

Creating a better future

PROSPERITY



- Employment generation
- Innovation of products and services
- Community and social vitality

A company's role in furthering economic, technological and social progress for its communities.

Digital operators

The key to sustainable growth is ensuring the power of connectivity and digital services to transform outcomes is available to all. Our six digital operators provide these to 157 million customers for 1440 minutes each day, every day. Together, we are enabling sustainable futures through services that reach beyond entertainment to empower opportunity across financial services, healthcare and education.

Financial services

VEON's digital financial services meet a critical need, transforming the traditional banking model in societies where low levels of financial inclusion remain a barrier to growth and social change. In four of our six markets, more than half of the adult population has no bank account. By delivering financial services via smart and feature phones, our digital operators can play a leading role in ending financial exclusion in the communities they serve.

JazzCash, our market-leading digital financial service in Pakistan, has pioneered the development of digital banking in a nation where the reach of traditional banks remains limited. Over 80% of Pakistan's adult population lack access to a bank account; a proportion that is higher for women who face additional social challenges to financial inclusion. As of the end of 2022, JazzCash serves the financial needs of over 16 million customers, providing a payments network that extends to 250,000 merchants and facilitating between 50,000 and 60,000 microloans each day, helping to sustain livelihoods at a time of rising living costs.

Beeline Kazakhstan has pioneered the nation's first digital payment card, Simply, which links to a customer's phone number to act as an electronic wallet and premium digital Visa Platinum card. Simply integrates with Apple Pay, Samsung Pay and Garmin Pay and currently serves around 250,000 active users monthly.

In Uzbekistan, Beeline has launched Beepul, an innovative digital payments service developed by our digital developer subsidiary in the country, BeeLab. In September 2022, BeeLab was granted a licence by the Uzbekistan Central Bank to expand the reach of Beepul. Now, customers of any network pay for around 500 services nationwide from their smartphone – a major step forward in the development of the nation's digital payment ecosystem.



Beeline has launched Beepul, an **innovative digital payments service** developed by our digital developer subsidiary in the country, BeeLab

Creating a better future continued

Female entrepreneurs get helping hand with Jazz



With a population of almost 230 million people, Pakistan is the world's fifth-most populous country. The Global Wage Report 2018/19 states that women in Pakistan make an average salary that is 34% lower than men, furthermore women make up 90% of the bottom 1% of wage earners.

"If you wanted to open a bank account until about six months ago, you would need a male relative or guardian to submit the documents on your behalf. You would need proof of income, and you would need to fill out a lot of very detailed forms in order to be able to get access to a bank account," says Ziana Sakhia, CEO and co-founder of Pakistan-based online marketplace Bechlo. "Now, thanks to initiatives like Jazz Cash, women can set up digital bank accounts without needing any male counterparts or any detailed documents proving a financial status."

Ziana launched Bechlo, which translates from Urdu as "sell it", on International Women's Day, 2021, with the tagline "Created for women, by women".

Bechlo is a virtual marketplace where people can shop through Instagram and Facebook. It features a one click checkout for payments, and the platform takes care of customer service, shipping and payments for the seller.

We are on a mission to make e-commerce easy, affordable and accessible for women across Pakistan. Internet access and smartphone ownership are still quite low relative to the entire population of over 220 million people, but the numbers are growing fast thanks to the efforts of operators like Jazz. Over the past three years about 25 million women have gained access to social media.

Finding inspiration

Bechlo is the culmination of what is now a 12-year career spent as an educator and entrepreneur. Ziana launched her first business, Fashioneastas.com, in 2010 as a Pakistan national living in Kuwait. "I noticed that among the large expat community there was a demand for Pakistani culture and clothing, but supply lines were limited. I set up Fashioneastas.com for designers in Pakistan to sell their products overseas, not just into Kuwait but around the world," she says.

In 2017, Ziana set up her second e-commerce company, which was a not-for-profit social initiative called The Green Bag Project. The idea was to create awareness about single use plastics.

"We came up with a line of reusable bags which were stitched by seamstresses in rural Pakistan," says Ziana, "The Green Bag Project exposed us to some of the issues people face in this part of the world such as unreliable (or non-existent) electricity supply or a shortage of equipment or resources. We realised that these limitations meant we could only do things on a small scale. That is when we had the idea for Bechlo. We could create a platform that would act as digital marketplace for women all over Pakistan that were making or reselling clothes."

Enabling entrepreneurship

In March 2022, Bechlo was announced as the winner of the National UNDP Jazz SDG bootcamp for social enterprises in Pakistan. This bootcamp was a part of the agreement inked between UNDP and Jazz in December 2020 with an aim to promote promising social ventures that are addressing the country's developmental challenges.

So far, this bootcamp and others like it have trained, mentored, and educated 201 nationwide social enterprises, including 159 female participants. The programme comprised 20 bootcamps nationwide by December 2022 targeting close to 800 youngsters and 50% women participation.

Taking part and winning the National UNDP Jazz SDG bootcamp for social enterprises also provided Bechlo with an opportunity to join Youth Co:Lab, the largest youth social entrepreneurship movement in Asia and the Pacific, along with providing access to mentorship opportunities and exclusive digital giveaways by Jazz.

Building the future

Ziana has big plans for the platform: "One of the biggest takeaways from the whole process is that it has given us belief in the project, that women-centred and women-led businesses can thrive," she says, adding, "Our aim is to digitise 100,000 female micro entrepreneurs by 2024. We want to help at least 25,000 women double their income."

