

AFNIC 2010 Business Report

Promoting security and
innovation in every domain





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For an increasingly secure DNS



For AFNIC, 2010 was devoted to boosting security and optimising service quality. Security first: we invested in infrastructures with the opening of our new tier-4 Datacenter (the most stringent level of system conservation). We also signed the extension root with the DNSSEC which, following the discovery of the Kaminsky Bug in 2008, led us to adopt the new protocol to reinforce the security of the .fr domain.

On 2 March 2010, we were also designated by Christian Estrosi, the French Minister of Industry, as the registry for the .fr extension for a period of seven years. Yet this same year, the Constitutional Council also called into question the constitutionality of that appointment. Although the reasons for the Council's decision challenge neither AFNIC nor its appointment as a registry, the Constitutional Council invoked the inadequacies of the existing legal framework which does not cover freedom of communication or entrepreneurship, and is therefore no longer suited to the current context of Internet predominance. AFNIC has been helping prepare this new legal framework, which will take shape in 2011. Finally, in 2010, AFNIC confirmed its positioning, celebrating the registration of 1,900,000 .fr domain names, the opening of the .fr domain name to French expatriates, and the choice of the AFNIC-CORE consortium by the Mairie de Paris as technical operator of the future .paris domain name.

JEAN-PIERRE DADAYROL

President of AFNIC

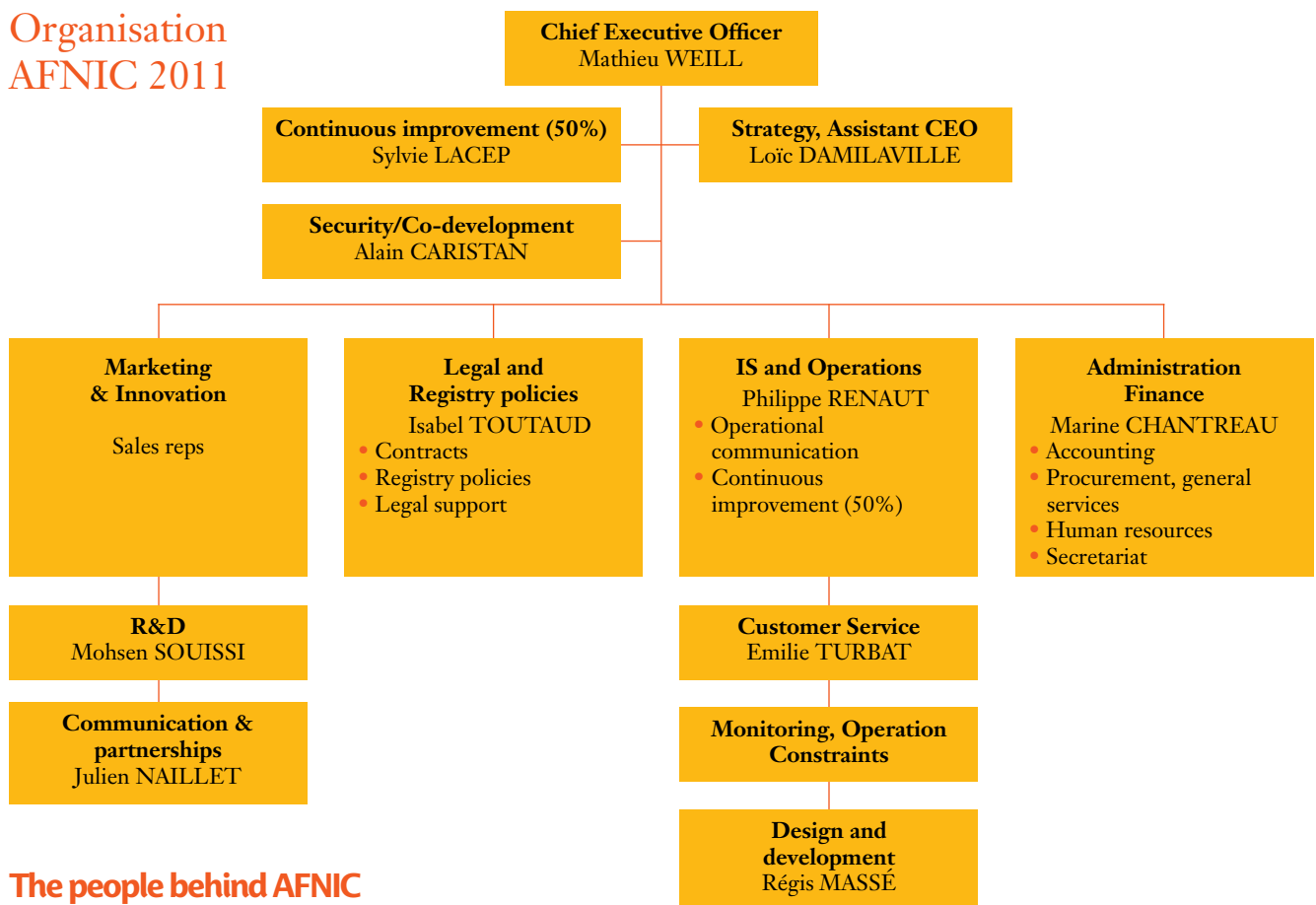
AFNIC in all its facets

AFNIC, a French non-profit association, was created in December 1997 at the initiative of the public authorities. The main purpose of AFNIC is to manage .fr and .re, two top level domains corresponding to France and Réunion. AFNIC promotes the development of .fr throughout the country by:

- flexible registration procedures
- automation of processes with the Registrars
- respect of user rights
- an attractive pricing policy
- a quality charter based on timeless values
- an investment with constantly improved security features
- an active research and development policy to enhance its expertise
- creation of new customer services

Additionally, as a neutral, independent body, AFNIC acts as a watch platform. Its studies, findings and data are provided to all web stakeholders for collaborative, consistent development of openness.

Organisation AFNIC 2011



The people behind AFNIC

55 employees

Average age: 37

Women: one third of the workforce (36.5%)



The year in actions

January 2010: AFNIC rolls out its own Anycast cloud; this addressing and routing system enables data packets to be redirected to the nearest or most efficient servers. It also enhances the performance and security of DNS architectures.

2 March 2010: the Ministry of Industry appoints AFNIC as the registry of the .fr domain for a period of seven years.

16 March 2010: the new naming charter for .fr domain names enters into force.

March 2010: the .fr domain name is opened up to French expatriates.

July 2010: AFNIC decides to publish a monthly dashboard on service quality.

