



04. Editorial
Quarter in short



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2022 brought the new
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along



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is managed by:





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#### **HEAD OF REGISTRO .IT**

Marco Conti

# Quarter in short

# Contract renewal and other variables in the crucial year of recovery and resilience, also in .it

by Francesca Nicolini

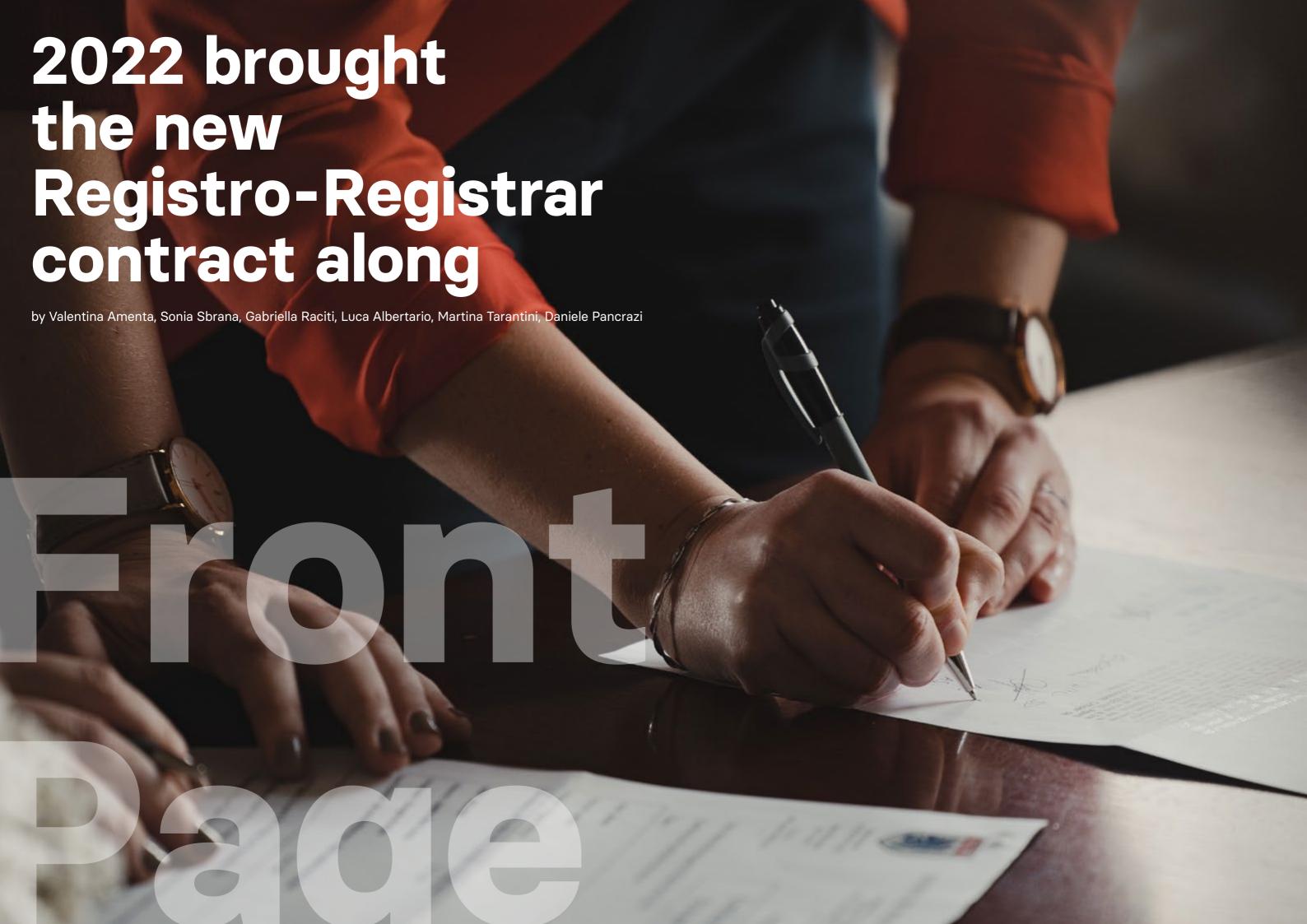
The year opens with a crucial event for the Registro: the renewal of the Registro-Registrar contract, valid for the next three years (2022-2025), aimed at ensuring, above all, digital identity and data accuracy. In general, 2022 is the testing ground for the country's recovery, economic stability agrees with us, this year will bring into focus the full awareness of being online and having a .it website. From here, we'll start counting the things done, those to be improved and those predicted, such as the growth of online business and the digital revolution in Italy. In parallel with the path taken for SMEs, the educational role of the Ludoteca on the risks and opportunities of the Web continues for the kids, with online lessons and the participation and conception of ad hoc events

From the examination made at the beginning of 2022 on the domains registered in 2021, we deduce that 2021 closes on a positive note with a growth of more than 550,000 new domains, which shows the full will of entrepreneurs and citizens to want to reborn from the rubble of a difficult two-year period, due to the pandemic, and to seize the opportunity for growth and challenge offered by the Net. From the studies carried out for the agri-food sector and the ICT sector on .it names, as shown by the respective Registro Observatories, "FINe - Food in the Net" and "ICT in the Net", the growth trend in 2021 is also confirmed for very important sectors: there are almost 4 thousand domains in the "food" sector and over 12 thousand .it names in the ICT sector, although in the latter sector there is a drop in the curve of new registrations in 2022.

But 2022 will be the testing ground for the Italian digital transformation, with entrepreneurs, freelancers and citizens ready to bet on the web, without being constrained by the pandemic emergency. With the choice of a .it site, citizens will demonstrate the value of their online identity even in their daily lives, and entrepreneurs and freelancers will seize the opportunities and challenges of online business.

In a digitised country, ready to take off on the Web, one cannot - however - overlook a very important aspect: it is necessary to start with the very young, to begin educating them right from the start on the importance of the Web, the opportunities it offers, and the wide range of information available. And this has been, for over eleven years, the mission of the Ludoteca of the Registro .it, which intends to educate the new generations in the correct use of the Web, but at the same time to recognise its dangers and risks – by means of lessons in schools, seminars, games, ad hoc workshops, and participation in events. In the first four months of 2022, almost 1,000 children and young people played, experimented and learnt about Web and cybersecurity.





Quarter Front Page

The Registrar 2022-2025 contract is an adhesion contract by correspondence and is finalised through the exchange, on one side, of the proposal to contract and, on the other side, of the acceptance of the proposal, which takes place by fully transcribing the terms of the proposal and accepting its conditions. In essence, a double, independent and, fundamentally, identical record is required.

All the parties' respective and different rights and obligations arise from their agreement, i.e. by signing the contract and exchanging the two unilateral deeds.

The legal framework for the new Registrar contract can be found in the regulatory developments that have taken place over the last three years:

The Registro and the Registrars shall conduct themselves in compliance with all the legislation in force in the various areas of activity and, specifically, for what concerns the processing of personal data, with EU Regulation 679/2016, "GDPR" and Legislative Decree No. 196 of 30 June 2003, updated by Legislative Decree No. 101 of 10 August 2018, and the amendments introduced by Legislative Decree No. 139 of 8 October 2021.

The Registro and the Registrars, regarding the digital infrastructure area, to which the Domain Name System services relate, are subject to cybersecurity laws, specifically the EU Directive 1148/2016 concerning measures for a high common level of security of network and information systems and EU Regulation 2019/881 (Cybersecurity Act).

