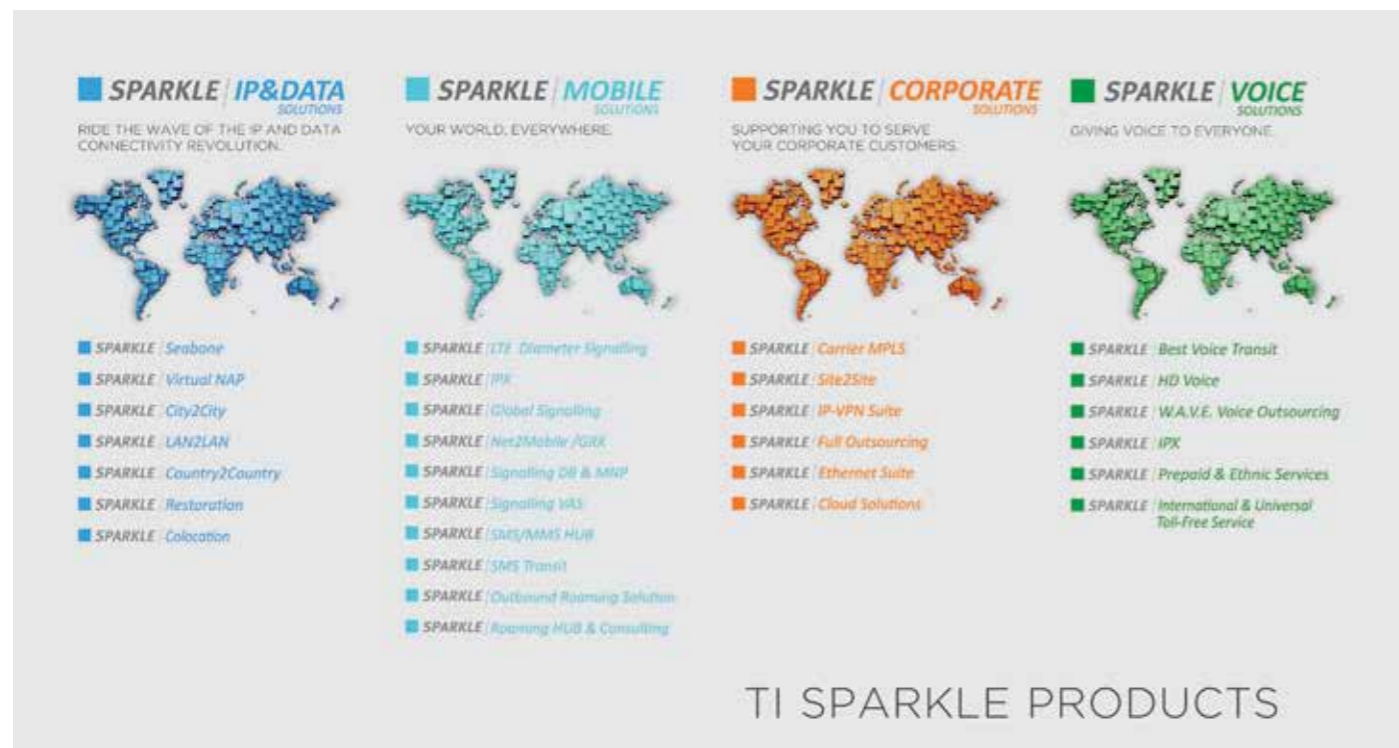


Getting Smarter



TI Sparkle is Telecom Italia Group's international carrier and a leading global operator ranking among the Top 10 service providers for IP and voice services worldwide. Through a full range portfolio of data, IP, mobile and voice solutions, TI Sparkle caters to the ever evolving needs of fixed and mobile operators, ISPs, OTTs, content providers, multimedia players and corporate customers.

With an always increasing network and service reach thanks to new and upcoming POPs in Africa and Asia, in addition to new network capabilities in the Americas, Sparkle's strategy is to maintain a strong focus on innovation in order to address the increasing operator demand for efficient and integrated platforms and interoperability, aiming to further consolidate its role to enable the recent data and

voice convergence trend onto a single platform.

Sparkle's IPX solution devised for both fixed and mobile operators fulfills this strategy. Through a single, converged interconnection, TI Sparkle's customers can access high quality existing and new voice and mobile data services such as GRX, global signaling, roaming solutions, SMS transit & hubbing, LTE/diameter signaling, voice over

LTE, HD voice and video, IP videoconferencing and soon other innovative services like IMS/RCS based enhanced communication applications.

