



NEARBY
COMPUTING

nearbycomputing.com

HISPASAT

Fast deployment of services
in **remote locations**



Challenges

01

LOW QUALITY SERVICE

Remote business locations or rural areas usually suffer from a **lower service level compared to urban or industrial areas**.

02

DIGITAL TRANSFORMATION

These areas are at risk of **not being able to enjoy the upcoming digital transformation** of industry, education, health, etc. or to pay a high extra cost for not losing track.

03

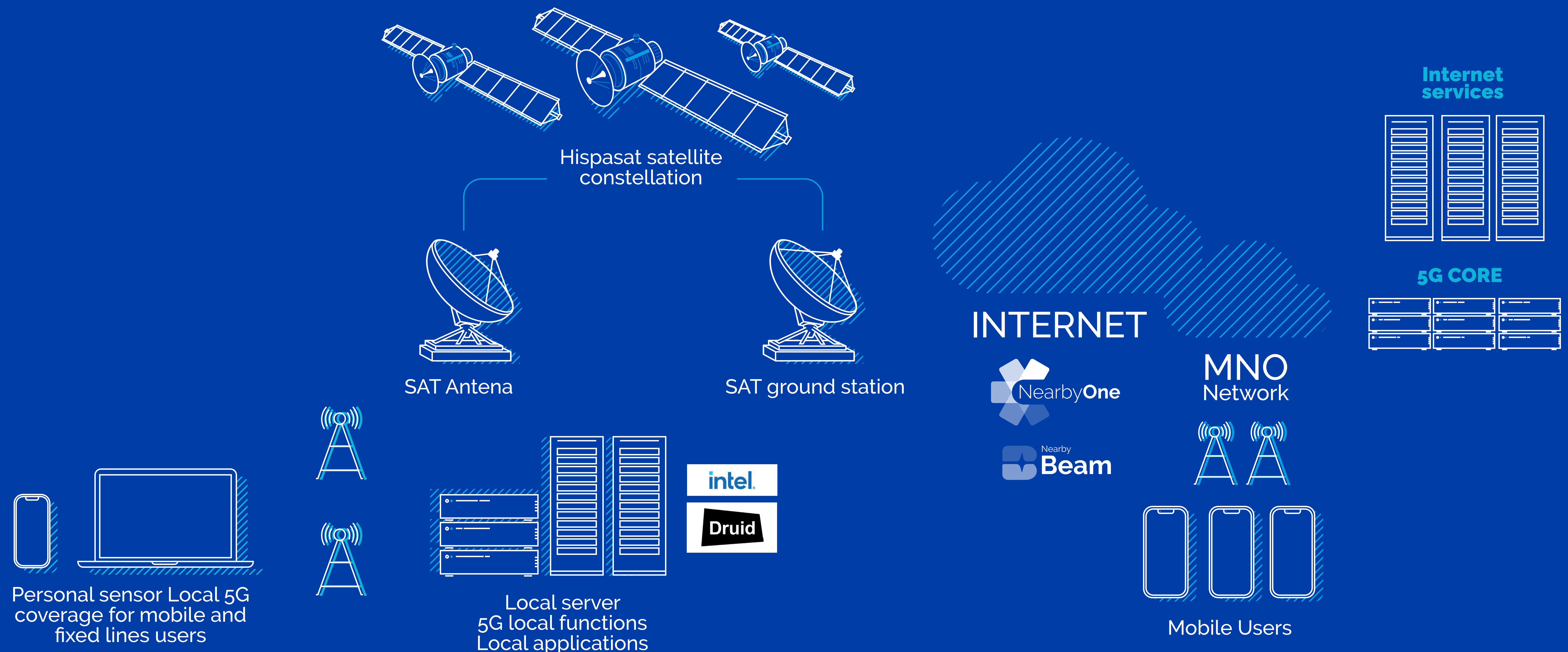
CONNECT RURAL AREAS

Governments are developing programs to **connect rural areas but at a slow pace**. Moreover, not only extra investments are needed but OPEX are significantly higher and governments don't pay for it.

