MIX.

ANNUAL REPORT

2021

ANNUAL REPORT

2021

"MIX looks to the future with optimism and awareness"

- Alessandro Talotta -

2021 was a year of growth for the Internet world, data development continues to show double-digit slippages and infrastructures, both for bandwidth deployment and for the development of cloud services, help to speed up the digitalization of our country.

Video takes up most of the bandwidth, nationally and internationally, and the most highly capitalized companies continue to be American and Chinese.

The digital finance presents the greater growth in the Market Place (for ex. Delivery Hero, Just it, Takeway), Large Cap e-commerce (Amazon, Alibaba, Ebay), e-commerce (Asos, Ocado, Farfetch, Hello Fresh), Classfields (Autohome.com.cn, Scout24, Zillow). The selling of journeys online is still affected by the COVID-19 and is still recording negative statistics.
The number of e-commerce users have crossed the 33 million people in Italy, against the 80% of users in China, and a number of Internet users of 190 million in France, Germany and Italy, and one billion in China.

Therefore, the biggest shipment hub in the world results to be mostly Chinese, except for Rotterdam.

So, the numbers at a global scale require a comparable dimensional relationship, where the dimension in scale plays a fundamental role, especially in a competitive view.

That's why is important, in Europe, to actualize industrial politics where every single country have the exact same goals, and to realize it with determination and confidence.

The Digital Agenda 2030 is a great opportunity to implement the necessary investments to accelerate the digitalizing process of European countries, Italy must go faster in order not to fall behind and, especially, give strategic priority to infrastructure investments.

In our sector each one must do his part, in this, MIX will be called to perform a leadership role, becoming to be a strategic reference for the development of internet and trying to be up to this work.

As network customers become increasingly demanding, working on quality and reliability will be critical.

In 2021 MIX gathered its resources to improve the processes and to manage the asset of the business. In economic terms the earnings are creasing, and the costs results to be in line with the best practice.

To sum up, the principal management drivers have been the efficiency and the financial management in the payments and takings, guarantying economic and financial solidity.

For example, MIX was able to manage a significant increase in energy costs. When looking at the price and volume delta, costs were doubled, if compared to the previous year.

The expense, related to the improvement of the processes, are to be considered as structural, and this will guarantee a constant bigger level of efficiency.

Looking at the past years, the investments are growing and destined for the technological enhancement of the performance and of the profitability indicators.

MIX at the end of 2021 is stronger and more solid, this will help build the future of the company in a more serene and sustainable way.

ALESSANDRO
Executive President and Chairman

IDENTIKIT

• Leading Italian IXP, founded in 2000, long standing history of service

• Highest concentration of connected networks in Italy

• One of the few European IXPs equipped with its own datacentre

• Carrier-neutral and data centre-neutral

• Interconnection services available at 9 different datacentres in Italy

• Authoritative resource for Italian Internet traffic statistics & trends

IN NUMBERS

358
Connected networks

1.7+ Tbs
Traffic Peak

2
Data Centres

#18
World IXP*

75%
Italian IXP traffic

9.4+ Tbs
Connected capacity

16
Shareholders
including the main Italian TELCOs

*For ASNs
Source: IXPDB by Euro-IX

euro-IX

MIX is one of the founding members of Euro-IX, the European Internet Exchange Association, whose purpose is the coordination, the exchange of knowledge and experience and the development of harmonisation activities between the IXPs of different countries for the benefit of the entire European Internet community.

open hub med

With approximately 150,000 km of submarine cables reaching Sicily, Italy is the natural hub for the "wet nets" of the Mediterranean. Exploiting this strategic positioning to strengthen Italy's role in the international telecommunications sector was the driver that led to the establishment of the Open Hub Med (OHM) Consortium.

The Consortium was founded by MIX together with other important national and international players.
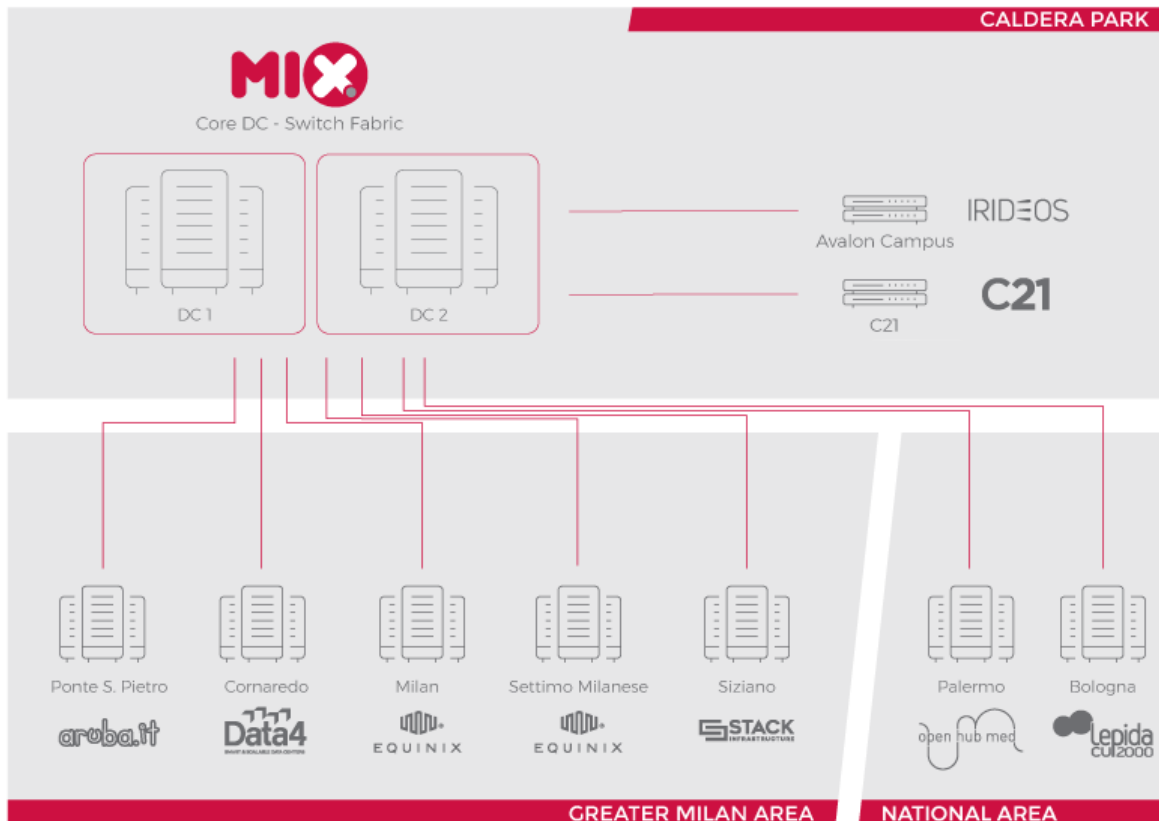
CERTIFICATIONS

