

A stylized world map in shades of blue and white, with glowing yellow and orange lines representing a global network or data flow. The lines are most concentrated in North America and Europe, with some lines extending across the Atlantic and into South America and Africa.

Corporate Presentation

May 2022



TIM Group Overview

It is the leading Telecommunications and ICT group and Italy's digital partner in the areas of **fixed, mobile and convergent telecommunications, internet, digital content, cloud platforms and services, ICT solutions, research and development**

- Leading Player in **Brazil**
- **Among TOP global operators through Sparkle**
- Core markets: **Italy, Brazil**



Sparkle Overview

Leading Global Service Provider, thanks to its **full range of ICT solutions** provides global connectivity, services and capabilities to **Enterprises, OTTs** and **Content Players, ISPs, Fixed and Mobile Operators**

Sparkle is the first provider of international services in Italy and **among the top ten globally**

COMPANY DATA

32 Countries of presence

Headcount **719**

164 PoPs Network coverage

PoPs via partners **>1,000**

KEY FIGURES

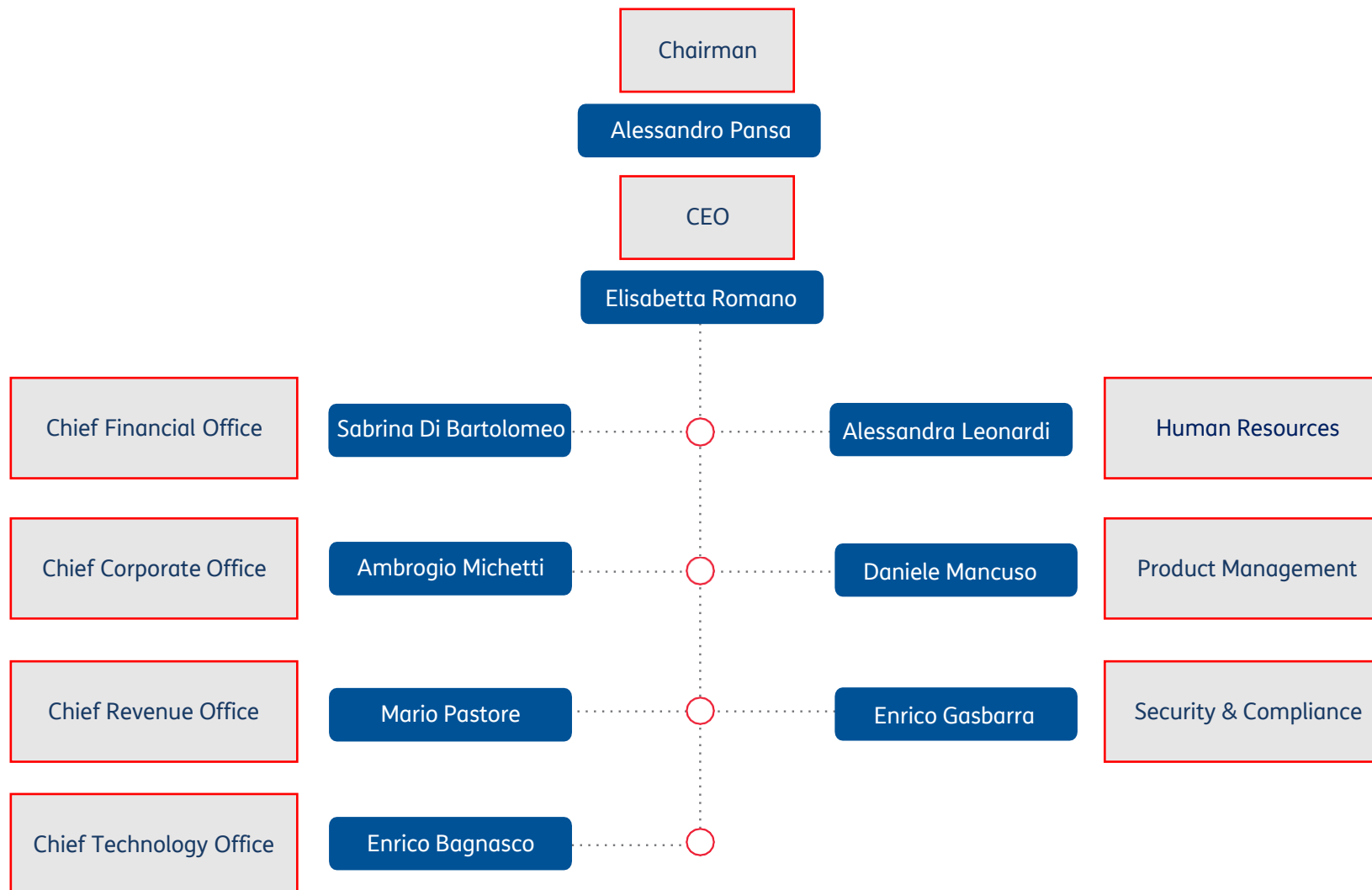
1,500 Clients

Voice Traffic **8 Bn minutes**

Data Traffic **77 Tbps**

1 Bn € Revenues

Organization



Positioning



Leader in Italy for **Multinational Enterprises** offering, challenger in Europe and Africa and emerging player in the rest of the world



Multicloud & Data Center solutions with strategic assets in the Mediterranean



Seabone, Sparkle's Global IP Backbone, ranks **5th** worldwide and is leader in the Mediterranean, Middle East, Africa and in South America



Global Player for **Mobile Connectivity** and **IoT Solutions**



Top Global Player for worldwide **Voice** traffic collected on an international basis



IP&Data
5
globally

1 in Middle East
1 in South America
2 in Africa
5 in Europe

IP WW Ranking

IP Global Ranking (Backbone)	August 2021
Lumen	1
Telia Carrier	2
Cogent Communications	3
GTT Communications	4
Sparkle	5
NTT	6
Hurricane Electric	7
Zayo	8
Tata Communications	9
PCCW Global	10

Source: Caida

Key Assets

#01

Global Services Portfolio for **Enterprises, Media & Content Players, Application Service Providers, OTTs, ISPs, Fixed and Mobile Operators**

