



# ParleIoT

SAY MORE WITH LESS DATA



# VISI • NSPACE



**2011**  
Foundation



**41**  
Employees



**Cyber, Space**  
and Defense



**DE & PT & ES**  
Offices

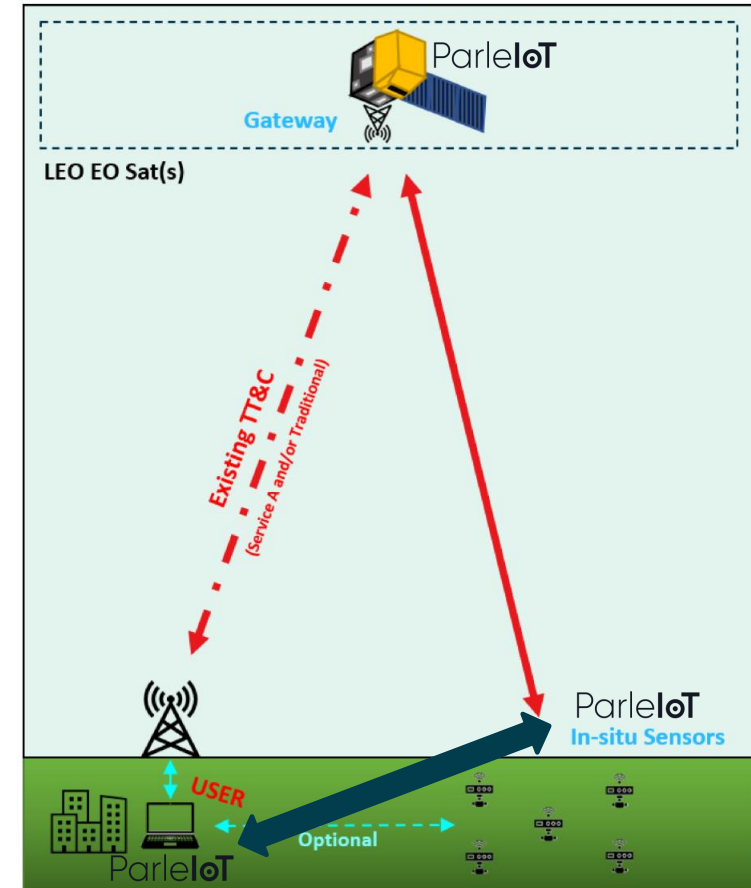
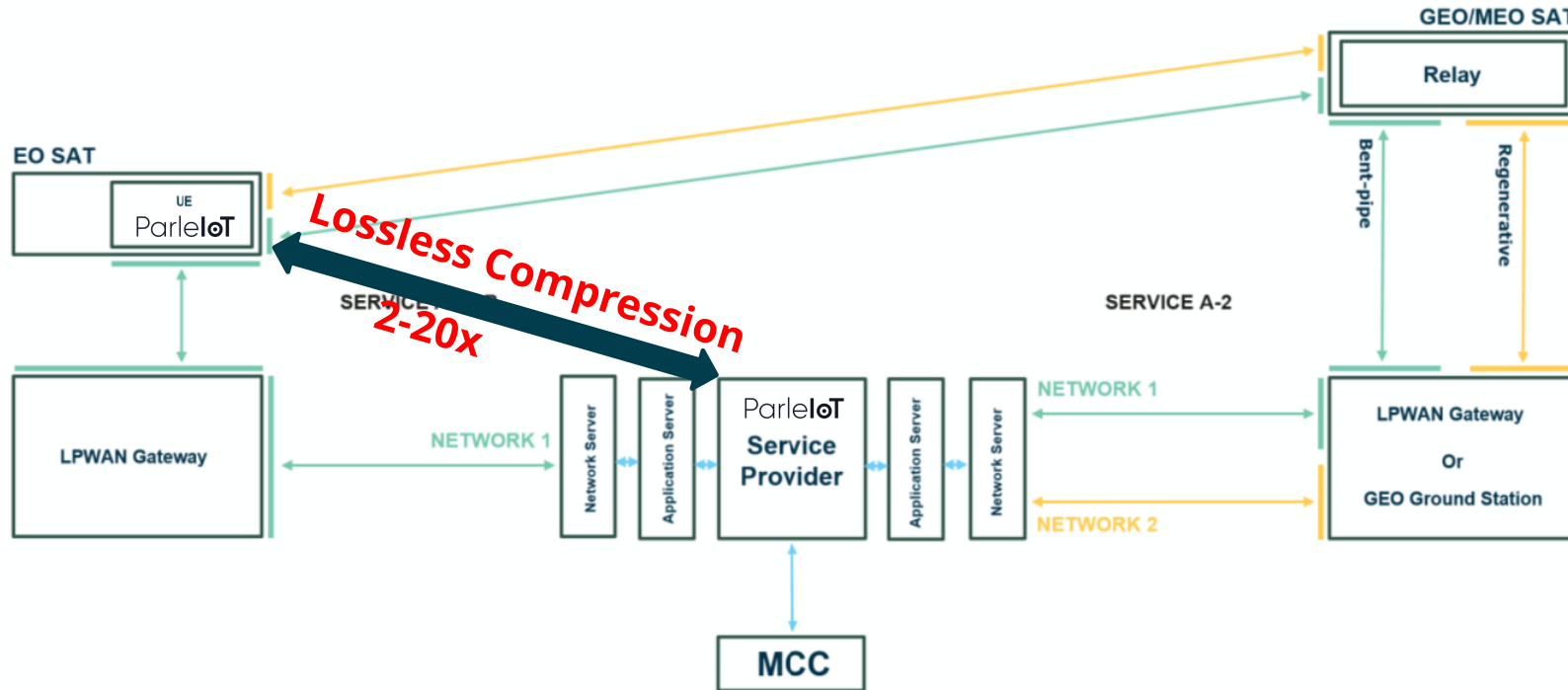
# What is it?

