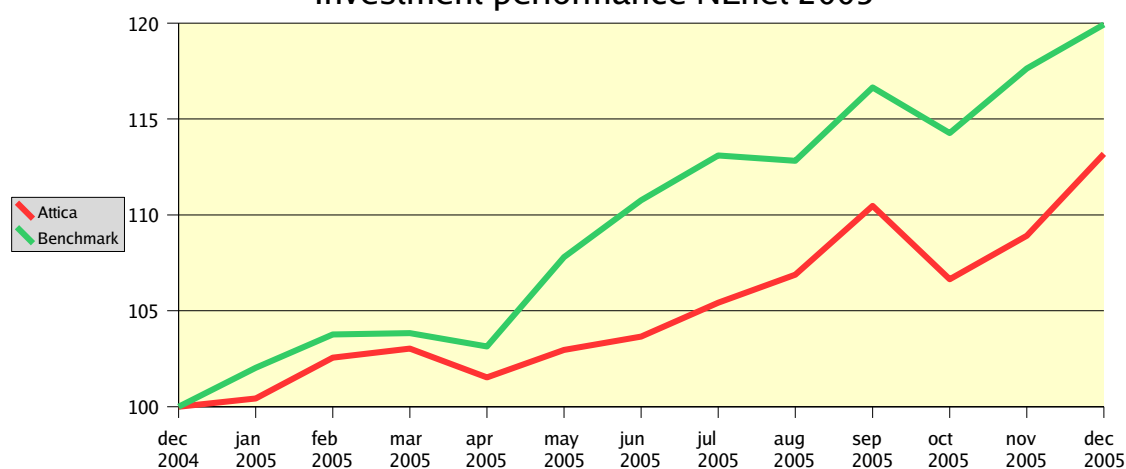
In 2005, the alternative investment management approach resulted in an absolute positive net return of +13,2% (in 2003: +7,8%), which lagged considerably behind the benchmark return of +20,0% (in 2003: +8,1%).

Looking at the longer term performance, over a period of 4¼ year since October 1, 2001 (the start of the performance measurement period with Attica), the average annual return was +6,98%, which exceeded the benchmark return of +4,65% quite significantly. Also, volatility of the benchmark was about 11,0% over this 4¼ year period, while the Attica-managed portfolio experienced a volatility of only 6,9% during the same period.

A graphical representation of the investment performance in 2005 is shown below:



Investment performance NLnet 2005



At the end of 2005, Stichting NLnet's capital had increased to 26,6 million euro, including unrealised investment results. 25,5 million euro of this end-of-year total was managed by Attica Vermogensbeheer. To cover the liquidity needs over the year 2005, an amount of 1,6 million euro has been withdrawn from the managed capital over the period May 2005 – July 2005.

5.5 Cost and revenue of investment management

The cost and revenue of managing the invested capital of Stichting NLnet in 2005 can be summarised and compared with numbers for 2004 as follows:

	2005	2004
Realised results from investment funds	932.268	312.813
Realised results from equities (incl. derivatives)	0	78.472
Realised results from bonds	0	41.223
Realised results from forward exchange contracts	-803.215	443.788
Realised currency differences in cash accounts	6.326	-58.059
Investment revenue: interest on bonds and deposits	0	7.745
Investment revenue: dividends on equities and funds	0	64.610
<i>Total realised result</i>	135.378	890.592
Delta in unrealised result on investment funds	4.033.602	730.776
Delta in unrealised result on equities (incl. derivatives)	0	-98.954
Delta in unrealised result on bonds	0	-27.720

	2005	2004
Delta in unrealised result on forward exchange contracts	-1.236.250	449.746
<i>Total delta in unrealised result</i>	2.797.352	1.053.848
<i>Total result (realised + delta unrealised)</i>	2.932.730	1.944.440
Transaction costs and custody charges	60.672	52.123
Investment management fees	197.120	200.569
<i>Total cost of investments</i>	257.792	252.692
<i>Net capital gain / loss (-)</i>	2.674.938	1.691.748

The unrealised result of the investment portfolio at the end of 2005 and at the end of 2004 can be summarised as follows:

	2005	2004
Unrealised result on investment funds	5.778.437	1.744.836
Unrealised result on equities (incl. derivatives)	0	0
Unrealised result on bonds	0	0
Unrealised result on forward exchange contracts	-564.756	671.494
<i>Total revaluation reserve ultimo 2004 (2003)</i>	5.213.682	2.416.330
<i>Idem ultimo 2003 (2002)</i>	1.416.330	1.362.482
<i>Increase / decrease (-) of revaluation reserve</i>	2.797.352	1.053.848

Governing Board Stichting NLnet

17 October 2006

T. Hagen
 F.M.T. Brazier
 T.W. van der Raay
 J.C.L.M. Alsters
 J. Onvlee