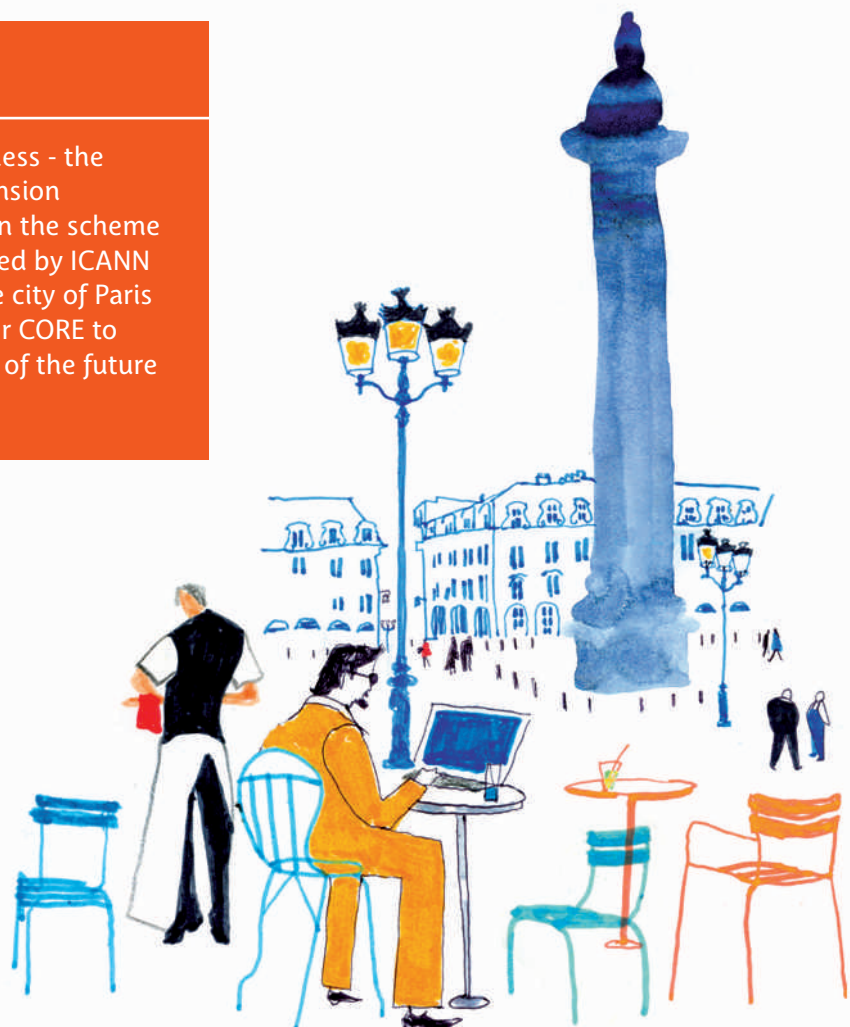
2010 also saw positive findings from the satisfaction poll of BE, started in December 2009, with growth of 0.4 point over February 2009.

14 September 2010: signature of the extension root for .fr and .re through the DNSSEC Protocol (DNS Security Extensions). This protocol will lead to even greater DNS security.

September 2010: launch of a communication campaign targeting our .fr users and prescribers.

AFNIC now in Paris

Eager to build on its core business - the technical management of extension registers - AFNIC participated in the scheme to create new extensions, started by ICANN in 2008. This know-how led the city of Paris to choose AFNIC and its partner CORE to become the technical operator of the future .paris extension.





DNSSEC keys to protection

Public or private, cryptographic keys have boosted security between the servers and the DNS root. It is an optimal protective measure. Changes since its inception in 1983 have allowed the DNS to limit risks of intrusion. However, when Dan Kaminsky discovered a new method of poisoning nameservers, the need to ensure the integrity of DNS records considerably increased. In practical terms, this meant that the organisations in charge of domain names progressively entered the signature phase for their security extensions.

AFNIC started DNSSEC assessment in 2003 at the Idsa research group.

However, the experiments demonstrated that the technology could not be implemented in the short term. It was therefore only in September 2009 that the signature project for zones managed by AFNIC in 2010 was created, including:

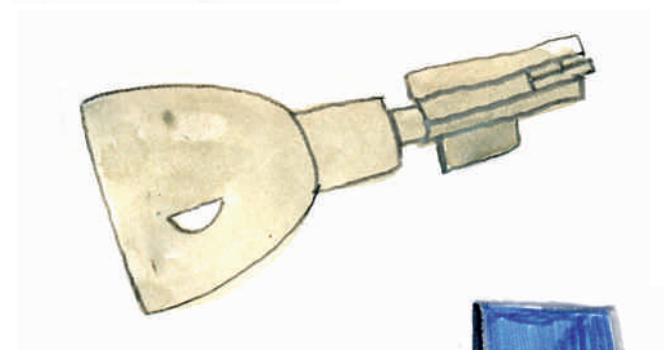
- the signature on 15 April 2010 of the *.pm* zone (Saint-Pierre et Miquelon),
- the signature on 3 September 2010 of the *.tf* zone (French Southern and Antarctic territories),
- the signature on 9 September 2010 of the *.yt* zone (Mayotte),
- the signature on 14 September 2010 of the *.fr* and *.re* zones (France and Réunion),
- the cryptographic keys were inserted into the root the following month.

The signature of these zones marked an important step in the securement of French DNS zones. Yet the security of the French DNS will only be genuinely improved once all the keys are published in the DNS root, delegation key fingerprints are published, and validating DNSSEC resolution services are widely accessible. On the other hand, the service will be open to the *.fr* delegations sometime during Q2 2011.

Use of cryptography

DNSSEC offers extensions based on the use of cryptographic signatures (public key cryptography) to protect the DNS by providing the following services:

- securement of DNS transactions,
- securement of data contained in DNS messages by means of authenticating their origin as well as guaranteeing their integrity during routing,
- storage and distribution of the keys required for the smooth operation of the first two services cited above.





> EXPERT OPINION

Backing security with secrecy

BY PHILIPPE RENAUD

IS and Operations Manager, Chief Technical Officer

The DNSSEC protocol uses cryptography to sign the DNS records. Technically, you address server X and have the resources to verify whether it is authorised to answer you. This new protocol forces zone registers and administrators to be extremely meticulous in their management and procedures. We have to rotate the keys, set up a key repository, and also ensure the rotation of our own keys to the web root. It is a highly sensitive subject, since there is a risk of error in setting up the zone signatures and since

the software components in question are still young. The root is the starting point for the chain of trust. There must be no errors on any of its links. AFNIC declares data and sets up complex procedures such as monthly key rotation. It also implements constraining precautionary measures. All the data are found on acid-protected HSM chassis' (Hardware Security Module). The HSM is a chassis capable of self-destructing if it is physically handled. It can only be accessed with trusted cards.

AFNIC has set up witnessed key rotation procedures. Two people are required to change the .fr signature key to enable data sharing. Both keys are signed by a smart card. Although the protocol is fairly complex, it ensures a high degree of chain security. We needed one year to reach the .fr signature, followed by a stabilisation period of three months. In 2011, we are pursuing our efforts for the overall security of the entire .fr zone.



New Datacenter

Technological performance promoting data security

From a technical standpoint, daily data management implies 24/7 operation of the DNS in perfectly secure conditions, as well as maintaining the registration chain fluid for the almost 800 registrars. To reach this degree of excellence as well as ensure that service quality is constantly reinforced and secured against any threats of hacking or natural disasters, AFNIC decided to set up a cutting-edge Datacenter in 2010. Bolstering the robustness of infrastructures is a constant need. Today, the infrastructures are hosted and

administered at AFNIC. However, from a technical standpoint, the new Datacenters have reached levels of performance, robustness and physical security which cannot be attained alone. All the facilities are currently ready, but data migration will only take effect in April 2011. AFNIC will ultimately also have another, equally professional recovery centre in France. The AFNIC offices may simply act as a secondary fail recovery centre. Having several recovery centres guarantees protection and smooth functioning for all clients and users.



> EXPERT OPINION

AFNIC has its own Anycast cloud

BY PHILIPPE RENAUT

IS and Operations Manager, Chief Technical Officer

The other major project of 2010 was the deployment of the Anycast technology at AFNIC. Work started on the system in 2009, and it was operational and ready for deployment by January 2010. Anycast technology leads to overall improvements in DNS server quality. Until now, secondary deployed servers often numbered five or six, and could be saturated by a hacking incident. Anycast technology displays a single site when there are several servers throughout the world that answer. The

system is highly resistant, since attacking it would require having an equal number of servers, as equally geographically distributed, a major hindrance to hacking. AFNIC deployed this server chain worldwide, relying on specialised service providers for this initial phase. Then in 2010, it started to deploy its own network by mainly targeting the national territory and major cities, first Paris, then Lyon since it is an industrial hub close to the Swiss-Italy border. Finally,

the next steps, with the same goal of better serving the French community, were Réunion and Europe... notably Brussels. Frankfurt and London are the next steps. This major milestone in 2010 helped us reached an unparalleled level of security, boosting the resilience of .fr by increasing the capacity of the system or network architecture to keep functioning through a breakdown, and by reinforcing resolution service quality for the domain names.