In keeping with its role as an essential component of the Italian Internet infrastructure, MIX maintains a high level of vigilance in relation to all aspects of reliability and security.

Confirming the level of excellence of its services and infrastructures in these areas, MIX has obtained an ISO27001 certification, a standard issued by the

International Organization for Standardization (ISO) which covers all the aspects of security of IT systems and processes. MIX is the first IXP to overcome the controls required by ISO certification.

MIX has also obtained the OIX-1 certification, currently issued to only 5 IXPs worldwide by Open-IX. This certification defines the standards of performance, reliability and resilience for large-scale interconnection services.

One of the key factors in achieving these certifications was the complete control of the two Data Centres built in the Caldera campus. The Data Centres are managed in total autonomy by MIX, entirely under its direct responsibility.

SERVICES

- PUBLIC PEERING
- PARTNERSHIP PROGRAM
- CARRIER HOTEL
- MEET-ME ROOM
- PRIVATE NETWORK INTERCONNECTION (PNI)

Peering Services

As Italy's leading Interconnection platform, MIX provides a number of solutions to meet your network needs.

Peering Services enable all networks to interconnect with one another to exchange internet traffic.

Interconnecting with other networks can be achieved in the following ways:

Public LAN Peering
The MIX Public Peering service offers a direct connection to exchange Internet traffic with a multitude of connected networks on the MIX high-speed layer 2 interconnection platform.

Private LAN Peering
This service facilitates interconnections with connected networks at MIX to establish an interconnection agreement via a dedicated private VLAN with another specific network operator.

Private Network Interconnection (PNI)
This service allows two connected networks to establish a dedicated and direct connection between their equipment within the MIX datacentre.

Carrier Services

MIX offers Carrier specific services at the MIX Datacentre where the MIX Core switches are located. Carriers are able to provide telecommunications services to other entities through their own transmission equipment or optical terminations at this MIX managed Datacentre.

Within a specific, protected part of the colocation facility with guaranteed functionality, MIX carriers are ideally positioned to offer:

- · Interconnection services to operators connected on the MIX peering LAN
- · IP-Transit services to the wider Internet
- · Interconnect their equipment (active or passive) to other MIX connected networks located in the datacenter

All of this easily, quickly and at a fair cost.

PARTNERSHIP PROGRAM

The Partnership program is designed to facilitate the connection of networks to the MIX peering network from locations other than where MIX has its physical switches installed.

To better cover the different needs and offer more opportunities to partners, two different partnership models have been developed:

· The **Reselling Program** is a Qualified Service of the Reselling Partner to bring networks (Reseller Customers) to MIX through a one-stop-shop agreement.

· The **Pooling@MIX Program** is a Best Effort Service of the Pooling Partner to connect networks (Pool Element) to MIX on a pooling port.

The elements common to both of these services are as follows:

· Reseller Customers and Pool Elements peer to MIX independently and they appear on the MIX connected network list.

· First level support is provided by the Partner.

· L2 interconnection support to the LAN peering is provided by MIX

· Colocation services of client devices at MIX locations are not allowed.

MIX PARTNERS

RESELLER PARTNERS

Airbeam

China Unicom (Europe) Operations Ltd.

Fiber Telecom

GTT Italy

BSO Network Solutions

Redder Telco

Retelit

RETN

STACK EMEA

Telecom Italia Sparkle

POOLING@MIX PARTNERS

BBanda

Briantel

BSO Network Solutions

Fiber Telecom

Internet One

Lepida

Net Global

Sirius Technology

Sysway

Wifiweb

DATACENTRE SERVICES

The MIX Datacentre is an optimal solution for housing network and transmission equipment intended for interconnecting at MIX.