#02

Worldwide presence in 32 countries based on fully owned companies and offices

#03

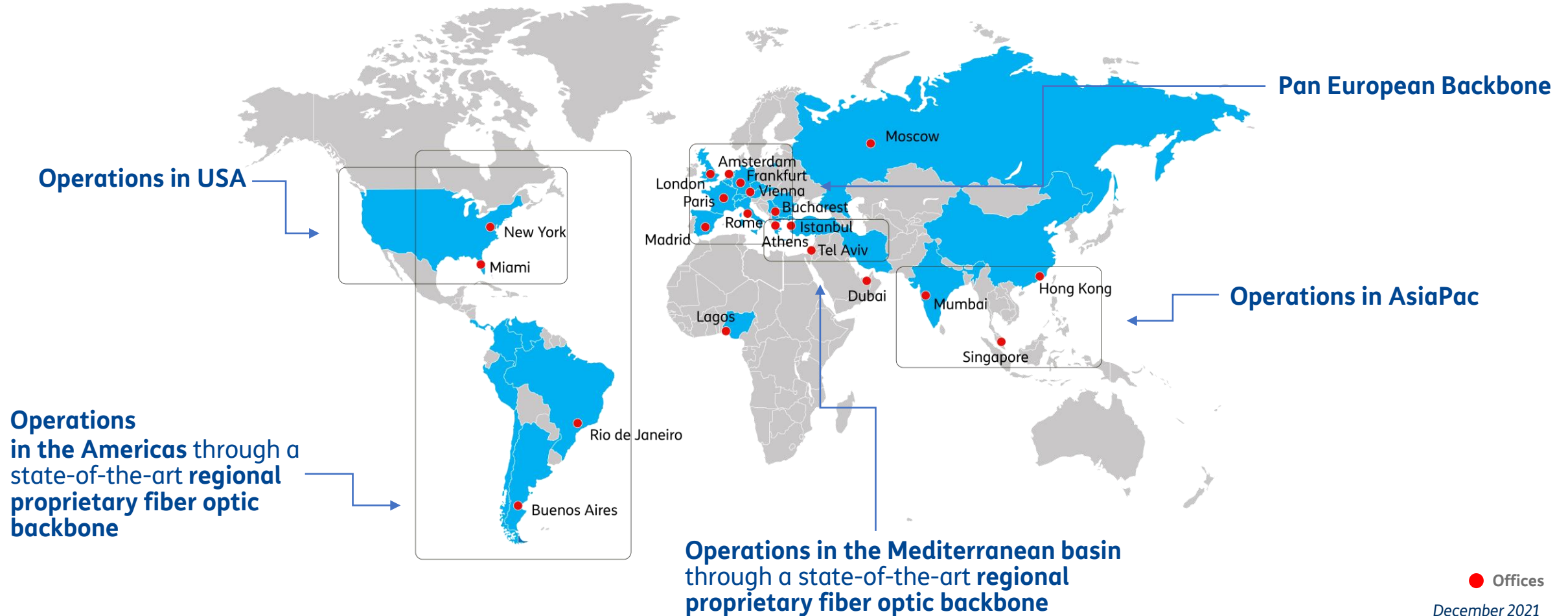
State-of-the-art Global Network with proprietary backbones in **Europe**, the **Mediterranean Basin** and the **Americas** and ownership in submarine cables connecting Europe with **South-East Asia** and the Americas

#04

Customer care at the center of the system, active 24x7x365, with **multilingual Call Center** supported by **three global NOCs** with 24/7 coverage

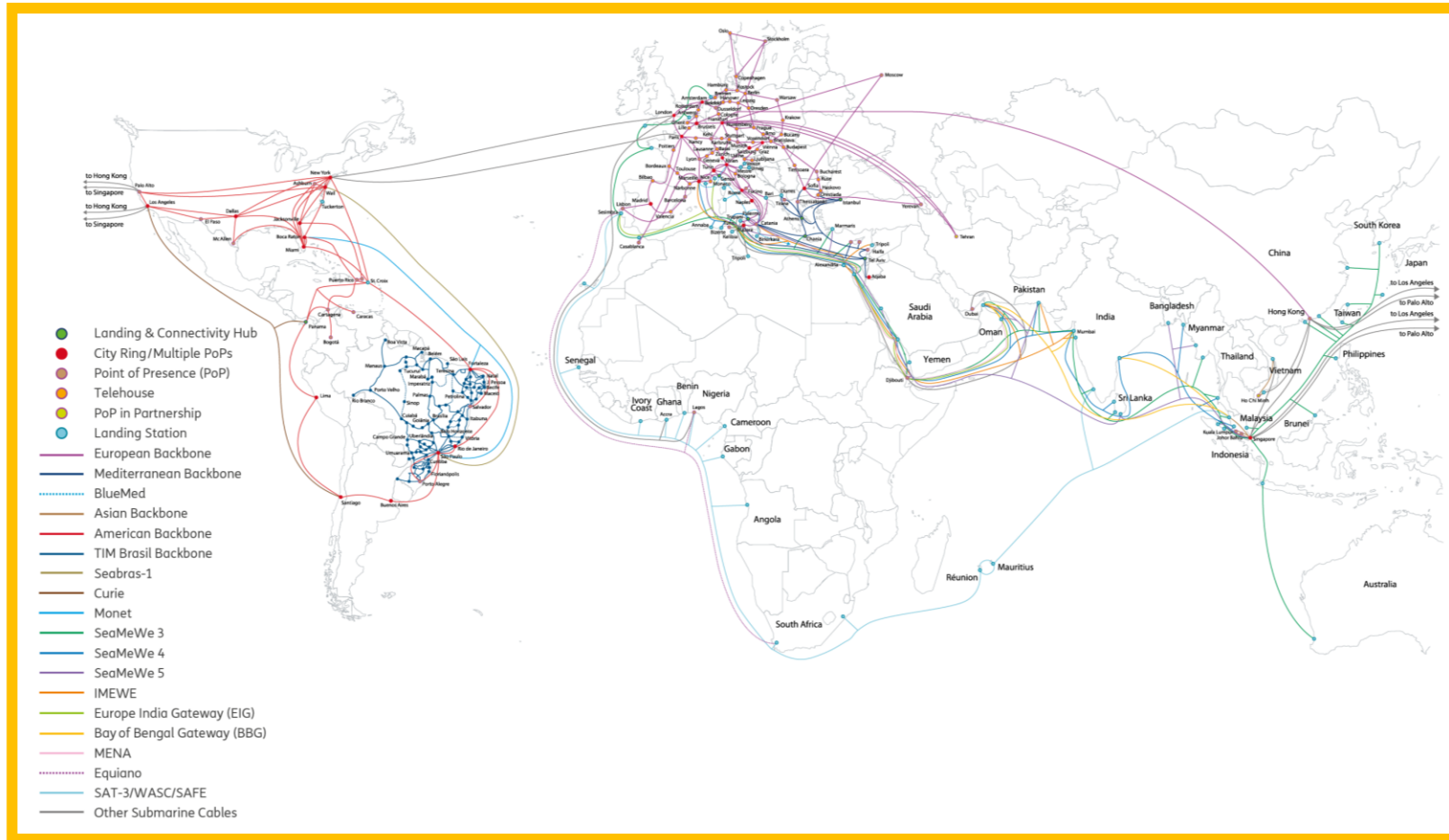
Operations

Sparkle has a **global presence** based on its fully owned subsidiaries and offices in **32 countries**, with a headcount of over 700 in Italy and abroad



Global Backbone

Sparkle's backbone represents the highway that allows, also through agreements with over 200 regional and local operators, to reach any destination in the world



Sparkle owns and manages a **global and technologically advanced proprietary network of over 600,000 km of fiber** which include **three major regional systems in Europe, the Mediterranean and the Americas** as well as an extensive ownership in major international submarine cables

- **81 cities in 44 countries**
- **164 proprietary PoPs (Point of Presence)**
- **>1,000 PoPs through partners**
- **3 Network Operation Centers “around the clock”**

Service Proposition



ENTERPRISE

Complete portfolio of services, including global connectivity and ICT, aimed at serving the needs of enterprises with the highest performance level