Bechlo is helping women across Pakistan tap into the idea of doing business. "We are helping women who make clothing and jewellery at home and women who source their product from a wholesaler find buyers. We are even helping people who are reselling pre-loved items so that they do not

even need to know how to make or source product, they can just sell what they have at home," says Ziana

In the very short time since the launch, Bechlo is already making a massive difference to the lives of women in Pakistan by embracing the advantages that come with mobility and ever more affordable smartphones. According to data from the GSMA, in 2018 the mobile ecosystem generated 5.4% of GDP or USD 17 billion in value add. This is forecasted to increase up to USD 24 billion in 2023 due to productivity benefits from increasing mobile internet penetration, and no doubt the enablement of social enterprises like Bechlo.



Creating a better future continued

Education

Educational opportunities are among the most exciting needs we can serve through our digital services.

With around half of the combined population of our markets under the age of 30, the ability to access teaching and education resources through our networks has considerable scope to improve life outcomes for individuals in the developing markets we serve.

Covid-19 lockdowns demonstrated the ability to migrate learning online during extended periods when physical contact was not possible. Today, conflict in Ukraine is driving a similar need. Throughout, our digital operators have enabled teachers and students to stay connected with free access to e-learning, ensuring the continuity of education outside of the classroom.

Our digital operators are now expanding the scope and reach of online education through new edtech services tailored to a variety of learning needs, from elementary

schooling through to language skills, postgraduate study and vocational training.

Alongside free access to e-learning platforms that enable students to continue their education wherever they are located, Kyivstar TV now provides a wealth of educational programming for a variety of audiences in Ukraine. These range from preschool learning through to language courses and academy modules offering ICT skills in programming, online design and cybersecurity. By bundling these resources together with entertainment content, our goal

is to encourage learning through the interactive use of a single media platform designed to entertain as well as to inform.

Banglalink has partnered with TutorsInc to deliver a host of digital learning experiences via its MyBL app. TutorsInc is a conceptual learning platform offering a rich variety of study materials including online courses, one-to-one video sessions, live classes and study notes covering both national and international academic.

Developing digital skills

When Botir Arifdjanov founded the Astrum IT Academy in 2021, he was confident there would be no shortage of applicants. "The demand for software engineers has surged in Uzbekistan in recent years following incentives created by Uzbek Government for IT companies", said Botir, whose background as a tech entrepreneur and pioneer of edtech in Uzbekistan gives him first-hand experience of the role digital education can play in helping to realise the government's ambitious digital transformation agenda.

The Astrum IT Academy is one of a growing number of digital educational initiatives Beeline is proud to support in Uzbekistan. Working in partnership with Bilim Tech, a leading local edtech company, Beeline is helping Astrum realise its ambition to become Central Asia's largest IT academy. Through providing educational services and opportunities for students to experience real-life AI and big data projects, Beeline is sharing its digital expertise while helping to develop a talent pool vital to the future success of both our Company and the nation.

Developing digital skills is a key component of the government's digital Uzbekistan 2030 strategy. Launched in 2020, this ambitious project aims to achieve a transformation of the nation's digital capabilities in a variety of sectors, including telecommunications, public services and healthcare. As the nation's leading digital operator, Beeline is playing a leading role in helping to realise these goals, both through expanding the reach of our high-speed 4G data networks and nurturing local talent to grow the digital economy they enable.

This is important for a nation where a lack of local ICT employment opportunities has encouraged many to seek careers elsewhere. With over 50% of the population under the age of 30, there is a golden opportunity to equip individuals with these skills at an early age.

Beeline is investing in this process through our own operations. In August 2022, we announced our plans to build an international operations hub for VEON's IT and digital teams in Tashkent's newly-opened IT Park, boosting local ICT employment opportunities and enabling the sharing of our expertise with other ecosystem companies. We expanded our local BeeLab software team from 15 to 100 employees and are investing in a Beeline IT Academy in Uzbekistan to provide our own digital education hub across areas including IT skills and cybersecurity.

Away from the workplace and classroom, Beeline is pioneering new ways of developing edtech services, including the delivery of digital education materials through its new SINAPS platform.

"Education is a living thing; it evolves", says Andrzej Malinowski, CEO of Beeline Uzbekistan. "The objective of our industry should be to provide a platform with courses related to coding, programming and cybersecurity – allowing people to gain knowledge that is relevant and useful. This is especially important in countries such as Uzbekistan with a fast-growing younger generation."



Creating a better future continued

Digital transformation through education

"I cannot thank Beeline enough for this centre," says Eldar Juraev, a student at Kyrgyzstan's Jalal-Abad State University and a regular user of the city's new co-working centre, opened by VEON's digital operator in the country, Beeline. "In the classes, I have learnt about so many useful applications and financial services that will help me in the future."

Eldar is just one of the many young Kyrgyzstanis on whom the country is pinning its economic hopes. Citing digital transformation as a key development goal, Kyrgyzstan's 2018-2040 national strategy includes a pledge to enable the next generation to play a leading role in domestic and global digital labour markets.

But vision is not always matched by resources, especially in towns like Jalal-Abad which are far from the capital city, Bishkek. For the past five years, Beeline has been working to address this shortfall by creating co-working centres that provide students and budding entrepreneurs a bright, modern environment with free access to computers and Wi-Fi. Fully equipped with ICT equipment, furniture and support, these centres create havens for study, as well as providing spaces for fostering digital collaboration within communities.

Beeline is also offering masterclasses to co-centre users in order to share our digital knowledge with a generation which, like Eldar, is eager to learn. For classes on programming, project and productivity management, software have been provided to support young people in developing their skills, knowledge and entrepreneurial potential while strengthening the awareness of Beeline among a socially aware community.