In light of these regulatory developments, the contract is a "bridge" contract designed to achieve an increasingly effective policy on Registrant data accuracy, in order to be able to gradually develop operational methods that implement forms of digital identity verification during the Domain Name Registration phase.

In light of these guidelines, the following new elements were implemented in the new contract proposal, which also led to changes in the internal guidelines and regulations of the Registro .it:

- Deletion of domain names by Registrars: Registrars may delete a domain name, upon explicit request by the Registro .it, if the Registrar has received a formal request regarding the inaccuracy of the domain name Registrant's data, and, due to manifestly incorrect data, has been unable to contact the Registrant
- The Code of Conduct (CoC)
  becomes mandatory: in order to sign
  the Registrar 2022-2025 contract,
  the Registrar must sign the CoC
  (Annex B). The Code of Conduct is
  a fundamental document that must
  guide the Registrar in its activities
  with the Registro .it

- Registration Form Change: implementation of a specific section for the Registrant's Data Accuracy that must be specifically approved by the Registrant when registering the domain name
- Privacy policy: sole traders and freelancers (new EntityType 3) will be able to express their consent to the disclosure of whois data in the same way as natural persons

gov.it: The Registro .it grants

the Registrar the non-exclusive right

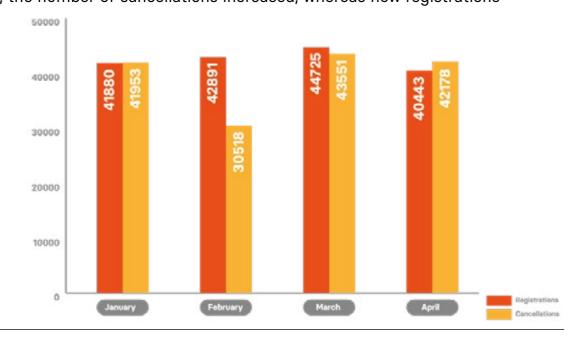
- United Kingdom and Brexit: those who have citizenship, residence, or headquarters in the United Kingdom may formally register a domain name with the Registro .it
  - to register and maintain for third parties, or subordinately for itself, domain names in the SLD gov.it.
    This option will be activated during the Registrar 2022-2025 Contract and notice will be given to Registrars via the e-mail list and the news will be published on the Registro .it website
- Data accuracy software: the Registro .it has designed and implemented a system to detect anomalies in Registrants' data and report them to Registrars for their verification of accuracy, correction or possible deletion of the associated domain names
- Suppression of fax for communication with the Registro .it



# **Growth of the New Registrations**

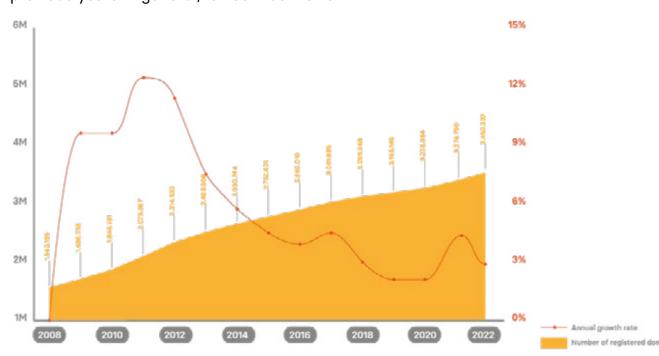
An analysis of the trend in registrations of .it names shows that, as a general rule, new registrations amounted to almost 170 thousand domains, an important number, but lower than in the same four-month period in previous years. The total difference between the number of new registrations and cancellations, during the first four months of 2022, is only almost 12 thousand domains compared to over 61 thousand in the same four months of 2021. The trend, in fact, when compared to the first four months of last year, shows that, in these four months of 2022, the number of cancellations increased, whereas new registrations

decreased:
in particular,
cancellations exceed
new registrations in
January and April.
In February alone,
the number of new
registrations exceeds cancellations by
more than 12,000
domains



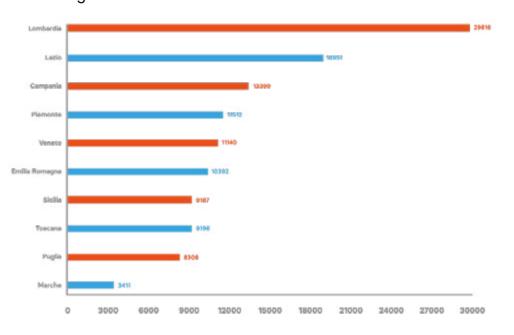
# Yearly growth

At the end of the first four months of 2022, the total number of .it domains amounted to 3,462,076, a rather modest growth of only 0.34 per cent (+11,739 domains) compared to the end of 2021. When compared to the growth rate of the first four months of the previous year, and of previous years in general, it was much lower



# **Top Regions**

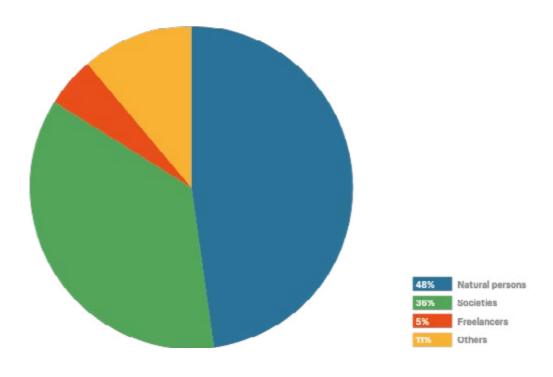
The regional ranking in terms of new domain registrations does not change at the beginning of 2022 compared to the last four months of 2021. Lombardy and Lazio regions remain in first and second position respectively, with unchanged percentages at 20 and 13 per cent. The regions of Campania and Piedmont also remain in the same positions with unchanged percentages. On the other hand, Veneto performed well, increasing its percentage at the expense of Emilia Romagna



# **Entity Types**

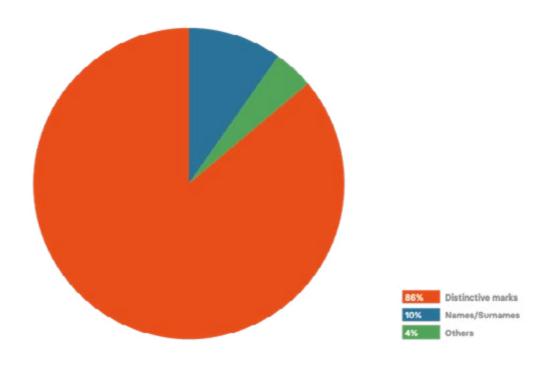
Compared to the last four months of 2021, the percentage of natural persons decreased by two points to 48 per cent. However, the percentage of new .it domain names relating to businesses rose by one point to 36 per cent.

The proportion of freelancers remains unchanged at 5 per cent



# **Reasons for oppositions**

In the first four months of 2022, 86% of oppositions concerned the infringement of distinctive company signs. 10% concerned oppositions filed to protect names/surnames, while the remaining 4% concerned various reasons

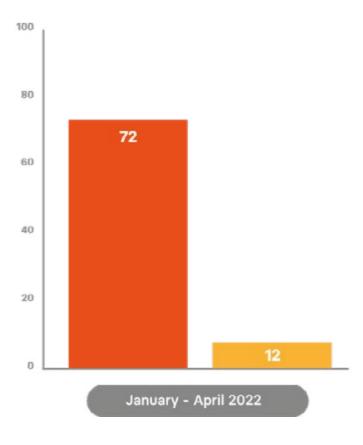


# **Oppositions - Reassignements relationship**

72 oppositions were activated in the first four months of the year.