The fundamentals of IPX - IPX stands for IP Packet eXchange - include openness, efficiency, quality and cascading payments to participants. An IPX is an open network that allows interconnection between operators of all types and has the ability to carry different types of traffic without major changes to network infrastructure, thereby enabling operators to add new services easily. That ease of use and applicability to multiple services delivers great efficiency to mobile and fixed operators and the

IPX architectures also reduce the number of commercial bilateral and roaming agreements that are needed for interconnection, thereby delivering further savings.

The IPX offer is in fact more than simply generating operational cost savings and efficiencies. It allows providers to ensure a high quality user experience that is secure and free of spam because IPX networks are based on a private means of interconnection for operators.

In a few words, IPX offers a next generation alternative to the internet that combines the flexibility and efficiency of the IP world with the security and reliability of traditional

networks. This is particularly significant for network based operators as they transition to an all-IP environment to capture efficiencies and support new services, especially those following the introduction of LTE.

Today, Sparkle's IPX proposition relies on a global coverage thanks to the relevant number of IPX interconnections developed in the Middle East and Africa as well as Europe, North and South America and soon coming in AsiaPac. A global IPX network that comprises of not only wholesale and retail operators but also of major OTTs, is what Sparkle has been able to build up thanks to a portfolio of about 400 IP connections established globally.

Leveraging on this global network, TI Sparkle has developed its LTE Diameter Signaling solution, a top quality LTE Roaming Exchange IPX based service for operators who are able to offer their own 4G mobile subscribers the same quality of service as in their home network, even while roaming.

In detail, Telecom Italia Sparkle's IPX and LTE roaming solutions offer mobile operators worldwide the following advantages:

- opex and capex reduction for wholesale transport services by integrating all-IP solutions onto a single interconnection and at the same time offering access to new revenue

generating services for their mobile subscribers;

- guaranteed top quality of service and security;

- fast go-to-market for innovative and differentiated 4G services including the delivery of IP-based voice, data and rich multimedia communication services on any device;

- set of web based tools with comprehensive traffic and qualitative KPIs reporting.

This makes TI Sparkle's IPX based LTE Diameter solutions the easiest opportunity worldwide for operators planning to offer 4G roaming.

Striving to quickly build up global LTE roaming capabilities, Telecom Italia Sparkle has recently announced the industry's first ever LTE roaming peering agreement, a major testimonial of Sparkle's commitment to the development of IPX and the new value added services it supports.

In addition, to add more value to its roaming proposition, Sparkle is about to launch a new service to support mobile operators with real time roaming intelligence data which will help them improve their own retail customers roaming experience with customized offers.

On the IP side, Sparkle is consolidating its global positioning among the Top 10 service providers

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through its Seabone service while expressing regional excellence such as in Africa where it continues to be a leading internet hub, while Sparkle's POPs in Sicily have been managing a relevant quota of the data traffic towards the big internet originated in South East Asia, making Sparkle a preferred hub between Europe/US and Southeast Asia.

Sparkle's strong MEA regional positioning on IP will soon be further strengthened with the implementation of successful partnership models it has developed in East Africa and in other untapped regions of the African continent. There is strong growth in specific markets in West Africa, which will help consolidate Sparkle's business into one of the fastest growing regions globally.

Soon to be announced, these new partnerships will bring the big internet closer to local eyeballs with a major improvement of their user experience by reducing latency and eliminating hops, providing a cost effective and top quality service to

local ISPs and a complete diversification of the paths towards each destination worldwide.

As part of the effort undertaken to position itself on the higher end of the value chain, Sparkle is expanding its cloud computing services in the Mediterranean where it has officially launched a new Cloud Solutions suite of services in Greece, while it continues to evolve its proposition in Turkey towards PaaS and SaaS solutions.

While scouting new potential markets in the region, Sparkle has created a network of state-of-the-art datacenters in Italy, Greece and Turkey that leverage on a fully redundant, low latency and top performing global backbone. This makes Sparkle the right choice in the EMEA region for integrated value added solutions - from connectivity to advanced IaaS and PaaS services and virtual hosting, right up to disaster recovery.

Sparkle, like dreams, ideas and thoughts, has no boundaries. ■