

Quarter

A woman with brown hair tied in a bun is sitting in a modern office chair, working on a laptop. She is wearing a black sleeveless top and a green skirt. The office has large windows in the background showing green foliage. On the desk, there is a red alarm clock, a smartphone, and a small box. A potted plant is on the floor next to the chair. The overall atmosphere is bright and professional.

Year 12
N°02 10/2024

Front Page

Andrea Passarella is the new Director of Cnr-Ilt

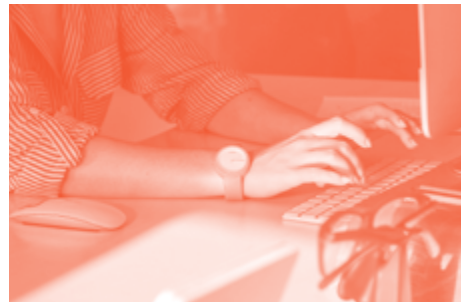
.it News

News, events, projects and
numbers about the Registro .it

From the World

News from the world
of ccTLD and the Network

Quarter



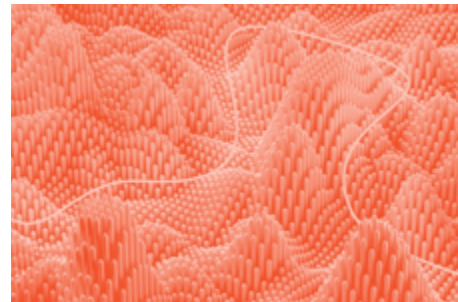
04. Editorial

Quarter in short



06. Front Page

Andrea Passarella is the new Director of Cnr-Ilt



14. Statistics

The statistics of Registro .it



30. .it News

News, events, projects and numbers about the Registro .it



34. From the World

News from the world of ccTLD and the Network



44. Events

Upcoming events from the digital world

Registroit

L'anagrafe dei domini .it

is managed by

ilt
ISTITUTO
DI INFORMATICA
E TELEMATICA

 **Consiglio Nazionale
delle Ricerche**

EDITORIAL COORDINATOR

Anna Vaccarelli

EDITORIAL COMMITTEE

Valentina Amenta, Maurizio Martinelli,
Anna Vaccarelli

GRAPHIC DESIGN

idna.it

EDITORIAL BOARD

Francesca Nicolini (editorial coordinator),
Giorgia Bassi, Stefania Fabbri, Beatrice Lami,
Gian Mario Scanu, Gino Silvatici

PARTICIPANTS

Valentina Amenta, Rosaria Deluca, Arianna Del Soldato
and Adriana Lazzaroni (From the World),
Maurizio Martinelli, Luca Albertario with Sonia Sbrana
and Daniele Pancrazi (also for legal captions),
Michela Serrecchia (technical captions),
Silvia Giannetti (operational captions)
Chiara Spinelli

DATA SOURCE

Systems and Technological Development Unit
of the Registro .it

DATA PROCESSING

Lorenzo Luconi Trombacchi, Michela Serrecchia
(Internet services and technological development),
Luca Albertario, Daniele Pancrazi, Sonia Sbrana
(Legal and Contractual Aspects Unit), Silvia Giannetti
(Registrar Operations and Services Unit)

EDITED BY

External Relations, media, communication unit and
marketing of Registro .it
Via G. Moruzzi, 11-56124 Pisa
tel. +39 050 313 98 11
e-mail: info@registro.it - website: www.registro.it

HEAD OF REGISTRO .IT

Andrea Passarella

Quarter in short

2024: news, data and events of the second quarter of the Registro .it

by Francesca Nicolini

A new Head in charge of the Registro .it, the events and initiatives of the Ludoteca of Registro, the newly elected members of Steering Committee of the Registro .it (CIR) and the Internet Festival 2024: these are the main topics on the agenda in this new quarter of the year

Changing of the guard at the direction of the CNR Institute of Informatics and Telematics in Pisa (Cnr-lit): as of 1 September, Andrea Passarella is at the direction of Cnr-lit, succeeding Marco Conti, director of the Institute from 2019 to 31 August this year. With this role, the new director also gets, de facto, the position of head of the Registro .it.

The mid-year part holds few surprises in store for us, but many certainties: among these, there is the Ludoteca's commitment to "educate" young Internet users and teachers to properly use the Net and its digital tools. This year, the Ludoteca is also committed to "educate" on topics concerning the origins of computer science through its women pioneers: a new series has been created, dedicated to women in computer science, who played a key role in the discipline, but who have not been valued and whose role as scientists in the era in which they lived has not been recognised. Nowadays the topic is interesting, not only to make these extraordinary women known to students and teachers, but to highlight once again the gender gap, even in the Stems disciplines, which are less chosen by female scholars and researchers than others.

With regard to the Steering Committee of the Registro .it (Cir - an advisory body, which expresses opinions in order to improve the service of registering .it names, according to principles of fairness, transparency, equal accessibility to the service, and the rights of third parties and consumers), elections to appoint members designated by the Registrars were held in June and Antonella Bianco of Register .it and Luca Luperini of Aruba .it were elected. Mrs. Bianco is the first woman elected by Registrars.

The second quarter of the year is the period in which preparations are concentrated for the events of the Registro at the Internet Festival (IF), an event promoted by the Registro .it and the CNR Institute of Informatics and Telematics, which this year will take place - in Pisa - from 10 to 13 October. On the programme, the usual presence of the Ludoteca at the T-Tour with ad hoc events, the Cybersecurity Day, an annual appointment on computer security, and a new event to show the importance of online presence with a dedicated website for companies and their brands.

The keyword of the fourteenth edition of IF2024 is #generation, the natural and biological process by which human beings reproduce. However, by multiplying, generations draw the line between eras and generations themselves, and - at the same time - they build bridges connecting them through time, ensuring that information, knowledge and ideas are always shared. With technological evolution, we have moved into a complex scenario, where behaviour, roles, knowledge and social relationships are challenged by technology and, especially, AI, capable of creating new realities and content, imitating human talent and creativity.

Still on AI, the need has been felt, at the European level, to strive to implement technological solutions capable of increasing people's trust in the new AI systems and, consequently, increasing the balance of social relationships. The principles of transparency and the algorithmic ability to know are therefore the new tools needed to regulate relationships between companies and people throughout the data life cycle.

Finally, as always, the new issue of the Quarter .it brings updates on many different topics from the world of the Net, keeps us updated on the draft of the implementing measure of the NIS 2 Directive, on ".internal", Icaann's new TLD for private use, and on the latest programme of "New Generic Top-Level Domains", which follows the launch of new gTLDs in 2012.

Enjoy your reading!





Andrea Passarella is the new Director of CNR-IIT

by Chiara Spinelli

Front Page

Change in the leadership of the Institute of Informatics and Telematics: Andrea Passarella, Research Executive of the National Research Council and former head of the CNR-IIT Ubiquitous Internet Research Unit, took office on September 1, 2024, succeeding Marco Conti, former Director of the Institute. Passarella also takes over as new Head of Registro .it, the Italian Registry for Internet domains.

Throughout his career as a researcher Passarella has published more than 230 scientific papers in international journals and conference proceedings, in the fields of Future Internet, mobile networks, social networks, distributed AI, quantum Internet, receiving 5 Best Paper Awards at international conferences.

In 2016, he co-founded the international journal Elsevier Online Social Networks and Media, of which he is Associate Editor-in-Chief. He has served as General and Technical Program Chair and held various roles in the organising committees of numerous international conferences in his research fields. He has coordinated and served as CNR Principal Investigator in several European, national and regional research projects in the fields of mobile networks, future Internet, cyber-physical systems, and distributed AI.

Since January 2023 he is Scientific Coordinator of the CNR Spoke in the NRRP RESTART (Telecommunications of the Future) project, the main national research initiative in the field of post-5G networks currently active. He is involved in several Higher Education initiatives, including the board of the national PhD in Artificial Intelligence – AI & Society.

From 2019 to 2023, he served as elected member of the Scientific Council of CNR DIITET, the CNR Department on Engineering, ICT and technologies for energy and transportation. Between 2020 and 2021 he has been one of the members of the Expert Group on Mathematics and Computer Sciences (GEV-01) of ANVUR (the national agency for the evaluation of Universities and Research Institutes), for the national Research Quality Evaluation Exercise 2015-19.