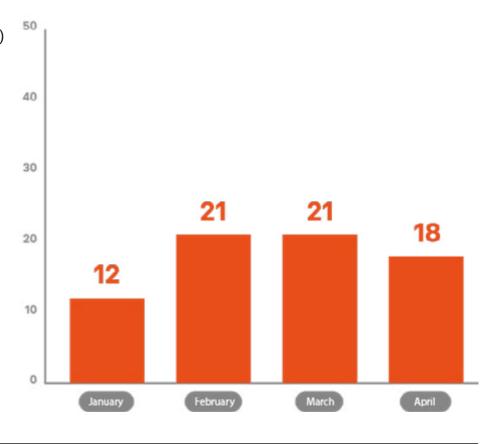
Most of the procedures (37), about half of the cases, were activated by Italian subjects, either as assignees or opponents. 28 foreign assignees saw opposition activated by as many national subjects; there were 5 cases in which a foreign subject activated opposition of a domain assigned to an Italian subject. Finally, 2 procedures have seen foreign subjects involved, either as registrant or as opponent. Out of the 12 reassignment procedures in total, 5 saw Italian subjects involved, both as respondent/assignee and as complainant/opponent. 4 procedures saw national subjects as complainants opposed to resistants, assignees of foreign domain names, and only one case saw a foreign subject as complainant. In only 2 cases was the complainant a foreign subject and the respondent an Italian.

Finally, only one case concerned two foreign subjects contesting a name



# **Monthly Trend of the Oppositions**

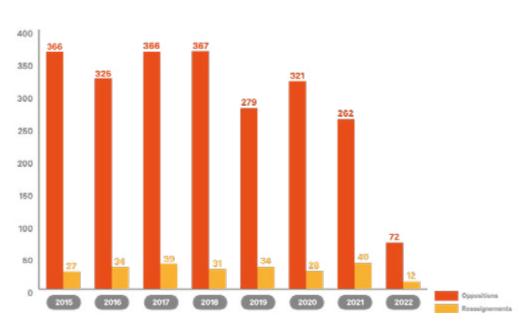
The graph shows a slow start: in January, 12 oppositions were activated, the lowest number (6) compared to the period average of 18 procedures. In February/ March, a constant trend can be observed, with 21 oppositions in both months



# **Yearly trend of the Oppositions - Reassignements**

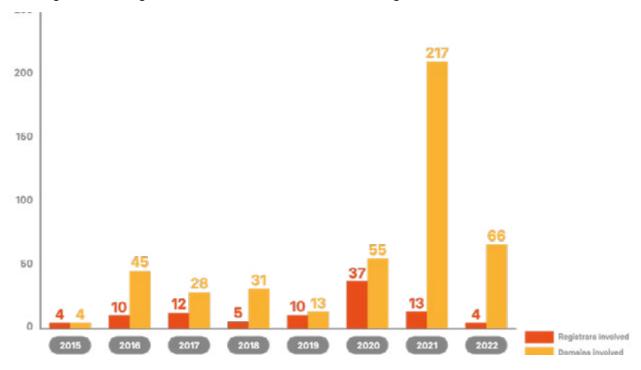
In the first four months of 2018, oppositions amounted to 129, the highest number if we consider the period from 2015 to 2018. In the following three-year period 2019/2021, the amount of oppositions was quite stable: 88 (2019), 86 (2020) and 90 (2021), respectively. A decrease was reported in the first quarter of 2022, with 72 oppositions. Also in the first four months of 2018, the highest number of reassignment procedures (16) was registered, in terms of subjects appealing to PSRDs: 9 (2019), 11 (2020) and 12 in 2021.

Consequently, the trend has been rather constant over the last 4 years, a trend that seems to be confirmed in 2022, with 12 procedures activated



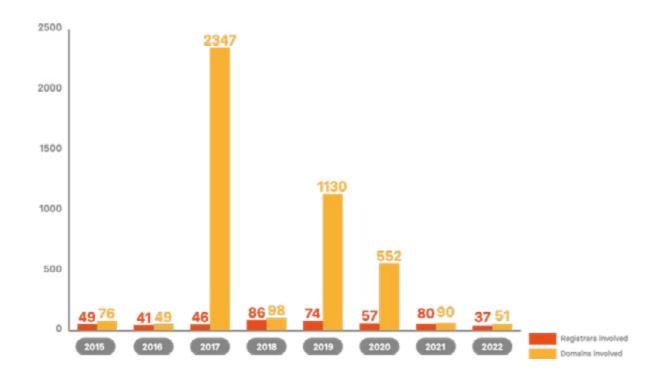
# **Authinfo requests**

In the first 4 months of 2022, 61 requests for Authinfo codes were submitted, almost all of which were due to the fact that a Registrar was not operative (including its services and those of its users) for a few days, and several of its customers requested the Authinfo code directly from the Registro to migrate their domains to another Registrar



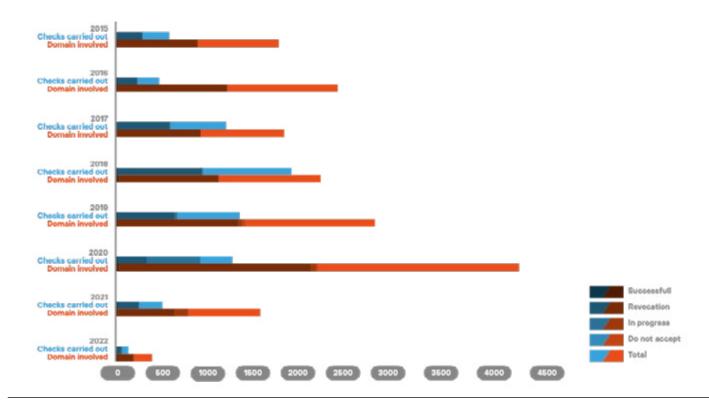
# Requests from competent authorities

37 are the requests from the competent authorities at the beginning of the year, involving 51 domain names. There was a peak in requests in March, leading to a significant increase compared to the same period in 2021