For those who harbour ambitions to become ICT professionals, Beeline offers a variety of courses dedicated to providing vocational training to the nation's young adults. These draw on the skills of teachers and mentors from across the industry to provide education and mentoring in a variety of technology and digital fields, together with internship opportunities at Beeline. In total, around 360 participants were selected from about 1,600 applicants for these courses in the first year, 10 of whom were offered internships and two became successfully employed by Beeline.

Partnerships are another route through which Beeline extends the reach of its digital education initiatives. These include free courses offered in collaboration with Digital Academy, a local specialist training institute, in areas such as UX / UI design.

Participants include 21 year-old Anara Erkebayeva from the village of Uchkun in the Kara-Suu district of the

Osh region. Despite suffering from scoliosis from a young age which limits her mobility, Anara is determined to pursue a career in IT and signed up to one of Digital Academy's courses, eventually being awarded with a high-quality laptop from Beeline as one of the highest performing students.

Arna now runs her own e-commerce business. "Beeline has created an excellent opportunity for mastering the IT sphere," she said of her course experience. "Such courses are a great opportunity for people with disabilities. I am grateful to Beeline for this opportunity. It motivates me for new achievements."

Building on the success of its first year of courses, Beeline has now launched a second stream which has attracted more than 3,000 applicants from across the country, 75 of whom went on to receive training in data science, SQL, ICT project management, information security and systems administration. Students were also given tours of IT companies and participated in teambuilding exercises and meetings with experts to help prepare them for the workplace.



"It is important for us that our social and educational initiatives bring real benefits to society," said Alexander Atamanov, Commercial Director of Beeline Kyrgyzstan. "We want our youth to develop and contribute to the development of the country."

That is a goal we share with the nation as we partner together to realise the full potential of Kyrgyzstan's digital future.

Digital skills programmes

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Particulars

Digital inclusion

Number of digital wallets (thousands)

– JazzCash (Pakistan)

– Simply (Kazakhstan)

– BeePul (Uzbekistan)

– Balance (Kyrgyzstan)

Digital skills and literacy

Number of educational institutions with free or subsidised internet connections

Number of individuals benefitting from donated ICT equipment

Number of individuals benefitting from mobile literacy and skills development programmes

Number of individuals enrolled in traditional education and skills development initiatives

Digital innovation

Monthly active users of self-care apps and web services (thousands)

– Ukraine

– Pakistan

– Bangladesh

– Uzbekistan

– Kazakhstan

– Kyrgyzstan

Make your mark

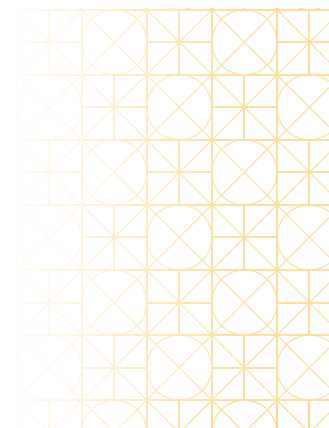
Number of people attending entrepreneurship educational events

Number of people entering digital entrepreneur competitions

Number of start-ups supported

Number of hackathons conducted

Particulars	2022	2021	2020
Digital inclusion			
Number of digital wallets (thousands)			
– JazzCash (Pakistan)	16,421	15,199	12,168
– Simply (Kazakhstan)	2,256	1,760	710
– BeePul (Uzbekistan)	285	224	135
– Balance (Kyrgyzstan)	243	34	31
Digital skills and literacy			
Number of educational institutions with free or subsidised internet connections	1,923	352	102
Number of individuals benefitting from donated ICT equipment	158,739	54,890	42,100
Number of individuals benefitting from mobile literacy and skills development programmes	480,500	52,100	39,814
Number of individuals enrolled in traditional education and skills development initiatives	161,603	59,534	41,825
Digital innovation			
Monthly active users of self-care apps and web services (thousands)			
– Ukraine	3,945	4,206	2,898
– Pakistan	12,672	9,827	7,789
– Bangladesh	5,700	3,194	1,872
– Uzbekistan	4,868	3,625	2,026
– Kazakhstan	3,933	2,990	1,907
– Kyrgyzstan	549	324	91
Make your mark			
Number of people attending entrepreneurship educational events	4,736	39,524	4,479
Number of people entering digital entrepreneur competitions	22,698	17,301	19,260
Number of start-ups supported	41	14	13
Number of hackathons conducted	16	6	6



Creating a better future continued



In Ukraine,
Kyivstar has
joined on an
ambitious project
to establish a
**national digital
health service** as
part of its
commitment to
**rebuilding the
nation**