IP&DATA

A complete range of solutions designed to access any content on the Internet with secure global international IP connectivity, high-performance international bandwidth and IP MPLS services



MOBILE

Multichannel Messaging Service Suite for Mobile Communication and Digital Promotion.
Full IoT solutions for remote control of devices



CLOUD & DATA CENTER

Suite of highly flexible and scalable top class integrated IaaS, PaaS and SaaS that meets the ever growing need of cost efficient and top security IT solutions, available in several Data Centers worldwide, with proprietary key assets in Italy, Greece and Turkey



VOICE

Voice Solutions offer worldwide voice capabilities to Carriers, Service Providers and Mobile Operators combining network reliability, competitive pricing and excellent routing solutions

Solutions for Enterprises

Sparkle is the ideal partner to support business growth driven by digitalization through:

The most innovative Cloud and Multicloud solutions to accompany companies in the digitization process

Focus on network and asset security with DDOS and SASE

Advanced network solutions for flexible connectivity for companies and to the main Cloud providers: SD-WAN, MPLS, Internet Access

Solutions for Enterprises

Connectivity

Evolved - Flexible - Managed

- **Cloud Connect** – high performance dedicated connectivity to the major Cloud Providers
- **Bandwidth on demand (BoD)** for Ethernet services
- **SD-WAN** as an evolution of IP MPLS services for **greater flexibility** towards **Cloud solutions** and **multisite connectivity**
- **Direct Internet Access (DIA)** for high performance Internet access

Security

Network - Asset - SOCaaS

- End-to-end network security features, DDOS and SASE
- Security control and management services through the highly specialized Sparkle's SOC

Cloud

Multicloud

- **Multicloud platform** for access to different Cloud Providers and **optimization of flow management**
- **Dedicated and dynamic connectivity** to the major Cloud Providers
- **Back-up and Data Recovery services with flexible solutions** at Sparkle's Data Centers

Solutions for Enterprises

Multimessaging

- **Multichannel platform** (SMS, OTT channels, email) for two-way communication between company and customers (**A2P and P2A**)
- **Marketing campaign** and **customer profiling** modules
- **Chatbot** solutions for **automated customer management**
- **Lead generation** and **customer acquisition** campaign management
- **Proprietary SMS transport network** with direct termination agreements with international mobile operators

IoT

- Supply of **SIM/eSIM** able to register under visited network worldwide
- Mobile cloud network infrastructure for **ultra-low latency connectivity**
- IoT platforms for connectivity and device management
- Advanced **billing modules**
- **Plug & Play IoT**

Global Network Infrastructure, Colocation and Multicloud

Colo and Hosting capabilities, completely integrated with Sparkle's network services worldwide

Regional Data Centers in Italy, Greece and Turkey that leverage on Sparkle's unique protected terrestrial and submarine network to Europe

Cloud

Multicloud

Reselling of Public Clouds and professional services

Online Marketplace

Self-Management white label marketplace and advanced SaaS solutions

Security

The best and most reliable Authentication service

Cloud Storage & DRaaS

Secure, reliable and scalable with high business agility and continuity

Cloud Connect

Fast and secure connectivity with all players

Data Center

Colocation

Six DC Hubs worldwide

Power

Best technology in the market

Cabling

Everything you need to be connected

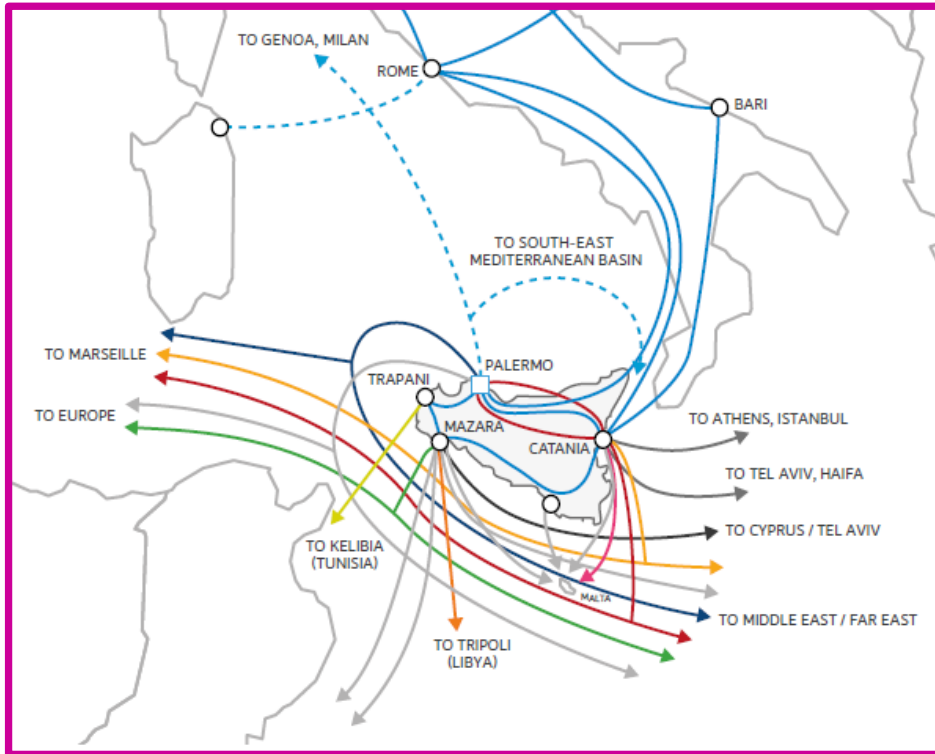
Colo Professional Services

360° Data Center support

Sicily Hub as Top Mediterranean Gateway to the Global Internet

The leading IP gravity center in the Mediterranean where Content meets ISPs

● SPARKLE | Sicily Hub



- **Neutral colocation facility**
- **Connected to all landing stations in Sicily, including SeaMeWe-5**
- **Around 18 subsea cables**
- **Private or Public Peering through DE-CIX**, the world largest neutral IX
- **Content**, the most important players have chosen Sicily Hub to interconnect with ISPs
- **Quality & Competitiveness**, improved latency and lower costs than any other European location
- **Flexibility**, to efficiently manage submarine and terrestrial capacity with enhanced resilience
- **Marketplace** of multi-breed interconnected players to trade any telecommunication and cloud solutions

Excellence in the Industry: Certifications



Certificate of Origin - **Certification for the use of renewable energy in the data centers of Metamorfosis (Athens), Koropi and Chania**



Quality, Health & Safety and Environment - **ISO 9001, ISO 14001, ISO 45001, ISO 27001**



MEF 3.0 Carrier Ethernet



MEF 3.0 LSO Sonata API

Excellence in the Industry: International Awards



Customer Experience prize at the World Communication Awards 2021 as a recognition for the company-wide CX program deployed across three dimensions - process automation, digital tools and a customer-focused organization - to deliver an engaging customer journey experience