1 million euros

in expenditure and investment
(2010 cost of the Datacenter)

Developing .fr

The notion of domain names is increasingly well understood by Internet users.

Over 1,900,000 .fr domains were registered at year-end December 2010, and we expect to celebrate the 2 millionth .fr domain name in 2011. Yet, many brands and companies still seem to shy away from it and do not always see why it is required, in economic terms. However, with 18% growth year on year in 2010 (10 points more than the world average for extensions), .fr demonstrated that it is crucial for both individuals and companies within the French territory. In fact, one out of two names belongs to a professional website, while 62% of the web servers associated with the .fr domain names respond successfully. In other words, 85% of the domains of the zone direct to a real site. The opinion polls carried out by AFNIC in 2010 also revealed that .fr stirred feelings of attachment to the French territory, while 76% of the respondents stated that they would use the extension to spontaneously look for the website of a French company. Finally, if they had to choose just one extension, 62% of respondents claimed they would opt for the national extension.

What's in a (domain) name?

Remember that a domain name gets your name known on the Net.





Technically, each computer connected to the Internet is identified on the network by an IP address, a series of numbers which is simpler to replace by meaningful letters. For example, it is easier to type *www.afnic.fr* than a series of numbers like "192.0.2.1". That is what a domain name is for. It is easier to use and memorise.

Some **1 900 000** domain names registered as at year-end December 2010

DNS Unicast servers

-  AFNIC
-  SIDN

DNS Anycast servers

-  AFNIC
-  Netnod
-  PCH
-  ISC



Geographical distribution of DNS servers for .fr and .re as at 31 December 2010
(Source: AFNIC)



> EXPERT OPINION

.tounes, a successful skill transfer

BY **MOHSEN SOUISSI**

Research & Development Manager

تونس.

The register market is a niche. To date, there are around 250 registrars worldwide. There are proven economic and technological models that meet their needs. If you own a register and you do not want to take care of anything, there are turnkey operating agreements. AFNIC, on the other hand, takes a co-development approach through its articles of association. Our typical client wants to manage, learn to manage and take as sovereign a role as possible in the entire management of its system. The CODEV-NIC system, AFNIC's technological support jointly developed with other members of the International Board, is based on the principle of sharing knowledge and know-how. It is mainly grounded in the transfer and ultimate acquisition of both by the register holder.

Obviously, in this case, the initial investment is heavy. Knowledge must be acquired, engineers trained, equipment bought, etc. On the other hand, our client enhances its autonomy and genuine freedom of action. That was the case of Tunisia. The country had financing from the World Bank. They also belonged to the International Board. They knew about our expertise and fully agreed with co-development. So, from April to July 2010, we prepared a specific solution. Unfortunately, with their tight budgetary constraints and deadlines, we had to pare down our vision. The project therefore started out with a week-long field mission, after which we submitted a report specifying the respective roles of AFNIC and the client, since it is imperative that the client be actively involved in setting up its system.

We carried out short cycles of design, development and roll-out. At each step, there was a deliverable for the field, a technical platform which we remotely operated. We called on a technical consultant from Côte d'Ivoire specialised in the open source software that was used. This active cooperation is what gives co-development its full meaning. With this first test, AFNIC demonstrated its ability to carry out a complete transfer onto a register management system becoming independent. We also know that, although they are completely satisfied with this model, it is not impossible that .tn will migrate towards our solution but on their infrastructure and under their management.

ATI (Tunisian Internet Agency)

ATI launched an international call for tenders to help deploy the registration system for the .tounes TLD («Tunisia» in Arabic letters). AFNIC was chosen for its offer including the CODEV-NIC software as the «driver» of this register. The transfer was carried out 26 April to 27 July 2010.

It included systematic tests of CO-DEV-NIC with the IDN (originally slated but never actually tested); the addition of specific rules to Arabic-language characters (RFC 5564); the installation of the software on ATI machines; and the training of Tunisian engineers in the completely independent administration of their new registration system.

.fr opens up to French expatriates

On 16 March 2010, after the Minister of Industry appointed AFNIC as registry, AFNIC modified its charter to authorise the registration of .fr domain names by French expatriates. This naturally followed the step taken on 20 June 2006 to open up the extension to individuals. Starting at that date, a territorial requirement applying to individuals limited .fr domain names to individuals who could prove they had an address in France. This excluded French individuals residing abroad who had not kept a French residence. They were unable to register a domain name with the extension of their own country.

This situation ended on 16 March 2010, without causing any surge in the number of applications for new .fr domain names.

It is an interesting phenomenon that raises several questions: is it difficult to reach these individuals through the traditional channels used by AFNIC? Is it due to their longstanding use of generic extensions or the extensions of the countries where they are living? That would make sense, since an Internet user living abroad may prefer to target the web community of that particular country by choosing the national extension of the country, just like foreigners living in France who choose the .fr TLD.

Preparing to open up to Europe



2010 was also the year we prepared to open up .fr to Europe. To define this registration policy better, AFNIC consulted the web community, as is stipulated in the agreement binding it to the Ministry of Industry. The method chosen for

this poll was an online questionnaire.

From 12 July to 26 September 2010, AFNIC consulted the public on opening up .fr to European companies and individuals residing in the European Union. The poll ended on 20 October. One initial observation was the low response rate.

Out of the nine topics covered, the respondents found no fundamental objection to opening up .fr to all of Europe.

On the contrary, the poll identified major points for discussion, such as the information to be provided to the holder of the domain name, the residence of the administrative contact, and the status of the domain name during the verification. Finally, the holder's eligibility counted less than the possibility of reaching the holder and consulting the holder's updated administrative data. Respondents even expressed the desire to block the domain name if the contact details of the holder were erroneous.

A preliminary revision to the .fr registration rules was drafted at the end of 2010, based on the recommendations of the consultation committees and working groups and the findings of the public poll. As a result, .fr should open up to Europe during the last quarter of 2011.



> EXPERT OPINION

Reinforcing .fr in a suitable legal framework

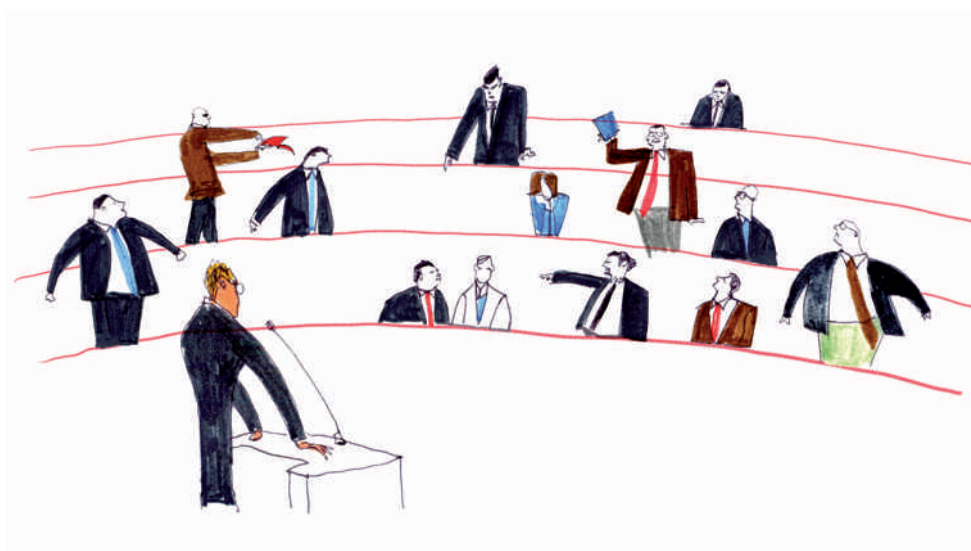
BY ISABEL TOUTAUD

Legal & Registration Policy Officer

On 6 October, the French Constitutional Council ruled that Article L45 of the French Post and Electronic Communications Code would be unconstitutional as of 1 July 2011, handing the initiative over to the legislature to change it. On 6 October 2010, the ruling on the constitutionality question was passed. That opened the way for our March appointment for the management of the .fr extension, since the Constitutional Council judged that the legislative framework was unconstitutional in October. AFNIC's work was not in any way called