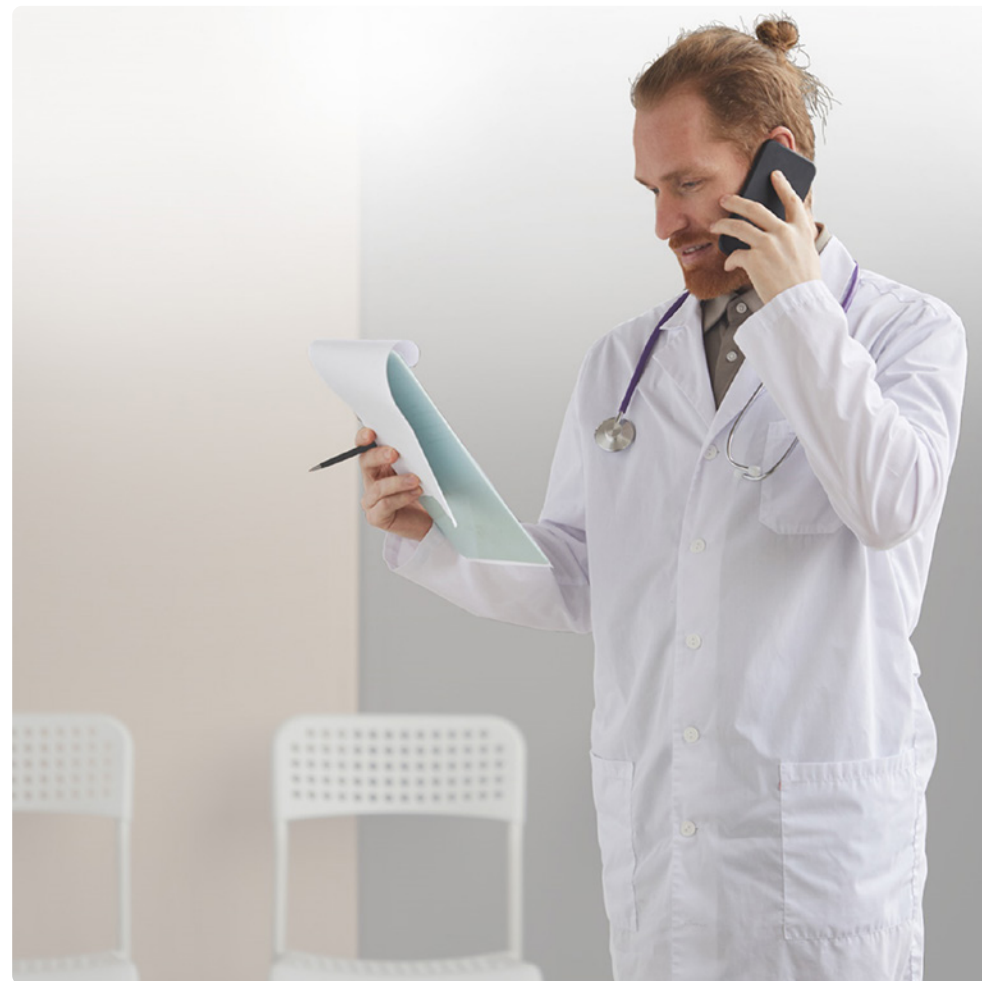
Healthcare

Access to healthcare is a pressing need across the communities we serve. Medical facilities can be dispersed and lay outside the financial reach of many. Democratizing healthcare access through the development of smartphone-enabled services enables our digital operators to deliver a range of medical resources via a single portal, reducing costs and barriers to successful diagnoses and treatment.

The project brings Kyivstar together with Helsi Ukraine, the country's largest medical information system, in which Kyivstar has made a strategic investment in order to scale eHealth service at the national level and make it available to every Ukrainian, both at home and abroad. As well as acting as the digital interface between patients and medical staff, Helsi will enable the preparation of treatment plans, maintain medical records and integrate the provision of primary healthcare with pharmacies and laboratories, providing vital continuity in care as the nation rebuilds.

In Pakistan, Jazz's BIMA Sehat provides a 24-hour tele-doctor service and hospital insurance package in partnership with our MILVIK Mobile Pakistan partner. This service is offered to all of Jazz's pre-paid customers for as little as PKR 1.43 per day, providing smartphone access to an extensive network of healthcare resources along with discounts at pharmacies and on laboratory tests and home medicine delivery.

Banglalink's Health Hub is a one-stop healthcare platform that covers every aspect of an individual's health, from initial consultations to treatment planning and medicine delivery. Introduced as part of Banglalink's MyBL self-care service, users have access to a comprehensive array of affordable digital health services provided by Health Hub partners, including Bangladesh's leading healthcare providers Doktorbhai, DocTime and Pulse.



Creating a better future continued



@banglalinkmela
is **empowering**
young stars like
Mohima to
pursue their
passion for
creating digital
content

Entertainment

The expansion of our 4G networks has transformed our ability to serve a host of media streaming, music apps and live sports to our customers. Developed using the very latest digital technologies and protocols, these are expanding access to a world of local and global entertainment and redefining the customer experience of our services.

In Ukraine, our media streaming service Kyivstar TV provides more than 20 000 units of content, including Hollywood blockbusters, series, documentary films, and 320 live TV. This over-the-top (OTT) platform is one of the leaders on OTT market and its popularity continued to grow throughout 2022, driving a 60% rise in its user base.

Jazz's video streaming app Tamasha provides our mobile subscribers in Pakistan with unrivalled access to the best in premium TV channels, movies, dramas and live sport, each delivered in HD format to their smartphones. 2022 saw Tamasha's user base rise to 6.5 million after it delivered exclusive ad-free streaming of the Cricket World Cup and live streaming of the FIFA World Cup throughout the fourth quarter.

In Bangladesh, Toffee has grown rapidly to become the nation's number one video streaming app, with over 25 million active users. With its emphasis on local language content, user-generated media and sport, Toffee has proven to be a local success story in a market where global streaming services have struggled. 2022 was a record year for Toffee as it attracted more users than ever before after launching exclusive streaming of the FIFA World Cup, enabling Toffee users to view live matches from any network.



The beautiful game

Little else has the ability to unite a nation in a single moment in quite the same way as live sport. In Bangladesh, 2022 saw live streaming of the world's most watched sports event go mainstream as Banglalink's market-leading streaming service Toffee provided live coverage of the FIFA World Cup via 4G networks for the first time.

Toffee's coverage was a landmark moment for Bangladesh's fast-growing streaming industry. Record online audiences were recorded as the tournament's reach extended beyond traditional TVs to the smartphones of a new digital audience. Around one billion views of the sporting action were served by Toffee, which provided exclusive match play access across all networks to fans on the move or on large screens via the Toffee Android TV app.

