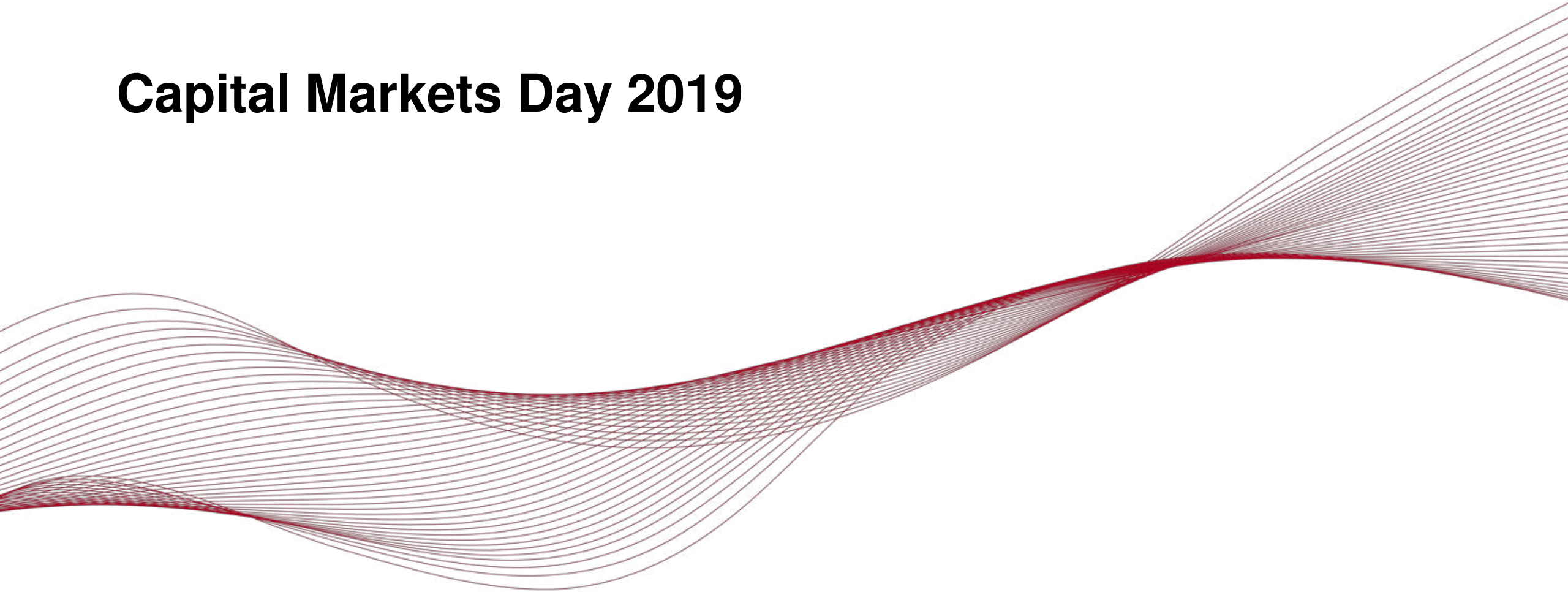


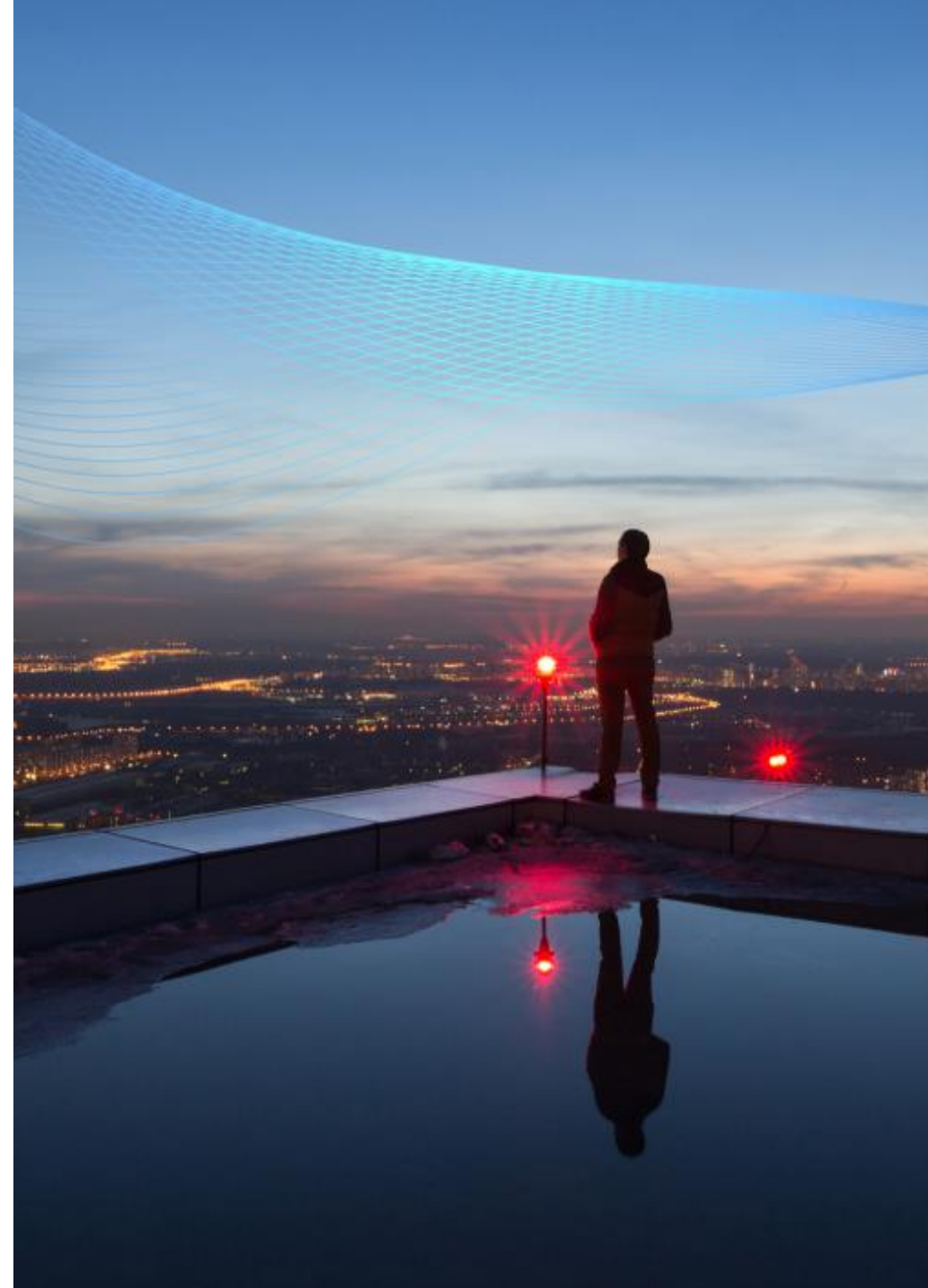


# Capital Markets Day 2019



# Agenda

- 1:00 PM ▶ **Business and Strategy Update**
  - ▶ **Video Traffic Management**
  - ▶ **Embedded DPI for Cybersecurity**
- 2:30 PM ▶ **Coffee Break**
- 2:50 PM ▶ **5G Core Networks**
  - ▶ **Integration of Acquisitions**
  - ▶ **Financial Update**
  - ▶ **Concluding Remarks**
  - ▶ **Question and Answer Session**
- 4:15 PM ▶ **Snacks and Mingle**