Solution architecture

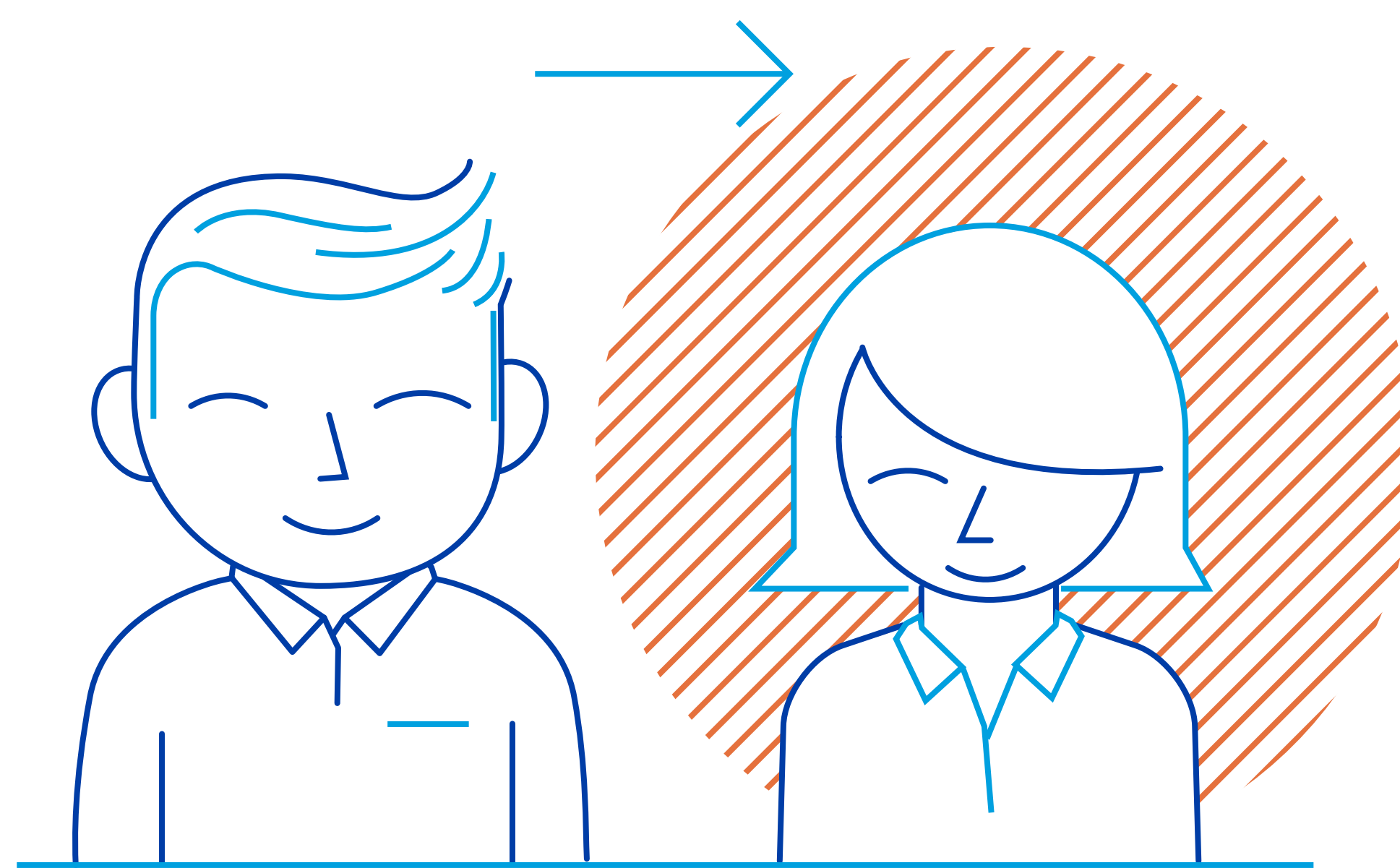
Extension of 5G networks in remotes sites through satellite backhauling

Thanks to Beam and Glide, the provisioning and lifecycle management of the video analytics and mission-critical communications applications are enabled. Provisioning and lifecycle management of the 5G core are also supported. This entire stack runs on Lenovo edge servers.



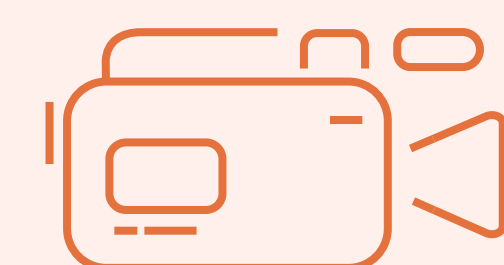
Use cases examples

Users can enjoy these and other services through the local communication infrastructure



Edge hosted team

Video features



- Screen Sharing.
- Whiteboard.
- Switch between cameras.

Voice features



- Dial pad to make PSTN calls.
- PSTN and PBX integration with transcoding.
- Multiconference.



Edge cloud gaming

Key elements

Zero Effort

Do not modify the application.