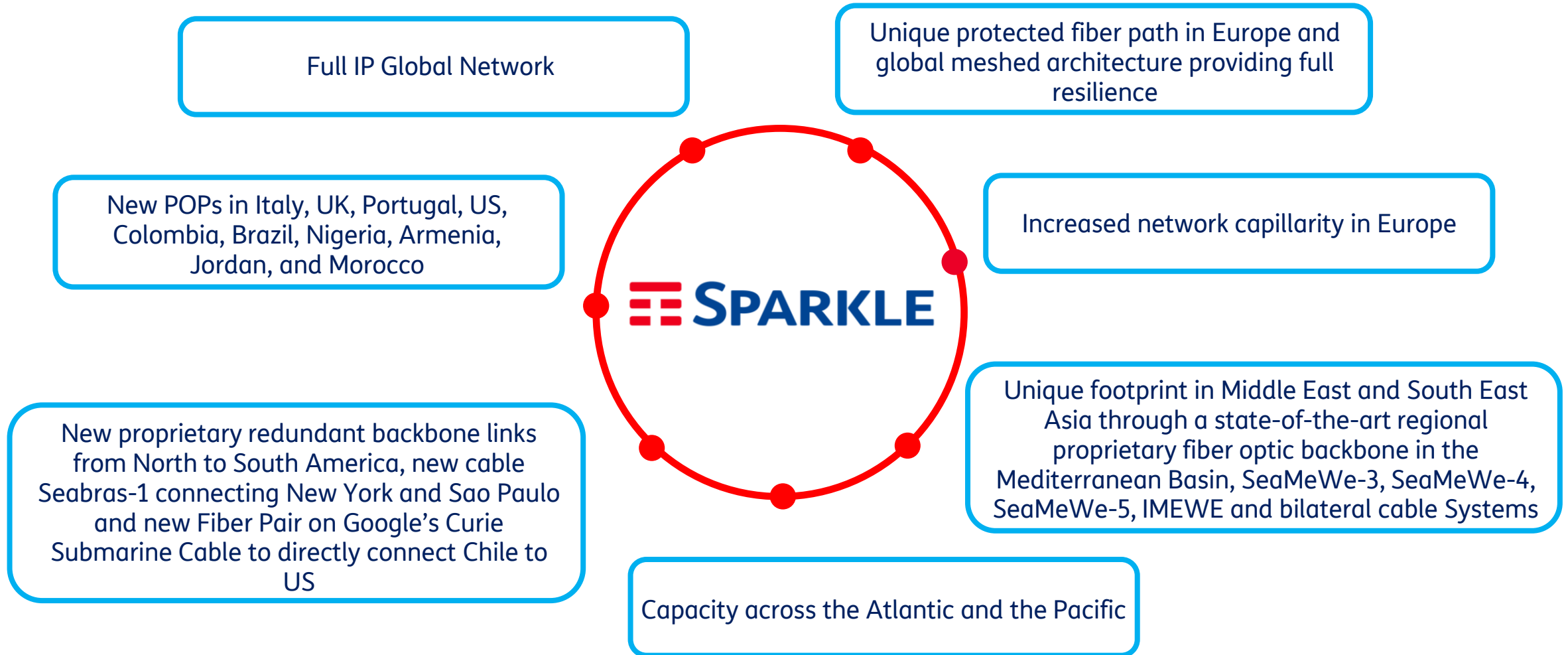
Global Carrier Awards 2021, the most prestigious competition for the international wholesale sector, in the category **Project of the Year – Terrestrial**. This awards acknowledges Sparkle's expansion in Europe and in the Mediterranean with the deployment of Nibble, an ultra-long-haul photonic backbone linking Sicily with the major Points of Presence and data centers in Europe



Business Impact Award received from MEF in March 2021 for a Proof of Concept on Secure Access Service Edge (SASE). The “Remote Employee Access to Cloud” PoC demonstrated how Sparkle enables multinational enterprises to deploy a post-pandemic hybrid workplace model, establishing secure and effective remote employee access to company resources located in multiple clouds or on premise