# Introduction

Jan Häglund  
President and Chief Executive Officer



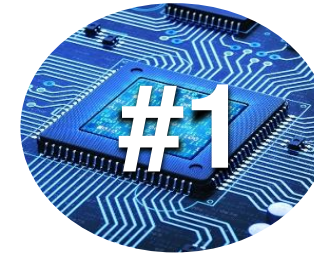
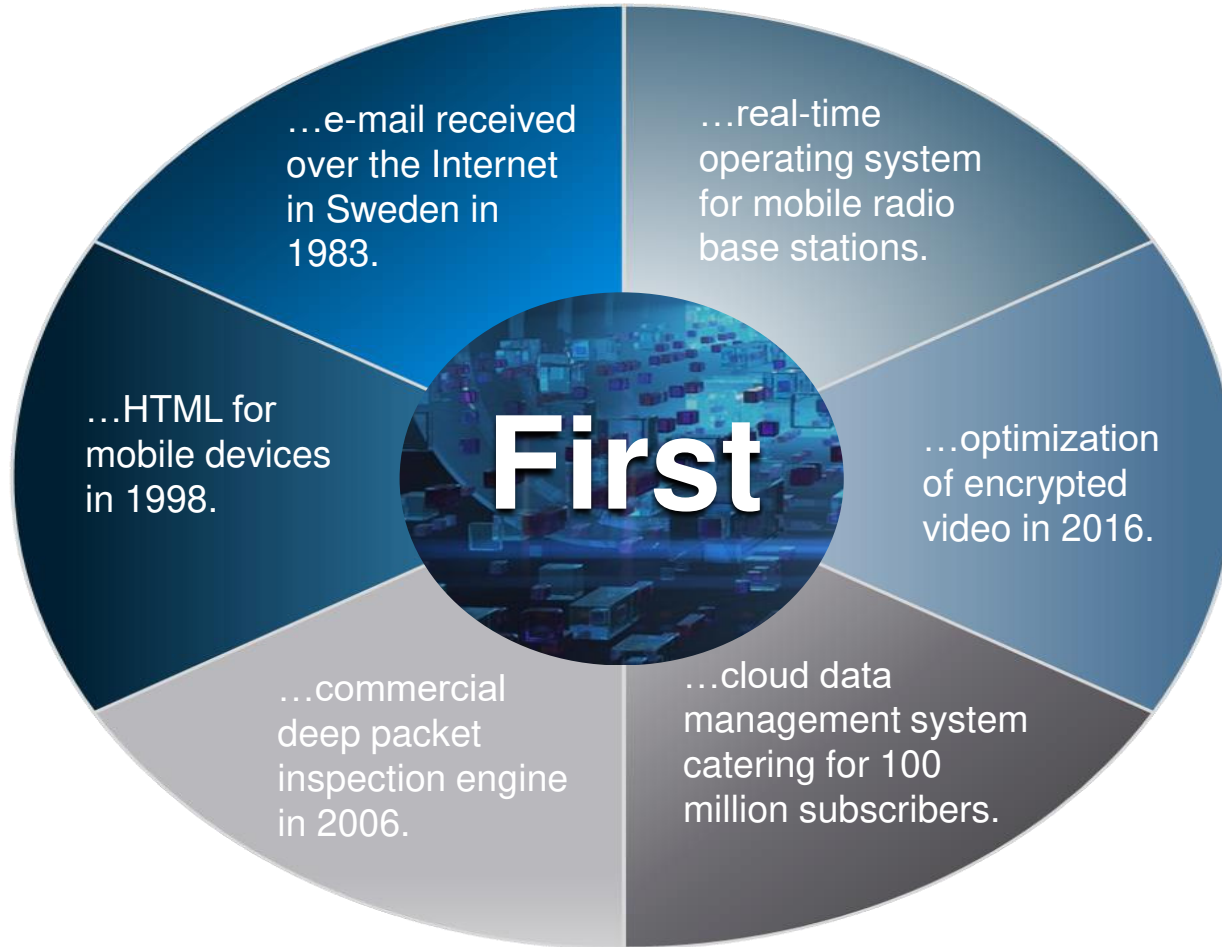


*Enea is a world-leading supplier of innovative software components for telecommunications and cybersecurity*

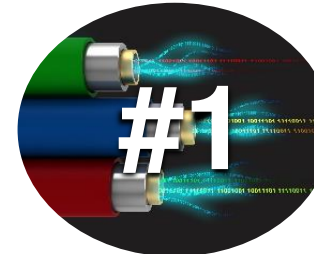


**ENEAA**

# Proven Track Record



**Real-time operating system for radio networks**



**Embedded Deep Packet Inspection**



**Video traffic management**

# Solid Financial Performance

Jul-Sep 2019

Jan-Sep 2019

HEAD  
QUARTER  
KISTA,  
SWEDEN

REVENUE  
250.2  
MSEK

OPERATING  
MARGIN\*  
25.4  
PERCENT

LISTED  
NASDAQ  
STOCKHOLM  
(MID CAP)