The MIX Datacentre has been divided into four separate and specific areas to offer a tailored solution and to professionally manage both requested interventions by the MIX NOC staff, for connected network devices and for the arrival of newly connected networks.
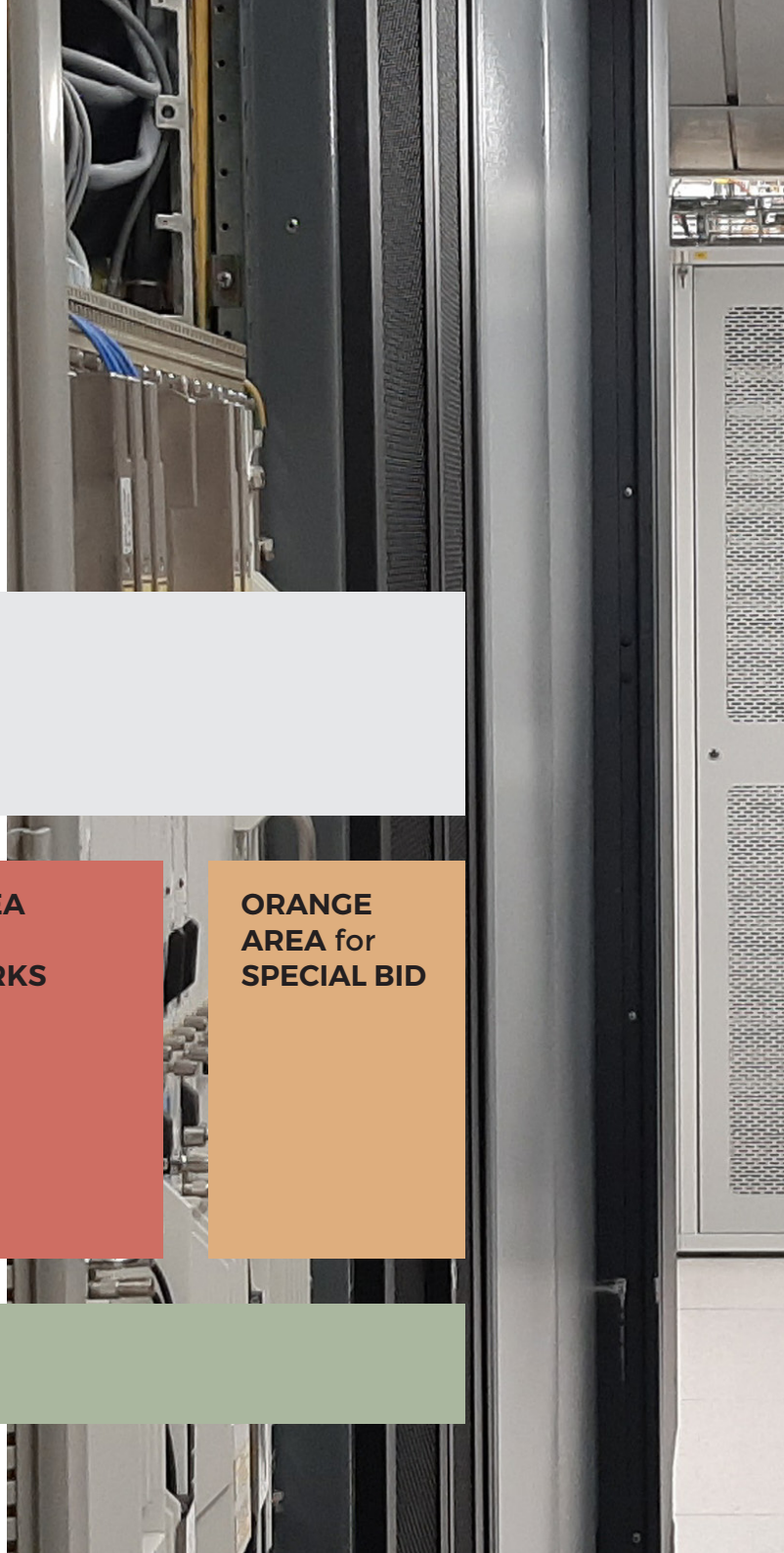
SWITCH FABRIC

BLUE AREA dedicated to **MEMBERS**

RED AREA for **TLC NETWORKS**

ORANGE AREA for **SPECIAL BID**

GREEN AREA for **INCOMING FIBERS**

BENEFITS OF MIX

- Enhanced network performance

- Reduced network latency

- Improved customer and end user connectivity experience

- Reduced IP transit costs

- Better insight and control over routing and Internet data flows

- Increased redundancy and resiliency of your network connectivity

- Direct connections with other networks in a secure environment

- Highly reliable connectivity platform adhering to the highest technical standards

INTERCONNECTIONS

280.000+
Announced
IP network prefixes

2.600+
PNIs

358
Connected networks

32
New customers

CONNNECTED NETWORKS

CONTENT DISTRIBUTION NETWORKS

GAMING COMPANIES

INTERNET SERVICE PROVIDERS

TRANSIT PROVIDERS

CLOUD PROVIDERS

CARRIERS

ON-DEMAND CONTENT PROVIDERS

PUBLIC ADMINISTRATION GOVERNMENT

LIVE CONTENT PROVIDERS

RESELLERS

16

SHAREHOLDERS

AIIP - Associazione Italiana Internet Providers	**11.47%**
BT Italia S.p.A.	**11.09%**
Clio S.p.A.	**2.49%**
Eolo S.p.A.	**15.00%**
Fastweb S.p.A.	**1.12%**
Irideos S.p.A.	**15%**
It.Net S.r.l.	**5.37%**
Orange Business Italy S.p.A.	**1.12%**
Retelit S.p.A.	**3.28%**
Sequenza S.p.A.	**3.37%**
Telecom Italia S.p.A.	**11.09%**
Tiscali Italia S.p.A.	**2.25%**
Tiscali Financial Services SA	**1.12%**
Utility Line Italia S.r.l.	**3.98%**
Vodafone Enterprise Italy S.r.l.	**2.25%**
WindTre S.p.A.	**9.97%**

BOARD

Alessandro Talotta
Executive President and Chairman

Eugenio Contatore
ITNET

Vittorio Figini
Utility Line Italia

Marco Fiorentino
A.I.I.P.