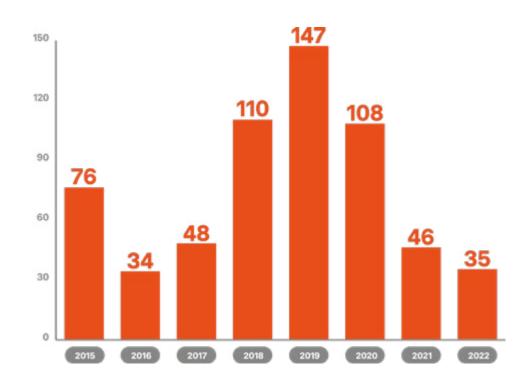
# Verification of domains by Registro

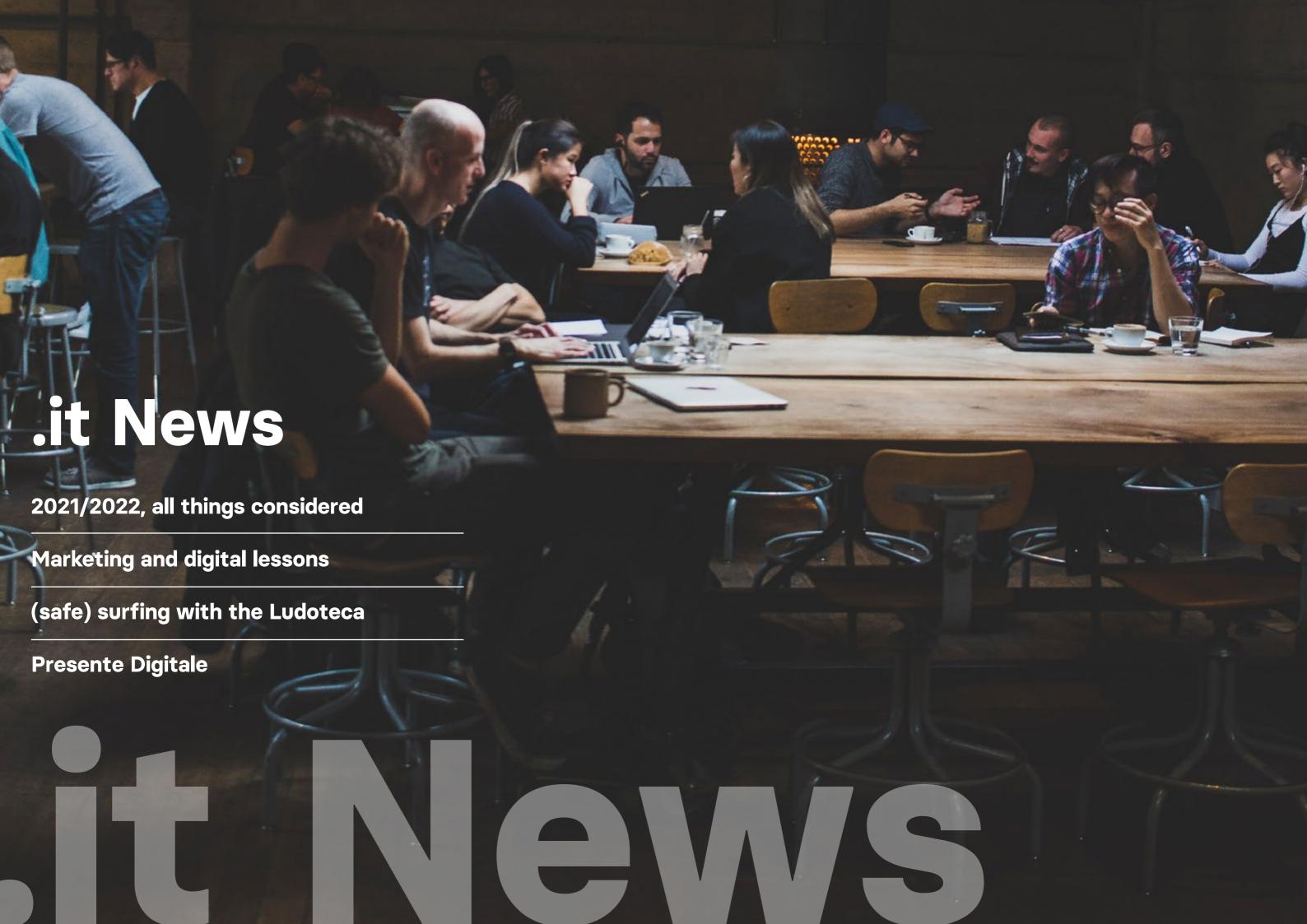
A total of 124 verifications were carried out, covering 372 domain names. This figure is in line with the average number of activities carried out in 2021, confirming the Registro's ongoing activities on the accuracy of Registrant data in the Whois DB



# **Reserved names**

The reserved domains are 35 in the first four months. There was a peak in the first two months of the year, during which several names were requested by municipalities that previously used a domain name under the Second Level Domain (SLD) gov.it







The .it domains have increased for three years now, despite the last two years characterised by pandemics, resulting in a health and economic crisis, and uncertainty for the future. Particularly difficult years, which have not, however, discouraged investing in the online world, seeking to seize the opportunity and the challenge of the Net.

In 2021, there were over 550,000 new .it domain names, propelling the national web to a growth of 2.24%, with a total of 3,450,337 .it names on 31 December of the same year. The year 2021 is undoubtedly the year of awareness and resilience through web presence, for citizens and entrepreneurs, to have, respectively, a digital identity, and a platform for recovery and relaunch.

ghout the country: this confirmed that the Web is perceived as an opportunity and a challenge, line with the reports of professional associations, which - precisely in 2020 - recorded a decrease of about 40,000 freelancers. At the same time, the .it names assigned to businesses (-6.3% of new domains compared to 2020) decreased. The only category experiencing no decreases is that of natural persons: +12.3% compared to 2020 and, in general, more than half (53.7%) of all

growing by more than 70 percent in three years (2008-2011), 2022 could be the turning point for an increasingly digital Italy.

If, on the one hand, .it domain names have increased, on the other, the digital divide between the North and the South of the country continues to emerge, as can be seen from the CNR-IIT study, which calculates the index of Internet diffusion in Italy based on the penetration rate for each region and province, analysing the number of registered domains for every 10,000 inhabitants. As far as regions are concerned, Northern Italy stands out, in the examined period from January to October 2021 - with Trentino Alto Adige on the podium, followed by Lombardy and Valle d'Aosta. As far as the provinces are concerned, on the other hand, Milan is at the top, followed by Bolzano and Florence.

# The Registro's agri-food sector analysis of 2021 data: food and .it, a winning combination

by Maurizio Martinelli and Francesca Nicolini



Through "FINe - Food in the Net Observatory", the permanent observatory of the Registro .it, set up to analyse the spread of the Internet among the various sectors belonging to the agri-food industry and study their geographical distribution, the .it domain names registered in 2021 were analysed. The study showed that almost 4,000 new domains on the various agricultural products intended for feeding were registered last year.

FINe, since 2016, the year of its establishment, in collaboration with the Department of Informatics of the University of Pisa and Infocamere, has been offering a picture of the agri-food sector on the Internet and was created to analyse the presence of a very important sector for the Italian economy on the Net. In this sector, the total number of .it websites registered so far tells us that 37.8% belong to the catering sector, 12.3% to the wine sector and 11.3% to the farinaceous products sector. They are followed, both at 8.3%, by the "other" agro and agritourism sectors.

In 2021, considering the 3,834 new .it websites with "food" as the common thread, almost 42% belong to catering, 12% to farinaceous products and 10.17% to wine. This is followed by the "other" agro sectors (hunting, forestry, use of forest areas, etc.) with 9.05%, agritourism with 5.63% and cultivation with 4.90%.

If we consider 2016 as the beginning of our survey, the number of websites related to the agri-food sector increased by 8.4%. This shows the opportunity of online business seized - over the years - by business entrepreneurs: a digital reality that works, if we consider the 4,680 new sites registered since the beginning of the year, with a number, in fact, higher than that of the whole 2021.

# Over 12 thousand .it names of the ICT sector in 2021. Downward curve at the beginning of 2022

by Stefania Fabbri and Maurizio Martinelli



The domestic market of Information & Communications Technology (ICT) closed 2021 with an expenditure equal to EUR 34.4 billion, up 4.1% compared to 2020 (report 2021 Assintel - National Association of ICT and Digital Enterprises), a sector that is constantly evolving not only from the technological point of view, but also from the viewpoint of possible users and customers. The figure is confirmed by "ICT in the Net," the permanent Observatory of Registro .it, which analyses the spread on the Internet of sectors related to ICT and which notes - in 2021 - the registration of 12,175 new .it names, with a clear dominance of those pertaining to Telecommunications and Computer Science (90.92%). This is followed by those pertaining to Commerce and Repair (5.64%), News and Blogs (2.63%) and Manufacturing (less than 1%). Basically, the analysed picture reflects the total pie of registrations which, as of 30 April 2022, has 132,803 .it websites relating to ICT. Of these latter, the Telecommunications and Computer Science sector accounts for 70.7%.