EARNINGS PER  
SHARE  
2.37  
SEK

R&D OPEX  
INVESTMENT  
16  
PERCENT

REVENUE  
751.2  
MSEK

OPERATING  
MARGIN\*  
26.8  
PERCENT

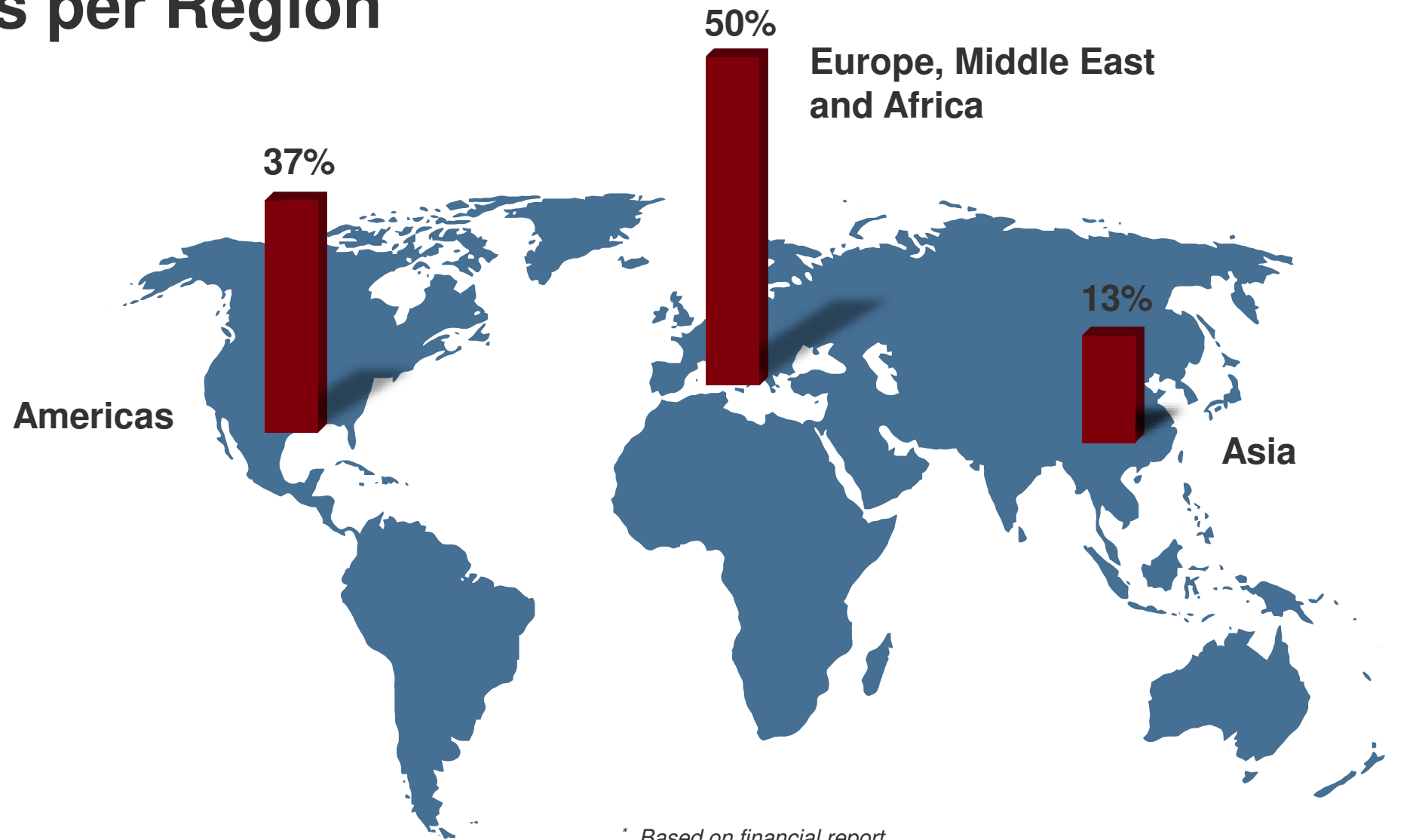
EARNINGS PER  
SHARE  
7.21  
SEK

R&D OPEX  
INVESTMENT  
16  
PERCENT

\* Excluding non-recurring items



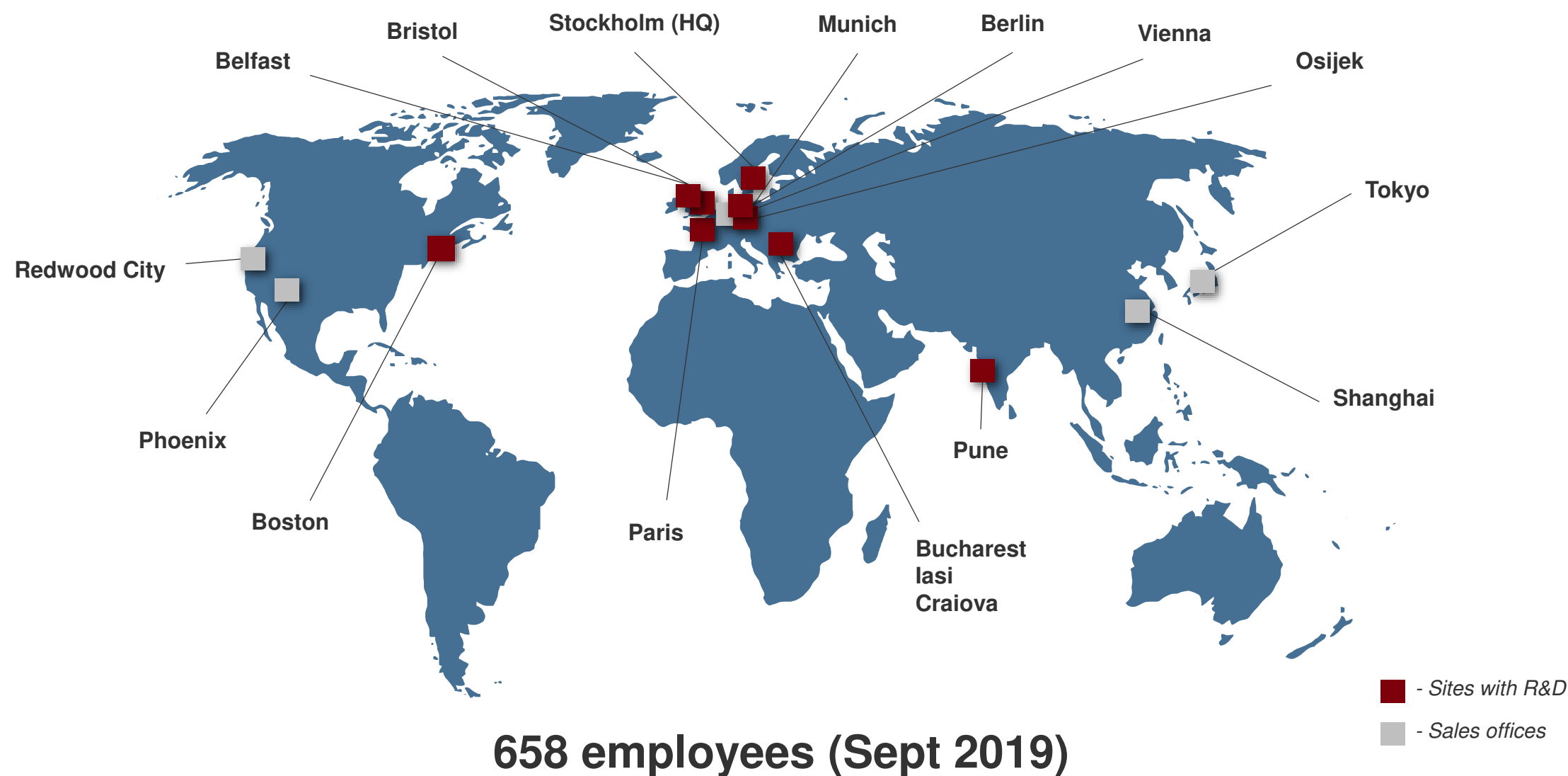
# Sales per Region



*\* Based on financial report  
for third quarter 2019*

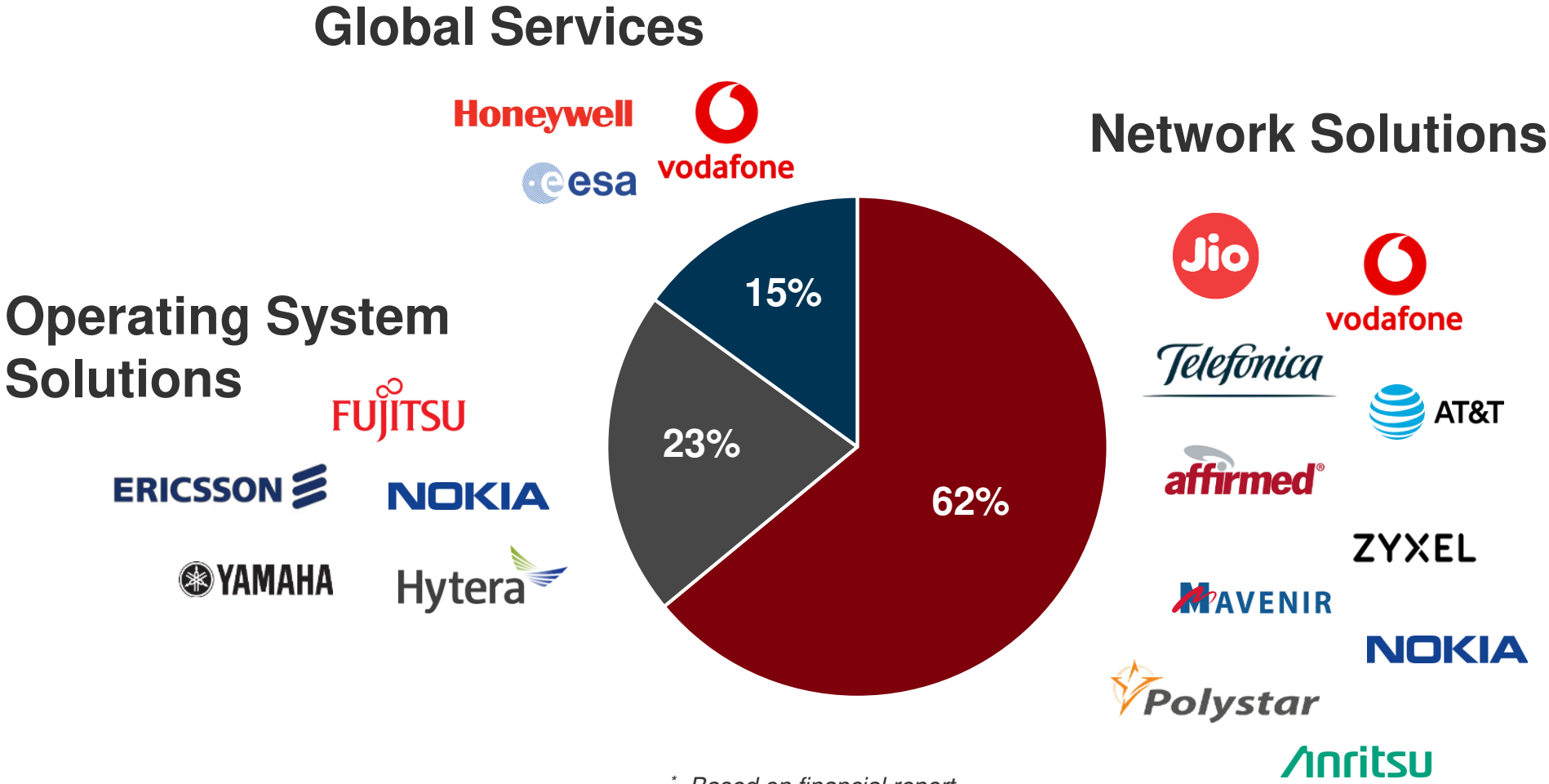


# Global Presence



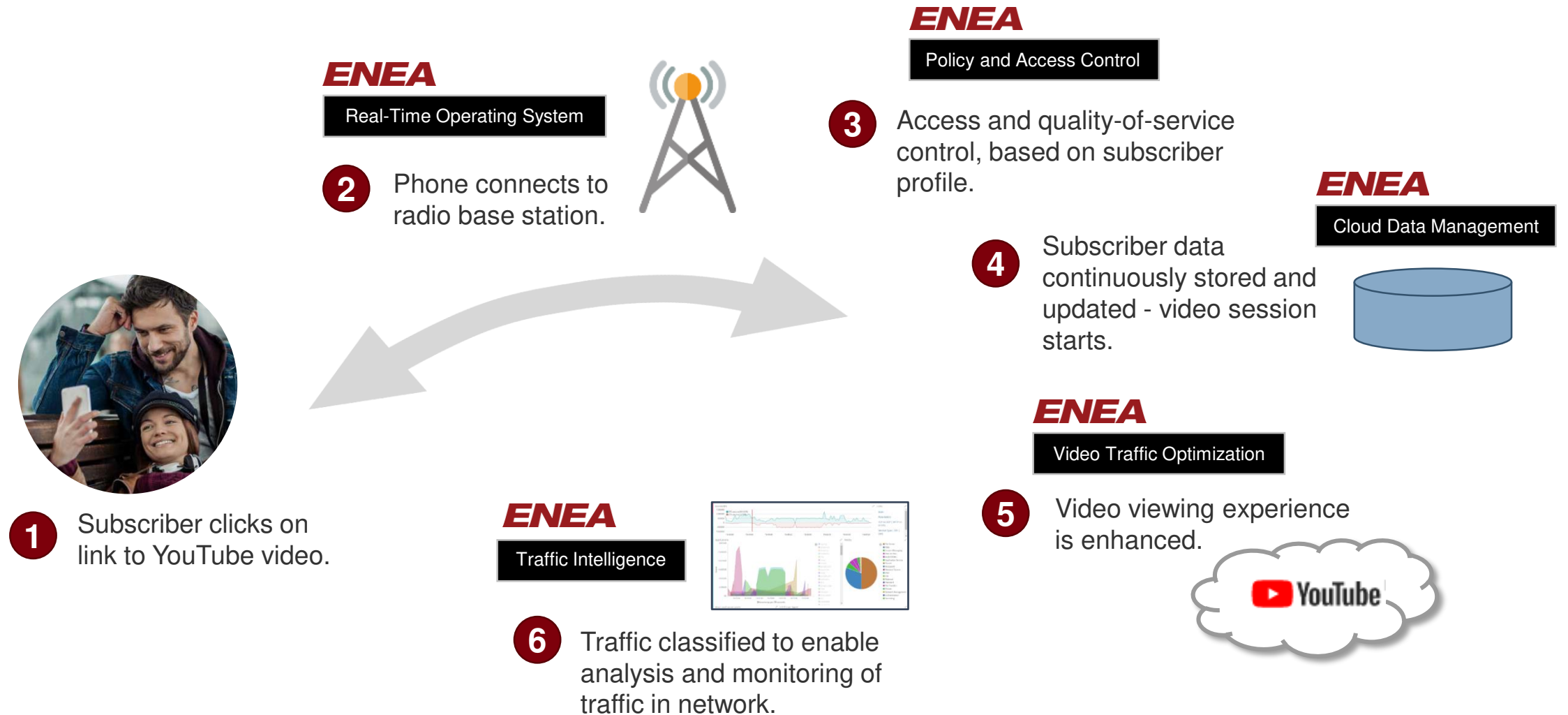


# Strong Customer Base

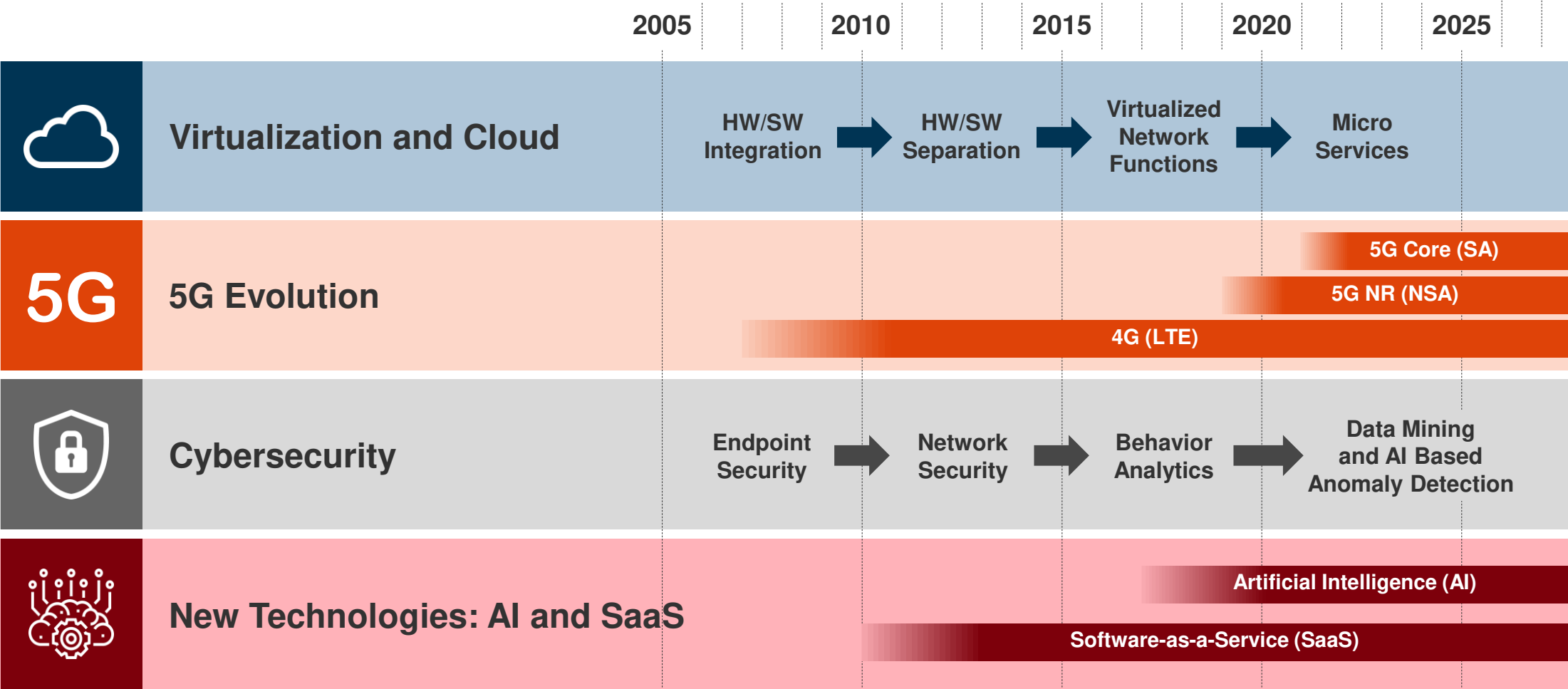


\* Based on financial report  
for third quarter 2019

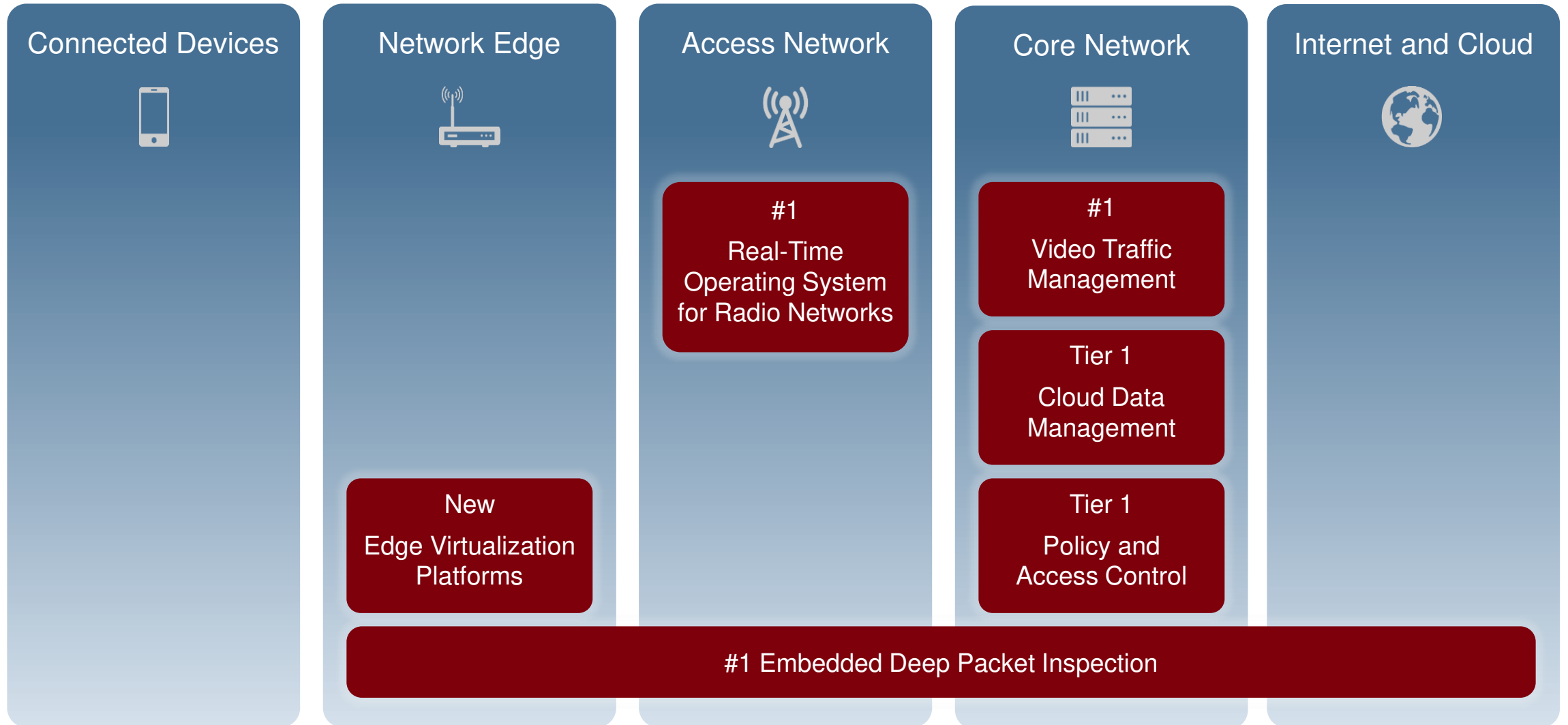