Guido Garrone
Eolo

Andrea Giovanardi
BT Italia

Alberto Maria Langellotti
TIM

Roberto Loro
Sequenza

Andrea Podda
Tiscali

Federico Protto
Retelit

Vincenzo Scarlato
Irideos

Giulio Signorelli
Wind Tre

PEERING CREW

1	2	3	4	5
Giovanni Verzotti	**Cristiano Zanforlin**	**Martina Mordà**	**Daniela Cipriani**	**Giorgia Montano**
Accountant	Chief Commercial Officer	Inside Sales	Marketing & Communications Mgr	General Secretary & Administration Assistant

6	7	8	9	10
Simone Morandini	**Alessandro Talotta**	**Michele Perrucci**	**Monica Arensi**	**Eugeniu Iusca**
Service Development Manager	Executive President & Chairman	DC Manager	General Secretary & Administration Mgr	NOC

11	12	13	14	15
Mauro Magrassi	**Gabriel Ramini**	**Gianmarco Clerici**	**Gaetano Tomasi**	**Leonardo Schiavini**
Chief Technical Officer	IT Manager	Network & Security Manager	NOC	NOC

FINANCIAL RESULTS

EBIT

	2017	2018	2019	2020	2021
EBIT	€386.705,00	€288.129,00	€228.660,00	€647.525,00	€718.785,00

EARNINGS

	2017	2018	2019	2020	2021
EARNINGS	€ 3.362.251,00	€ 3.755.583,00	€ 4.059.288,00	€ 4.707.319,00	€ 5.395.864,00

COSTS

- 40.19%
- 10.59%
- 29.25%
- 15.35%
- 2.48%
- 2.14%

Legend:
- Human Resources
- Raw and consumable materials
- Use of third party assets
- Services
- Depreciation and write-downs
- Other

