



# ASPIDER-NGI IoT On-Demand Data Connectivity



## Summary

ASPIDER-NGI is a privately held, global provider that offers Infrastructure as a Service (IaaS) for mobile access, applications, and connectivity services. The ASPIDER-NGI HQ is based in the Netherlands, one of the world's most competitive mobile markets. Over the years, the company has extended its operations to Belgium, France, UK, Eire, Malta, Ivory Coast, New Zealand, and United States. The company enables disruptive communication service development and provides voice, data, and messaging integration. All services are on-demand, cloud-based solutions delivered via APIs or web interfaces. Our objective is to allow all organizations to easily and cost-effectively add mobile connectivity and application capabilities to extend their services. ASPIDER-NGI customers include some of the largest operators in the world, including these examples:

Vodafone

T Mobile

Tele 2

KPN

**“We are seeing huge increases in transactions and increases in device growth. This means we have to be able to scale at ever-accelerating rates but must manage the service delivery expansion as a seamless process.”**

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**Tony Craven**  
CIO, ASPIDER-NGI

## The challenge

As one of the leading IoT Mobile Virtual Network Enablers (MVNEs), ASPIDER-NGI is focused on helping clients connect their millions of IoT devices. The growth of IoT devices started for the company in 2014, when the number of machine subscribers that it supported on its core network actually surpassed the number of human subscribers. According to IHS Markit Research, the growth in the IoT market is not expected to slow down, having flourished to an estimated 15.4 billion devices in 2015, forecasted to almost double to 30 billion in 2020, and more than 75 billion by the year 2025. As the machine growth on the company network continued, reductions in ARPU and the transaction volumes proliferated: all factors that forced ASPIDER-NGI to garner new economies of scale to support its client base. Its customers were also increasingly delivering critical solutions on which businesses depend for their operations: automotive, safety, security, and transportation. To service all of its requirements, the company needed a simplified mobile architecture that could scale elastically end to end securely, with machine-learning capabilities and virtualized mobile network functions, and could distribute those functions where needed to optimize how it met customer and service demands.

## The ASPIDER-NGI Solution

Operators need a simplified mobile architecture that can securely scale elastically end to end, with machine-learning capabilities and virtualized mobile network functions, and can distribute those functions where needed to optimize how they meet customer and service demands. For ASPIDER-NGI it was about redefining customer

business through the network and integrating with cloud services reaching them over all access types. These initiatives included acquisitions of IPR and smaller competitors; refocusing of target solutions to the larger OEMs; and, most importantly, challenging their teams for new thinking. One of the M&A transactions strengthened their OCS position to cope with increased capacity, and this triggered a complete reevaluation of their Mobile Packet Gateway and GGSN scalability. They chose the Cisco® Ultra Packet Core (UPC) solution to provide 4G/5G capability and to help better manage allocation of sessions and improved policy enforcement. The solution is fully integrated to the ASPIDER-NGI core using orchestration of both NFV and overall network core provisioning for six distributed colocations.

**“We tasked our development, marketing, and operations staff to find new technologies to stimulate even more growth and remove traditional obstacles. The end result forced us to evolve our core technologies and the way that we apply them to meet our customer needs.”**

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**Jan Mooijman**  
CEO, ASPIDER-NGI

**“To grow, we have to accelerate our pace of thinking, and our openness to adopting new approaches that can still provide the reliability that the industry demands.”**

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**Tony Craven**  
CIO, ASPIDER-NGI

**“Innovation is a mindset that you have to continually develop.”**

**Jan Mooijman**  
CEO, ASPIDER-NGI

Mobile operators get a network that can give them the flexibility, agility, control, security, performance, and resilience to monetize and match the demands of new services such as vehicle and drone operation, critical infrastructure status monitoring and fault remediation, and industrial automation process control. By preparing your network, you won't just deliver new services faster; you will be able to deliver them better, ready to realize the full potential that 4G and soon 5G has to offer.

By partnering with Cisco, service providers also understand that software-defined networking and virtualization can now enable new services that offer the following benefits:



## How Cisco helped

4G/5G is about empowering your customer business exponentially to deliver innovative services from the mobile cloud. It's not just new technology. With the combined ASPIDER-NGI and Cisco solution delivering the 4G/5G services and support that our enterprise customers demand with the scale, simplicity, flexibility, and agility they need. Cisco Ultra Services Platform supports Control and User Plane Separation (CUPS), which allows ASPIDER-NGI to disaggregate its cloud-native functions and deploy them across the IP network with multiaccess edge computing wherever needed to optimize delivery of content and services. Ultra also will also enable network slicing, and the Cisco IP infrastructure offers routing support and the Cisco Automation suite to make sure of the specific KPIs each slice requires. As ASPIDER-NGI customer access requirements grow, Ultra's multiaccess function provides seamless X-access convergence across cellular, Wi-Fi, and fixed line access. This creates the flexibility for higher aggregated bandwidth, access selection to balance service quality and cost, and connection redundancy. With the combined ASPIDER-NGI and Cisco solution, we can cover your services end to end from the cloud to the device across multiple access types to dynamically adapt and deliver the best mobile experiences, giving you the ability to deliver superior flexibility, agility, and performance beyond your toughest competitor.