into question. Rather, the Constitution Council affirmed that, given the extent of deployment of the Internet, holding a domain name has become an underlying element of our society which should be guaranteed, just as communication, freedom of expression, and the right to entrepreneurship. But when liberties such as these are at stake, the legislative authorities must define the rules, not the regulatory authorities. It may be pointed out that article L45 goes back to 2004, and addresses the subject through only about thirty lines. It refers the readers to the application

decree of several pages of management and attribution rules. Likewise, the by-law which appointed AFNIC specifies other prescriptions which are reproduced or supplemented in the AFNIC agreement at the very end of the chain. That was what the Constitutional Council disagreed with. Proper legislative procedure requires the entire framework to be found in national law. The Council therefore asked the government to reconsider the legislative framework before July 2011. We have obviously offered to participate in these discussions for the sake of general interest.





Transparency and service quality

The year 2010, was therefore focused on boosting client satisfaction. AFNIC undertook commitments regarding performance and availability levels, the service and data delivery cycle, and publishing a monthly dashboard of its performances. AFNIC succeeded in informing clients of new services ahead of time, by sending them technical specifications well in advance. Additionally, test phases are longer, release dates are clearer, and for each service offered, clients can consult a dedicated blog for real-time information.

Operational communication informs them in a completely transparent fashion of any events that happen at AFNIC. By boosting the level of information and monitoring, even at night (the night shift team has six people), AFNIC reinforces the fluidity of its services and strengthens its ties with the Registrars. On this subject, during 2010 AFNIC met several times with the Registrars. By getting acquainted with their teams and working methods and listening to their expectations for the registry, AFNIC is able to hone its own research into transparency and excellence.

Starting in July 2010, AFNIC published a monthly dashboard on service quality

As part of AFNIC's State appointment as registry for .fr domains, AFNIC is committed to communicating on the accomplishment of service quality goals. These goals are described in Appendix 3 of the agreement signed with the State. They address:

- DNS (Domain Name System) services,
- the registration service,
- customer service.



Dashboard for AFNIC service quality

December 2010

DNS Service

Goal:

Availability of the .fr resolution service with an answer leadtime of under 300 ms 100% 100%

Delay between sending the query and receiving the answer, from the user's point of view

Authoritative servers for the .fr zone answering 100% of the time at least 150 ms n/a 75%

Delay between sending the query and receiving the answer, from the user's point of view

Registration service

Availability of domain name creation 98,3% 99,4%

Processing of domain name creation operations in under 3 seconds 91,5% 100%

During a period of unavailability, from reception of the request from the Registrar to notification that the domain name creation is visible in the Whois lookup

• For other registration processes:

Identification of legal entities within 30 working days 98% 100%

Processing of applications with authorisation within 2 working days 100% 90%

All other applications require additional assessment

• Leadtime for publication of new registrations:

Average daily file updates of the .fr zone 22,9 24

• Whois access service:

Whois availability (on «port 43») 99,4% 99,4 %

Answers to queries received (on «port 43») in under 500 ms 98,3% 100%

In period of availability

Availability of the service to check domain name availability 98,7% 99,4%

Answers of the service to check domain name availability

(provided to the Registrars) in under 500 ms 99,7% 100%

In period of availability

Customer Service

• Phone calls:

Calls from registrars treated in under 3 minutes 100% 90%

• E-mail:

Queries receiving a qualified answer in under 3 days 95% 90%

Outstanding queries requiring the input from experts of the Registry

• Data leadtime for technical operations:

Announcement of maintenance operations on its technical infrastructure 10 days before the operation 100% 100%

Number of incidents upsetting the quality of services which was communicated on www.afnic.fr/operations 4/5 100%

... within one hour 80% 100%



L'AFNIC speaks

Since its inception, AFNIC has seen itself as a centre of expertise on domain names and the functioning of the Domain Name System. That is the first legacy from its origins as the NIC (Network Information Center), the second being its express will to share this expertise by making it available to the Internet community. In partnership with telecom Sud Paris, each year since 2007, AFNIC has published an industry report on domain names in France. The purpose of this reference document is to analyse market trends and critically analyse the .fr database in order to draw conclusions regarding changes in terms of use or the appearance of new issues such as the deployment of IPv6. In providing this industry report, our goal is to provide a clear, documented view of phenomena at work in our market. Patrick Maigron, lecturer and researcher at telecom Sud Paris, makes a valuable contribution. In addition to this annual document, AFNIC also launched a collection of industry reports in 2006. They sum up a given

issue in highly understandable and forward-thinking terms. For example, the September 2006 report on «Slamming» is still vitally up to date, as is the report on potential DNS attacks. In 2010, we published a report on the Second Market for domain names, (i.e. the market for domain names that are already registered), and another on DNSSEC, a protocol intended to improve DNS security against certain types of attack.



2010 French domain name industry report



Thematic report - *The secondary market for domain names in France* (April 2010)

Thematic report - *DNSSEC Domain Name System Security Extensions* (october 2010)





> EXPERT OPINION

The Internet is an ecosystem

BY LOÏC DAMILAVILLE

Strategy, Assistant CEO

Most web stakeholders are highly conscious of the fact that they exist in an ecosystem, interacting with other sites through more or less reciprocal ties. Yet each stakeholder only has a very small vision of its surroundings, without any holistic representation of its own ecosystem. Through this study - a first in our industry - we were able to map all the key stakeholders and position them in relation to AFNIC, and in relation to others. The study also identified the major communities (e.g. domain name professionals,

technologists, forums, policy, marketing communication, HR, leisure) which are interested in domain names, each from its own viewpoint. These communities then branch out into smaller groups, for example, of legal professionals, civil society, media, registrars and domainers. They represent a variety of approaches to and expectations concerning domain names, and so of AFNIC. In fact, we particularly observed that AFNIC was at the centre of the community of domain name professionals, yet

relatively remote from the overall ecosystem! We are going to use this map to refine our web presence. Visually, this will involve getting AFNIC into the centre of the map, by forming closer ties with communities with which we do not communicate enough. Naturally, the «ties» of which I am speaking go beyond mere «netlinking». If we consider that the Internet mirrors the real world, our actions towards these communities cannot be limited to the «virtual» dimension.