INVESTMENTS

- €666.676,00 (2017)
- €477.841,00 (2018)
- €458.582,00 (2019)
- €671.771,00 (2020)
- €942.368,00 (2021)
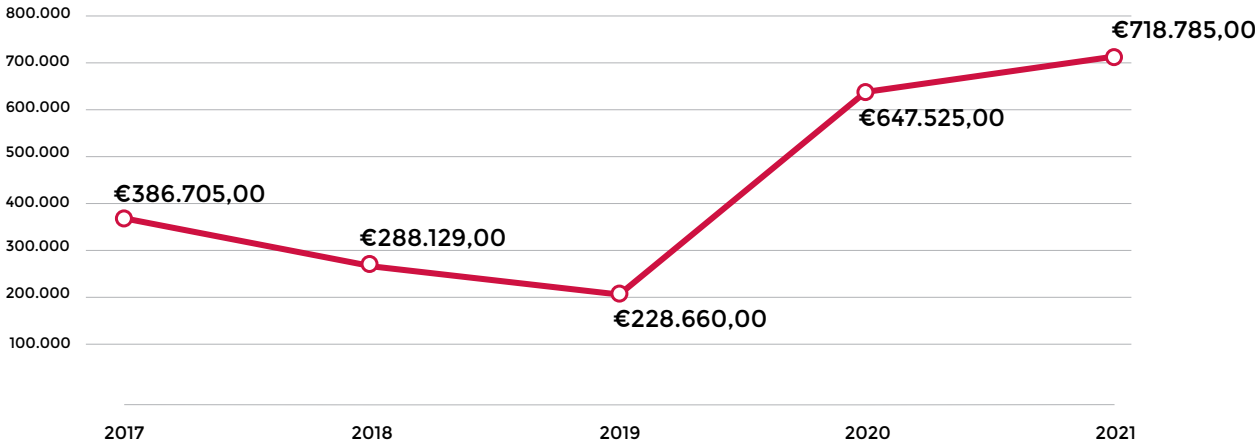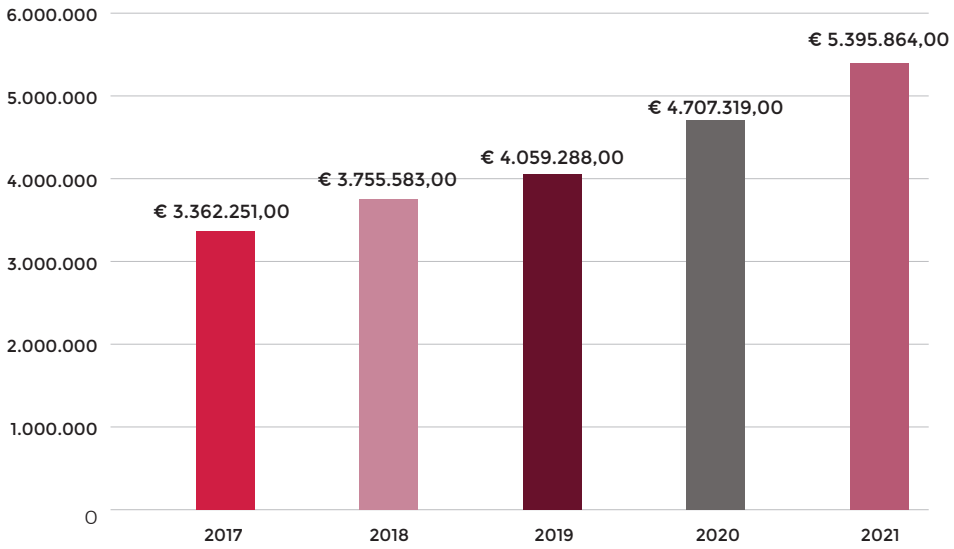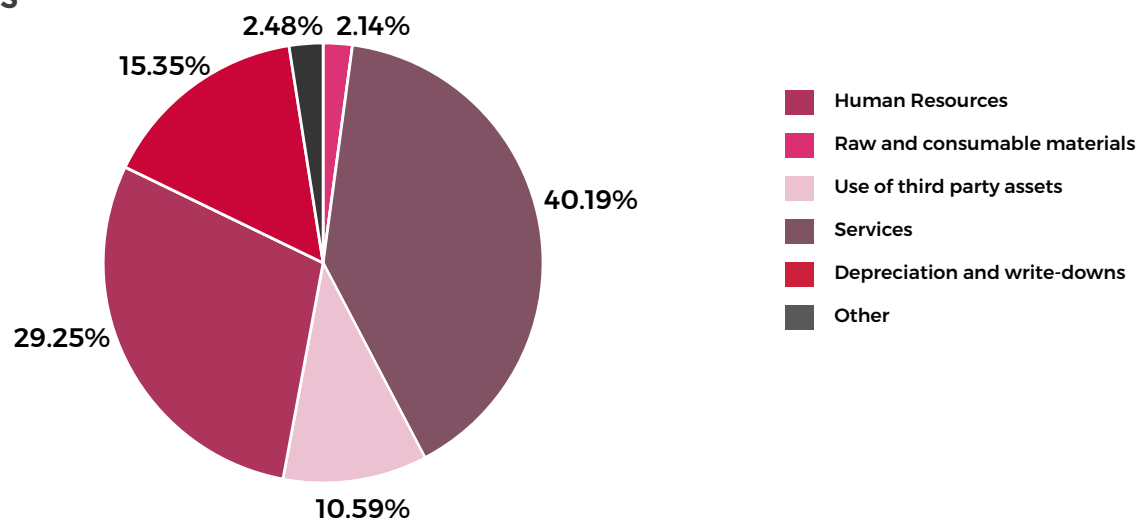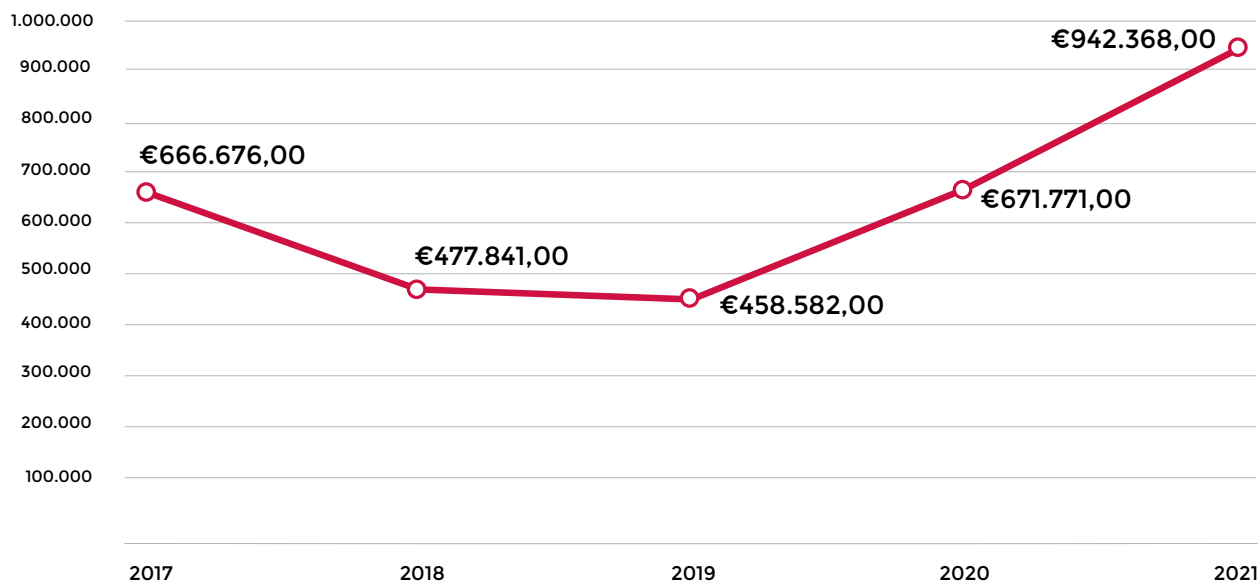
KEY FACTS
2021

ALESSANDRO TALOTTA

The shareholders meeting, on 29 April, elected Alessandro Talotta as the new president of MIX. Replacing Joy Marino, who has been the guide of MIX since its foundation in 2000.

Talotta, had covered the role of vice president in MIX for two years, he is AD of Interxion Telecom S.r.l. and he boasts a 30 year journey in the interconnection field with important roles in many different companies like, Itatel, TIM, Wind Infostrada and Sparkle, where he was the chairman and the manager director.

"It was an honor for me to work for MIX for the past 20 years, with a so professional and committed team" declared Joy Marino. "In quality of President I had the chance to make MIX one of the most reliable and stable internet exchange. Since the internet continues to have an enormous impact over all the new society aspects, I see at the future of MIX with faith, hoping to see it grows and serving the internet community for many years to come"

Alessandro Talotta and all the Board of Directors of MIX gathered around to thank Joy Marino for bringing the society to the actual level helping to create, for the Italian and international internet community, which operates in our country, an essential asset to the functioning of the nets and digital services.

