

# BlueMed: sparking diversity in the subsea market

Sparkle's Giuseppe Valentino says the company's BlueMed cable is adding a valuable new route

In today's global subsea industry, diversification is one of the names of the game. The idea behind establishing new routes is that it limits risk and provides alternative pathways to complement the many submarine systems already out there, leading to a more robust global market for capacity.

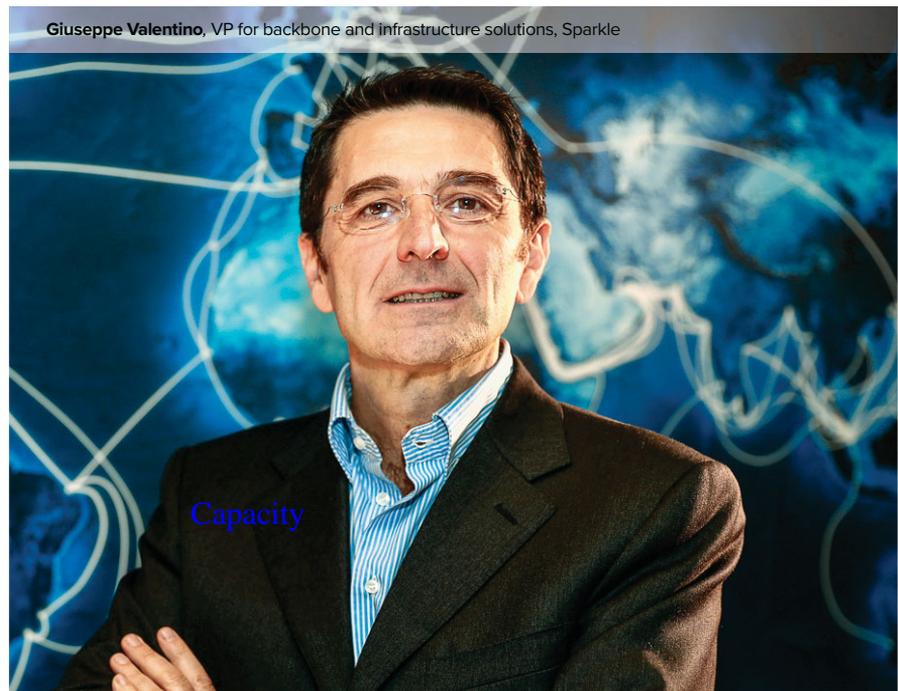
"Establishing and maintaining diverse routes is critical to ensuring the reliability and resilience of communication networks," says Giuseppe Valentino, VP for backbone and infrastructure solutions at Sparkle. "This approach helps to mitigate risks associated with natural disasters, human activities or unforeseen events, enhancing the overall robustness of global communications infrastructure."

In the Mediterranean, a key route for cables between regions as a link between the North, South, East and West of the world, new developments have been stirring in the depths of the sea this year to meet these needs. There, Sparkle has been rolling out BlueMed, a new cable aimed at creating a digital highway to connect Italy with France, Greece and Jordan, plus other branches in the Mediterranean.

## MOVING SOUTH

As Sparkle has identified, following the explosion of data traffic to all corners of the world in the past two decades, the centre of gravity for digital communications has been moving southwards over time. That puts Italy at the focal point of routes crisscrossing the Mediterranean and opens up multiple opportunities at this nexus of activity for economic growth and collaboration between regions.

In light of all this, Sparkle is seizing on the chance to give customers in all segments the chance to capture the benefits of an additional route via BlueMed, while adding resilience and scalability.



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And those new routes are required as the need for capacity continues to rise, with global internet bandwidth increasing by over 20% this year and now standing at 1,217Tbps. Citing subsea cables as the “lifelines” of the internet that carry around 99% of data traffic, Valentino says having more of them is key. “As demand for communications intensifies, the need for more undersea cables becomes paramount to sustain and enhance global capacity,” he says.

Sparkle thinks BlueMed provides a solid answer to this need. Equipped with four fibre pairs and an initial design capacity of more than 25Tbps per pair

inside a wider 20-fibre-pair design on the overall Blue cable, Sparkle believes the cable offers unprecedented ultra-high-speed connectivity throughout the region it addresses.

With Sparkle having started the rollout of BlueMed at the end of January by laying a branch in Golfo Aranci on the island of Sardinia, the route is part of the Blue and Raman submarine cables being built in partnership with Google and other operators. These also include additional extensions in Africa and Asia, and will extend all the way to Mumbai in India, further opening up cross-continental opportunities.

## ALTERNATIVE PATH

In the name of diversity, BlueMed passes through the Strait of Messina between southern Italy and Sicily rather than following the traditional route via the Strait of Sicily on the other side of the island. That brings an alternative pathway via which carriers, telecoms operators, content providers and enterprises can capitalise.

Furthermore, whereas cables from the Middle East and Asia traditionally end up landing in Marseille, BlueMed instead has its main European landing point in Genoa, which is set to become a key internet node between regions and an alternative entry point into Europe. There, the cable arrives at the Genoa Landing Platform, an open and neutral facility designed to accommodate a further six cables without impacting on the environment and city – thus giving the location significant potential for future growth.