Toffee's live coverage was provided in partnership with K Sports, one of the nation's leading sports marketing companies, for which the popularity of Toffee was a key attraction.

"Toffee is the right fit for live streaming a mega event like World Cup Football because of its wide user base and smooth streaming experiences," said Fahad Mohammed Ahmed Karim, Chief Executive Officer of K Sports. "It is an exciting opportunity for our football lovers to watch the live stream of world cup matches in a convenient way."

Sports fans certainly seemed to agree. Toffee's viewing numbers hit new highs as football fans turned away from traditional TVs for the convenience of live streaming through their mobile devices. Over 25 million unique viewers watched the Round of 16 matches and 15.5 million live streamed the world cup final. The tournament helped drive a fivefold increase in Toffee's daily active user base, which closed the year at 5.2 million.

Launched in November 2020, Toffee has grown quickly to become the nation's favourite mobile streaming platform. With an emphasis on local language and user-generated content alongside sport, Toffee now attracts more active users than any other digital entertainment service in Bangladesh. As with its success in streaming live cricket to a nation passionate about the sport, the FIFA World Cup demonstrated Toffee's ability to connect football with new audiences though a personalised viewing experience that matches the change in people's sports consumption habits. Toffee enabled revenue generation for local content generators.

Toffee's reach reflects the considerable investment Banglalink has made in the nation's high-speed 4G networks as it embarks on ambitious strategy to move from regional mobile provider to nationwide digital operator. Banglalink installed 4,200 new base stations in 2022 alone, which alongside a doubling of its radio spectrum enabled it to expand its 4G reach to over 80% of customers by the end of the year. Throughout, Banglalink maintained its position as the nation's fastest mobile network, receiving the Ookla Speedtest Award for the third year running.

Toffee is one of a variety of digital services this network expansion is enabling Banglalink to deliver to a growing audience of users. These provide our customers with gateways to digital capabilities in healthcare, finance and education. Together, they are redefining expectations of what mobile connectivity can offer, as well as allowing a nation to share treasured moments of the beautiful game.



Creating a better future continued



The world's increasing **reliance** on **mobile networks** that **connect** billions of people online demands **constant network** quality, reliability and availability

Investing in our infrastructure



VEON possesses one of the largest mobile telecoms footprints in the developing world. We are rapidly deploying high-speed 4G networks to provide customers with robust, safe and secure connectivity through which to experience the best in converged digital services.

In 2022, we increased the number of 4G sites in each of our countries of operation, with a collective growth rate of 20% year on year. As of the end of the 2022, we are serving 85 million customers with 4G, accounting for 54% of our total subscriber base. Our goal is to increase 4G penetration to 70%, enabling access to and opportunities in mobile financial services, education and healthcare.

Our investments into our networks and most notably into our 4G networks have resulted not only expanded coverage but also in consistently high levels of customer experience, resulting in our operating companies receiving recognition for the quality of the experience that they provide. Expanding 4G participation means widening the reach of digitisation in the fast-growing economies we serve. This enables the digital economy to evolve, creating new avenues for growth.

Strong infrastructure, network quality and resilience

The world's increasing reliance on mobile networks that connect billions of people online demands constant network quality, reliability and availability. VEON sets high standards for the quality and the reliability of the networks to provide accessibility of high-speed mobile networks, ensuring the availability of critical communications in the short term and the contribution to growing economic and social activity in the medium and long term.

Network KPIs:

Particulars	2022	2021	2020
Total base stations (physical sites)			
– Total sites – 2G	52,951	47,047	44,903
– Total sites – 3G	40,747	39,777	39,826
– Total sites – 4G	56,970	45,638	36,595
Active mobile subscribers (3 months millions)	157	153	144
Active mobile data subscribers (3 months millions)	112	106	94
Active Mobile 4G subscribers (3 months Mn)	85	71	52
Network Mobile Data Traffic in TBs ('000)	8,838	6,809	4,616
GB of use (GBOU) (average GB per data user per month)			
Total Ukraine	8.2	6.6	5.3
Total Pakistan	5.5	4.8	3.6
Total Bangladesh	4.8	3.7	2.3
Total Uzbekistan	7.5	5.2	3.5
Total Kazakhstan	15.4	12.6	8.9
Total Kyrgyzstan	16.3	13.0	10.1



Expanding **4G participation** means **widening the reach of digitisation** in the fast-growing economies we serve

Creating a better future continued

Quality of service:

Particulars	2022	2021	2020
Network population coverage (percent)			
Ukraine			
– 2G	98%	98%	98%
– 3G	75%	75%	75%
– 4G	94%	90%	86%
Pakistan			
– 2G	84%	79%	74%
– 3G	55%	57%	62%
– 4G	64%	59%	51%
Bangladesh			
– 2G	97%	96%	96%
– 3G	76%	76%	75%
– 4G	81%	69%	60%
Uzbekistan			
– 2G	94%	92%	92%
– 3G	75%	75%	75%
– 4G	78%	62%	52%
Kazakhstan			
– 2G	98%	98%	98%
– 3G	89%	88%	86%
– 4G	87%	81%	76%
Kyrgyzstan			
– 2G	98%	98%	98%
– 3G	77%	77%	86%
– 4G	92%	93%	90%

Bridging digital divides through 4G for all

In Kazakhstan, the key challenge is geography. Kazakhstan is a vast country – the ninth largest in the world – and is sparsely populated. Almost half the population is rural, with a large number of small settlements situated many miles apart from each other. Nevertheless, our local digital operator Beeline is committed to providing the highest quality of connectivity and services to every citizen of Kazakhstan, regardless of where they live.