MIX PALERMO

MIX has created a peering environment dedicated to operators connected locally in its PoP activated in Palermo in 2017 in Open Hub Med, of which MIX is a co-founder.

MIX Palermo facilitates and encourages the exchange of data and guarantees the best latency possible. This technological choice is fundamental at a time when MIX Palermo has directly connected its first OTT network and connecting content operators whose delivery requires local platforms to reduce access times.

Thanks to the connection of the Sicilian PoP with the core of MIX in Milan, all operators connected to MIX Palermo can also enjoy direct peering with the over 350 connected networks on the MIX public LAN in Milan.

MIX Palermo represents the first remote PoP of MIX with its own technical autonomy. It is a solution with the great advantage of ensuring the data exchange and access to content of local connected operators takes place on the shortest path.

The unequivocal trend of decentralized network services, enabled by increasingly performing and high-speed access technologies, cannot ignore the need to create guaranteed interconnections at a local level. Unique in southern Italy, the growth of the Open Hub Med, MIX has recreated the development model established in Milan and now strengthens it by giving even more meaning to the motto "keep local traffic local", a tacit agreement that MIX has provided its customer for over twenty years.

THE NINTH MIX POP DI MIX IS IN EQUINIX ML5

MIX announces the activation of a new Point of Presence at ML5, Equinix's Settimo Milanese data center, near Milan.

The new MIX node in ML5 further increases the coverage of the public peering network already present in major data centres across the country.

The PoP connects customers at 100 Gbps and further expands the offering o MIX-IT's peering LAN network, to which over 350 networks. It is now possible to connect to MIX in ML5 with 10GE or 100GE ports, and several MIX switches to balance IP traffic at full wire speed. Like all primary MIX nodes, the architecture is designed to ensure total reliability on different paths for all customers in ML5 who want to connect to the peering LAN with redundant connections-easily meeting the needs of content owners and distributors.

+1.7 Tb/s

**Internet traffic peak record on 1 December at MIX during
the evening matches of the Serie A football championship.**

Extraordinary facts

LIVE STREAMING FOOTBALL: TRAFFIC THROUGH THE ROOF

With the broadcasting of the A series of football on streaming platforms, the prime time for the traffic data doesn't have the same trend during the day, but coincides with the play time and, because of that, changes the pattern: we are not dealing with on demand contents anymore, but with live events.

Immediately after the starting whistle, MIX registered a significant growth, approximately a Terabit, in just few minutes. Is an amount of data, which can't be compare to the on demand contents, and which involve all the systems that handle the fruition of the content to take decisions on where to direct the traffic in restricted minutes, with the net that has to adapt more quickly and managing a traffic spike never seen before at MIX.

In MIX the traffic increases of the 40% during a match.

MIX SWITCHING FABRIC

A talk with Gianmarco Clerici, MIX Network & Security Manager

Striving for service excellence is a mission at MIX, but what most contributes in positioning MIX as the leading Italian interconnection platform is a state-of-the-art switching fabric with a focus on performance and security.

Gianmarco has engineered a bespoke system capable of handling the interconnection demands of Italian and international network operators on the MIX interconnection platform.

A crucial part of the customer journey, he is responsible for connecting all MIX customers to the interconnection platform. Once onboard, every MIX customer interacts with Gianmarco, his long-standing commitment to MIX has exposed him to all aspects of technical operations making him an expert in the IXP market.

Gianmarco highlights, "The greatest demand on MIX these days is driven by gaming and live streaming content in particular sporting events such as football. The quality of live content with the lowest latency and highest performance is a key service element. This fits well with the focus MIX has on providing performance, security and value to its customers." Gianmarco comes into his element when confronted with the challenge of solving technical issues that may arise. The pressure can be high but he finds satisfaction in approaching the issue, reverse engineering and identifying the root cause of the problem, a skill that contributes to a service uptime of absolute excellence for the MIX peering fabric.

He led the initiative that resulted in ISO/IEC 27001 and OPEN-IX OIX-1 certification for MIX, a rather unique achievement for a European IXP operator.

MIX carries out an extensive evaluation before deploying any new hardware in its infrastructure. MIX has recently undergone a change of vendor for its interconnection switching fabric, a large undertaking when striving for a zero-disruption rate of service in deploying new technology.

"As Italy's leading IXP its vital to monitor technical developments to ensure the deployment of state-of-the-art technology. Latency, performance, security, power consumption, and maintenance times are all critical factors of any infrastructure upgrade at MIX," said Gianmarco.

What are the challenges ahead for leading IXPs? Network operators demand network agility, with direct connections to partners and providers on demand, fast and in an easy and secure manner.

"It's all about maintaining a high level of service, managing larger volumes of traffic and port technology with a future proof switching fabric and providing services that add value for MIX customers. Stability and a smooth transition to any new technologies is crucial in this business," he added.
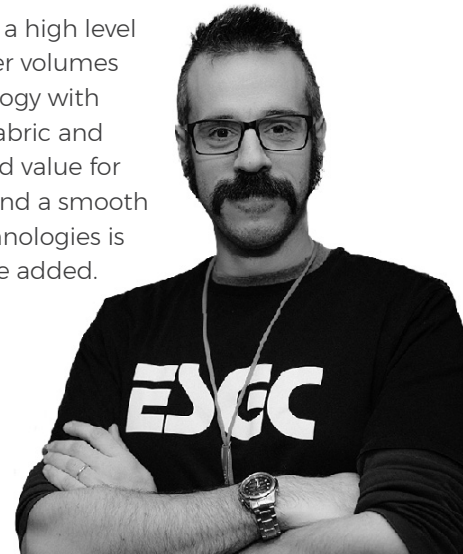
MIX DC2 DATA CENTER IS FUTURE PROOF!