The analysis of the data for 2021 offers an encouraging picture of the status of the sector: the ICT on the Net has become - in five years - less 'hard' and more 'soft', less sales and trade of electronic components or machinery, more consulting and development of virtual communication spaces and systems.

However, an examination of the data for the first four months of 2022 tells us that the trend has undergone a reversal, considering that the new .it domains registered in the ICT sector amount to only 5,347. Of these, once again, 73.70% refer to Telecommunications and Computer Science; 17.52% to Commerce and Repair; 6.12% to News and Blogs; 2.66% to Manufacturing. A comparison of the new 2022 registrations (1 January 1 to 30 April 2022) totalled in the ICT sector (5,347 domains), with the numbers for the equivalent four-month period of 2021 (6,919 domains) in the same sector, shows a decline in new .it names, amounting to 22.72%. The drop, however, may be merely a physiological settling of numbers from a two-year health emergency, in which the Italian Web saw a general increase in new registrations, as observed by the general demographics of .it between 2020 and 2021. This apparent halt, however, translates into an important feverish activity that cannot be underestimated, especially for those who now wish to build a new personal online path and business of their own on the Net.

Digital Talks: digital transformation and strategies in marketing with Al and data

by Stefania Fabbri

"Digital Talks" is the new format of Registro .it aimed at SMEs, which was created with the objective of helping small entrepreneurs and professionals to better direct their choices in an increasingly digitalised market. From artificial intelligence to the use of data, from the importance of analytics to the proper use of social media, these are the topics that Mr. Gianluca Diegoli, an expert in marketing strategies, addresses through dialogue with professionals who are able to offer their point of view on the various aspects.

Three episodes are currently available.

The first appointment of 10 March addressed a much-debated topic, the application

of artificial intelligence in the areas of marketing, production, sales, and logistics in small and medium-sized enterprises. Gianluca Diegoli interviewed Mr. Alessio Semoli, chairman of PranaVentures, who explained how data can be used as the starting point for developing a marketing strategy.

On 7 April, the new episode was again dedicated to data as a tool for creativity in marketing strategy. During the live event, Mrs. Federica Brancale, Data Strategist & Facilitator at Marketing Freaks, spoke with Gianluca Diegoli about data and its interpretation as a path to outlining and monitoring an effective communication and marketing plan in detail.

Digital transformation is the focus of the third appointment on 18 May. Gianluca Diegoli hosted Mr. Giorgio Soffiato, Managing Director of Marketing Arena SpA, who explained the substantial differences between B2B and B2C marketing: while the latter is usually considered to be simpler due to a more immediate user journey, B2B has the complexity of having to promote services and sectors that are not very straightforward and often speak to a very circumscribed and not very wide audience.

May marks the end of the first cycle of Digital Talks, which will be back in autumn, on the Registro's social channels, with three new appointments. You can review the episodes on social channels and on the Registro. it website



The last three episodes of Digital Tomorrow, the Registro. it podcast that investigates the future of digital with Mr. Pepe Moder and many guests, ready to give their point of view on the changes of tomorrow, have been published.

DIGITAL
TOMORROW

The topics of the podcast address the main technological trends and evolutions underway, from the Internet of Things to blockchain, from 5G to artificial intelligence.

The theme of the eighth episode is data mining: analysing data can bring benefits to SMEs, helping them to make decisions based on "insights" that emerge from the analysis and gain useful information from feedback and reviews. Pepe Moder talks about it with Mrs. Fosca Giannotti, Director of Research at the CNR Institute of Information Science and Technology, and Mr. Mirko Lalli, founder and CEO of The Data Appeal Studio.

The ninth episode deals with a very topical issue, the blockchain: one of the uses of this technology is in fact linked to the valorisation of Made in Italy products, for which it is possible to certify the origin, quality or sustainability of a product thanks to the blockchain system. Pepe Moder talks about it with Mr. Paolo Mori, researcher at the Institute of Informatics and Telematics of the CNR in Pisa and Head of the Trust, Security and Privacy research unit, and with Mr. Matteo Fratini, CEO of the I Potti de Fratini oil mill, which produces a high quality oil in Umbria

The tenth and final episode is dedicated to 5G: Pepe Moder investigates the change that the adoption of 5G will bring about in the daily lives of people and SMEs, how industrial processes, infrastructure control and services will be transformed. The guests of the episode are Mr. Paolo Ravazzani, Director of the CNR Institute of Electronics and Engineering of Innovation and Telecommunications, and Mr. Nicola Ciulli, one of the founders and R&D manager of Nextworksa company that deals with highly specialised consultancy in the TelCo and IT sector.

All Digital Tomorrow episodes are available on the Registro's website and the major listening platforms - Spotify, Apple Podcasts, Google Podcasts.

# The Ludoteca hosts kids from the Codytrip virtual tour in Pisa

by Giorgia Bassi and Beatrice Lami



The Ludoteca of the Registro .it took part in the Safer Internet Day (SID) sponsored by the European Commission. The Ludoteca of the Registro .it, which has been engaged for years in promoting the "Internet culture" in schools, with the aim of exploiting all the opportunities of the digital world, also by warning young users of the possible risks, could not fail to do so.

Since 2018, the educational section of the Registro .it has been expanded with courses on cybersecurity, to teach children and young people to recognise major online threats and useful behaviour to prevent them.

This year, the SID spoke the language of interactivity, thanks to a very original format: in partnership with the University of Urbino, the Ludoteca was chosen as part of the Cody Trip, a virtual and immersive tour, which - in the 2022 edition - introduced young surfers to the museums, exhibitions and historical sites of the city of Pisa.

Numbers of the initiative were impressive: around 20,000 young people from 600 different cities actively participated, interacting with the guides and answering questions in a highly engaging quiz.

The Registro leg was part of a tour devoted entirely to the Internet, to introduce young people to the historical and pioneering role played by the city of the leaning tower in IT, starting with the museum of Calculus Instruments and, specifically, a visit to the CEP, Pisa's (and Italy's) first electronic calculator for scientific research, the "Hello World!" exhibition with Fabio Gadducci, scientific director of the Museum of Calculus Instruments, and Luciano Lenzini, who was in charge of the first Internet connection from Italy to the USA in 1986.

The "historical" tour was bound to stop at the CNR and the Registro .it, where the first domain name with the .it extension, cnuce.cnr.it, was created in 1987. The experts from the Ludoteca explained to the kids the role of the Registry of Italian Internet names (.it) and the DNS, (Domain name system), a system to assign a name to a series of digits, known as the Internet protocol, which is otherwise difficult to remember.

Lastly, Luca Vasarelli, from the Registro's Digital Innovation Technology Unit, with his seminar, touched on technical aspects related to the Registro's services, starting with the network infrastructure, with the aim of highlighting the material nature of the Internet, often perceived as a "virtual" world where services are consumed passively, without knowing the rules.

The safe use of the Internet by new generations should indeed start from the technical basics, because only by thoroughly understanding a tool can one learn to use it responsibly.

# A workshop for very young Internet users

by Claudia Mazzanti and Manuela Moretti



A workshop dedicated to the conscious use of the Net was organised remotely by the Ludoteca of the Registro .it for the Safer Internet Day's youngest audience, namely some classes of the "Casa San Giuseppe" primary school in Melzo (Mi).

The main topic of the workshop, as always, was the correct use to be made of the opportunities of the Net.