Statistics

Growth of the New Registrations

Yearly growth

Entity Types

Reasons for Oppositions

Top Regions

Annual trend of Oppositions - Reassignments

Trend of the Oppositions

Resolution of Oppositions

Authinfo requests

Requests from competent authorities

Reserved names

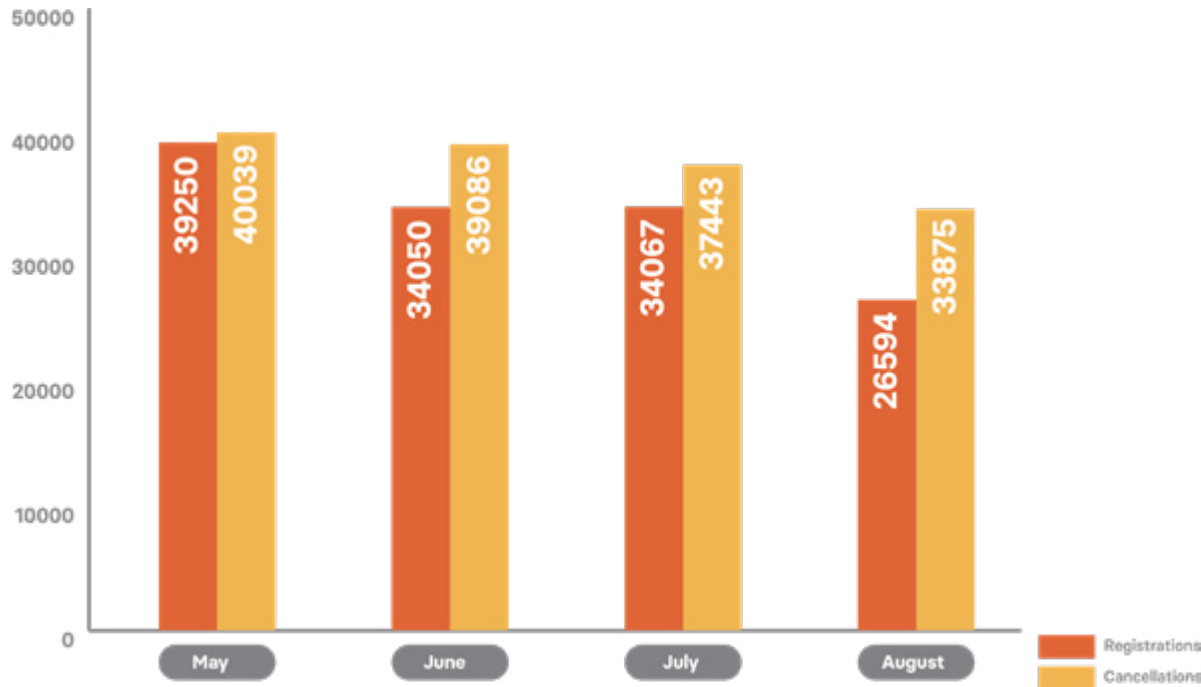
Verification of domains by The Registro

Statistics

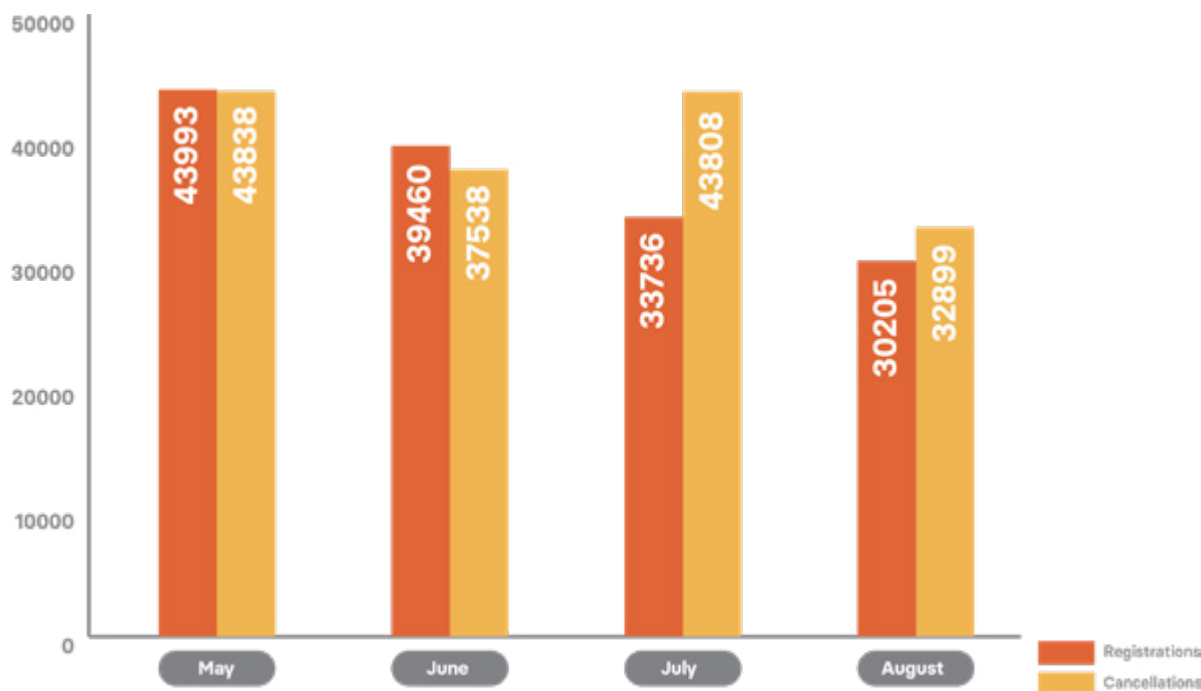
Growth of the New Registrations

The analysis of the trend in registrations of .it names shows, in general, that new registrations (almost 134,000) are significantly lower in number than in the same quarter of last year (over 147,000). It should be noted that in the second quarter of 2024, the number of cancellations exceeded the number of new registrations by more than 16,000 domains, compared to more than 10,000 in the same period of 2023. The trend, therefore, shows that in these four months there is an increase in the difference between the number of cancellations and new registrations, compared to the same quarter of the previous year

May/August 2024

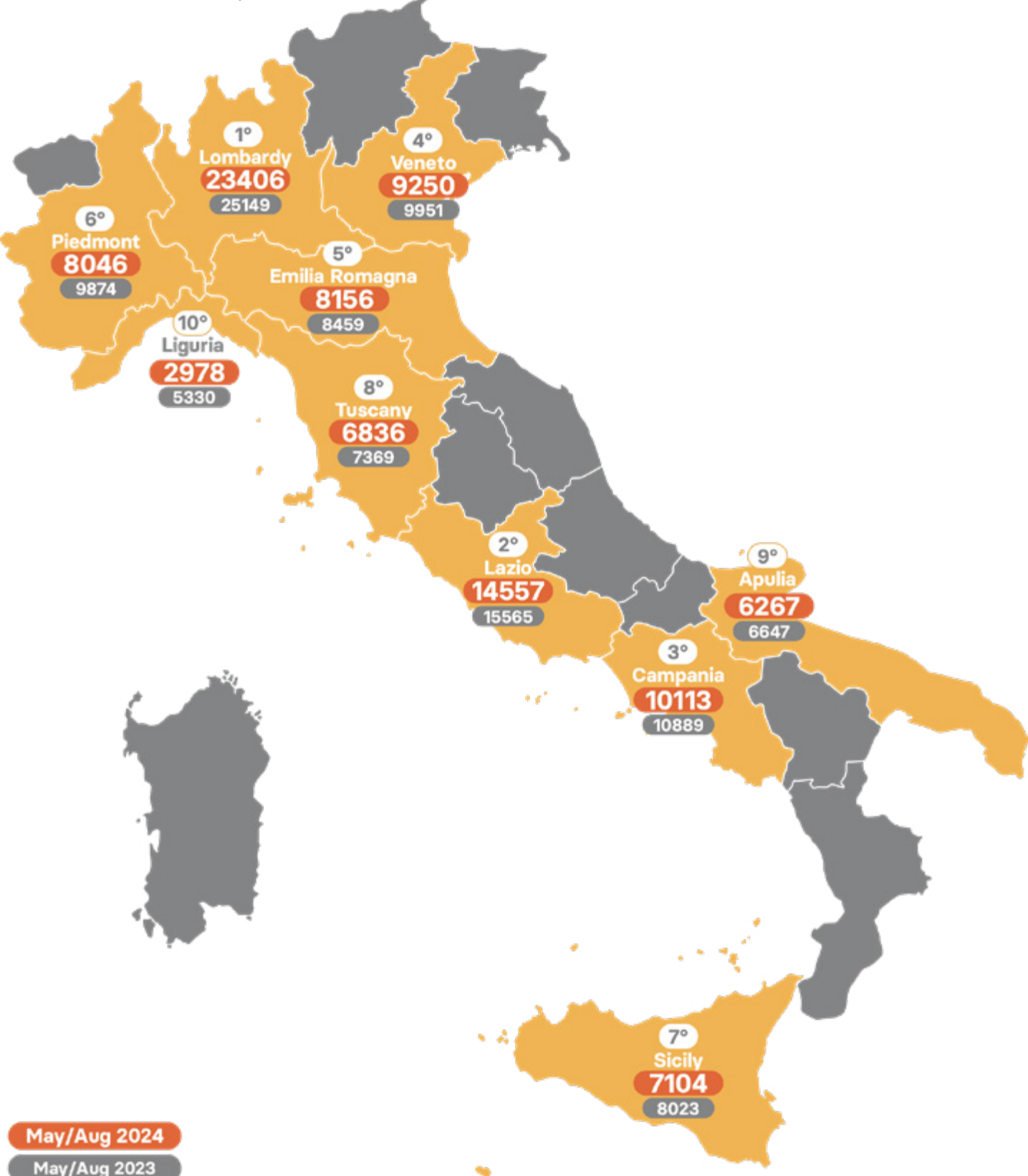


May/August 2023



Top 10 Regions

From May to August, Lombardy reconfirmed itself in first position in terms of registrations of new domains, with a constant percentage of 20%, while Lazio increased by one percentage point, reaching 13%, compared to the same period in 2023. Campania remains in third position with the same percentage (9%), while Piedmont loses one position, settling at 7%. On the other hand, Emilia-Romagna performed well, rising one position in the regional ranking, compared to the same four-month period in 2023



Yearly growth

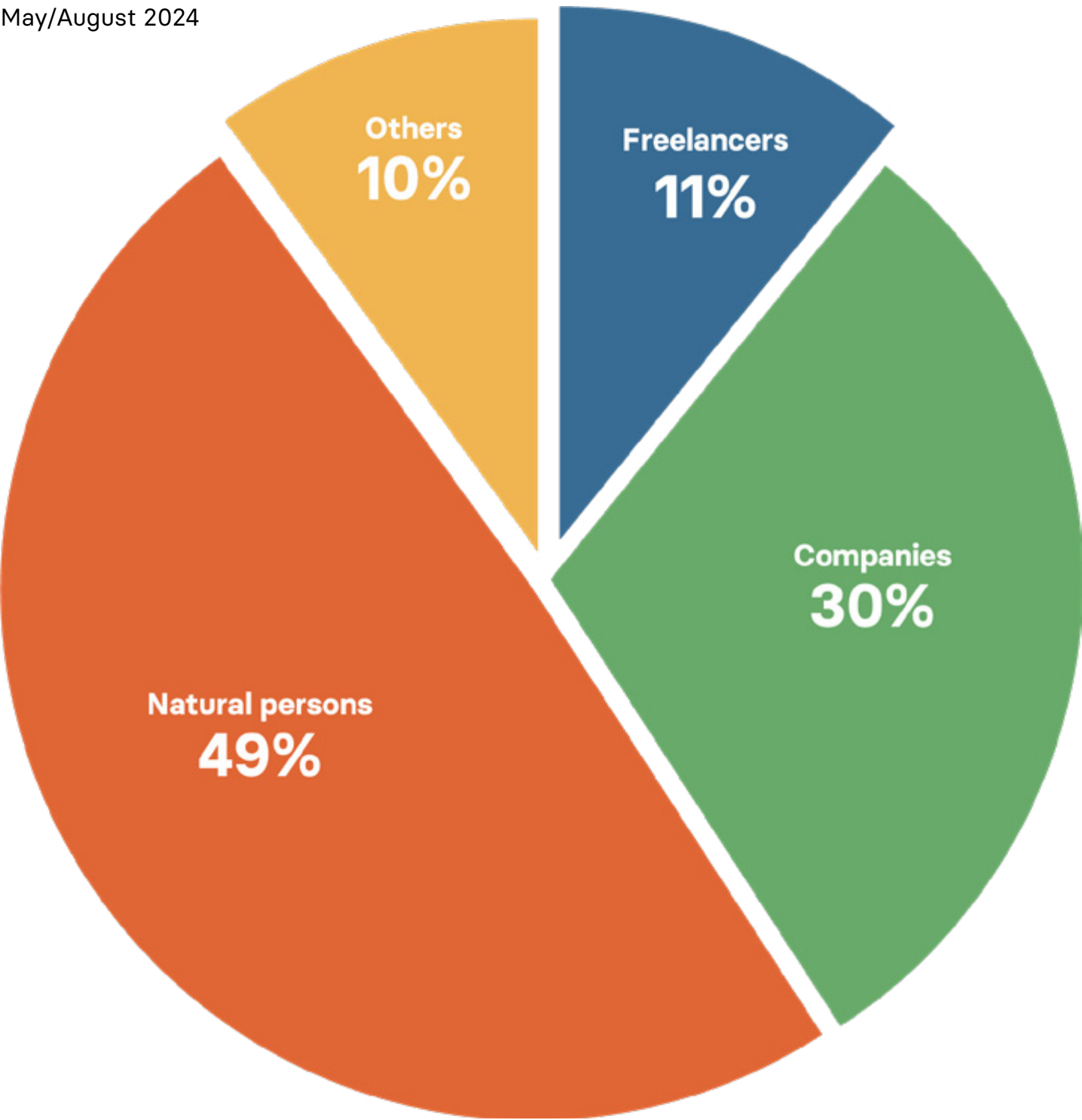
At the end of the second quarter of 2024, the total number of .it domains amounted to 3,481,481, a decrease of -0.46% (-16,143 domains) compared to the end of 2023. This percentage, compared to the same period last year (+0.41% compared to the end of 2022), is significantly lower, but in line with the trend recorded in the first four months of this year