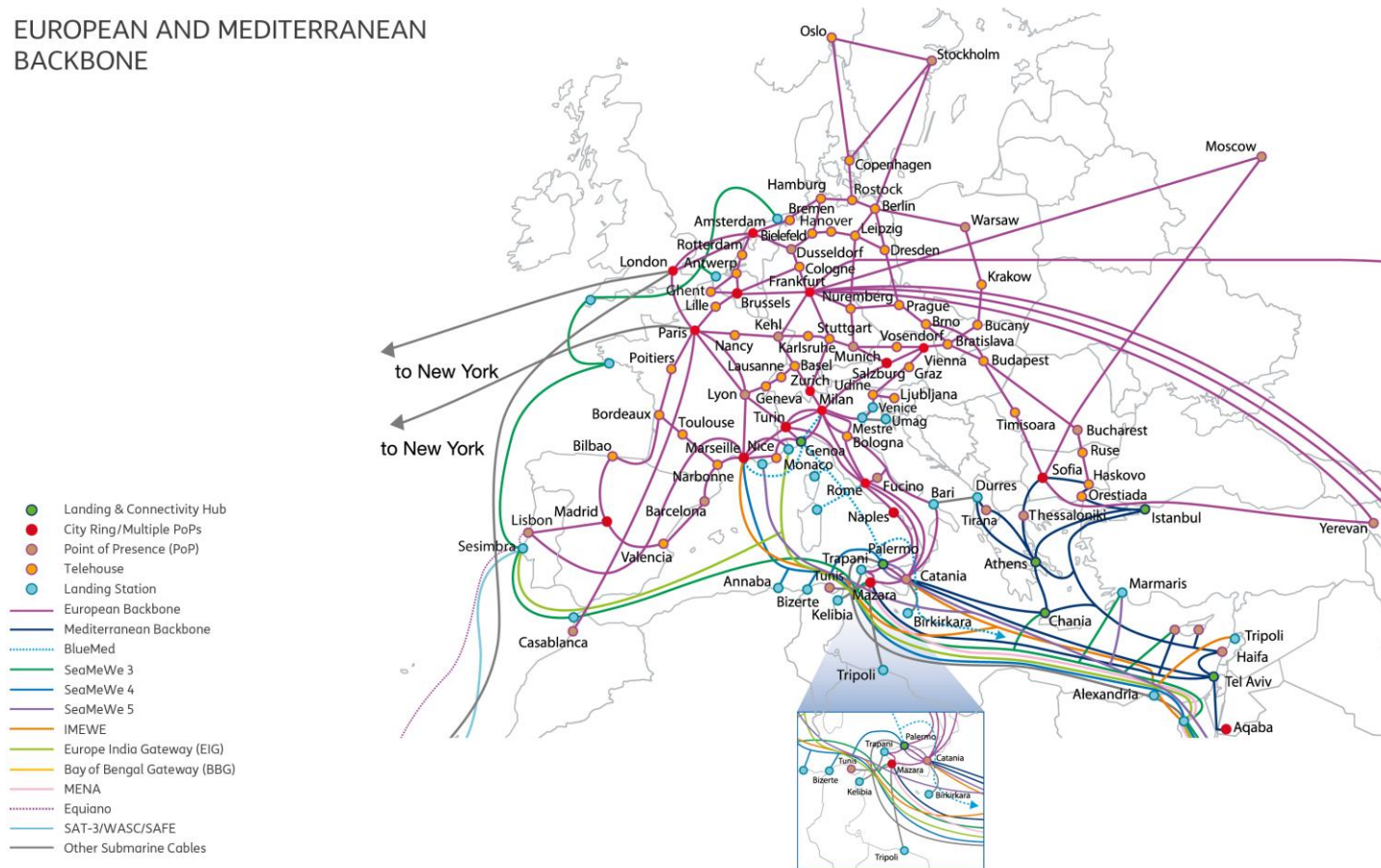
Focus on Sparkle's Backbone

Global Backbone



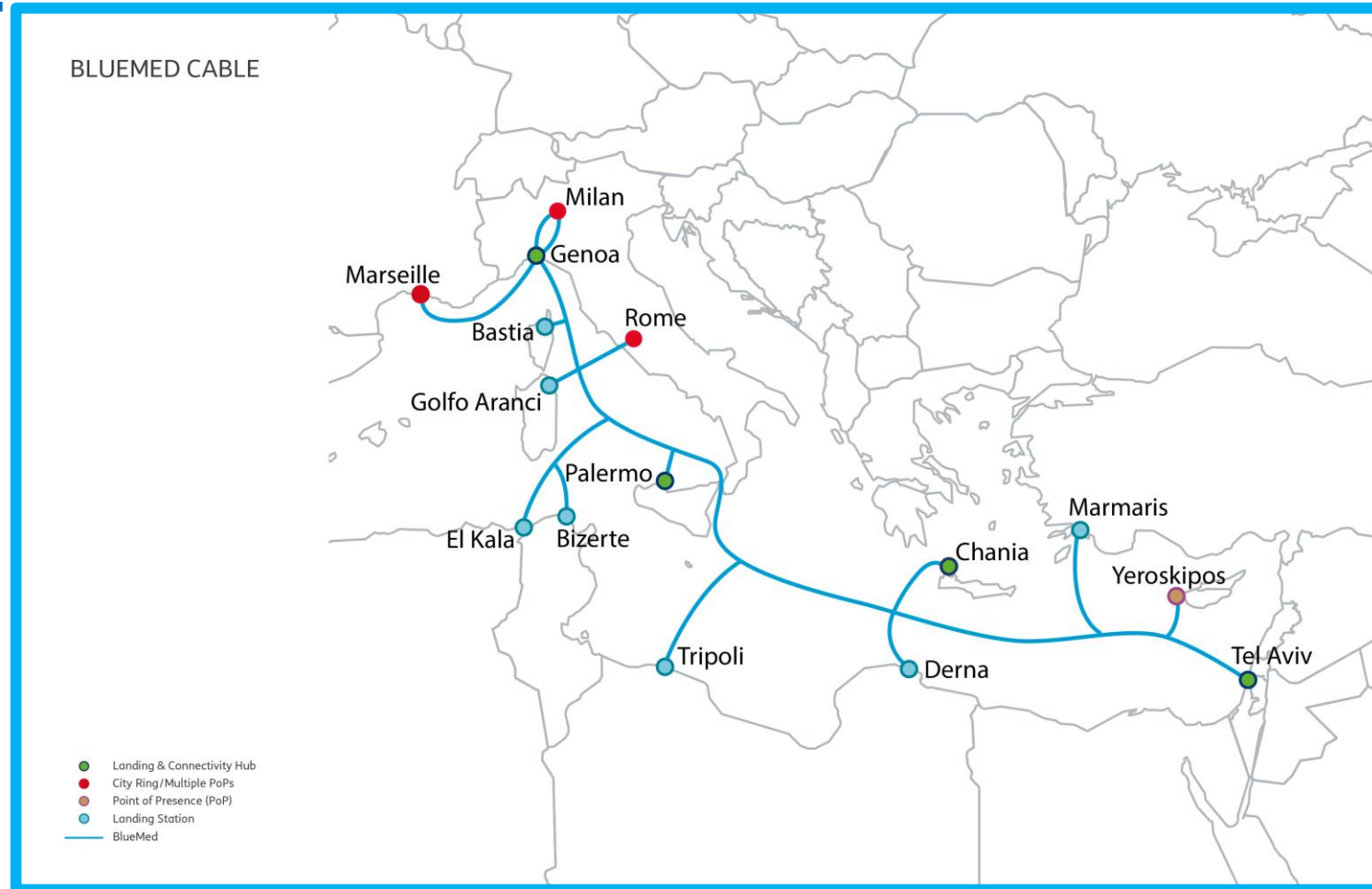
Key Regional Backbones: Europe & Mediterranean

EUROPEAN AND MEDITERRANEAN BACKBONE



- Increased network capillarity in Europe
- Unique protection from Istanbul to Europe through terrestrial and submarine networks
- Diversified and protected backbone links in the Balkans as alternative route to connect Europe to Africa, Middle and Far East
- New direct route between Athens and Milan - “Albania Crossing” - providing the shortest and fastest route from the Balkans to the main Western European internet ecosystems, adding diversity and redundancy to the existing routes
- New POPs in Moscow and Casablanca for the offering to Enterprises

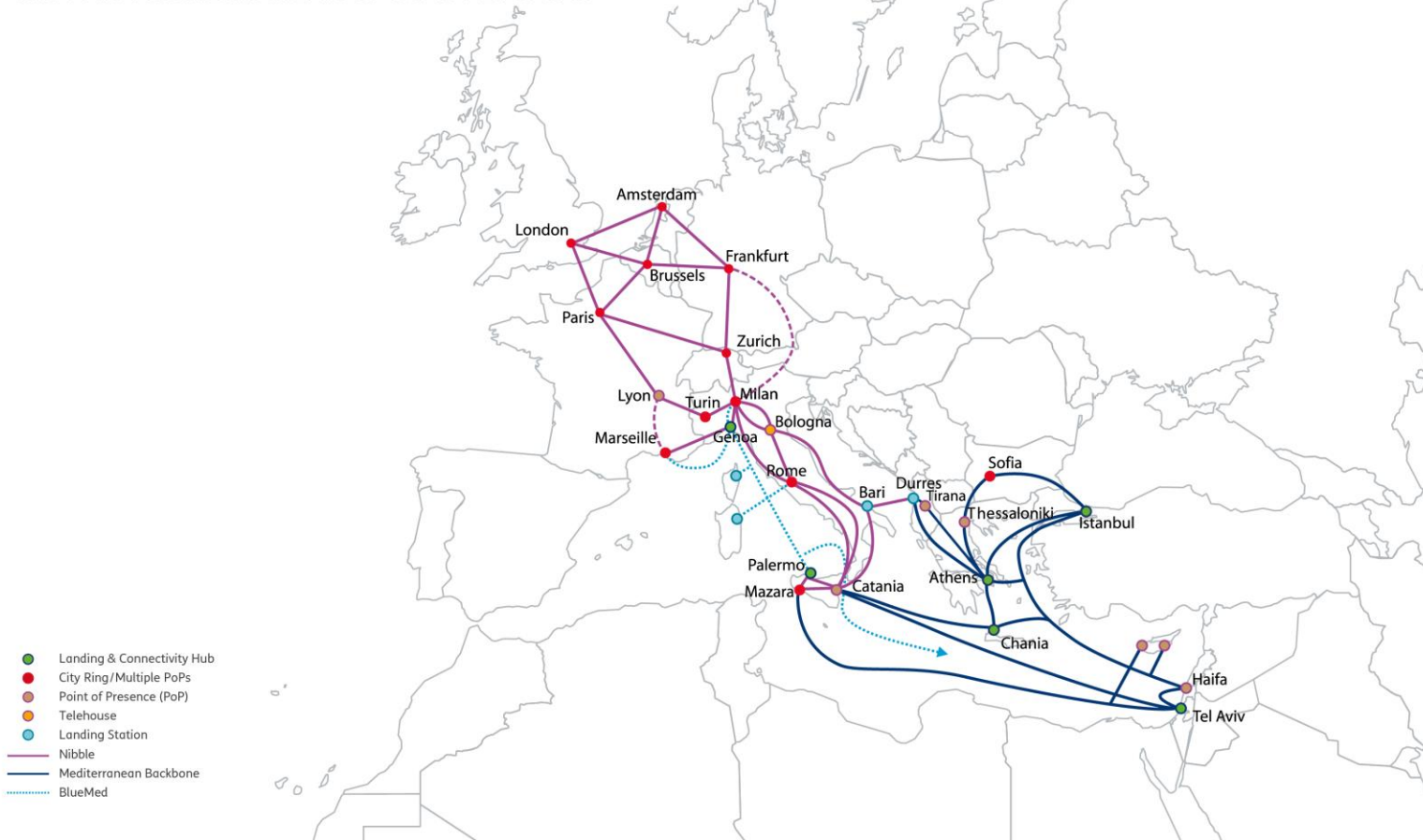
Reinforcing Leadership in the Mediterranean through BlueMed....