The desire to create structured, long-term R&D within a European ecosystem

In October 2009, a delegation of the IIS.se (.se register) visited AFNIC to express its particular interest in dialogue and joint work on R&D topics addressed by the AFNIC team, such as measurement platforms, the Internet of objects, and DNSSEC. To broaden the field of opportunities to other registries that are members of CENTR, AFNIC and .se set up a second R&D meeting on 1 and 2 July 2010 in Stockholm. The agenda was as ambitious as it was uniting (<http://www.iis.se/en.evenemang/seand-afnic-workshop>). Besides the goal of presenting and discussing R&D projects of shared interest, AFNIC and .se wanted to seize this opportunity to involve CENTR members (particularly those involved in R&D) in a debate on several questions: do CENTR members have a shared interest in creating a new working group dedicated to R&D within CENTR, like other existing groups such as CENTER-ADMIN and CENTER-TECH? If unanimously agreed, how should the working group be set up? 26 individuals from 12 different registers (.at., .cat., .cz, .de, .eu, .fr, .ie, .jp, .nl, .pl, .se, .uk) attended this meeting, at which the following subjects were dealt with: digital identities, web check-up measurements and analyses, and feedback on the findings of the poll on «AFNIC's technological background» federated ONS (F-ONS). (<https://www.centri.org/main/5515-CTR.html>).



At the end of the debate, the opportunity of creating a new working group dedicated to R&D was not unanimously approved. Everyone was interested, but the issue of human resource management blocked the consensus. After all, some registries have too few technical staff, and employees play several roles, from operations to technology watch and R&D. These individuals would be unable to attend even more meetings than they currently do (e.g. CENTER-TECH, RIPE, IETF, OARC). Even though no formal decision was reached on this point, a group of registries in attendance, (namely .cz, .fr, .se, and .uk) decided to pursue and hold a 3rd workshop some time in 2011. They committed to forming a programme committee by offering volunteers and concentrating on a small number of topics which will then serve as the basis for a call for papers. The CENTER secretariat offers to support this «informal» R&D group in terms of logistics and organisation, while the .cz registry offered to host the event in Spring 2011 in Prague. At end 2010, the programme committee was up and running, and preparations had started with the choice of dates and topics.



2010, the federated ONS platform in test phase

In 2010, the federated ONS platform (F-ONS) set up by AFNIC within the framework of the multi-partner WINGS project (*go to <http://www.wings-project.fr/>*) was exported to two other partners, namely, laboratory GreyC (Caen) and Orange Labs (Sophia Antipolis), in order to perform functional tests throughout the network. After this export phase, which required considerable coordination and follow-up, the functional tests which had been performed on the internal platform (AFNIC) were carried out and validated with the partners. The performance test phase also started at year end and will continue in 2011. (The project is slated to end in October 2011). On this occasion, the software programmes (ONS clients and update utilities for ONS redirections) were improved and updated.



Contributing to the development of Internet of objects in France and abroad

The AFNIC also made an active contribution to the GS1 «ONS Requirements Ad hoc Committee» to prepare a document entitled «Federated ONS (F-ONS) Requirements document». This document was issued and validated by GS1 at end 2010. Research carried out on the federated ONS was also used for the Proxi Produit project (in partnership with GS1 France and Adenyo), which was accepted by the state Secretariat in charge of the Outlook and Development of the Digital Economy. In this project, identifiers are not those of RFID labels, but of barcodes. The knowledge taken from the WINGS project particularly concern the format of domain names, the ONS client and

technical aspects relating to the appropriate types of DNS registration content. The WINGS project also led us to work with our respective Swedish counterparts (GS1 Sweden and the .se registry, IIS.SE). As part of an industrial project, they worked on extended packaging using barcodes. In this partnership, we were able to implant the federated ONS by making an instance of our European WINGS-based root cooperate with the Scandinavian ONS root. Today, it is the fourth operating ONS root. To put this root into operation, Sweden relied heavily on our research and also gave us some constructive feedback.



2010 Summary

Ever greater involvement in co-development

Reinforcing partnerships, starting programmes, supporting co-development actions

Since 2009, the co-development policy implemented within the framework of the International Body of AFNIC has received financing from Fonds du Collège, which helps develop partnerships with other domain stakeholders. It was with this goal in mind that AFNIC signed a partnership agreement with the AFTLD (African Top Level Domains Organization). Here is a list of actions supported by Fonds du Collège in 2010 (€60,000):

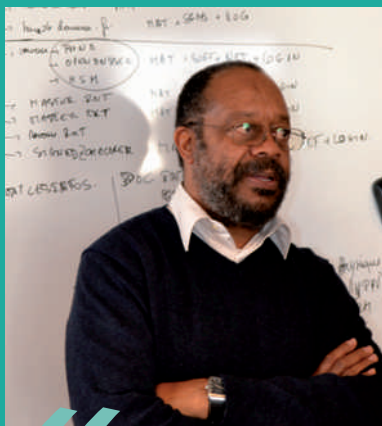
- NGL (of the Internet Society): training in Internet governance. Supported the opening of the first class in English in 2010 and the preparation of the French-speaking class for 2011;
- Euro-SSIG (summer school on Internet governance in Meissen, Germany, 25-31 July 2010): 3 participants received funding to attend;
- NSRC partnership (Network Startup Resource Center): French translation of their IROc course materials (Initial Registry Operations Course);
- Funding for the AFTLD workshop (IROc training) in Bamako (September 2010);
- Fellowship Grants allocated to six individuals to

attend major international conferences: 3 for ICANN (3 individuals), 1 for the IGF (Internet Governance Forum), 1 for the AFTLD, and 1 for CARI'2010 (African Conference on Research in Computer Science and Applied Mathematics).

The Committee, ecosystem of a TLD: privileged dialogue

Each year, the AFNIC General Assembly is a highlight of the International Committee's year, since it is the chance to bring together all members of the Committee. After meeting for the first time in another country (Dakar, Senegal in 2009), the annual meeting for 2010 was held in Paris on 9 and 10 June. The traditional seminar of the «joint day» is the chance for all Committee members to debate with their usual partners (Icann, Isoc, Adetef) on TLD development and international cooperation. This year's focus was on the issue of delegation and redelegation of ccTLD extensions – still a major source of concern in developing countries. An informative, constructive debate ensued on the analysis and perception of AFNIC on what it calls the ecosystem of a TLD, as well as the role of the registry manager in this context.





> EXPERT OPINION

Helping develop communities of stakeholders based on the value of shared dialogue

BY ALAIN CARISTAN

Security / Co-development Manager

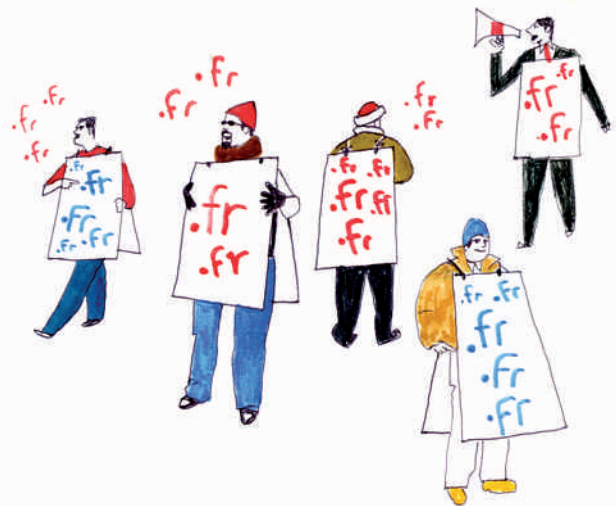
Since its inception, AFNIC has contributed to development of not only the French web community but also similar communities operating in the same business lines and addressing with shared societal issues. The Committee brings together stakeholders, initially focused on the French-speaking world, as the result of the initiative of the AFNIC founders to drive co-development policy with an eye on their counterparts in developing countries. The idea arose from the observation that the latter faced development problems in their management of ccTLD registries (country code Top Level Domain), and that both parties would benefit from sharing experience. This common ground was seen as a good vector for co-development on shared societal issues that applied to different contexts but which could be addressed together. Each brings its own

resources to the table. In the global South, you often find human resources and skills that can be reinforced, while the North often has resources and know-how acquired in the deployment and advanced operation of information technologies. We wanted to facilitate the appropriation of knowledge and provide practical assistance with knowledge transfer through mentoring. In the workshops set up, the chosen candidates are always specialists in their field, with operating responsibilities in their respective companies or bodies. During the week of training, discussions, meetings and practical work are carried out between trainers and trainees. The candidates are invited to put their learning to good use on their own project even while the course is still on. Depending on the course, this may even involve a directly usable project at their workplace. All our work

boils down to placing our future experts in a setting of dialogue free of competition, since all of them have their own individual projects. This reinforces both their independence and know-how and their ability to work in expert groups and pass on knowledge. In my view, the advantage of the Committee is its partnerships, which enable this cooperative support of the development of communities of Internet development stakeholders, based on the value of shared dialogue. Finally, dialogue and mutual help on the practicalities of co-development require time, investment and work - not on projects based on the economic and legal models of the global North, but on collaborative projects organised and run by the participants of the global South who are already experts in their fields of skills and valued as such by their home community.