This ambition lies behind Beeline's 'LTE Everywhere' strategy. Its goal is to equip 97% of our base stations with 4G capabilities through which we can provide high-speed internet access and the growing range of digital services this technology enables. Although we continue to experiment with 5G in Kazakhstan, which we believe has future application in industry-specific Internet of Things (IoT) deployments, we continue to view 4G as the workhorse for our customer networks for the foreseeable future given the tremendous range of services it can deliver. Beeline made continued progress in expanding its availability across Kazakhstan in 2022, with our 4G network now reaching 87.3% of the population, a 6.8 pp rise on last year.

As well as the successes of 'LTE Anywhere', Beeline is proud to partner with the nation's other mobile operators in the government's 250+ project to bring the benefits of internet connectivity to Kazakhstan's most remote regions.

Introduced in 2020, the 250+ project aims to extend high-speed internet to all villages with a population of 250 or more through a collaborative approach to network and equipment sharing between operators.

Once connected, local communities are offered network access through any mobile provider on competitive terms. In turn, each mobile operator is given equal access to the shared network.

Through the 250+ project, Beeline has extended its services to more than 1,500 villages for the first time, drawing on geostationary satellite technology where required to connect even the most remote settlements.

The 250+ project is transforming the digital connectivity of rural communities and providing access to a range of new services. These include distance learning, telemedicine, mobile financial services and access to a variety of government digital resources. Over time, the extension of high-speed internet into rural areas is expected to accelerate the economic development of the Kazakh countryside, driving e-commerce in the regions and facilitating the adoption of IoT technologies in agriculture for the first time. Most importantly, being able to access 4G and digital services for the first time is changing people's lives in ways many of us take for granted. They are able to read the news and access a wealth of information and resources previously beyond their reach. They can study and work remotely and access a variety of state services that previously required tens or even hundreds of kilometres of travel to reach.

4G access is also helping to bridge the digital divide between generations in Kazakh society. We see growing use of our video services, instant messaging and financial apps amongst our older customers. Thanks to 4G coverage they can see their families more often, they can watch their grandchildren grow and celebrate relatives' birthdays, regardless of the distances that separate them.



Creating a better future continued

Quality of service continued:

Particulars	2022	2021	2020
Voice inaccessibility (percent)			
Ukraine			
- 2G	2.34%	0.37%	0.40%
- 3G	0.38%	0.12%	0.13%
Pakistan			
- 2G	2.10%	1.71%	1.53%
- 3G	0.46%	0.49%	0.37%
Bangladesh			
- 2G	0.60%	0.59%	0.57%
- 3G	0.42%	0.33%	0.42%
Uzbekistan			
- 2G	1.29%	0.83%	0.58%
- 3G	0.25%	0.22%	0.24%
Kazakhstan			
- 2G	0.75%	1.08%	0.93%
- 3G	0.40%	0.28%	0.33%
Kyrgyzstan			
- 2G	0.19%	0.24%	N/A
- 3G	0.28%	0.16%	N/A

Particulars	2022	2021	2020
Data inaccessibility (percent)			
Ukraine			
- 3G	2.06%	0.76%	0.53%
- 4G	0.48%	0.16%	0.21%
Pakistan			
- 3G	0.70%	0.59%	0.36%
- 4G	0.92%	0.41%	0.28%
Bangladesh			
- 3G	0.48%	0.42%	0.37%
- 4G	0.49%	0.47%	0.33%
Uzbekistan			
- 3G	0.61%	0.46%	0.56%
- 4G	0.67%	0.61%	0.64%
Kazakhstan			
- 3G	1.32%	1.07%	1.07%
- 4G	0.35%	0.40%	0.35%
Kyrgyzstan			
- 3G	1.25%	0.76%	N/A
- 4G	0.45%	0.27%	N/A



Creating a better future continued

Quality of service continued:

Particulars	2022	2021	2020
Voice call drop rate (percent)			
Ukraine			
– 2G	0.90%	0.76%	0.68%
– 3G	0.31%	0.17%	0.18%
Pakistan			
– 2G	1.09%	0.84%	0.89%
– 3G	0.19%	0.15%	0.16%
Bangladesh			
– 2G	0.56%	0.66%	0.66%
– 3G	0.20%	0.21%	0.23%
Uzbekistan			
– 2G	0.41%	0.42%	0.71%
– 3G	0.13%	0.13%	0.14%
Kazakhstan			
– 2G	0.66%	0.58%	0.47%
– 3G	0.14%	0.14%	0.15%
Kyrgyzstan			
– 2G	0.30%	0.33%	0.35%
– 3G	0.40%	0.26%	0.22%

Data privacy and cybersecurity:

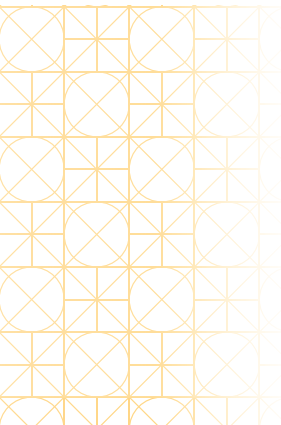
VEON takes the utmost care to comply with international data privacy rules, as well as the way we handle personal data, to ensure and underpin the trust of our customers. Together with data privacy laws, we have VEON Group privacy policy that sets the minimum data privacy standard across the VEON Group. This standard includes privacy principles such as lawfulness, transparency, data minimisation, retention, and security, as well as privacy processes covering privacy assessments, vendor assessments and individual rights. Our operating companies ensure that this standard is integrated into their business practices.