- New cable to connect Palermo with Genoa's new open landing station, directly connected to Milan's rich digital ecosystem
- Multiple branches within the Tyrrhenian Sea to support further extensions southbound of Sicily
- Capacity up to 240 Tbps, Total length of 1,000 km
- Expected RFS 2022
- BlueMed will provide **advanced connectivity between Middle East, Africa, Asia and the Europe** with up to **50% latency reduction** than existing terrestrial cables connecting Sicily with Milan
- Sparkle's new open landing station in **Genoa is set to become the alternative priority access for other upcoming submarine cables** looking for a diversified entry way to Europe, thus **strengthening Italy's role as digital gateway between Africa, Middle East, Asia and Europe**

....and Nibble, the new Pan-Mediterranean Network

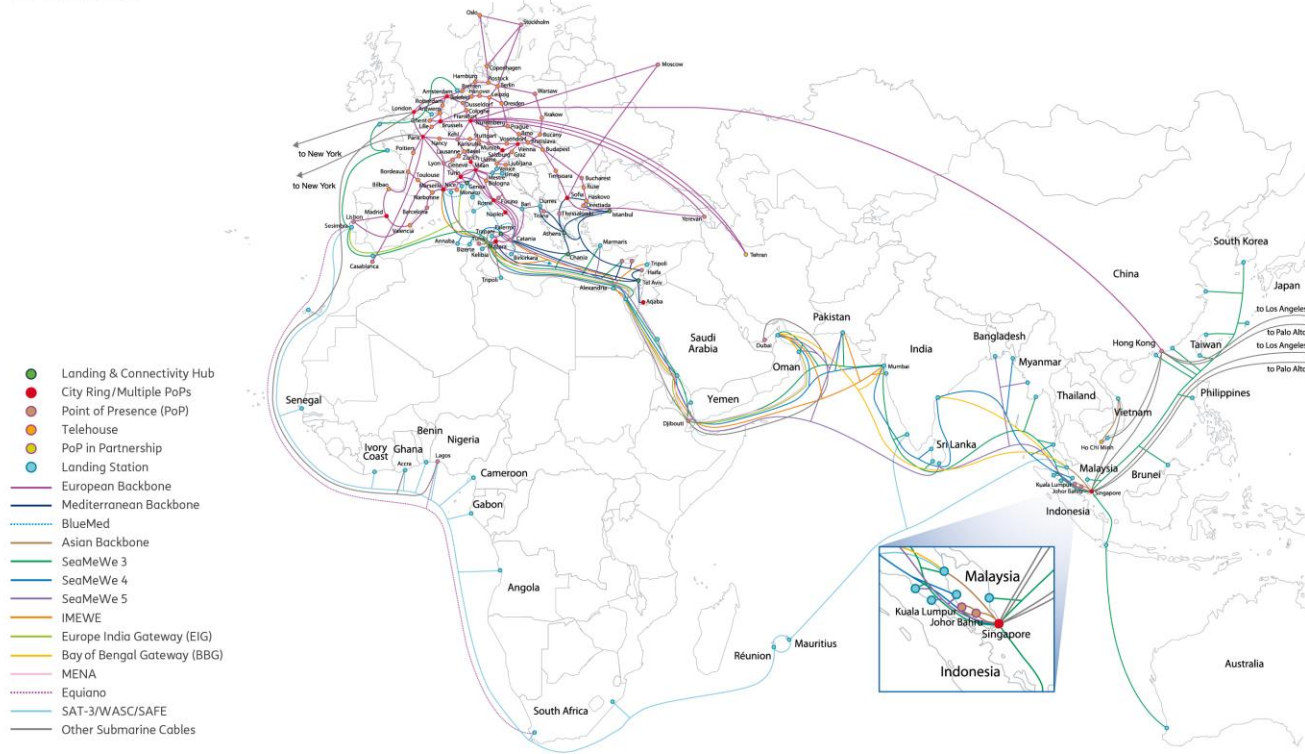
NIBBLE
THE PAN-MEDITERRANEAN OPTICAL NETWORK



- **New ultra-long-haul photonic backbone digitally linking Sicily with the major Points of Presence and data centers in Europe**
- **Built upon new express fibers, Nibble will provide industry-leading speeds, low-latency, high-performance, scalable and guaranteed connectivity services** between the most important European locations, meeting carriers and enterprises' rapidly increasing network capacity requirements
- **Based on: DWDM & Instant Network technologies, Software-Defined Bandwidth solution and Instant Network**
- **Nibble will progressively be integrated with Sparkle's existing Mediterranean and Balkans Network and with BlueMed**
- **First link connecting Sparkle's Sicily Hub in Palermo with Milan Caldera open data center**

Strategic Focus on Med, ME, Africa & APAC Corridors

EUROPE, MIDDLE EAST, AFRICA AND ASIA BACKBONE



Through Sparkle's global network, operators in fast-growing markets of Middle East and Asia have access to worldwide contents with unrivalled performance through a **2-way path connecting Sparkle's Asian network to Europe and US, both East and Westbound**

EUROPE & MEDITERRANEAN

- **Fully resilient Pan European backbone** covering 13 countries
- **State-of-the-art regional proprietary fiber optic backbone** covering : Italy, Turkey, Israel, Greece, Cyprus
- **Proprietary submarine cable Athens-Istanbul**
- **Bilateral cables with Monaco, Albania, Croatia, Slovenia, Cyprus, Malta, Israel and Libya**