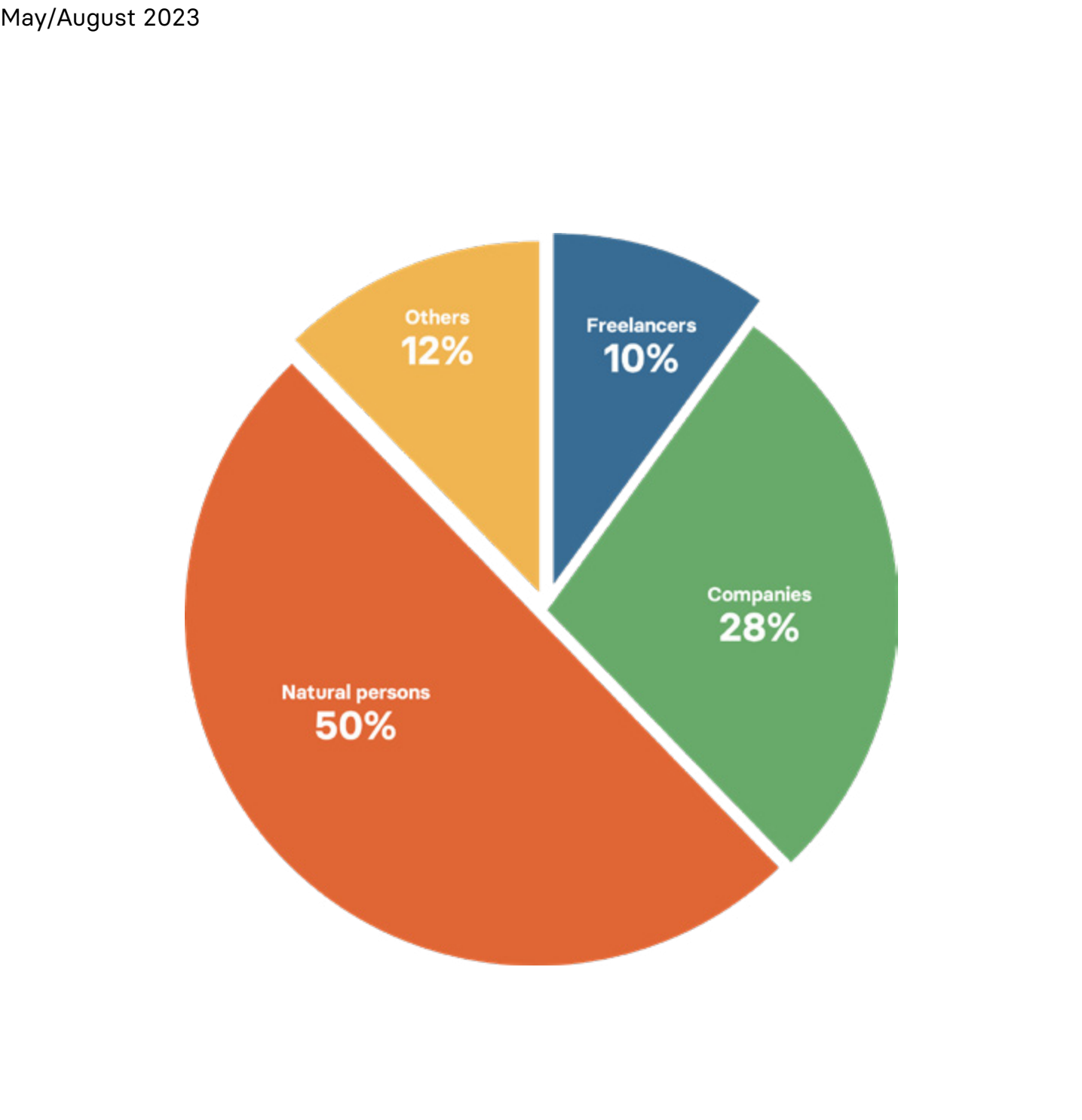
Entity Types

Compared to the second quarter of 2023, the percentage of new.it domains registered by natural persons dropped by one point to 49%. On the other hand, the percentages for businesses and freelancers increased to 30% and 11% respectively

May/August 2024



May/August 2023

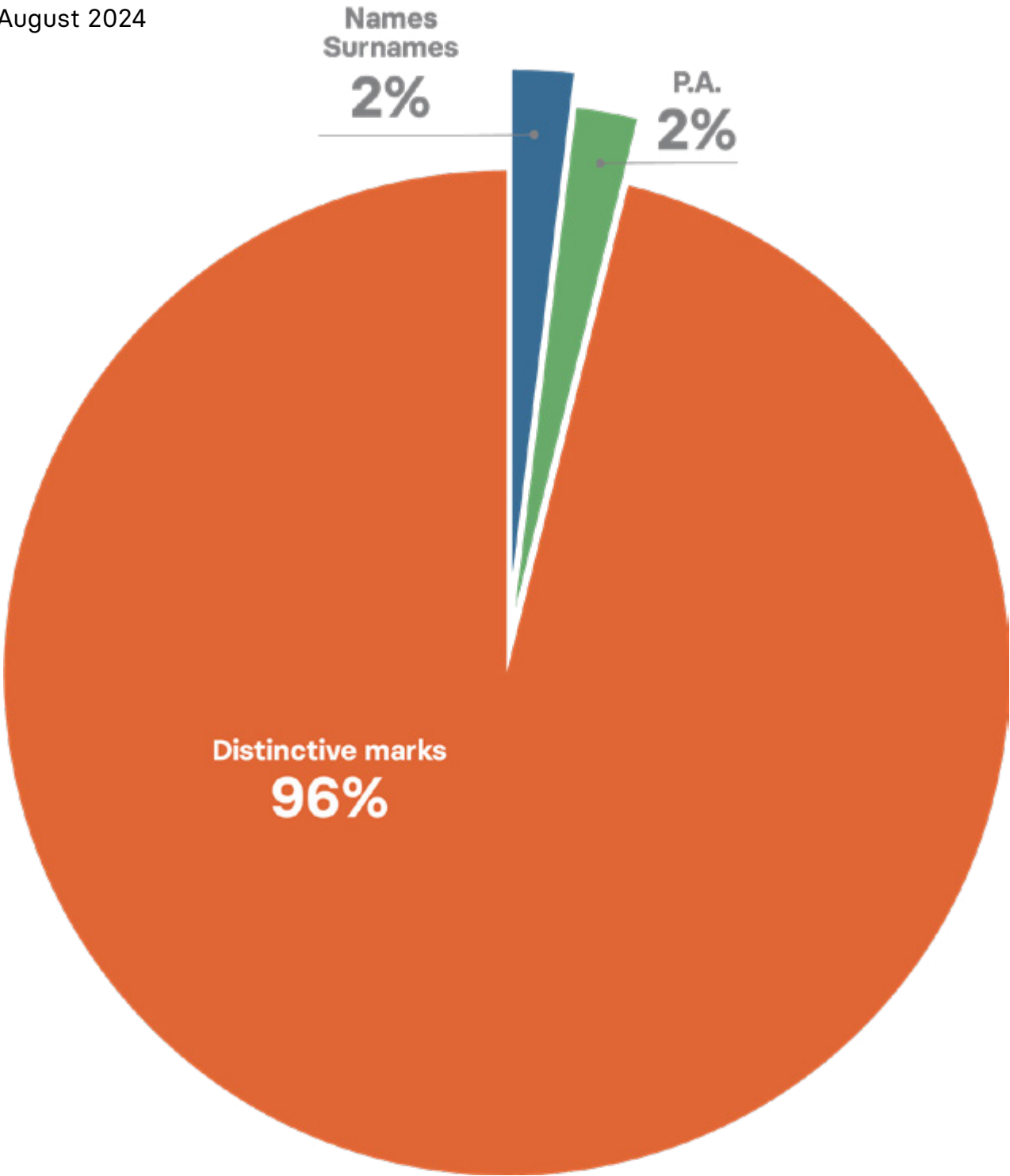


Reasons for Oppositions

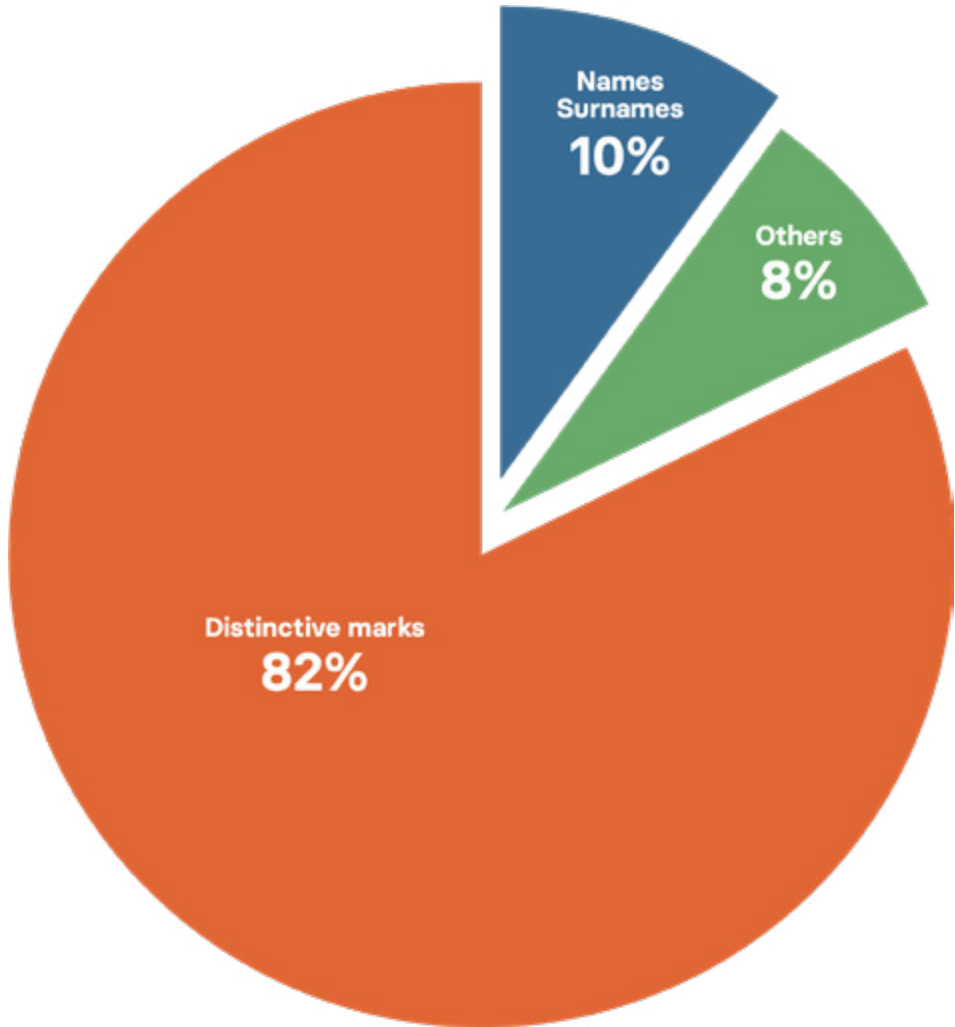
In the second quarter of 2024, there was an increase (+14%) in the number of oppositions filed (a remarkable 96%) on the basis of infringement of distinctive signs (in the same period in 2023 it had been 82%).