Supporting the change of our positioning by overhauling our identity

In light of the growing popularity of .fr (1,900,000 registrations in 2010), and the strategic changes of AFNIC, public communication must be backed this year by a change in our positioning. Not only is AFNIC a multi-registry association, but it also offers a wide variety of technological services for sale to its clients. It thus defends its dual purpose: staying true to its traditional role as a general interest service organisation, and reinforcing its support sales in order to fund its own development.



.fr likes attention



«In terms of communication, says Julien Naillet, director of communication and partnerships, AFNIC has worked on its visual identity in order to mirror changes to its positioning. In 2011, this

work will lead specifically to the preparation of a new logo and a revised set of graphics guidelines. The guidelines should also be used externally for marketing actions targeting our natural partners, in order to encourage adoption of .fr and raise awareness of its strategic importance on the French market. Today, AFNIC is not only the manager of .fr, but of .re as well. As technical operator, it is also

helping pave the way for the .paris extension jointly with the City of Paris. Finally, AFNIC also sells services. All year, we have discussed, exchanged viewpoints, and made choices of a legal nature (for example, by modifying of naming guidelines). Our communication goals should therefore reflect our actions in all these areas by:

- changing the visual identity of AFNIC to pave the way for a multi-register model,
- laying a new basis for its web presence by raising public awareness and developing a preference for .fr,
- starting and maintaining comarketing actions with registrars,
- measuring customer satisfaction,
- polishing AFNIC's image as a centre of expertise,
- developing registration activities.»

Result of communication actions over 2010

From 29 November to 31 December, AFNIC launched its communication actions by producing a mini-site: www.faites-vous-un-nom.fr as well as a multi-channel B2B advertising campaign intended for all prescribers likely to recommend or register a domain name on behalf of clients, such as web agencies, communication agencies and professionals, webmasters and intellectual property consultants. The purpose of the communication campaign was to raise awareness of how important it is to make a strategic choice of domain name and extension (.com, .net, .fr...) when launching communication on the Internet. It backed its statements with the latest .fr image poll conducted in June 2010 by AFNIC, in which three out of four French respondents stated

they would spontaneously look for a company website under .fr. This campaign was carried out on the Internet using conventional advertising tools such as banners and event-based means such as website skins and home pages. It was visible on various strategic sites, like *01 Net*, *Clubic*, *Comment ça marche*, *LinkedIn*, *Stratégies*, *viadeo* and *Zd net*. The campaign also featured a memo outlining its main points available for download. The campaign analysis revealed that:

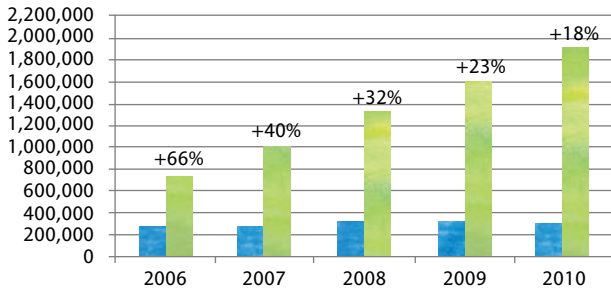
- over 52,000 unique visitors consulted the mini-site,
- the memo was downloaded 1,900 times.

Ultimately, the pre/post test study of the campaign showed an increase of 9% in the memorisation rate.