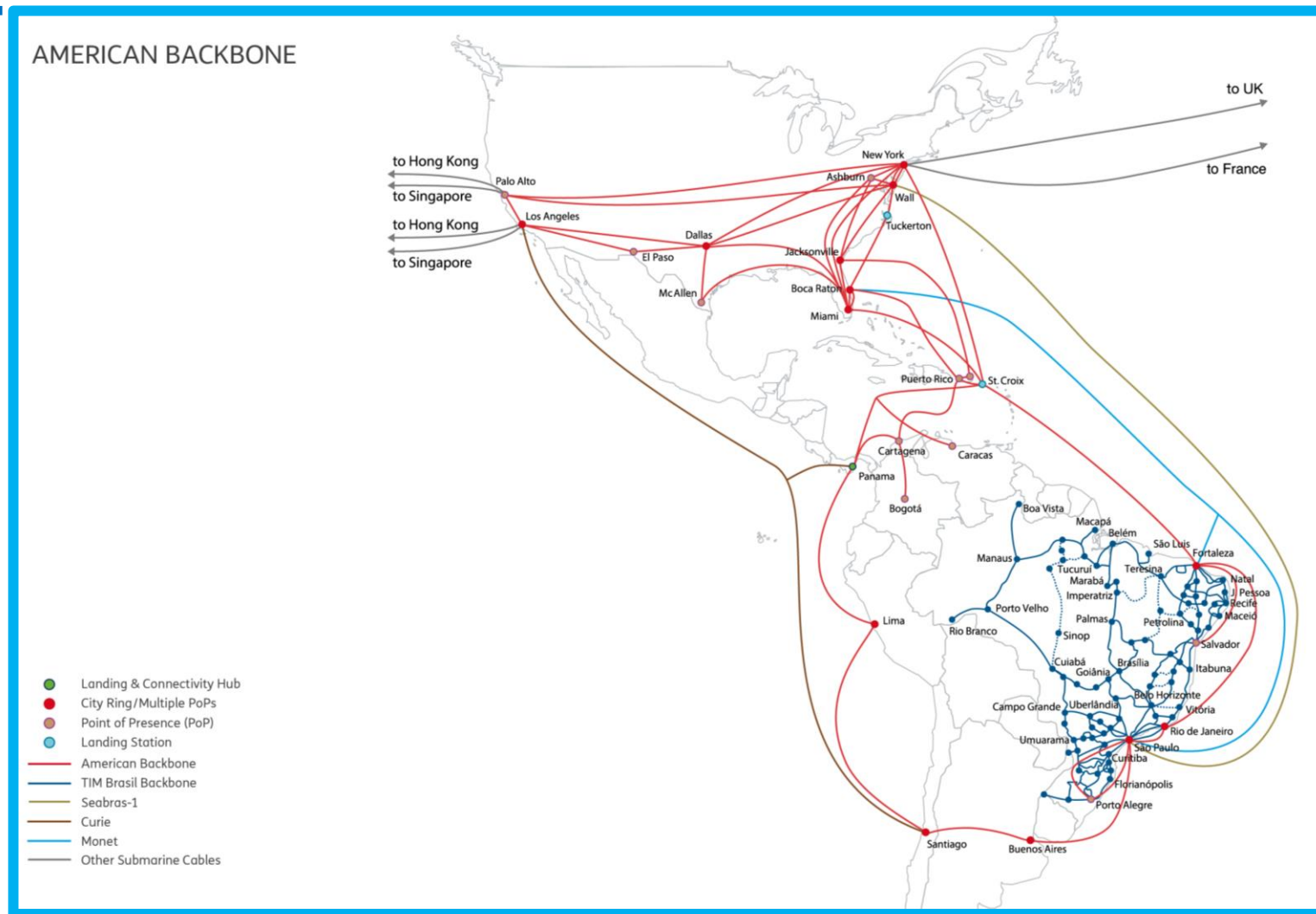
EUROPE TO AFRICA, ME & ASIA

- **SeaMeWe-4 cable:** France, Algeria, Tunisia, Italy, Egypt, Saudi Arabia, India, South-East Asia
- **SeaMeWe-5 cable:** Europe to Asia, reaching 17 countries, with a main landing in Catania, Sicily
- **IMEWE cable:** France, Italy, Lebanon, Egypt, Saudi Arabia, United Arab Emirates, Pakistan, India
- Other Submarine Cables: **SeaMeWe-3, EIG, BBG** and **MENA** (Europe, Africa, Middle East, Far East)

EUROPE TO WEST AFRICA & SOUTH AMERICA

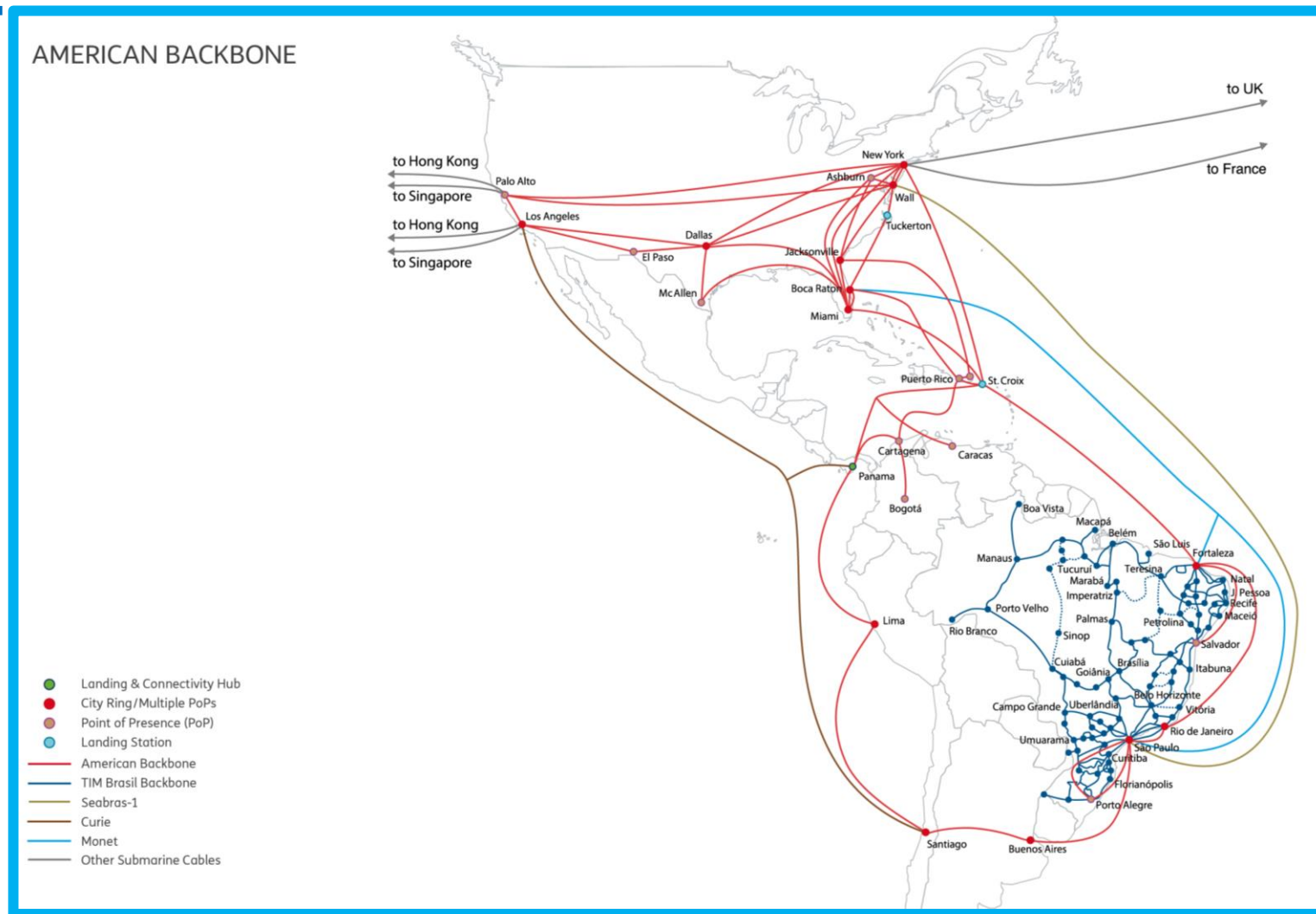
- **SAT-3** (Europe, West Africa), **ATLANTIS-2** (Europe, West Africa, South America)