The regulatory landscape around this issue is constantly evolving and we maintain an open dialogue with lawmakers as well as learning from best practices in countries with more established data protection frameworks.

Cybersecurity is important to us because we want to protect the business, our people, and our customer against cyber attacks, to comply with legal requirements, such as General Data Protection Regulation (GDPR). Cybersecurity is therefore of the highest priority to VEON and our Group CEO. Operational issues are reported into him on a rolling basis, and any cybersecurity issues are reported to each operating company CEO.

Particulars	2022	2021	2020*
Progress of additional security measures implemented	89%	84%	94%
Potentially adverse events analysed	~384	~682	~1,800
Critical incidents managed preventively and solved without major negative impact	9	9	16
Notifications from external cyber intelligence services	495	151	31
Internally identified compromises that resulted in a breach and exfiltration of data	3	15	47
Reports from outside parties and substantiated by the organisation	23	4	3
Complaints from regulatory bodies	4	1	118

* 2020 includes Russia, Algeria and Georgia as well.



Creating a better future continued

The communication lifeline of Ukraine

The war in Ukraine has taught the world just how important communications are to a country in crisis. Access to telecommunications is a fundamental human right, on par with access to food, water and shelter, or healthcare. The value of connectivity is not just a matter of calls and messages, it is about the digital services. For the displaced, mobile banking, healthcare information and even entertainment are lifelines.

Throughout the war, the team at Kyivstar has shown dedication and true heroism in their efforts to keep the network running. When Mariupol was besieged and surrounded, the invading forces attacked the telecoms infrastructure to suppress communications in the city. Mastheads were destroyed by missiles and the fibre backhaul networks were damaged. Amid the devastation, one mobile cell remained as the single functioning masthead in the city, thanks to the outstanding job done by the engineers who repaired it while under shelling. When the electricity cables were cut, the cell had to be powered by a generator refuelled by volunteers, but that single cell was a lifeline to the desperate residents of Mariupol and allowed them to communicate with their loved ones and even to plan their escape.

The preparation to protect the Kyivstar network started three months before the invasion and began with the core site. As a telecoms operator it has several core sites and added more redundancy nodes in a safe zones that enabled it to provide almost 100% redundancy for its core services.

For its field operations, Kyivstar took a different approach. Since it is difficult to mitigate a single site loss, Kyivstar's network engineers considered the broader topology and focused not on redundancy for one single site, but on continuity of service. These architectural approaches to embedding network resilience have paid off, preventing any one attack from disabling the core functioning of our network.

While the core network has remained intact, Kyivstar has seen considerable damage to its network infrastructure. More than 144,000 repairs of base stations have been performed, 800 settlements reconnected, over 600 cellular sites restored and 20,000 new batteries installed to protect the services from blackouts. Every day, 150 Kyivstar engineers work in the field to repair base stations or fibre optic backhaul links. These brave people take considerable risks to

ensure that network access is restored, and this has meant that the operator has been able to maintain network access across over 90% of its sites.

The damage to the backhaul fibre has also been mitigated by sharing arrangements between the three mobile operators in Ukraine. Where they were once competitors, they are now fiercely determined to work together to ensure that our customers have connectivity.

While keeping the networks operational has been a large part of Kyivstar's work, it has been cognisant of those who have been displaced by the conflict. Early on in the war, Kyivstar initiated a new service for the millions of refugees forced to leave Ukraine for other European countries. It called this service "Roam Like Home", enabling customers to make calls and use data as if they were in Ukraine. Initially this involved a few countries bordering Ukraine, however it has now grown to cover 27 European countries and has been used by almost three million customers.

"Roam Like Home" has been made possible by the cooperation of the international telecoms community and their support for the initiative, despite the cost to each individual partner.

For people displaced within Ukraine, Kyivstar is providing free internet services to bomb shelters and has connected 1,450 shelters. We are connecting new homes that have been built for displaced people and providing free internet connections.

The digital networks maintained by Kyivstar ensure that its customers continue to access their bank accounts, make payments and continue to operate their business. They can also access educational content, which was vital for displaced children, while being able to consume Ukrainian entertainment via their smartphones. The focus of the Company is the further development of the 4G network as the basis for digital services. In 2022, the Company built 700 new 4G base stations and technologically upgraded another 7,500 base stations to increase speed.

Kyivstar entered new adjacent markets during 2022.

To provide a national digital healthcare system for Ukraine, Kyivstar first partnered with, and then acquired a majority interest in, Helsi – the country's largest healthcare provider. This enabled Kyivstar to bring medical information and access to medical services to the people of Ukraine, even those in war-torn areas providing free calls and internet access to medical professionals.

Kyivstar is already planning for the rebuilding of Ukraine and it has already undertaken the reconnection of liberated territories.

The longer-term rebuilding of Ukraine will take far more time. Kyivstar is a signatory to the Lugano Memorandum of Understanding on the restoration of the country's digital infrastructure and will contribute \$8 million to the infrastructure rebuilding fund, which in turn will hopefully encourage other companies to lend their financial support.

The importance of communication is beyond question. The war in Ukraine has made that clear and the country has made every effort to ensure that its people have access to connectivity, and to restore the network when needed. While Kyivstar and its competitors-turned-partners can take much credit for this, thanks goes to the generosity and actions of the international telecoms community.

The cooperation between operators both within and outside Ukraine has been groundbreaking and points to brighter future of how the world will respond to crises through collaboration.



Creating a better future continued

Our environment

VEON is proud to be a member of the GSMA's Climate Action Taskforce. Climate is an important variable in our long-term business planning. We continue to work to reduce the Group's emissions further wherever possible, committing and acting by moving more towards focusing on how to further reduce the energy consumption.