# Billions of People Use our Software Every Day



# Macro Trends Create Growth Opportunities



# Leading Positions in Select Segments





# Successful Complementary Acquisitions



Annual turnover:  
EUR ~12 million (2019)\*  
No. of employees: ~90



Annual turnover:  
USD ~27 million (2017)\*  
No. of employees: ~140



Annual turnover:  
EUR ~14 million (2016)\*  
No. of employees: ~90

- ▶ Software businesses with customer base and revenues
- ▶ Complementary product portfolio, research and development, and innovation capabilities
- ▶ Integration with maintained customer and business focus
- ▶ Synergies in technology, customer base, and administration

*\* Estimated annual turnover  
at time of acquisition*

# Revenue Model – Main Revenue Types

Revenue type	Right	Recognition	Recurring	
<b>License</b>	Perpetual w cap	Time of delivery	No/Semi	New licenses for more capacity
	Perpetual	Time of delivery	No/Semi	Some licenses <sup>1)</sup> are per unit sold from "end-customer"
	Term-based	Over the period	Yes	Normally 3-5 years
	Usage-based	When used	Yes	
<b>Support&amp;maintenance</b>	Upgrades&support	Over the period	Yes	Normally 2-3 year contract, renewed Y on Y
<b>Services</b>	Fixed fee	%-complete	No/Semi	Some projects are for a few years
	Time & mtrl	When used	No/Semi	Some projects are for a few years

- Multiple revenue models with high degree of recurring and semi-recurring revenue

<sup>1)</sup> example: Contract signed with enterprise vendor, who sell new licenses quarter by quarter to new end-customers

# Well Positioned for Profitable Growth

## Brand

Leading independent provider of software components for 5G core networks and cybersecurity.

## Market position

Best-of-breed in targeted market segments. Trusted for critical software and infrastructure, known for innovative solutions.

## Business models

Software business with high margins and recurring revenues.

## Customers

Global relations with leading Tier 1 operators and solution providers, directly or via partners.

## Financials

Attractive revenue mix. Strong balance sheet with readiness for complementary acquisitions.