Key Regional Backbones: Americas



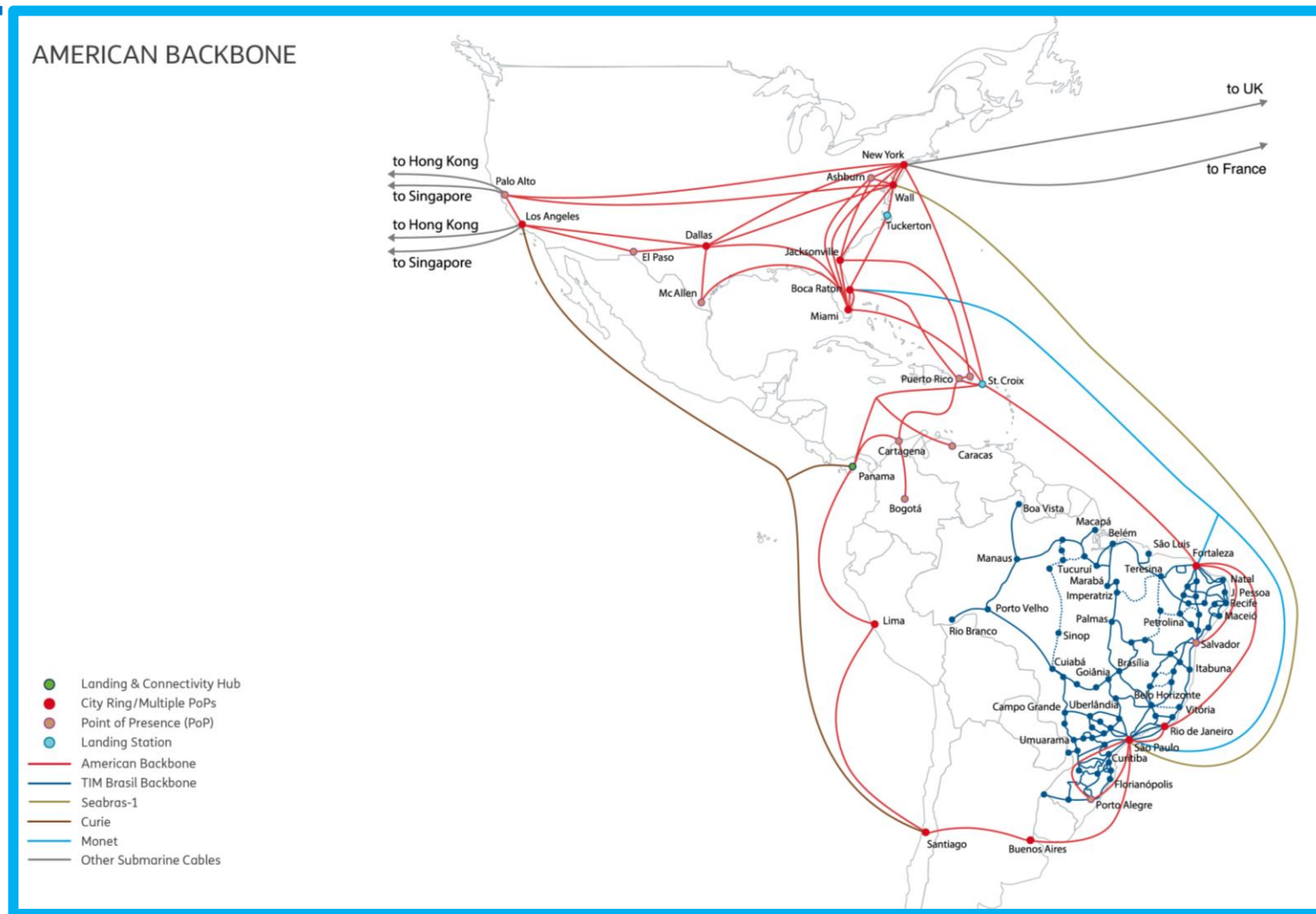
- Full IP network in the Americas
- **State-of-the-art proprietary fiber optic backbone in 8 countries: US, Argentina, Brazil, Chile, Colombia, Panama, Peru, Venezuela**
- New proprietary redundant backbone links from North to South America
- **TIM Brasil Backbone fully integrated with Sparkle's global network**
- Capacity across the Atlantic and the Pacific
- **New investments in Panama** for the construction of an **open landing and connectivity center** that aims to become the **digital hub for all Central America, the Andean region and the Caribbean**

Reinforcing Leadership in the Americas through Seabras-1....



- First cable to connect Sao Paulo directly to New York
- Seabras-1 is based on six fiber pairs and with initial design capacity of 72 Terabytes
- Sparkle owns 3 out of the 6 pairs
- Investment in a Branch Unit in Fortaleza, Brazil, and a protected backhaul between New York and Miami
- Full network resiliency with top service quality
- With Seabras-1 Sparkle will support the fast growing demand of capacity originating in South America, especially Brazil, along the South to North America route, one of the most relevant IP traffic streams globally
- With the backhaul extensions from cable landing points to main PoPs in New York and Sao Paulo, Sparkle will also provide easy onward connectivity to rest of world

....and Curie Submarine Cable



- New fiber pair on Curie submarine cable system connecting Chile to US
- Google-owned subsea cable Curie is the **first direct new generation US-Chile cable connecting Los Angeles to Valparaíso**
- Sparkle's new fiber pair on Curie will be **fully integrated with Sparkle's global backbone, increasing redundancy and offering a fourth diversified route to directly connect South and North America**
- Thanks to these newest highways, Curie in the Pacific and Seabras-1 in the Atlantic, Sparkle offers the best performance in terms of latency and robustness through its pillar connectivity service City2City and its global Tier-1 IP transit service Seabone



Thank You