In order to better understand the children's use of digital tools and the Internet, the Ludoteca experts conceived a sort of interactive game, based on the completion of a sentence beginning "with the Internet I can...", which the children had to complete.

The most frequent answers of the short survey were "play games", followed by "communicate with friends/relatives", "watch video tutorials", but also "see/visit new places", "do research" and "consult the school's electronic register".

The interactive experiment showed that the children already see the Internet as a platform with multiple possibilities, where they can "meet", discover and interact in a kind of parallel dimension to real life.

Moreover, through this workshop the young protagonists were able to reflect on the power of words used online, the importance of punctuation, the correct use of capital letters, "good manners" on the Net, and the concept of "respect" towards themselves and others, reflecting on how to protect their own privacy and that of others.

# But are we safe? Cybersecurity School

by Stefania Fabbri

On 10 May, in the Conference Room of the Rome headquarters of the CNR, the Ludoteca of the Registro .it organised a day for students and teachers dedicated to the opportunities and risks of the Net with a special focus on cybersecurity. "But are we safe? Cybersecurity school" was the title of the event, curated and moderated by journalist Mr. Giampaolo Colletti, with more than ten experts taking turns on stage.

The morning's work, dedicated to students, opened with the speech by Mr. Matteo Flora, CEO of The Fool, who suggested the first steps to be taken to be safer on the Net, defined the actors in the field and the strategies to defend oneself, closing with a look at the importance that cyber security will have in the future.





# PROGRAMMA MATTINA

### FENOMELOGIA DELLA CYBER SECURITY

Introduzione di **Anna Vaccarelli**, Responsabile Relazioni Esterne Registro .it e Ludoteca del Registro .it Modera **Giampaolo Colletti**, giornalista

#### **ORE 10.00**

#### ASSOLO: QUEI PRIMI PASSI PER LA SICUREZZA CIBERNETICA

Il primetro, le strategie, gli attori in campo, le tendenze in atto Matteo Flora, Ceo The Fool

#### ORE 11.00

#### TALK: A SCUOLA DI CYBER SECURITY

In che modo sensibilizzare il sistema scolastico ai rischi della rete
Alessandro Bencivenni, docente e sui social @profdigitale
Marta Michilli, Direttore Generale Fondazione Mondo Digitale
Matteo Uggeri, esperto di e-Learning e innovazione dell'apprendimento

#### ORE 11.30

# HOW TO: INSIEME PER LA COSTRUZIONE

DEL MANIFESTO

Domande tramite Slido per la stesura dei primi punti

#### ORE 12.00

#### TALK: LE DUE FACCE DELLA RETE, TRAPPOLA O OPPORTUNITÁ

Barbara Strappato, Direttore Divisione 1 Polizia Postale Guido Scorza, Componente del Garante per la Protezione dei dati personali

#### ORE 12.30

# HOW TO: INSIEME PER LA COSTRUZIONE DEL MANIFESTO

Domande tramite Slido per la stesura dei primi punti

# PROGRAMMA POMERIGGIO

## CYBER SECURITY, COME E COSA COMUNICARE OGGI E DOMANI

#### **ORE 14.00**

#### TALK: LO STORYTELLING DELLA

#### CYBER SECURITY

Tra startup, influencer ed esperti la nuova narrazione della cyber security

Nicola Palmieri, co-founder Docety

Fabiana Andreani, tiktoker @fabianamanager

Elia Bombarelli, docente di matematica e prof Youtuber

Sandro Marenco, prof tiktoker autore del libro "Dillo al prof" per Salani Editore

#### ORE 15.00

# HOW TO: INSIEME PER LA COSTRUZIONE DEL MANIFESTO

Domande tramite Slido per la stesura dei primi punti

#### ORE 15.30

# ASSOLO: IL FUMETTO DELLA

# CYBER SECURITY

Andrea Plazzi, traduttore, saggista, editor italiano e curatore "Le avventure di Nabbo e Linda"

#### ORE 16.00

#### CONCLUSIONI: IL MANIFESTO

Sintesi dei lavori della giornata e stesura del Manifesto



SEGUICI IN DIRETTA SUI NOSTRI SOCIAL

This was followed by two talks, the first to discuss what could be the best way to raise the school system's awareness of the risks of the Web; and the second to discover what the "traps" of the Web might be and how to defend oneself, with Mrs. Barbara Strappato, Director of Division 1 of the Postal Police, and Mr. Guido Scorza, a member of the Data Protection Authority.

In the afternoon, a focus for teachers on Cybersecurity storytelling among start-ups, influencers and experts, and in closing Mr. Andrea Plazzi, an Italian translator, essayist and editor, with a talk on how to promote the relationship between science and entertainment, reaching out to the very young also through comics.

During the event, the "Decalogue for the Connected School", the ten rules manifesto for aware and safe surfing, was launched, involving guests, students and teachers present on-site and online. The drafting of the Decalogue will be developed over time, through a series of in-depth e-talks, and will be presented at the Internet Festival in Pisa on 6 October, following a hackathon with teachers, students, researchers and digital experts.

# Numbers of the Ludoteca January-April 2022\*

edited by Beatrice Lami

## 10, 20 e 25 January | 7, 22 March

Lessons on the conscious use and opportunities of the Internet to 100 children from the "E. Toti" primary school in Pisa

## 10, 13, 14, 18 January | 5, 7, 8, 11 April

Cyber Security for Teens Project Lessons to 71 students from I.I.S "L. Da Vinci - Fascetti" in Pisa

## 11 January | 1, 9 February | 8, 18, 29 March

Lessons on the conscious use and opportunities of the Internet to 67 children from the "L. Rosati" primary school in Pisa

# 12 January | 4, 8, 9, 16, 21 February | 2, 10, 23, 28 March

Cyber Security for Teens Project Lessons to 83 students from I.T.I.S. "G. Marconi" in Pontedera (PI)

# 14 January | 10 March

Lessons on conscious use and opportunities of the Net to 21 children from the "Trento e Trieste" primary school in Cremona

## 17, 19, 21, 25 e 27 January | 21, 28 February | 4, 9, 14, 16, 18, 24 March

Cyber Security for Teens Project

Lessons to 110 students from the "F. Buonarroti" High School in Pisa

# 20 January

Webinar presenting the project based on the video game "Nabbovaldo and the cyber blackmail" for students, aimed at teachers (10 in total) from secondary schools

# 28 January | 16 February | 6 April

Lessons on the conscious use and opportunities of the Web to 38 children from the "N. Mandela" primary school in Buti (PI)

## 2 February | 9 March

Lessons on the conscious use and opportunities of the Web to 46 children from the "F. Tomei" primary school in Torre del Lago (LU)

# 2, 9, 11, 18 February

Project "Nabbovaldo and the cyber blackmail" Lessons to 110 students from the "G. Bartolena" secondary school of Livorno

#### 3, 7 February

Project "Nabbovaldo and the cyber blackmail" Lessons to 34 students from the "R. Gragnani" secondary school of Torre del Lago (LU)

### 7 February

Seminar entitled "Ludoteca .it: safe and aware on the Net" addressed to the teachers and parents (18 in total, including teachers and parents) of the students of the secondary school "R. Gragnani" of Torre del Lago (LU)

### 11 February | 1° April

Lessons on conscious use and opportunities of the Net to 17 children from the "S. Ambrogio" primary school in Cremona

### 14 February | 4 April

Lessons on the conscious use and opportunities of the Net to 24 students from the "A. Campi" secondary school in Cremona

#### 15, 23 February

Project "Nabbovaldo and the cyber blackmail" Lessons to 99 students from the "Minerva Benedettini" secondary school in Stagno (LI)

#### 17, 25 February

Project "Nabbovaldo and the cyber blackmail" Lessons to 35 students from the "F. De André" secondary school in Cascina (PI)

## 1° April

Lesson on the conscious use and opportunities of the Internet to 20 children from the "F. Rismondo" primary school in Pisa

## 4 April

Project "Cyber Security for Teens"
Online lesson to 18 students from the ISSIS "Polo Cattaneo" in Cecina (LI)

# 12, 13 April

Lessons on "Cyber security: how to defend data on the Web" to children from the "Don Milani" primary school in Palaia (PI) and the "G. Galilei" primary school in Cascina (PI) as part of the Nicola Ciardelli 2022 Solidarity Day.