In the reporting period of 2024, the opposing party's claims for first and last names accounted for 2%, a decrease (-8%) compared to the second quarter of 2023 (10%). Finally, again in the second quarter of 2024, 2 % of oppositions were requests made by public administrations, whereas none were in the same period of 2023, where, however, 8 % of them concerned various reasons (none in the same period of 2024)

May/August 2024



May/August 2023



Trend of Oppositions - Reassignments

In this second part of the year, 58 oppositions were activated, with an average of 14 per month. The highest number of activations was recorded in July, 23 (+9 above average), while the lowest was recorded in June, 7 (-7 above average for the period). In May there were 15 activations (+1 above average), and -1 (below average) in August, with 13 activations.

Of the 58 oppositions in the quarter examined, 40 were initiated by Italian subjects, either as assignee or opponent. In particular: 19 assignees have residence or registered office in Northern Italy, 8 in Central Italy and, finally, 13 in Southern Italy. As for the opponents, 30 have residence or registered office in Northern Italy, 7 in Central Italy and 3 in Southern Italy.

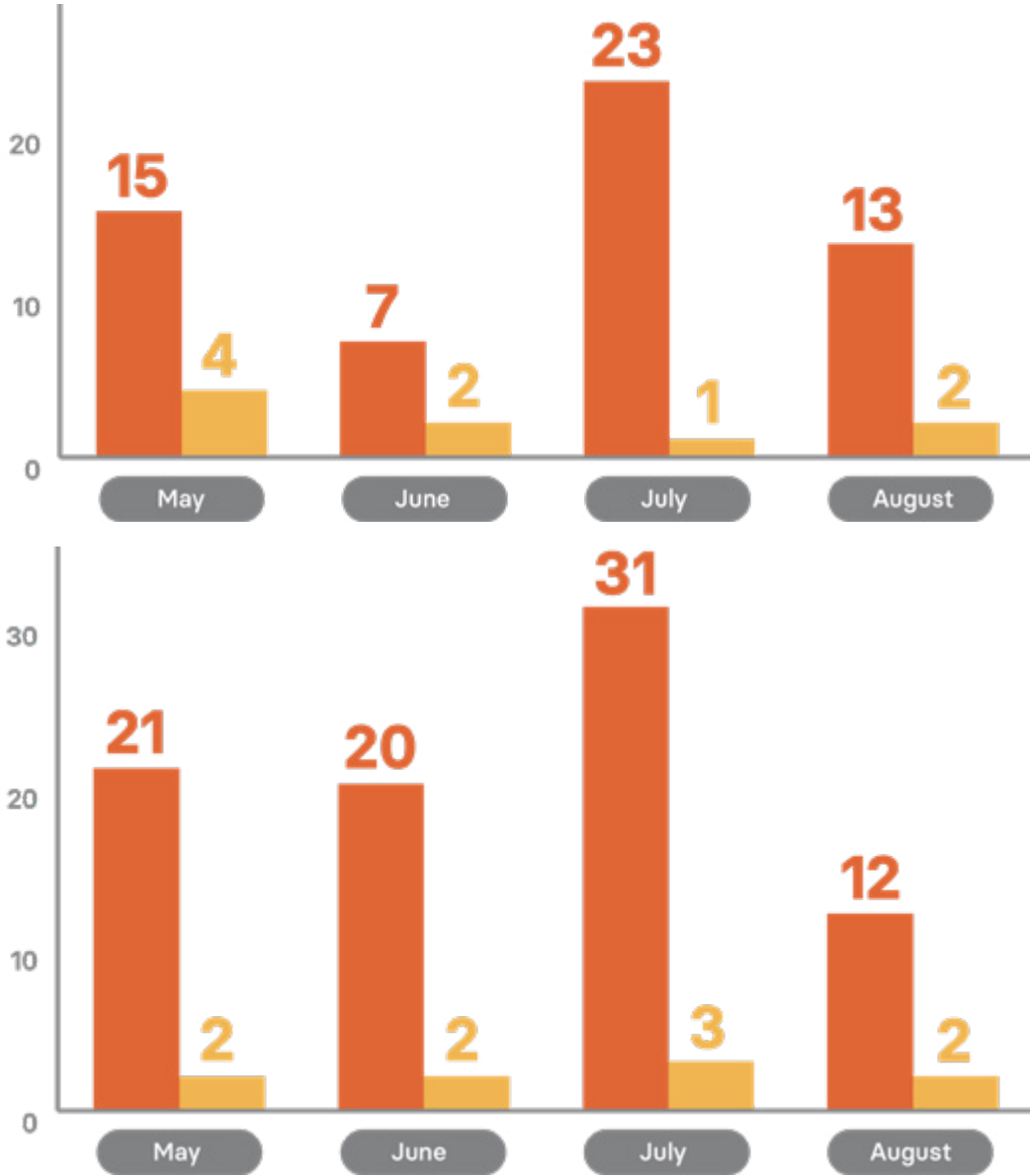
On the other hand, 5 foreign assignees have had their domain name assigned by Italian subjects contested. The total number of opposition procedures initiated by petitions submitted by foreign opponents and involving Italian assignees amounted to 6.

Finally, there are 7 opposition procedures exclusively facing foreign subjects.

As for the reallocations, at the PSRDs (Dispute Resolution Service Providers), 9 have been activated: in 4 of them, the subjects involved, assignee/respondent and opponent/complainant, are both Italian subjects.

3 foreign opponents/complainants filed complaints with the PSRD against Italian assignees/resisters. Finally, 2 foreign assignees/resisters have been subjected to appeals by Italian opponents/complainants

May/August 2024



May/August 2023

Annual trend of Oppositions - Reassignments

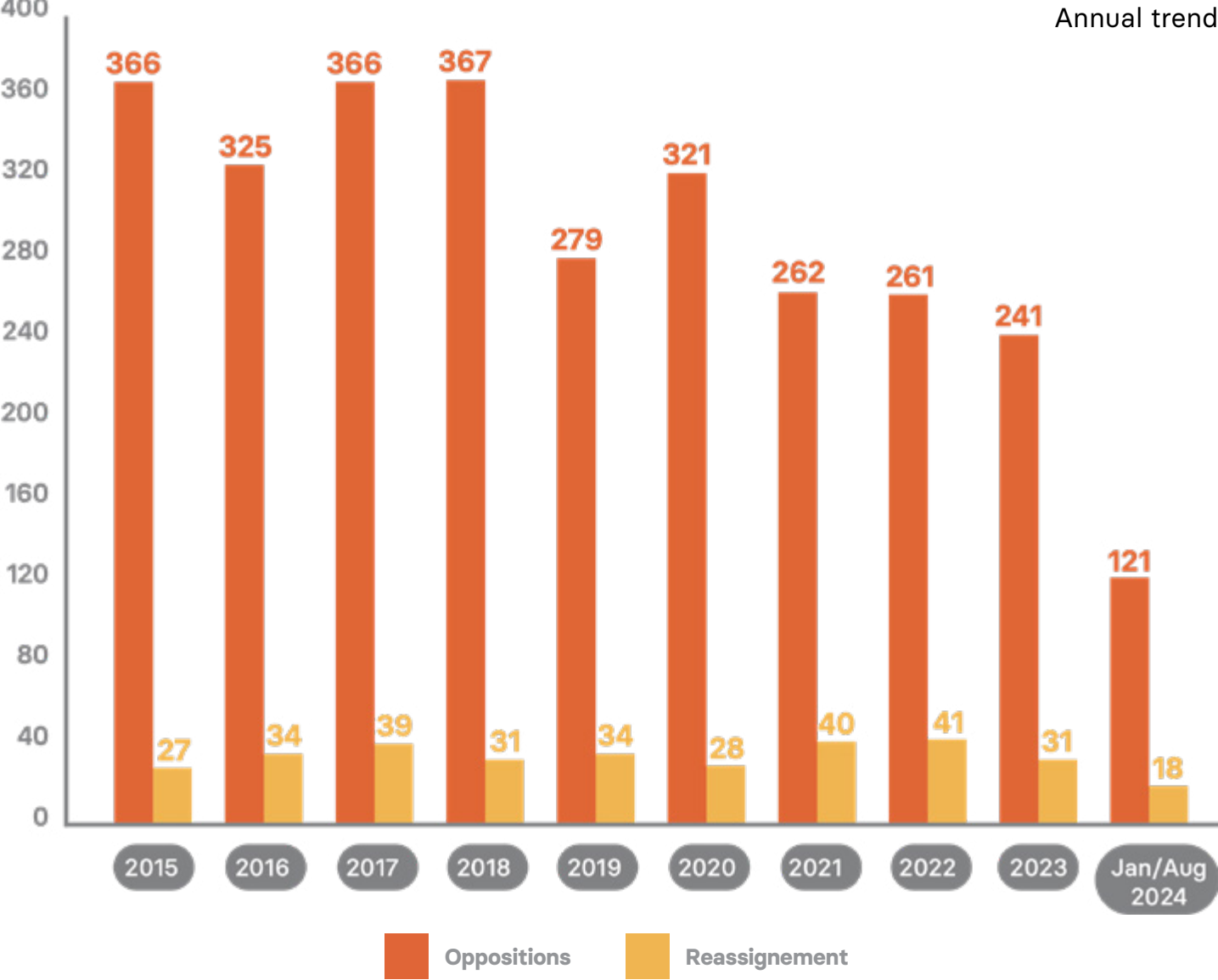
The downward trend of oppositions (-50) in the first two quarters of 2024 is confirmed (121 in the current year compared to 171 in 2023). The decrease, also observed in the second quarter, is the consequence of the lower number of activations in the first three months of the second quarter, May (15) June (9) and July (23), compared to 2023, thus -6, -13 and -7 respectively, for a total of -26. August 2023 and 2024 count 12 and 13 oppositions, respectively.

As far as reallocation procedures are concerned, the figure is stable, i.e. 18 reallocations in both 2023 and 2024. Specifically, 9 in the second quarter of 2023, as well as in 2024.

Specifically: the Board ruled five times ordering the transfer of the domain name to the opponent/complainant, effectively upholding the appeal filed. In one case, the assignee/respondent did not have its domain name transferred, as the opponent's/applicant's request was not recognised, and consequently, the complaint was rejected.