As Italy's sixth-largest city, Genoa is a historically important Mediterranean port and one of the country's major economic centres, with a population of close to 600,000. Apart from BlueMed, multiple other subsea cables have been arriving in the city or are set to do so, including 2Africa, Medloop and Unitirreno, adding to the richness of the location as a burgeoning digital ecosystem that can help to anchor the explosion in data traffic.

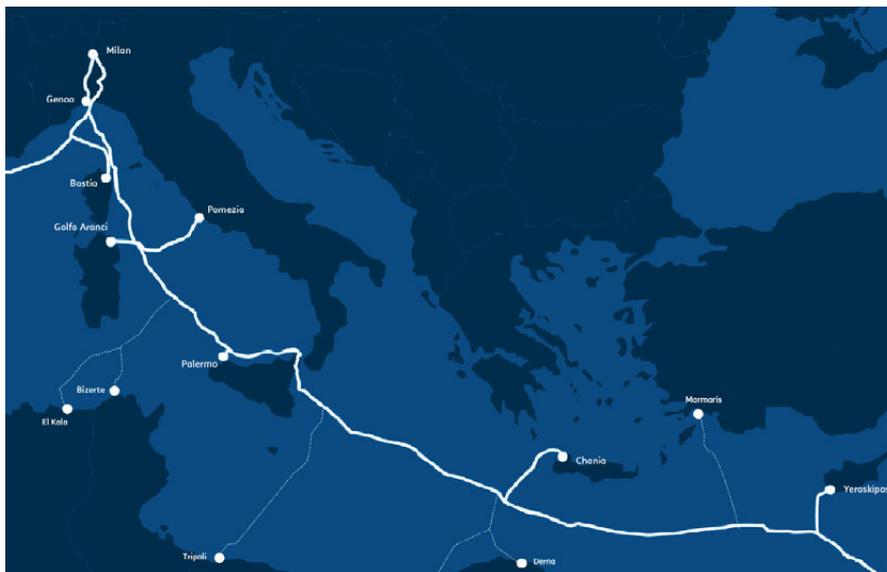
To ensure that the cable is connected to established ecosystems and thus maximise its benefits, an extension of BlueMed is already in place to Milan via two diversified terrestrial paths, and to Marseille via a dedicated submarine link.

## NEW ACTIVATIONS

Meanwhile, in September, Sparkle announced the activation of commercial services on the first section of the cable, connecting Genoa with Palermo in Sicily and Milan. Palermo itself, where the cable lands in the neutral Sicily Hub data centre, acts as a strategic internet hub through its proximity to Africa and the Middle East, and connection to multiple international cables landing on the island.

As a key milestone in BlueMed's rollout, the activation of this section enables operators, ISPs, enterprises and institutions to gain connections at multiples of 100 or 400Gbps, reducing latency by half compared with the terrestrial cables currently connecting Sicily to Milan.

That particular benefit is crucial in



today's communications systems, unlocking massive potential for real-time applications, says Valentino. "Low latency is imperative for real-time communication, be it in online gaming, videoconferencing or financial transactions," he says. "It enhances the efficiency of global networks and ensures a seamless user experience."

Swiftly following its activation of services on BlueMed between the Italian locations, Sparkle announced activation of the Middle East segment this September, connecting up Aqaba in Jordan to the company's Mediterranean backbone. In Jordan, the cable lands in the carrier-neutral Aqaba Digital Hub, which has hosted a Sparkle point of presence since 2019 and is already linked up to Seabone, the company's tier-1 global IP backbone.

The development will enable ISPs, carriers, telecoms operators, content providers, enterprises and institutions to capitalise on high-speed connections between Aqaba and Milan, while bolstering Jordan as a gateway into the Middle East.

## PARTNERSHIP POTENTIAL

With these recent milestones, BlueMed is coming closer to full fruition and is set to be fully completed next year – opening up more opportunities the further it gets towards that point. And apart from the many benefits it will offer for capacity and route diversity, the cable is generating new partnership opportunities as it expands.

In June, for instance, Sparkle announced that it had struck a deal to provide UAE-based Kush Investments

with a virtual-fibre service connecting Mumbai and Djibouti in Africa with Europe. Under this agreement, the two companies will work together to jointly support the expansion of the telecoms and ICT sector in East Africa, capitalising on a rapidly growing region with massive potential as a next location for development.

## MAXIMISING IMPACT

Adding these types of new submarine cables opens up many exciting new opportunities to fulfil demand for up-and-coming technologies and services, says Valentino. For the full benefits to be realised, he says, effective connectivity is needed between cables as the number of systems increases.

"Enhancing interconnectivity between submarine cables and terrestrial networks is crucial for facilitating seamless data transfer across regions," says Valentino. "Efficient interconnection points and network integration contribute to a more cohesive global infrastructure."

In light of these needs, Sparkle is developing new open and neutrally managed data centre hubs in Genoa and Tel Aviv, Israel, as ancillary elements to BlueMed. It is also enhancing an existing one in Chania, Greece, as well as the Sicily Hub in Palermo.

With all this new infrastructure, Sparkle is finding new routes to connecting up the world. "As the world becomes more interconnected, the expansion of undersea cables and the incorporation of advanced transmission technologies are crucial steps to fulfil escalating global capacity needs in the digital age," says Valentino. 