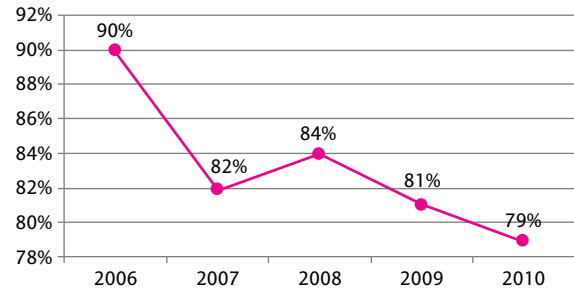
AFNIC in figures

Changes in the total number of .fr domain names

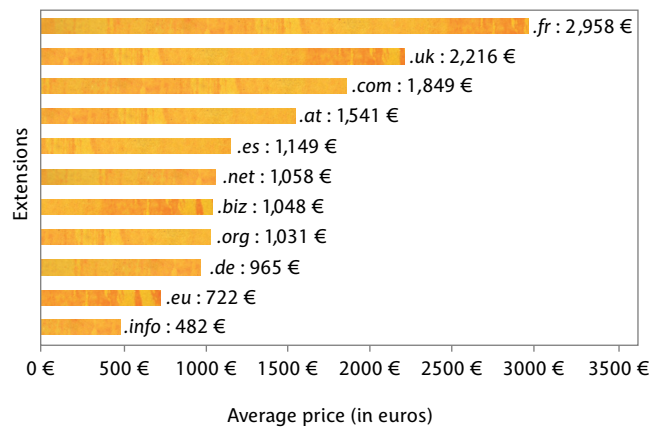


■ Variation ■ Cumulative total of .fr domain names

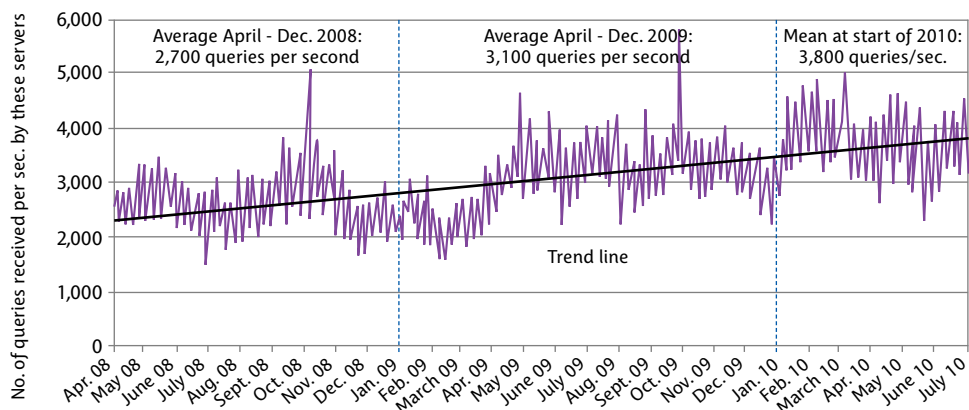
Renewal rates of .fr domain names



Average price of domain names sold on Sedo in 2009, by extension

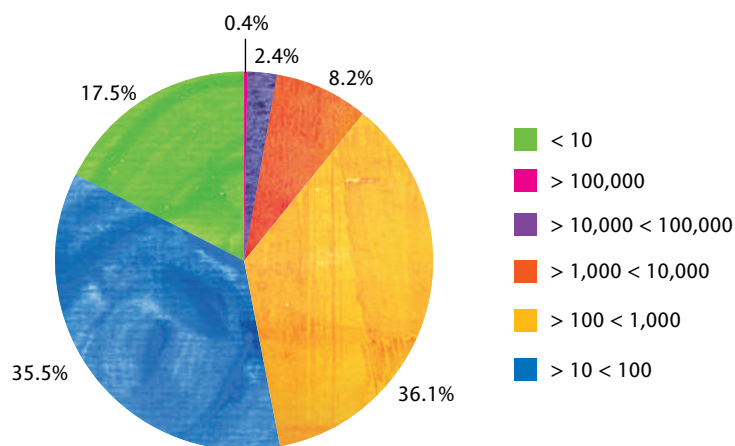


Changes to the number of DNS queries in 2010

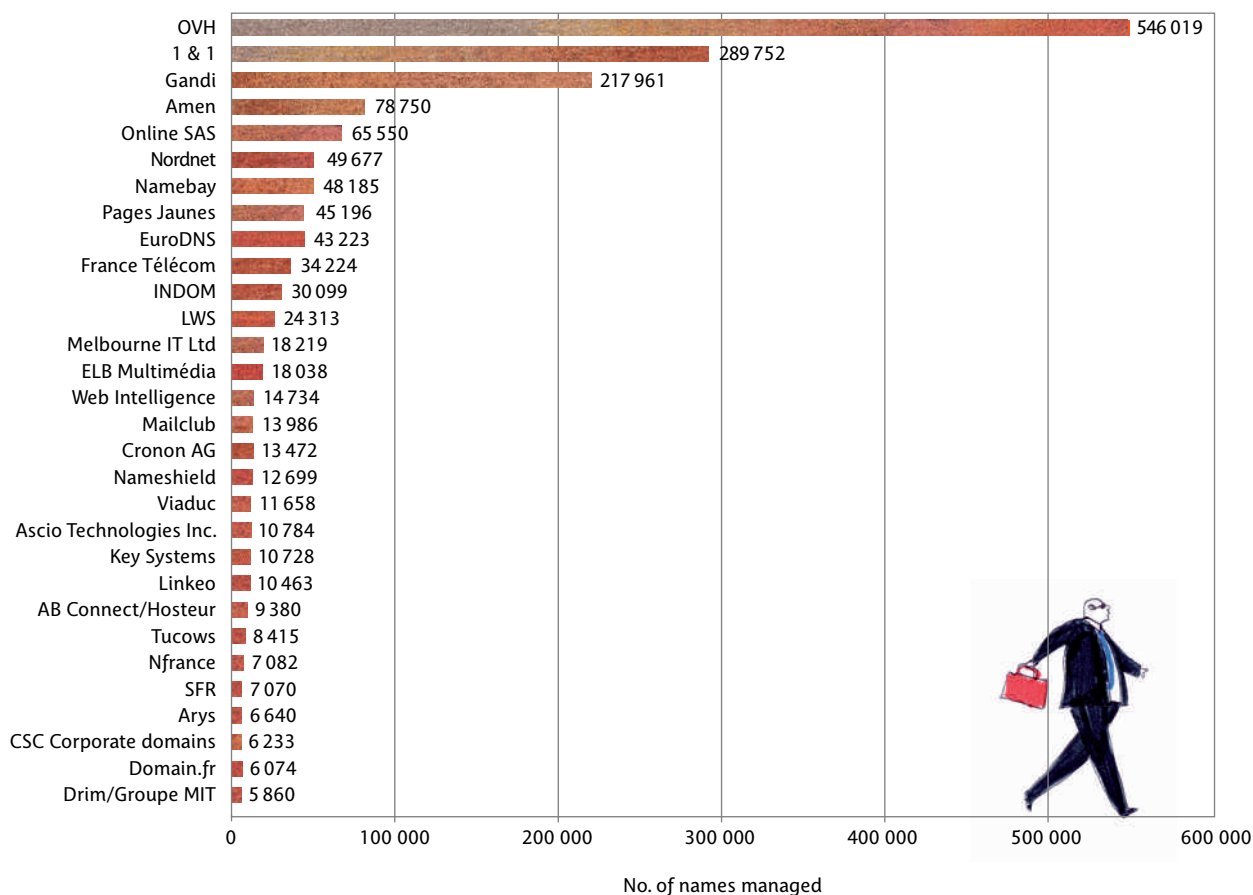


The phenomenon of registry concentration continues: 791 in 2010, down 25% over 5 years

Breakdown of registrars by number of domains in their portfolio



Ranking of the registries by the size of their .fr portfolio

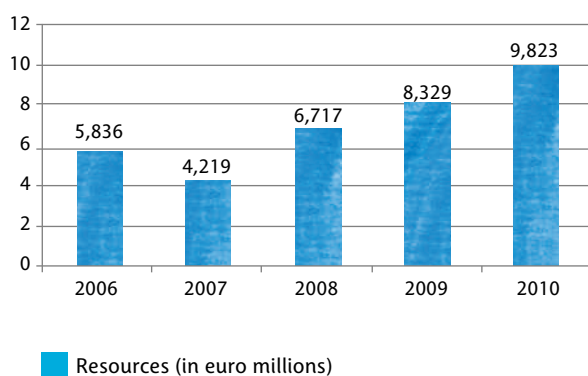


AFNIC in figures (cont'd)

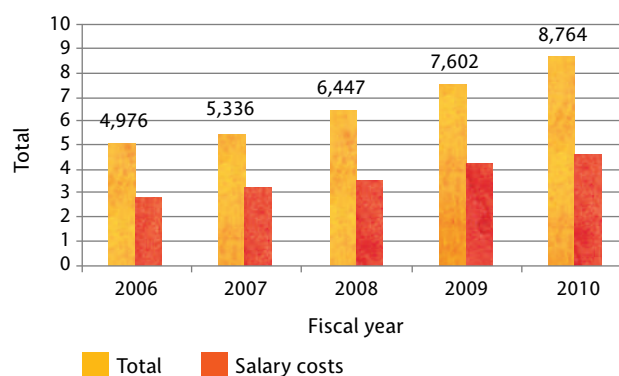
The growth in AFNIC revenue continued to slow down as expected, ending at 18% against an increase of 23% in 2009 and 44% in 2008. Revenue reached €9.8 M and is on line with forecasts from the beginning of the year. Operating expenditure totalled €8.8 M, up 15% over 2009, but slightly lower than the expected budget.

The net result is positive, standing at €792 k. This result made it possible to maintain a satisfactory level of reserves, which stayed at the unchanged percentage of 93% of the assigned target. The Association's financial standing stayed healthy and it had the funds required to implement its strategy.