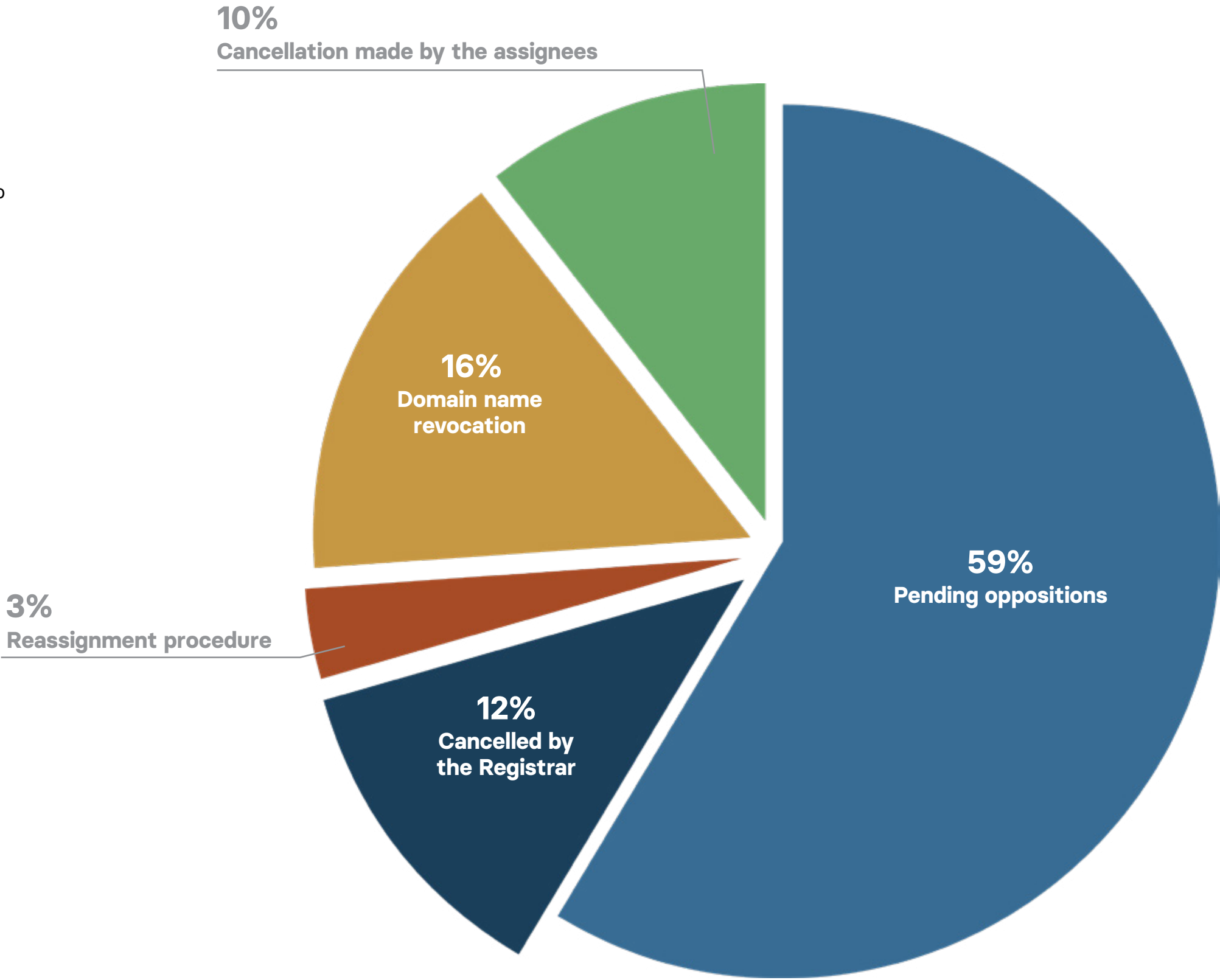
In a single case, the Board ruled for the extinction of the complaint filed.

Finally, there are 2 procedures pending before the Board



Resolution of Oppositions

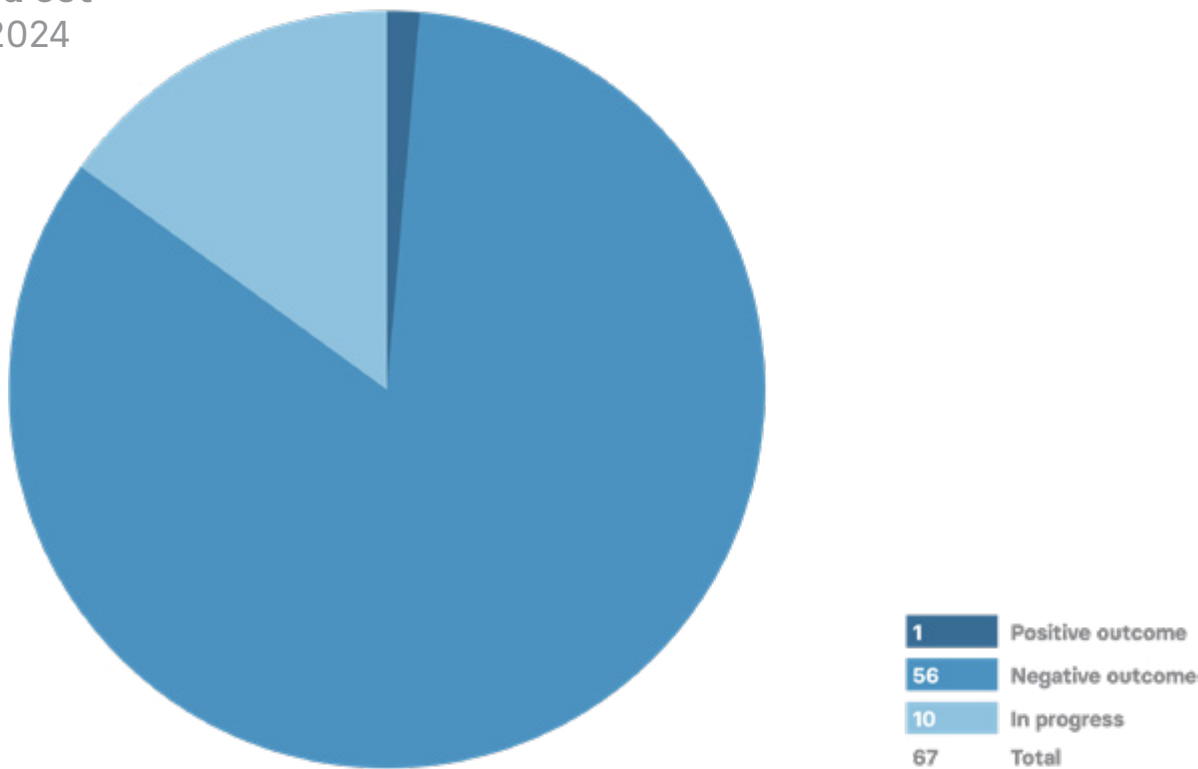
Considering that 59% of the 58 activated oppositions are pending, the reasons for resolution are as follows: 16% were resolved with the revocation of the domain name, following the verification of the subjective requirements; 12% of the resolutions occurred following the cancellation made by the Registrar of the disputed domains; 10% of the assignees requested the cancellation of the .it name subject to opposition. Finally, 3% of the opponents approached a PSRD to initiate a reassignment procedure



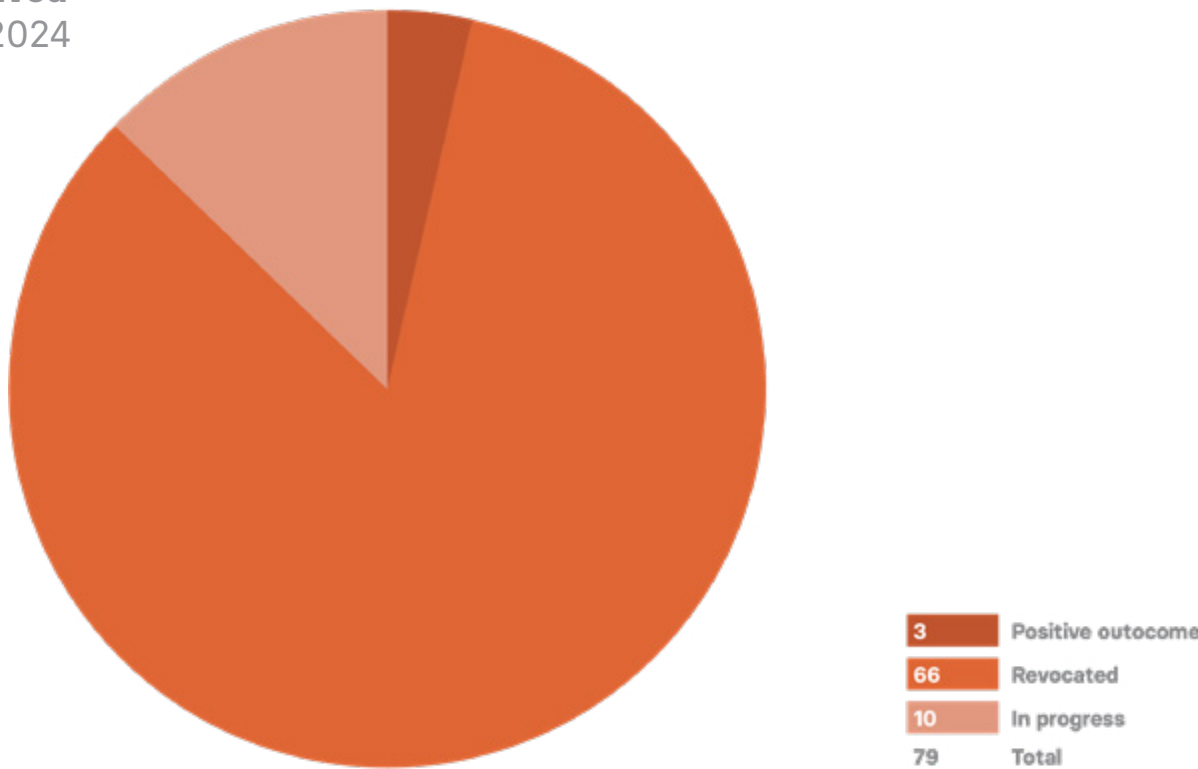
Verification of domains by Registro

The Registry carried out 67 verifications, which involved 79 .it names: only 66 of these were revoked and only 3 domain names had a positive outcome. For 10 domain names, the verifications are still ongoing