A total of 62 children and young people participated in the lessons

## 27 April

Lessons on the conscious use and opportunities of the Web to 41 school children from the "G. Puccini" primary school in Torre del Lago (LU)

In the first four months of the year, almost 1,000 children and teenagers were involved in workshops and seminars at the Ludoteca

\*lectures and seminars were all conducted online

# .it News: Presente Digitale, the portal of teachers

"Presente Digitale" is an initiative of the National Research Council of Italy - in particular the Registro .it of the Institute of Informatics and Telematics of the CNR of Pisa and the Institute of Educational Technologies of the CNR of Genoa - designed for teachers, with the aim of introducing topics of great interest in the school world such as: networked didactics, coding, cybersecurity, Internet of things. The portal, with its free courses, offers a training opportunity to all teachers who want to keep up to date with the digital world.

The online courses available on the "Presente Digitale" portal in the first quarter of 2022 are those related to cybersecurity and computational thinking and coding.

Building awareness of online risks and learning about cybersecurity

by Ilaria Matteucci

Everything around us is now governed by ICT technologies and software and is connected to the Internet: these two ingredients make everything around us subject to possible cyber attacks. For this reason, and in order to raise awareness of these increasingly common issues, as well as to provide useful tools and notions for teachers, a course on cybersecurity has been organised as part of the "Presente Digitale" portal project, thanks to the knowledge of experts from the CNR Institute of Informatics and Telematics in Pisa (CNR-IIT).

The course is divided into five modules, each of which is dedicated to a specific topic relating to computer security: starting with a general introduction, moving on from notions of cryptography and secure communication protocols, to discuss resource access control, systems vulnerability analysis and their risks, and finally cybersecurity on social networks and other applications. Each module includes a lesson, which can be accessed through a video featuring CNR-IIT researchers themselves.

In addition, basic documents are made available to teachers who attend the lessons, as well as supporting documents as in-depth material. For each module there is a test to check the learning of the previous module's notions: in order to access the final test, it is necessary to pass the tests of each module.

The aim of the course is to provide teachers with knowledge of cybersecurity issues and useful material, so that they can, in turn, transmit and raise awareness of security risks on the Net to their students. In this way, like a sort of word of mouth, cybersecurity becomes "viral" and we all become more aware and less vulnerable.

# Computational thinking and coding in primary schools

by Augusto Chiocchiarello

"Computational thinking" and "coding" are two key words that characterise a curriculum reform process that aims to introduce new skills related to the introduction of computer science into compulsory schooling. The main objective of the course is to provide a training opportunity for primary school teachers interested in introducing coding to children as an expressive language and learning tool.

The course is structured in five modules divided into three sections:

- programming for learning computational thinking and coding in primary school (module 1);
- introduction to coding through: interactive stories, turtle geometry and video games (modules 2, 3 and 4);
- examples of activities to be carried out in classrooms
   1 to 5 (module 5).

Each module includes a theoretical part and a workshop part: the theoretical part focuses on a possible approach to introducing programming in the classroom; the workshop part focuses on Scratch, a simple and intuitive block programming environment.

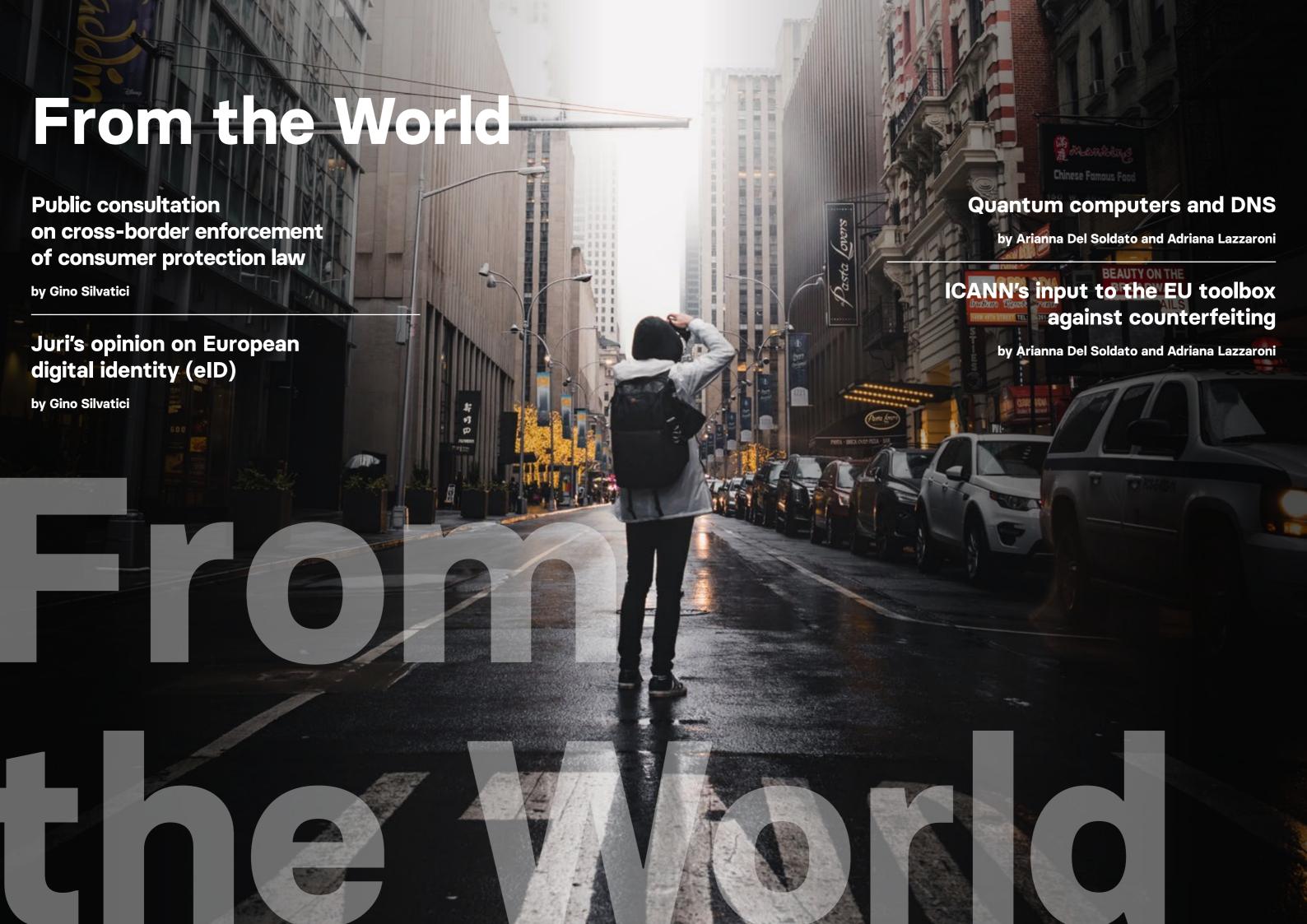
No prior knowledge of computer science is necessary to participate, but only curiosity and a willingness to get involved.