- Lossless data compression
- Cost reduction for IoT data
- Lightweight and efficient



<https://parleiot.com>

# SHOWCASE – PARLEIOT



# PARLEIOT – ADDED VALUE

## Decreased data volume for cost reduction

- Enhance the battery life of IoT sensors
- Reduce transmission costs
- Increase effective data volume in daily allowance
- Deployable on satellites, sensors, gateways, and cloud

	Service A-1		Service A-2		Service B	
	Minimum	Scalability	Minimum	Scalability	Minimum	Scalability
Data Type	TT&C Messages	-	TT&C Messages	-	Data & Messages	-
Direction	Bidirectional	-	Bidirectional	-	Bidirectional	-
Coverage	Terrestrial & Coastal (Very Limited open ocean coverage)	Gateway distribution (Minimum Elevation Angle)	Terrestrial & Ocean (Limited polar region coverage)	Minimum 3 GEO Relays (MEO to address pole coverage)	Terrestrial & Ocean (Limited in-situ sensor battery)	Sensor distribution (More EO LEO Satellites)
Visibility Latency	≤ 10 Minutes (Limited by ocean coverage)	Gateway distribution (Minimum Elevation Angle)	Near-zero (Limited by pole coverage)	Minimum 3 GEO Relays (MEO to address pole coverage)	N/A (Limited by latitude, orbit, app)	No. LEO EO Satellites No. In-situ Sensors
Upload Speed	≥ 2kbps	Limited by Link Budget	≥ 2kbps	Limited by Link Budget (possible with add. service cost)	≥ 2kbps	Limited by Link Budget
Download Speed	≥ 2kbps	Limited by Link Budget	≥ 2kbps	Limited by Link Budget (possible with add. service cost)	≥ 2kbps	Limited by Link Budget
Daily Data Allowance	≥ 30kB (150 Messages per day)	Increase allowance (at an additional service cost)	≥ 30kB (150 Messages per day)	Increase allowance (at an additional service cost)	≥ 3kB (30 Messages per day)	Increase allowance (with bundle options & service cost)
Message Length	Variable (Ave. 0.2kB)	Protocol dependant (Max 1kB)	Variable (Ave. 0.2kB)	Protocol dependant (Max 1kB)	Variable (Ave. 0.1kB)	Protocol dependant (Max 1kB)
Capacity	≥ 500 Satellites	Gateways & Satellites (Additional ITU BW if needed)	≥ 500 Satellites	Gateways & Satellites (Additional ITU BW if needed)	≥ 50 Sensors (/satellite)	≤ 20,000 Sensors (/satellite) ≥ 50 LEO Gateways (/sensor)

**Thank you!**

**VISION** ● **N**  
SPACE

milenko.starcik@visionspace.com

**VisionSpace Technologies**

Robert-Bosch-Straße 7

64293 Darmstadt

Germany



<https://parleiot.com>