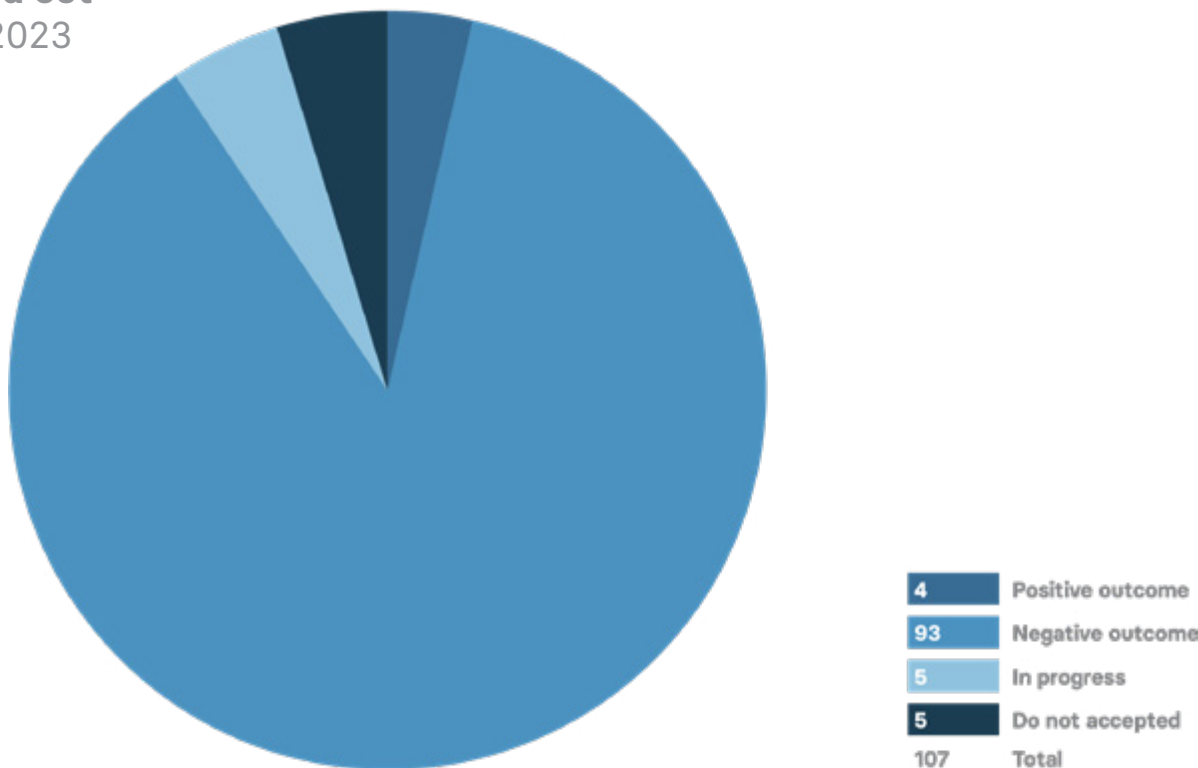
Checks carried out
May/August 2024



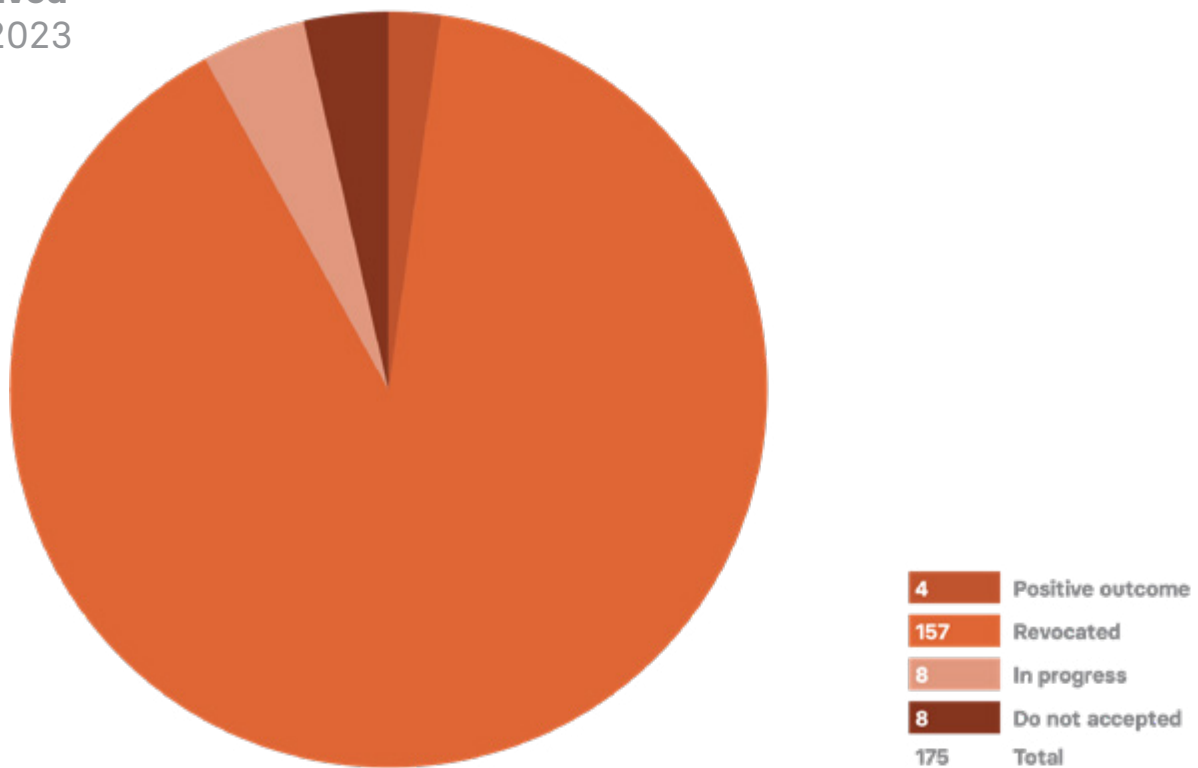
Domains involved
May/August 2024



Checks carried out
May/August 2023

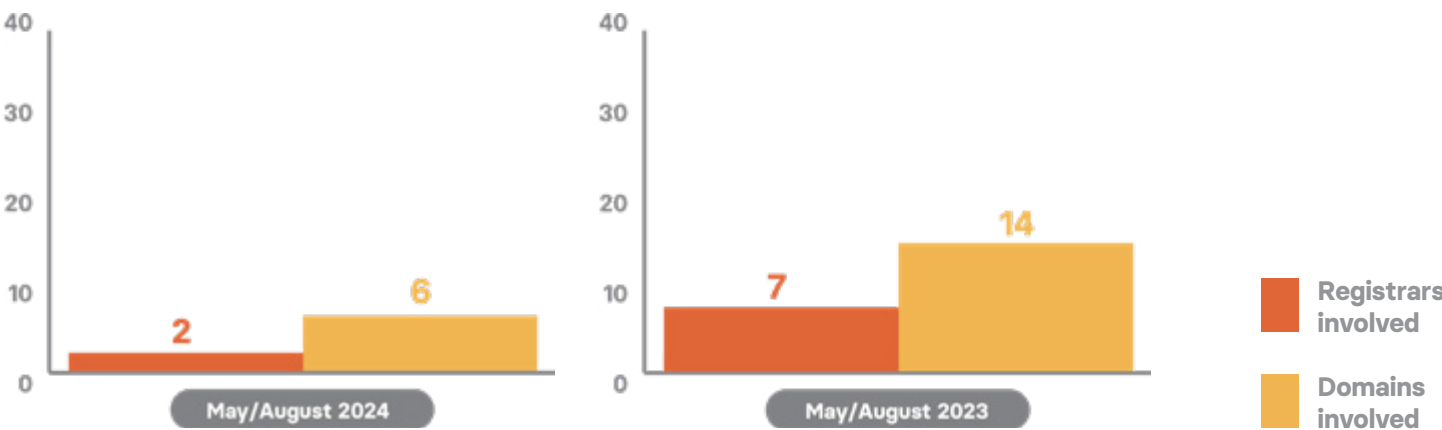


Domains involved
May/August 2023



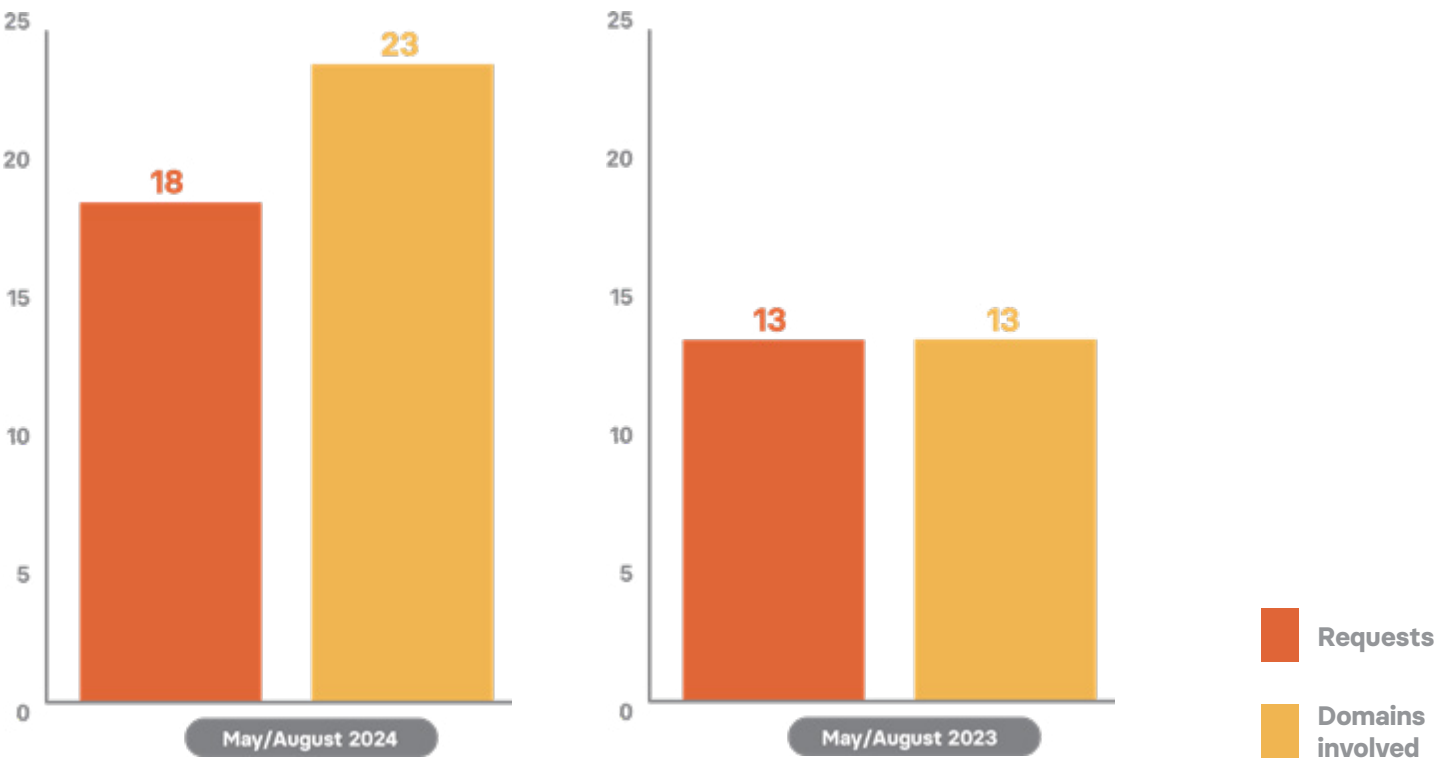
Authinfo requests

In the second quarter of 2024, the number of applications for the Authinfo code decreased. Also for this period, these are domain names in NoRegistrar status, without a Registrar with an active contract. The Registro .it in these cases issues the authinfo code that is needed to migrate the domain name to another Registrar. In total, only 6 domain names were involved



Requests from competent authorities

Requests from the competent authorities concerned 23 domain names, almost double the number of the same quarter of last year (13)



Reserved names

The number of registrations of names of municipalities in this second quarter is 47, which is higher than in the same period of 2023 (38). The first region, with the most reserved names registered, continues to be Sardinia with 11 new domains



.it News

Two new representatives in the CIR:
for the first time a woman elected by Registrars

At the Internet Festival 2024 with the keyword
#generation

“Women & IT” the new web series
of the Ludoteca of Registro .it

.it and .eu together to educate on the conscious
use of the Net



Two new representatives in the CIR: for the first time a woman elected by Registrars

by Gino Silvatici

From 24 to 26 June, the latest online elections were held for the renewal of the Steering Committee of the Registro (CIR): Antonella Bianco of Register .it and Luca Luperini of Aruba .it are the two new members elected by Registrars.