Climate-related physical risks to the telecoms industry include potential damage to vital infrastructure and utilities through the impact of more frequent and severe storms, tropical typhoons and the rising sea level. Climate-related regulatory risks include increased pricing of operational cost due to pricing of GHG emissions, and energy and fuel taxes. In addition, there are risks of higher capital costs due to a required transition towards the use of renewable energy solutions.

Taking mitigating action on climate change is not only a position we take as a result of our VEON values but a growth opportunity for mobile operators. Our biggest contribution

comes from the emissions avoidance potential that comes with digitalisation, helping other industries – our corporate customers – optimise their operations for a reduced carbon footprint.

Additionally, VEON has a role to play in improving the use of mobile technology to help micro-enterprises, and services that support the response of authorities to extreme weather events and ensure efficient deployment of emergency services. Finally, mobilising customers in emerging economies to engage in a low-carbon and low-waste lifestyle is an area in which mobile operators and digital service providers can contribute.

Environmental performance

Particulars	2022	2021	2020
Total CO₂ emissions (megatons)*	0.7	0.6	0.6
CO ₂ emissions scope 1 (megatons)	0.1	0.1	0.1
CO ₂ emissions scope 2 (megatons)	0.6	0.5	0.5
Number of BTS with solar and/or wind energy technology	823	695	464
Number of BTS with free-cooling technology	7,453	6,948	6,771
Number of BTS with hybrid-diesel technology	12,794	13,193	12,475
Number of BTS which are outdoor sites	28,934	22,208	19,567
Number of BTS which use power-saving technology	58,739	46,240	33,359
Energy use (MWh)	1,495,706	1,397,186	1,272,404
Network (base stations and related buildings and equipment)	1,358,922	1,250,970	1,123,972
Diesel generators	86,980	80,420	84,333
Grid electricity	1,234,890	1,134,490	1,036,870
Solar	36,917	35,780	2,488
Grid electricity (renewable)	135	279	281
Offices and other buildings	117,811	127,498	131,249
Diesel generators	1,819	990	1,023
Natural gas	7,364	7,814	6,998
Grid electricity	84,636	91,410	97,082
District heating	3,392	3,857	3,532
District cooling	20,600	23,428	22,614
Vehicles	18,973	18,717	17,183
Diesel	4,944	4,923	5,210
Petrol	14,030	13,794	11,972
Compressed Natural gas	0.0062	0.0045	0.0042

* The International Energy Agency (IEA) cost intensity factor have been used for conversion to CO₂ emissions.

Weathering the storm

Being the country's largest telecoms Company brings with it considerable responsibility for ensuring the nation stays connected. It means acting as a beacon of hope and stability when natural disasters strike, as it did in the summer of 2022 when catastrophic floods inundated around one-third of Pakistan and impacted the lives of more than 30 million people.

Heavier than usual monsoon rainfall coupled with melting glacial ice following a severe heatwave resulted in several weeks of flooding between June and October 2022. The human costs were considerable. Over 1,700 lives were tragically lost and around 13,000 people were injured. Over two million houses were either damaged or destroyed and an estimated 33 million people displaced in what became the deadliest and costliest flooding in the nation's history.

Jazz's primary responsibility after the floods hit was to ensure our networks could provide the essential connectivity that is so critical at a time of national emergency. "Many of the people affected by the floods rely on Jazz not just for voice calls and messaging, but for digital payments, banking and other core life services," explained Aamir Ibrahim, CEO of Jazz. "Despite flood damage to fibre networks and many masthead sites being under water, Jazz was able to maintain a network availability of 96% through its rapid repairs taskforce."

The financial dislocation caused by flooding was an immediate need that Jazz met through providing free calls in flood-affected areas to enable people to stay connected throughout the emergency. Jazz was also the first company to pledge PKR 1 billion (USD 4.5 million) to humanitarian relief efforts in order to provide shelter, food and medical kits to flood-hit areas.

The specific needs of particular communities and sectors hardest hit were uppermost in our minds as we targeted our financial and logistical support. These included the needs of women through an emphasis on providing female hygiene products to flood-affected areas, as well as mobile healthcare units and specialist care for those pregnant and nursing.

The devastation to agricultural communities was the focus of an initiative by our digital bank, Mobilink Microfinance Bank (MMBL), to extend a digital advisory services for farmers. Agriculture represents 22.7% of Pakistan's GDP and employs over a third of its workforce. Devised in partnership with Pakistan's leading AgriTech company BaKhabar Kissan, the digital service provided personalised instructions on how to help rebuild farmlands, with advice tailored to specific crops, weather

and livestock. With an estimated 3.6 million acres of crops and 700,000 livestock lost to the floods, long-term support for this sector is vital.

As well as immediate relief, our response to the devastation focused on the future resilience of Pakistan's economy and the contribution marginalised communities can make to its prosperity. This included MMBL's discounted 4G handsets programme for female entrepreneurs, designed to encourage the participation of women in the digital economy. Under this scheme, substantially discounted Jazz Digit 4G handsets pre-loaded with MMBL's DOST financial services app were offered to customers in order to boost financial inclusion among women, which in Pakistan still stands at just 7%.

As the nation steadily recovers, Jazz is continuing to help the government prepare for future national emergencies through our development of Pakistan's national SMS warning system. This is one way in which our network can help mitigate the physical impact of future events while we develop services today that can foster economic resilience to their occurrence. These are small steps, but ones which can have a profound impact on the lives and livelihoods of those we serve and protect.