Low Cost

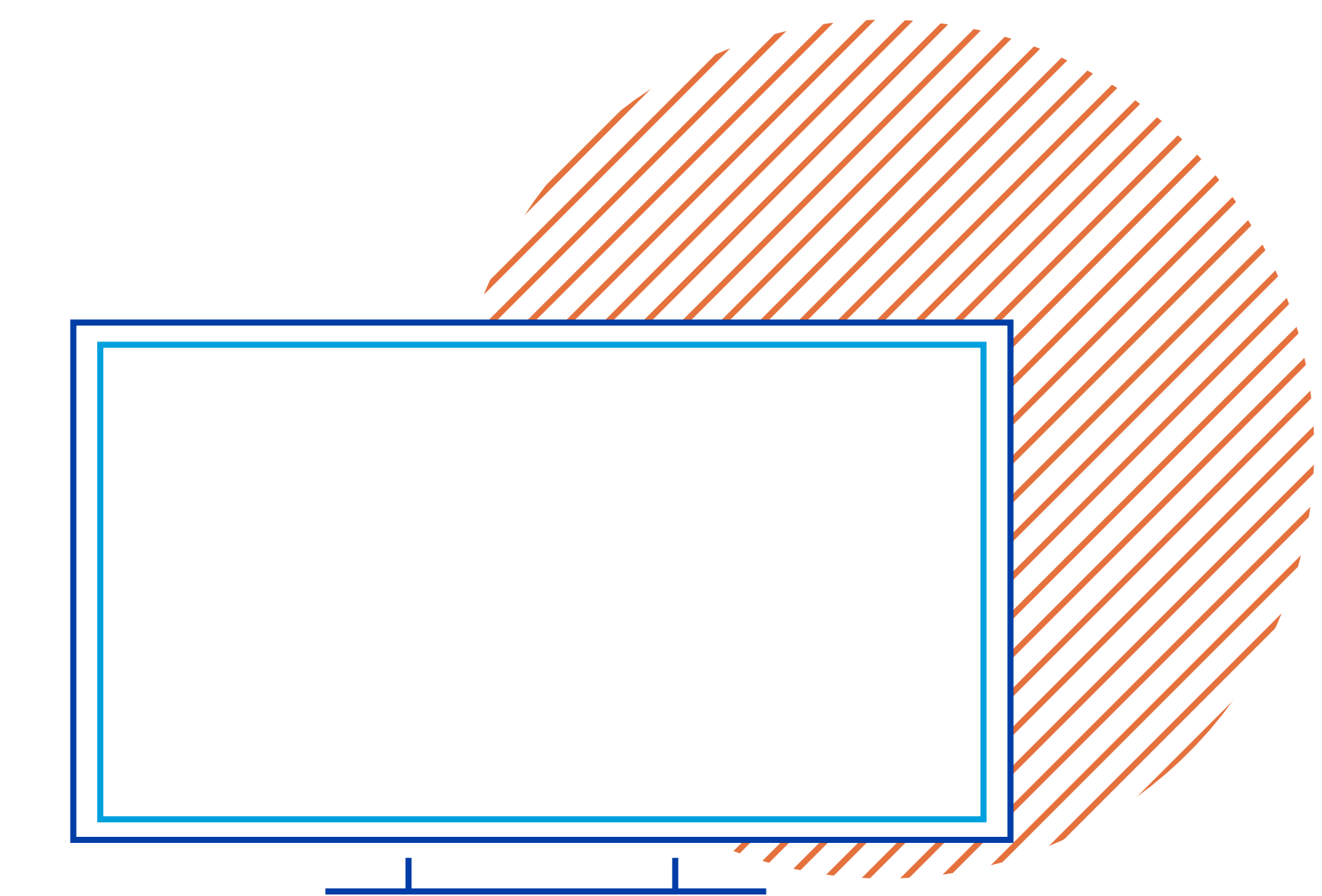
Patented technology reduces infrastructure costs to provide the service.

Low Piracy

Only A/V streams are sent out to the remote end-devices.

From any device

3D intensive software can be accessed from any end-device, FHD, 60fps.



Edge content delivery network

Key elements

Latency

Reduced UE to content time.

Throughput

No backhauling bottlenecks.

Availability

Close to the users, less exposed to connectivity issues.

VALUE-ADDED SOLUTION

Solution **outcomes**

The fast and affordable access to next generation services in areas with poor network coverage.

NearbyOne's orchestration enables the extension of cutting-edge services to remote locations, leveraging SAT communications. Service providers or companies with remote sites can deploy and manage the latest applications at an affordable CAPEX and OPEX budget.

- Lots of potential beneficiaries: deployable in rural communities, remote enterprise sites, mines, sea platforms, boats, public facilities in wild environments...
- Ultra- fast solution deployment: 1-2 days instead of 1-2 weeks.
- Affordable backhaul costs, with no investment.
- Extension of public 4G/5G networks to access public telecom services.
- Private 4G/5G network on every remote business location with one centralized network Core.
- High-bandwidth, low latency services can run locally thanks to Edge Computing, delivering the same quality standards as in urban areas.
- Local phone calls can be processed locally avoiding the satellite backhaul latency.
- Flexible sizing of the solution to allow limited CAPEX.
Remote orchestration services enable a tightly controlled OPEX – no support technicians' travel.
- Can be fed by solar/wind power, backed by a fuel engine.



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