The representative from Register .it is the first woman appointed to this position through an election procedure: other women have already been members of the CIR, such as Rita Forsi (former MISE, now MIMIT), Anna Vaccarelli and Rita Rossi (both Cnr-lit and Registro .it), but they were appointed within the Committee by their respective bodies. Antonella Bianco is the Registry Relations Manager at Register and has been in charge of Product Owner Domains & DNS since 2015.



Luca Luperini, in turn, has been responsible for the Hosting and Domain Business Line of Aruba.it for over 15 years.

In the past, as Product Manager, Luperini was in charge of the design and development of Aruba and Vianova services, following the entire life cycle of strategic products such as hosting, public cloud, colocation service and the proposition of e-mail and collaboration tools.

what's that

The Steering Committee of the Registro (CIR)

curated by Gino Silvatici

The Steering Committee of the Registro (CIR) is an advisory body of the Registro and expresses opinions with the aim of improving the functioning of the domain name registration service, in the light of the principles of fairness, transparency, equal accessibility of the service, third party rights and consumer rights. In the past, the advisory board of the Registro was called "Rules Committee", active until 2015: its task was to formulate the registration rules for the allocation and management of domain names in the ccTLD .it.

The CIR remains in office for two years and is composed partly of members nominated by the bodies or associations that sit ex officio at the advisory board table and partly of members elected by the registrar community as their representatives.

The Committee is composed of:

- a member appointed by the Ministry of Enterprises and Made in Italy (MIMIT);
- a member appointed by the Presidency of the Council of Ministers (Department for Public Administration);
- a member appointed by the Agency for Digital Italy (AgID);
- two members representing two trade associations (Registrar);
- two members representing the field professionals (Registrar);
- a member representing the users designed by the National Council of Consumers and Users (CNCU);
- a member representing the GARR Consortium;
- two members representing the Registro .it.

The main function of the CIR is to express non-binding opinions on the Regulation for the assignment and management of .it domain names and the Regulation for dispute resolution, as well as opinions on the Dispute Resolution Procedures, the criteria for the accreditation of out-of-court Dispute Resolution Service Providers (PSRD).

The CIR also has a proactive function by bringing to the attention of the Registro topics of relevance for the immediate future, including those relating to the growth of .it and linked to crucial aspects for the dissemination and promotion of .it itself. The Committee may play a proactive role in presenting to the Registro .it research or development topics of general interest to Registrars and relevant, in a general sense, to the sector in which they operate and whose implementation is of collective benefit.

The meetings of the CIR are held from 2020 onwards mainly online and meetings are held every 4 months. The minutes of the meetings are published on the website of the Registro .it.

At the Internet Festival 2024 with the keyword #generation

by Stefania Fabbri



From 10 to 13 October, Pisa will host the 14th edition of the Internet Festival (IF), the annual event dedicated to digital innovation, its protagonists and the future of the Net. This year, the common denominator of the event is the keyword #generation, a concept which, in the era of artificial intelligence, has evolved further thanks to advances in models and algorithms, opening up new complex scenarios.

Today, advanced digital tools are capable of creating original contents in different fields, emulating human intelligence. The most recent generations, such as Millennials, Generation Z and Generation Alpha, are deeply immersed in the technological paradigm and constantly interact with digital resources with uninterrupted access to information: these elements are fundamental in defining new perspectives, behaviours and parameters of social identity.

All this and more will be the focus of IF2024, with a wide range of activities and events, including workshops, seminars, debates, book presentations, interactive exhibitions, installations, performances and music, offering a diverse and engaging experience. An important part of the Festival will be the T-Tours with an educational and training programme aimed at students of all ages.

In particular, the Ludoteca of the Registro will be present among the T-Tours with two workshops:

Thursday 10 October

"First think, then share"

A workshop which encourages the youngest to reflect on the appropriateness of sharing personal information online, addressing issues such as reputation on the web and strategies to protect digital identity.

IF2024 will see the Registro engaged in the organisation of two events in cooperation with Pisan Industrial Union.

Friday 11 October

"At school for computer security with Internetopoli"

A seminar dedicated to the web app Internetopoli, which offers teachers tools and paths to teach computer security in the classroom.

IF2024 will see the Registro engaged in the organisation of two events in cooperation with Pisan Industrial Union.

Thursday 10 October

"Domain extensions as a branding and marketing tool"

An event to explore how domain extensions can be used to improve online presence and protect the brand.

Friday 11 October

"Cybersecurity Day"

An annual event dedicated to cybersecurity, where experts, researchers, and representatives from the business world and public administration will present the latest developments in cybersecurity, digital sovereignty, and specialized training. In the afternoon, thematic panels will be held on digital rights and cybersecurity in the energy sector, along with matchmaking meetings between industry and research.

More details on the programme at the official event website.

“Women & IT” the new web series of the Ludoteca of Registro .it

by Giorgia Bassi and Stefania Fabbri

With the series “Women & IT”, the Ludoteca of the Registro .it pays homage to four extraordinary female scientists who, through their work, laid the foundations of modern computing.

These women not only overcame the gender barriers of their time, but they also contributed to innovations that still influence the way we live and work today.

This new production was born out of a reflection on the fact that also the history of scientific progress is “affected” by the gender gap, so much so that this phenomenon has been given a name: Matilda Effect. This term was coined in 1993 by science historian Margaret Rossiter, based on the work of Matilda Joslyn Gage, a 19th century women’s rights activist, who noted how women who had contributed to science were often ignored or forgotten by history. With the term “Matilda Effect”, Rossiter wanted to highlight and criticise this constant marginalisation and lack of recognition of women in the scientific field, which contributes to perpetuating the idea that science is an exclusively male domain.

This is all the more applicable to a field like IT, traditionally dominated by men. For example, if names such as Blaise Pascal, Bill Gates, Steve Jobs, Tim Berners-Lee, Mark Zuckerberg and Adriano Olivetti are also known to the non-specialised public, the same cannot be said for their female counterparts who have contributed significantly to the history of computing and the web like the protagonists of our web series.



Grace Murray Hopper (1906-1992)

She was a pioneer in computer programming. Her work led to the development of the first compiler, a programme that translates human language in machine code, making programming more accessible. Thanks to Hopper, languages as COBOL have become fundamental tools in the world of programming.

Ada Lovelace (1815-1852)

Daughter of poet Lord Byron, she is recognised as the first programmer in history. Collaborating with Charles Babbage on the design of his analytical machine, Ada wrote what is now considered the first algorithm to be executed by a machine, paving the way for programming as we know it today.



Hedy Lamarr (1914-2000)

Best known for her film career, she was also a brilliant inventor. During World War II, she developed a spread spectrum communication system that forms the basis of modern wireless technologies, such as Wi-Fi and Bluetooth. Her creative and ingenious mind transformed global communication.

Radia Perlman (1951)

She is often called the “Mother of the Internet” for her fundamental contribution to the development of network protocols. Her algorithm for the “Spanning Tree” protocol allowed the creation of reliable and scalable networks, an essential component of the Internet as we know it today.



Edith Clarke (1883-1959)

Was a pioneer in electrical engineering and the first woman in the United States to become a professional electrical engineer. Clarke is known for the development of the “graphic calculator”, a tool that simplified complex calculations for electricity transmission lines. She was the first woman to be a professor of electrical engineering at the University of Texas in Austin.

“Women & IT” is a video format also designed to be used in gender & STEM workshops for students in the last year of first and second grade of secondary schools. A workshop on the topic will be held during the European event Bright - The Researchers’ Night 2024, scheduled in the Pisa Research Area on 27 September.

.it and .eu together to educate on the conscious use of the Net

by Giorgia Bassi

“The Internet, what an adwwwenture! Journey to discover the Net and its history”, this is the name of the event by Registro .it in cooperation with EURid, designed to introduce the younger generation to the world of domain names.

The initiative, held last 14 May in Pisa, was proposed within the context of “All Digital Weeks” (13-31 May 2024), one of the main European campaigns to raise awareness of digital skills, co-funded by the European Commission and aimed at providing European citizens with the digital tools and skills necessary to face future challenges.

The training day, which was attended by students from the “F. Buonarroti” Scientific High School of Pisa, consisted of a session dedicated mainly to the world of .it and .eu domains, followed by a guided tour of the “Hello World!” Exhibition, organised by the Museum of Computing Machinery.

Through an interactive and informative presentation, the experts from both the Registries, Italian and European, introduced technical notions on domain names and the Internet (IP address, Domain Name System, protocols), with a reference also to registration rules, Net governance and some aspects of cybersecurity, useful to avoid risks and be safe even online.

The guided tour of the exhibition was an opportunity to learn about some of the most important milestones in the history of computing machinery: from mechanical machines to the first computers with graphic interfaces, through a time span that stretches from the second half of the 19th century to the 2000s, with a focus on Pisa, the city where - at the end of the 1950s - the Pisan Electronic Calculator (Calcolatrice Elettronica Pisana - CEP), Italy's first scientific calculator, was built.

Crescere digitali

**Ludoteca**
Registro.it


Powered by EURid

In occasione di
ALL
DIGITAL
Weeks

Save the date

MARTEDÌ 14 MAGGIO 2024



Internet
che a**www**entura!