The course aims both to develop programming skills, for those who are beginners, and to provide insights and resources to those who have already started coding activities in the classroom.

The estimated commitment for the course is 25 hours, five hours for each module. As it is mainly aimed at in-service teachers, the course has been structured in such a way as to maximise self-management of study time. The course does not attempt to replicate a traditional classroom situation at a distance, but provides materials (videos and texts) that are easy to consult and opportunities for discussion to develop a community of practice among participants.

Although the course is designed to be taken over a five-week period, participants can also organise themselves according to personal needs: it is possible to register for the course and start taking it when one feels it is appropriate to do so. In the face of this flexibility, certain constraints on teacher and tutor availability must be considered, which is not guaranteed all year round and includes two short breaks during the Christmas and Easter holidays, and a long summer break, in July and August, for course maintenance. Given the schedule of teacher and tutor availability, the course can be thought of as having three editions per school year: autumn, winter and spring.

(for a short video presentation of the course)



Quarter From the World

# Public consultation on cross-border enforcement of consumer protection law

by Gino Silvatici



The European Commission has opened a public consultation on cross-border enforcement of consumer protection laws: the aim is to gather feedback from different stakeholders on the enforcement of consumer rights in the EU by 27 June.

The consultation was launched ahead of the Commission's report on the enforcement and out-of-court settlement of consumer disputes. The report will analyse the progress in the implementation of the Regulation on Consumer Protection Cooperation (CPC), the European Directive on Online Dispute Resolution (ODR) and the Directive on Alternative Dispute Resolution (ADR).

# Juri's opinion on European digital identity (eID)

by Gino Silvatici

The European Parliament Committee on Legal Affairs (Juri) has published its opinion on the Commission's proposal for a European digital identity (eID).

According to this report, European digital identity accounts should allow users to use electronic signatures and seals accepted throughout the EU, as well as guarantee high levels of security, including encryption, based on the use of free and open source technologies.

As far as cybersecurity is concerned, Juri explicitly requires Internet Service Providers (ISPs) to meet the cybersecurity risk management requirements listed in the NIS (Network and Information Security) Directive 2, failing which the qualified status of such a provider shall be revoked.

# Quantum computers and DNS

by Arianna Del Soldato and Adriana Lazzaroni



In the last few years, quantum computers have aroused considerable interest in the scientific and technical security communities, which are concerned about their ability to undermine the most popular cryptographic algorithms.

A "cryptographically relevant quantum computer" (CRQC) would, in fact, be able to considerably weaken digital signature algorithm security, such as - for instance - those used in DNSSEC (Domain Name System Security Extensions) and those used for key exchange, in the TLS (Transport Layer Security) protocol: signatures used by these algorithms could be forged and, as a result, their protected data could be hacked.

CRQC computers are not yet available, but could be in the coming decades. However, since quantum computing technology is new and manufacturing functioning quantum computers is incredibly expensive, no one can currently predict their implementation.

In order to support the ICANN community in better understanding quantum computing and its impact on cryptography, ICANN's Office of the Chief Technical Officer (OCTO) recently published the report "Quantum Computing and the DNS", which reviews recent research on the subject, attempting to simplify complex technical issues so that the international community can begin to think about the changes it will need to make when the time comes.

Although the ICANN community has not yet developed a common understanding of how developments in quantum computing relate to DNS, the OCTO, in order to ensure the stability, security and interoperability of DNS, outlines in this document its opinion on certain principles, which are not - however - intended to be prescriptive: 1) the DNSSEC community can wait until it is significantly clearer when a CRQC can be created. This way, it will be able to refine its choices on the adoption of post-quantum cryptography (PQC)-based signature algorithms that are best suited to the DNS; 2) timelines and decision-making for the choice of algorithms used for PQC key exchange in the TLS protocol should not be influenced by choices and requirements demanded by the DNSSEC. Lastly, since the major concern of the CRQC community is the privacy of private information transferred over the network

via TLS, both in the short and long term, OCTO argues that the DNS community should follow the choices of the TLS community regarding applications in the emerging DNS-over-TLS and DNS-over-HTTPS protocols.

ICANN will, of course, keep monitoring the progress of these new algorithms and help the Internet community understand their importance.

(for more informations)

Quarter From the World

# ICANN's input to the EU toolbox against counterfeiting

by Arianna Del Soldato and Adriana Lazzaroni



the creation of a package of measures and tools (so-called Toolbox) to improve European anti-counterfeiting policies. The overall objective of the EU Toolbox is to develop a consistent, effective and coordinated action against online and offline counterfeiting by clarifying the roles and responsibilities of right holders, intermediaries (i.e. social media, domain name registries/ registrars, payment services and transport and logistics industries) and national and EU public authorities in a spirit of mutual cooperation and data sharing.

To this end, the European Commission recently launched a public consultation and opened a "Call for Evidence" inviting all public and private stakeholders to submit inputs for the creation of an EU toolbox against counterfeiting. Last April, ICANN also took part in the public consultation and provided feedback, especially on online counterfeiting aspects.

Besides providing information about its mission and mandate, ICANN's response to the "Call for Evidence" provided evidence of its specific role in developing and enforcing Domain Name System (DNS) policies globally. Although counterfeit sales associated with malicious domain names represent only a small part of the overall counterfeiting issue, the problem certainly cannot be ignored. It mainly affects generic top-level domain names (gTLDs), as registrant data verification practices employed by an increasing number of European ccTLD operators have helped significantly reduce cases of DNS and domain abuse associated with counterfeit goods compared to most gTLDs.

As for these latter domains, ICANN also summarised the most important policies and tools adopted, which address a) the protection of intellectual property rights, b) dispute resolution mechanisms on gTLDs that are of interest to intellectual property owners, and c) policies adopted for the control and correctness of domain name registration data.

ICANN acknowledges the complexity of the topic and the need to put in place effective measures against counterfeiting and the protection of intellectual property and brands online, and concludes the report by defending practical and contract mechanisms currently in place to mitigate abuses and intellectual property infringement cases such as the "Domain Abuse Activity Reporting System (DAAR)" and the "Domain Name Security Threat Information Collection and Reporting (DNSTICR)" programme, but at the same time states that further surveillance actions are to be considered outside its mandate.

In fact, ICANN's Statute states that its role shall not include regulating online content and provides specifically that "ICANN shall not regulate (i.e., impose rules and restrictions on) services that use unique Internet identifiers or on the content that such services carry or deliver...".

Although gTLD Registries and Registrars, as online intermediaries, may play a role in this area, activities specifically focused on content disseminated online are outside ICANN's mandate. Furthermore, ICANN states in its report, policies adopted and contracts in place with gTLD Registries and Registrars comply with regulations and laws in force, and even where necessary, it is not ICANN's role to enforce laws, as this is the exclusive prerogative of national governments.

Its task is rather that of enforcing the agreements and policies for the creation of "rough consensus" that are developed and defined in ICANN community's multiple constituencies.

(for more informations)



21-22 September 2022

RIPE

RIPE Days, Tashkent (Uzbekistan)

21-28 October 2022

RIPE 85, Belgrade (Serbia)

#### 20-22 June 2022

EuroDIG 2022, Trieste (Italy)

#### 30-31 July 2022

OARC 38, online event

#### 25-27 October 2022

IMC, Nice (France)



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