A talk with Michele Perrucci, MIX Data Center Manager

The increase in Internet traffic and the number of new MIX customers recorded in the last two years has led to the need to further expand the capacity of the MIX datacentre, both to meet current needs and to make the MIX infrastructure ready for future ones.

MIX has two data rooms at its headquarters in Milan Caldera, known as DC1 and DC2: the expansion specifically concerned the DC2 room.

Obviously, efforts like this need people and behind the coordination of all DC2 expansion works is MIX's Data Center Manager, Michele Perrucci, who has worked at MIX for over 20 years. Michele oversees all operations relating to the datacentre: his main activities include the implementation and management of the DC areas as well as the important task of assisting MIX customers during access interventions for installations, cabling and operations on specific customer projects. Michele also evaluates the technological aspects related to the infrastructure for the further development of DC MIX.

"The needs of our customers are always a top priority for us. All of MIX's NOC has always been the best to ensure that our data center has both the capacity and the technical specifications required by our customers. "Michele is known for being very precise and everyone recognizes that he always has the best of himself to reach the objectives within the defined timescales and with the highest quality level.

He is passionate about everything related to the world of data centers from future technological developments: cabling and fiber are his daily bread.

"We are very satisfied with the feedback we have received over the years from our customers: we can claim to provide a quality service at 360 degrees. We always strive to take care of customers from the first technical contact to the activation of their services. Some time ago one of our customers called us "the peering shop" because small shops are synonymous with high quality. I've always liked this definition", Michele added.

The expansion of DC2 was born as an extension of DC1. The initial logic has been overturned: from a single open space environment, we have moved on to smaller independent rooms with 20-24 racks plus another with 12-14 racks. With the creation of the DC2 we have set up environments with more flexible and capacious racks, giving our customers the possibility of installing the latest generation machines. Thanks to MMRs, MIX is able to offer rack space with maximum flexibility, drastically reducing delivery times. The expansion of DC2 therefore allows MIX to offer its customers additional redundant and secure colocation spaces.

MIX NEW CUSTOMER PORTAL

A talk with Simone Morandini, MIX Service Development Manager

One of the latest projects managed by Simone Morandini, Service Development Manager and well-known face of MIX, is the new release of the Customer Portal.

MIX has in fact released a completely renovated customer portal designed with the aim of offering a better user experience when using MIX services.

"We have listened to our customers: the features of the new customer portal have been designed to meet their needs, to always provide the best possible service," said Simone.

Simone is responsible for the MIX customer interfaces on the interconnection platform and for monitoring all activities on the peering LAN. It takes care of the internal database which is the heart of all MIX information, including interconnect resources, service and colocation space, as well as database automation processes.

Simone is also a true populariser: with great passion he explains the importance of MIX activities for the functioning of the Internet in Italy and is the driving force behind MIX'COOL, the educational project designed for secondary school students, which brings young people closer Italians to the reality of Internet Exchange Points (IXP) and explains their role in the process of data exchange on the Net.

What are the first evidences from the release of the new Customer Portal?

In this release phase, the information from the previous portal has been retained but is managed by different back-end software, with improved features that include:

More control by the customer: MIX customers will be able to create their main account and additional accounts on the portal, in total autonomy.

Improved statistics: MIX has completely rewritten the software that generates the statistics and the traffic data collection engine is all new.

"MIX customers will soon be able to find more new features and functionalities designed following the feedback we have received from them. A focus group of 30 customers tested the beta version of the latest release, providing positive feedback on the renewed Customer Portal but also expressing appreciation for being included in the project", Simone added.

Bye bye 1GE port!

MIX announces that starting from 1 January 2022 it is no longer possible to activate new 1 GE ports. The news is welcomed by the operators.

Why join MIX?

MIX produces a series of video interviews with its best customers, to explain the advantages of interconnection in the main Italian IXP.

The interviews are available on the MIX YouTube channel.

EVENTS
2021

MIX events

SALOTTINO

The Salottino 2021 virtual edition took place on 11 May. We discussed network monitoring with Peter Cohen, Head of Network Partnerships RISKIQ, cybersecurity with Luca Deri, Founder of NTOP and IPv4 address exhaustion with Valentina Vergani, Head of Network Achitecture Eolo.

In conclusion, Mauro Magrassi, CTO MIX, outlined an overview of the traffic trends in European IXPs during the pandemic, before starting a lively Q&A session.

IPv6 3 luglio
6 LOTTINO

MIX events

6LOTTINO Powered by MIX

6lottino took place on 6 July 2021, an online event to take stock of the implementation of IPv6 in Italy with authoritative national experts.

This meeting was promoted by MIX, following the interest found on the topic of IPv6 during the Salottino in May.

To offer participants a discussion that is as constructive and interactive as possible, a special "program committee" was set up with Italian experts from various sectors, with the aim of involving network operators and ISPs in the debate.

International events

BACK TO LIVE EVENTS!

ROLL THE DICE

On 29 November, the Salotto was held, the annual event on technology and surroundings, promoted by MIX: an opportunity for informal discussion and reflection on issues related to the Network, able to involve company directors, technical managers, experts and technology enthusiasts as well as industry journalists.