**Viaggio alla scoperta della Rete e della sua storia**

USCITA DIDATTICA PER STUDENTI DELLE SCUOLE SECONDARIE DI II GRADO



Prima parte
Lezione “Le nozioni base di internet, i nomi a dominio”

Seconda parte
Visita guidata al Museo degli Strumenti per il Calcolo – MSC, Pisa

Durata complessiva dell’esperienza: 2 ore

Per informazioni e iscrizioni:
giorgia.bassi@iit.cnr.it

From the World

**Draft of the implementation measure
of the NIS 2 Directive**

by Gino Silvatici

**Algorithmic transparency: an ethical value
for building the future**

by Valentina Amenta and Rosaria Deluca

“.internal”: the new TLD of Icaann for private use

by Arianna Del Soldato and Adriana Lazzaroni

**New expansion of DNS: the latest plan of
“New Generic Top-Level Domains” coming soon**

by Arianna Del Soldato and Adriana Lazzaroni

From the world



Draft of the implementation measure of the NIS 2 Directive

by Gino Silvatici

On June 27, the European Commission published a draft of the implementation measure of the NIS 2 Directive, which specifies standards for the technical and methodological requirements of cybersecurity risk management measures. The draft clearly indicates the cases in which an incident is considered significant with regard to DNS service providers, domain name registries, cloud computing service providers, data centre service providers, online search engines and social networking platforms. The draft also specifies when a cybersecurity incident can be considered significant for these operators. An incident may be considered significant for top-level domain registries in the following cases: when an authoritative server is completely unavailable for a period of more than one hour, the average response time of an authoritative server for domain name resolution to DNS requests is more than 10 seconds, or when the integrity, confidentiality or authenticity of stored, transmitted or processed TLD administration data is compromised.

According to the not-yet-finalised implementing measure, some of the network security measures require a multi-stakeholder approach to identify the best available standards and implementation techniques.

These security measures include the transition to state-of-the-art network-level communication protocols and the deployment of modern, internationally agreed and interoperable e-mail communication standards.



Algorithmic transparency: an ethical value for building the future

by Valentina Amenta and Rosaria Deluca

Artificial intelligence is a rapidly developing field of research with many practical implications in various fields, but at the same time with new risks that are difficult to predict and manage.

Indeed, if the capabilities of artificial intelligence (AI) systems are left unchecked, they can pose a fundamental threat to the protection of citizens' privacy, with the risk of both disseminating confidential information and leaking false or contradictory information.

In this new digital scenario that we are experiencing, there is a need, at European level, to strive to implement technological solutions capable of increasing people's trust in the new AI systems and, consequently, increasing the balance of social relations.

Hence, principles, such as transparency and algorithmic knowability, intervene as tools that regulate the relationship between companies and people throughout the data life cycle, in a proactive manner. This guarantees a society characterised by a system of values and moral principles in which "the human being" retains a central position.

Full algorithmic transparency, understood as the total impenetrability and intelligibility of digital processes, is thus achieved when the algorithm leading the AI to the automated decision is knowable to the citizen, i.e. in the right to know the logical process on the basis of which that decision was made. In the current regulatory context, the key text outlining the principle of transparency is undoubtedly the GDPR (General Data Protection Regulation). In particular, Articles 13(2)(f) and 14(2)(g) require the data controller to disclose the existence of automated decision-making, stating that "significant information about the logic used and the importance and envisaged consequences of such processing for the data subject" must be specified.

But it is with the EU Artificial Intelligence ACT 1689/2024, which came into force last 2 August, that transparency takes on a cultural and practical value in raising awareness of both thought and action, becoming the pillar on which to build the society of the future. Full implementation of the Regulation will take place in two years to allow for a gradual and effective implementation of the new rules. This time frame may vary with priority given to high-risk sectors.

“.internal”: the new TLD of Icann for private use

by Arianna Del Soldato and Adriana Lazzaroni

.internal



Icann (Internet Corporation for Assigned Names and Numbers) has officially reserved the top-level domain (TLD) “.internal” for private use, which can be used to manage devices connected to local networks and will therefore not be accessible via the Domain Name System (DNS). This decision follows years of technical evaluations, public consultations and internal discussions within the Icann constituencies. It also addresses and resolves a long-standing issue whereby uncoordinated use of domain names for private use could lead to conflicts and DNS vulnerability and offers a coordinated and official solution for internal use only.

The recommendation to reserve a domain for internal or private use was first formulated by the Security and Stability Advisory Committee (SAAC) of Icann in September 2020, through the SAC113 report (SSAC Advisory on Private-Use TLDs). The latter recommended the creation of a dedicated domain, which would never be publicly delegated in the DNS root, in order to prevent potential conflicts and strengthen network security.

As pointed out by Icann, many companies and providers of networking hardware solutions, in order to avoid remembering the number sequence of the IP address block of class C (identified by Iana - Internet Assigned Numbers Authority), resort to an improvised use of ad hoc TLDs, not present in the root zone, for the exclusively private use of the domain. This has led to uncoordinated operational practices, including the informal use of top-level domains, which can potentially conflict with the root zone, as well as cause harm to Internet users.

The Icann Board has, therefore, initiated an evaluation process that has gone through several stages, with periods reserved for “public comments” (January-March 2024), in order to adopt the best approach to implement the aforementioned recommendation. This process ended last August with the reserved domain “.internal”, which is intended to provide a standardised and conflict-free space for network administrators and users requesting a domain name for internal or private purposes (the resolution of .internal TLDs is in fact done in an isolated and local manner within the private network).

Despite some comments raised by users during the public consultation period, in particular concerning the length and potential meaning of the string “.internal”, the Icann Board introduced the new TLD as a solution to address the risks already identified in the SAC113 report. This decision is not expected to have a significant fiscal impact for Icann, nor is it expected to introduce critical factors for the security, stability and resilience of the DNS.

New expansion of DNS: the latest plan of “New Generic Top-Level Domains” coming soon

by Arianna Del Soldato and Adriana Lazzaroni

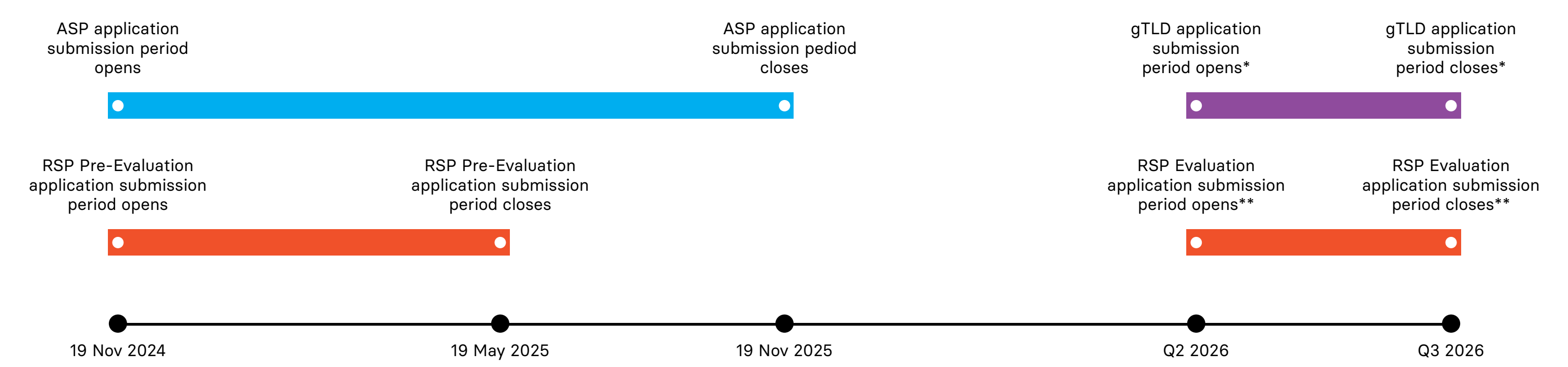
The programme “New Generic Top-Level Domains” (gTLD) is an initiative led by the Ican community, aimed at expanding the Domain Name System (DNS). Through the introduction of new gTLDs, in a variety of alphabets and languages, the programme aims to encourage innovation, competition and consumer choice in the domain name sector. Companies, communities, governments and other organisations will have the opportunity to apply for new top-level domains that best reflect their online identity and the interests of their customers and citizens.

The next will be the second round of the “New gTLD” programme launched in 2012, with which more than 1,200 new names such as .aero, and .info, and other Internationalised domain names (IDN) have been added to the Internet. This new plan will offer the possibility of registering even more domain names of greater length and with different alphabets. These domains will play an important role in the expansion of the DNS, because they will allow speakers of non-Latin languages to access the Internet using their own language and writing system.

The opening of the new application period is scheduled for April 2026: the timing is dictated by the policy implementation work, which is estimated to be completed in May 2025 with the completion of the “Applicant Guidebook” (AGB), the main regulation on which the new gTLD programme is based. Once completed the AGB, Ican estimates that it will take about a year to get the process up and running and open the application period.

The new plan, differently from the first, also provides for an initial pre-assessment period for applicant “Registry Service Provider” (RSP), which will run from 19 November 2024 to 20 May 2025, as well as a second one to coincide with the opening of the application window for gTLDs. The aim is to reduce the costs and time required for the overall evaluation by separating the evaluation phase of the technical aspects of operation from the label application. RSPs provide essential services on behalf of Registry Operators, so careful evaluation is important in Ican’s mission, as it contributes to ensuring a stable, secure and resilient Internet. The RSP evaluation process and criteria are described in the RSP Handbook. All new gTLD applicants are required to use the evaluated RSPs. A list of pre-assessed RSPs will be made available prior to the opening of the application period for the gTLDs.

Parallel to the pre-assessment period, there is also an Applicant Support Programme (ASP) for RSPs, developed specifically to make the application for the new gTLD more accessible and to facilitate the management of a registry for those applicants who would otherwise be unable to do so due to financial and resource constraints. The support plan will have a duration of one year, so as to give RSPs sufficient time to apply for support before the opening of the application period for new gTLDs. Below is a diagram of the programme’s timeline.



Events

International appointments from the digital world

IETF

2-8 November 2024

IETF 121 - Dublin (Ireland)

RIPE NCC

28 October - 1 November 2024

RIPE 89,
Prague (Czech Republic)

ICANN

23 October 2024

ICANN Webinar Series - Europe: Blocking
Ads and Trackers at the Domain Level,
online

9-14 November 2024

ICANN 81 - Istanbul (Turkey)

20 November 2024

ICANN Webinar Series - Europe:
An Evolution for Domain Names
the Next Round of new gTLDs, online

CENTR (for members only)

8-9 October 2024

Joint CENTR 25th R&D
and 51st Tech meeting
Frankfurt (Germany)

10-11 October 2024

59th CENTR Administrative workshop
Oslo (Norway)

18 November 2024

Interoperability as the way forward:
digital wallets and internet infrastructure,
Brussels (Belgium)

20 November 2024

2024 Annual CENTR meeting (GA72),
Brussels (Belgium)

Other events

1-3 October 2024

CyberChess - Riga (Latvia)

10-13 October 2024

Internet Festival - Pisa (Italy)

26-27 October 2024

OARC 43 - Prague (Czech Republic)

5-7 November 2024

Smart City Expo World Congress,
Barcelona (Spain)

19 November 2024

TLD ISAC 2024 meeting - Brussels (Belgium)

15-19 December 2024

Global IGF 2024 Riyadh (Saudi Arabia)

Quarter

Registro.it

L'anagrafe dei domini .it

is managed by



ISTITUTO
di INFORMATICA
e TELEMATICA



Consiglio Nazionale
delle Ricerche