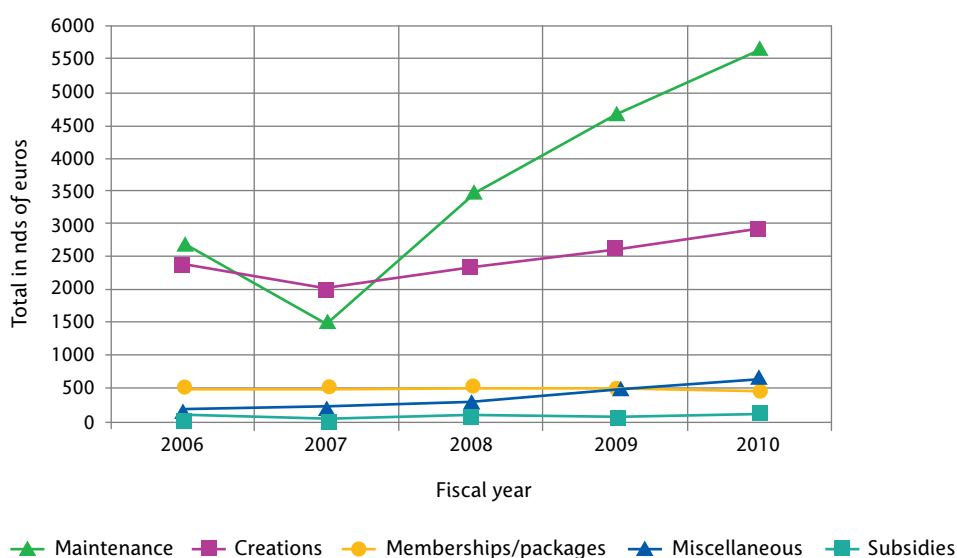
Changes to operating revenue



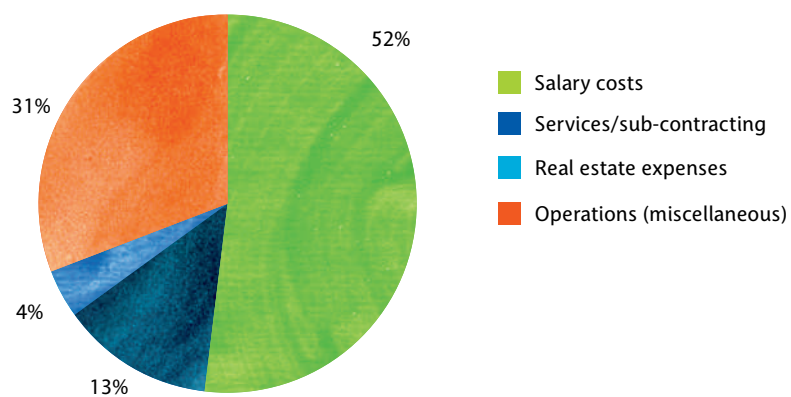
Changes to operating expenditures



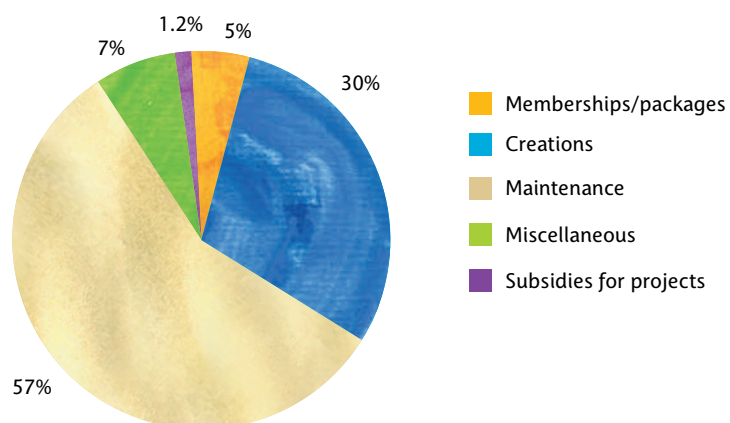
Changes to the resource structure



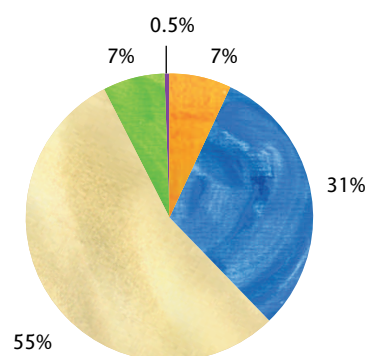
AFNIC expenditure structure for 2010



Resource structure of AFNIC in 2010 (thousands of euros)



2009 (for comparison)



Changes to the operating result in millions of euros





AFNIC and the future

A great deal of positive events happened for AFNIC in 2010, and 2011 should continue in the same vein.

A new legislative framework is expected for 1 July 2011; it will have an inevitable impact on existing registry policies. Other challenges are also already in the works, such as the opening up of .fr to Europe, the introduction of IDN under .fr, and the DNSSEC deployment.

These are not new projects. In fact, AFNIC has been working on them for several months, and in some cases for several years. But their implementation should be completed towards the end of 2011.

In the same time period, AFNIC also wants to pursue the work on service quality, customer satisfaction, and development of its registration activity started in 2010.

It will reorganise its services to better meet these goals. For example, an operational "customer service" will be set up to better meet the needs of the registrars and develop active cooperation. Additionally, a Marketing and Innovation department will bring together these services which have until now been too far removed from each other to provide a genuine growth strategy for our Internet registration business.

The 2011-2015 strategy breaks down into five key areas:

- aiming for operational excellence,
- developing the preference for .fr in France,
- consolidating our technical operator activity,
- reinforcing the resilience of the Internet,
- raising awareness of AFNIC's expertise in the community.

Another major issue for AFNIC - security - will also still be a top priority. AFNIC will pursue investment in this area, particularly by deploying two new Anycast nodes, completing construction of its Datacenter, and setting up an annual security audit.

In other words, 2011 is full of exciting challenges. In addition to celebrating the 2 millionth .fr domain name, it will also be the 25th anniversary of the .fr TLD!





Glossary

AFNIC: *Association Française pour le Nommage Internet.* AFNIC is the management centre (registry) and resource centre (NIC France) of country code top level domains (ccTLD) for France: *.fr* and *.re* (Réunion).

AFTLD: *African top Level Domains Organization.*

ccTLD: *country code Top Level Domain.*
Around 250 ccTLD have been determined using the ISO 3166 two-letter country codes. Examples: *.fr* for France, *.jp* for Japan, *.de* for Germany.

CENTR: *Council of European National Top-level domain Registries.* Founded in 1998, CENTR gathers a certain number of NIC (mainly from Europe) desiring to join forces to face issues of their ccTLD registry businesses.

Naming guidelines: set of rules governing an extension (ccTLD or gTLD). The Guidelines cover all administrative, legal and technical aspects of domain names which may be registered under these extensions.

DNS: *Domain Name System (or Service).* Distributed database that records web resources (computer, router) in the form of a domain (e.g.: *afnic.fr*) and matches them with an IP address.

DNSSEC: *Domain Name System Security Extensions.* DNSSEC is one of the extensions of the DNS protocol. This extension uses digital signatures to ensure the authentication and integrity of DNS registrations.

gTLD: *generic Top Level Domain.*
generic Top Level Domain.
Examples: *.com*, *.net*, *.org*, *.biz*, *.name*...

ICANN: *Internet Corporation for Assigned Names and Numbers.* This organisation was founded in October 1998 as an initiative of the American government. Its purpose was to take over Internet administration from the American government.

IDN: *Internationalized Domain Name.*
Domain name featuring characters other than ASCII characters (e.g. Arabic, Chinese or accented characters).





Glossary

IETF: *The Internet Engineering Task Force.*

The IETF is an ISOC body. Based on volunteering, it federates research and development groups working on Internet technologies and protocols.

ISOC: *Internet SOCIety.*

Association of professionals interested in Internet growth and expansion worldwide.

NIC: *Network Information Center.*

As the name implies, a centre for information on a network. AFNIC is therefore designated "FR NIC" or "NIC France".

Naming: policy for assigning domain names. This varies between the various bodies accredited to manage their webspace (.fr: AFNIC, .uk: Nominet, .com: verisign...).

ONS: *Object Naming (or Name) Service.* Standard that associated a single identifier on an RFID label to a single file (web accessible) describing the object in question.

Registry: Body (association, company, etc.) in charge of managing the database of a TLD, or of IP addresses for a specified region.

RFID: *Radio-Frequency Identification.* Radio identification standard.