The fifteenth edition of the most anticipated B2B event by TLC operators in Italy took place in phygital mode: participants had the opportunity to participate in presence, albeit in a slightly reduced number compared to previous years, or by connecting remotely. As already happened in the 2020 edition, the Salotto was then broadcast in live streaming and the agenda of the day was developed to all intents and purposes as an interactive schedule, usable through the MIX Salotto app, to encourage involvement and opportunities. networking between participants, both face to face and remotely. The app functioned as a single interface through which the delegates were able to access all live content, review the videos of the recorded sessions, interact with each other, with the speakers, sponsors and with the various protagonists of the event.

The morning panel, moderated by Enrico Pagliarini of Radio24, was preceded by a keynote speech by Gerard Pogorel, Professor of Economics and Management-Emeritus, ENST - Telecom ParisTech, entitled

"European digital strategic autonomy, challenges and opportunities". A debate followed by the following representatives of the institutions: Anna Ascani - Undersecretary of the Ministry of Economic Development; Vincenza Bruno Bossio - Deputy PD, Transport and TLC Commission; Massimiliano Capitanio - Deputy League, Transport and TLC Commission; Luca Carabetta - M5S Deputy, Productive Activities Commission; Nunzia Ciardi - Deputy Director of the National Cybersecurity Agency; Daniele Leodori - Vice President of the Lazio Region; Giorgio Mulè - Undersecretary of the Ministry of Defense; Adolfo Urso - COPASIR President. On the industry side, there were speeches by Franco Bassanini - President of Open Fiber; Massimo Palermo - Country Manager Italy and Malta Fortinet; Marco Pennarola - Head of Marketing Fastweb; Nicolò Peri - CEO Fiber Telecom; Federico Protto - CEO Retelit; Mirko Voltolini - VP Innovation

Colt. In the afternoon, however, three technical in-depth sessions were held on "Routing and Network Security", "National Cloud" and "Live Content Delivery" organized by three program committees of volunteer experts. The three themes - and this is the novelty of Salotto 2021 - were chosen through a survey launched in June among the members of the MIX community who were also asked to apply to collaborate in the organization. The three sessions were attended by well-known international experts including Marco Aldinucci - full professor at the University of Turin, Vittorio Trecordi of the Milan Polytechnic, Gaurab Raj Upadhaya - Head of Global Video Delivery Amazon Prime Video, Kotikalapudi Sriram - Senior Engineer US NIST.

Participants then voted on their favorite session and, as always, asked questions and interacted with the experts. At the end of the works, a pleasant surprise

not only for those who will be in attendance but also for those who have followed the event remotely: the show cooking of the Cerea brothers of the three-star Michelin restaurant "Da Vittorio", who showed how to prepare a perfect Milanese risotto.

The day ended with an aperitif accompanied by live music from a manouche team.
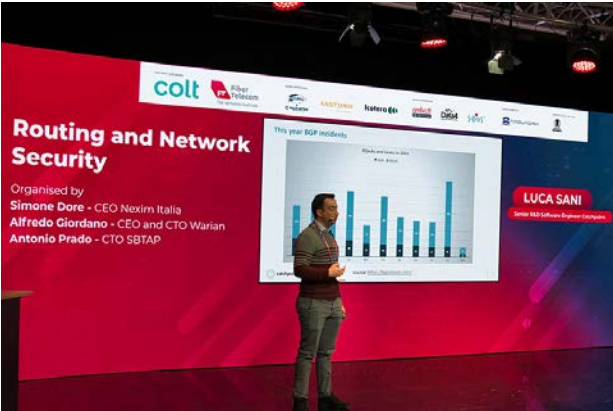
MIX'COOL IS BACK AT THE PISA INTERNET FESTIVAL

For the second consecutive year, MIX, in line with its role as a fundamental "glue" and "facilitator" of the Net, has in fact chosen to support the Tuscan event which aims at spreading knowledge about the Internet world.

The 2021 edition of the Internet Festival focused on the concept of #Phygital, that is the process of hybridization between the physical and digital worlds which, with the pandemic, has undergone a significant acceleration.

But how does the Internet work?

To answer this question, MIX has developed the MIX'COOL educational project which, as already in 2020, has been included by the scientific committee of the festival in the schedule of the T-Tours, the training proposals on the themes of the Internet and digital innovation, dedicated to the youngest. MIX'COOL is aimed at the fourth and fifth grades of secondary schools with an IT focus, primarily ITIS but also scientific high schools, and aims to tell children what an IXP is and how it works - a data exchange point, which MIX is precisely -, and its role in the functioning of the Internet.

The project, with the participation of over 4200 students and teachers since 2012, from the 2020 edition is carried out with a totally online formula that includes an interactive video lesson lasting about 90 minutes, on the Google Meet or Zoom platform. During the meeting, students and teachers, led by Simone Morandini, MIX Service Development Manager and project representative, retraced the concepts learned in the class, seeing a practical application in the MIX datacentre.

To make the experience more engaging, the video "Journey to the heart of the Net" was also shown, a fascinating virtual tour in the MIX datacentre, to discover the "backstage" of the web, and the students were invited to participate in a game quiz.

IN NUMBERS

582 students

22 classes

12 schools

INTERNET FESTIVAL 2021
FORME DI FUTURO

MIX'COOL
EST. 2000
16004
MILAN INTERNET EXCHANGE

#PHYGITAL
WWW.INTERNETFESTIVAL.IT
MIX.

Via Caldera 21 - Building Orange/3 - 20153 Milan, Italy

Tel. +39 02 40915701 | info@mix-it.net | mix-it.net

C.F./P.I. 13036360157