# Executive Management Team



**Jan Häglund**

President and  
Chief Executive Officer



**Erik Larsson**

Head of Marketing and  
Communication



**Jean-Philippe Lion**

Head of Business Unit  
Deep Packet Inspection



**Björn Westberg**

Chief Financial Officer



**Adrian Leufvén**

Head of Business Unit  
Operating Systems



**John Giere**

Head of Business Unit  
Openwave Mobility



**Daniel Forsgren**

Head of Corporate  
Development



**Bogdan Putinica**

Head of Business Unit  
Global Services



**Roland Steiner**

Head of Business Unit  
Policy and Access Control

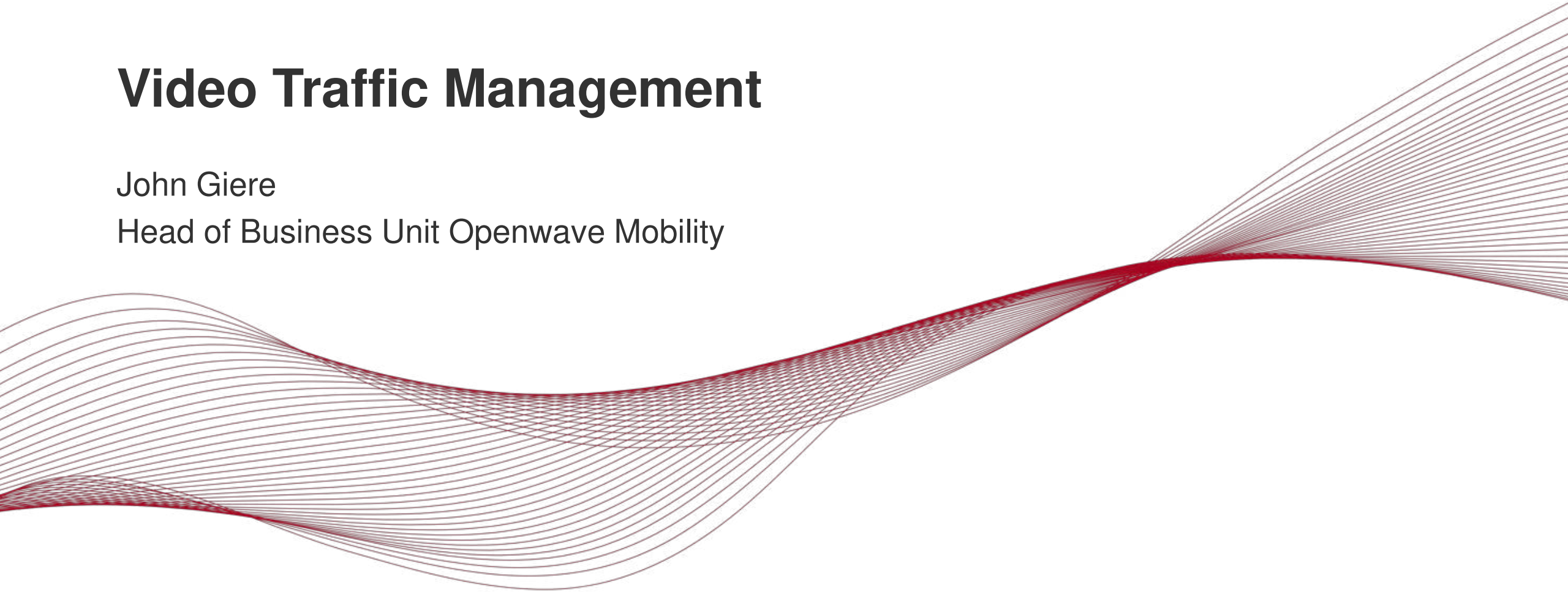




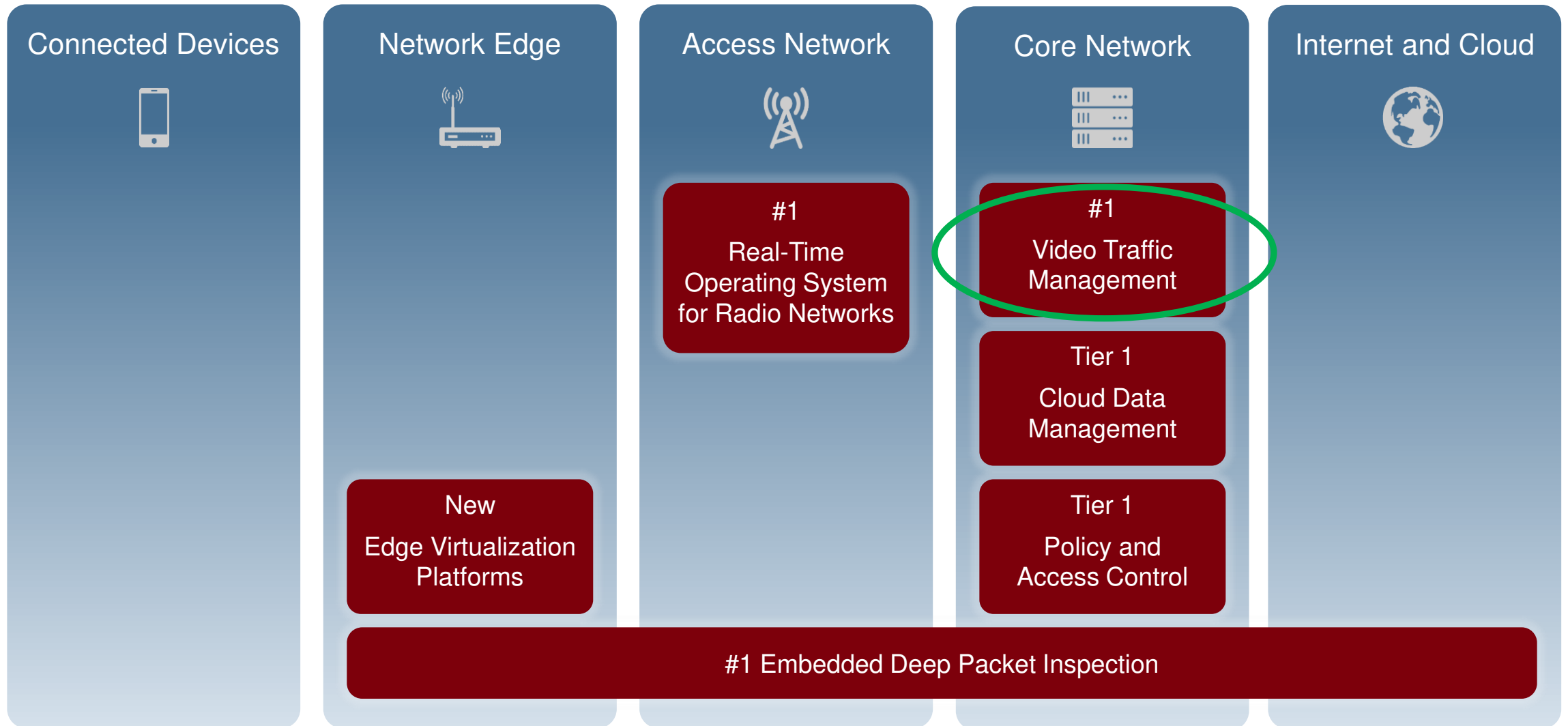
# Video Traffic Management

John Giere

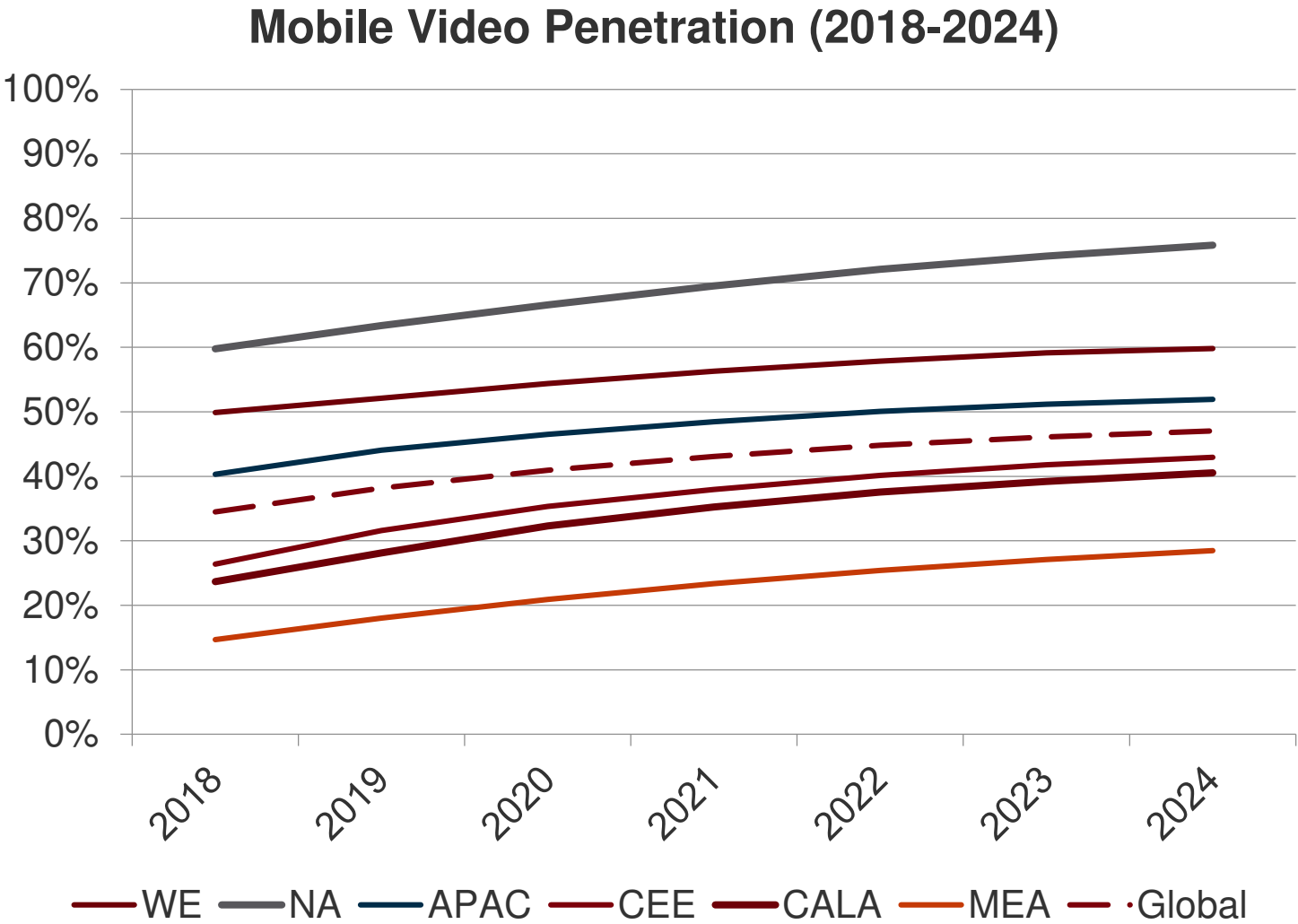
Head of Business Unit Openwave Mobility



# Leading Positions in Select Segments



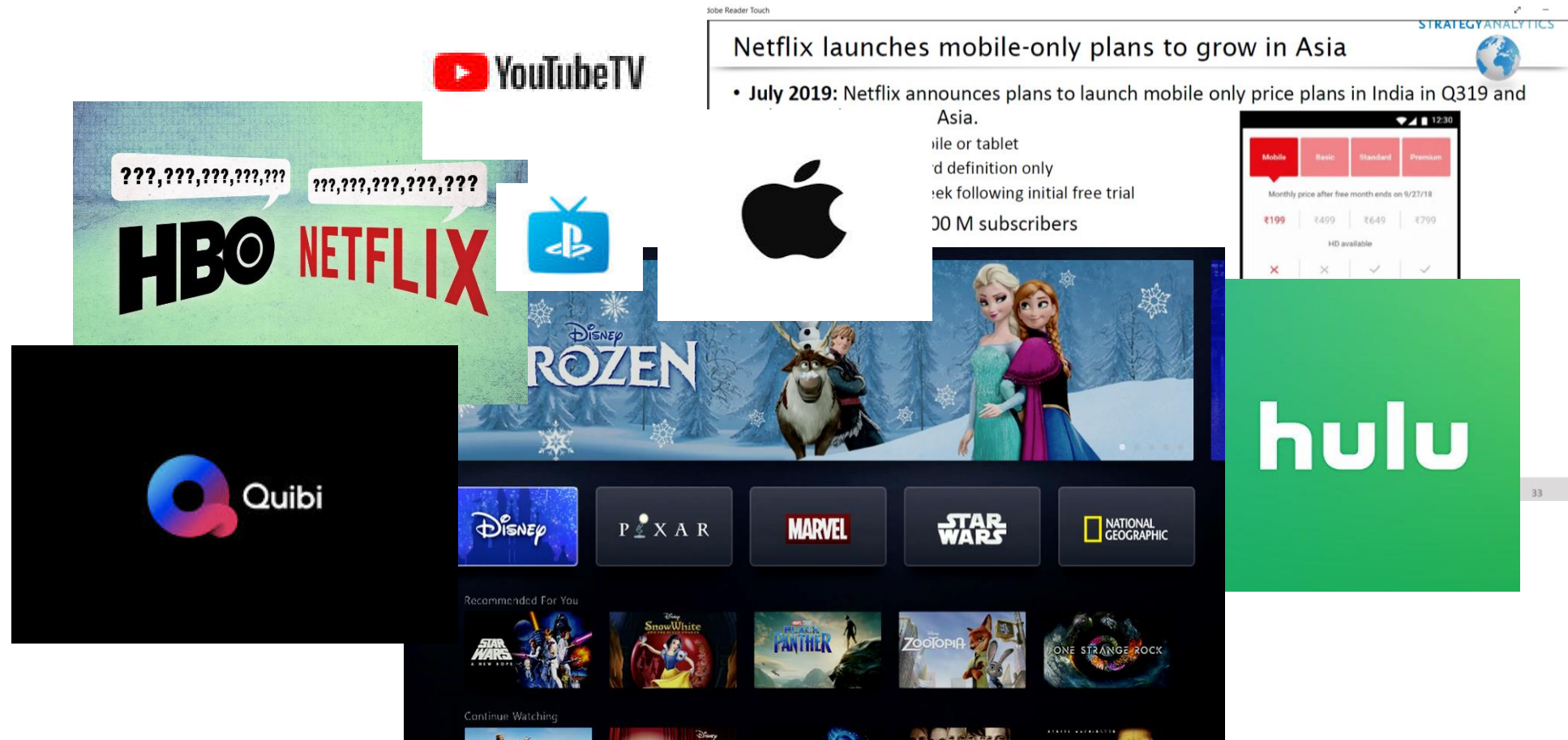
# Market: Adoption of Mobile Video Continues to Grow



*By 2024 there will be 4.6 billion smartphone users across the world*

Source: Global Mobile Video Update, Strategy Analytics, August 2019

# Market: 2019 The Year of Video Streaming Services

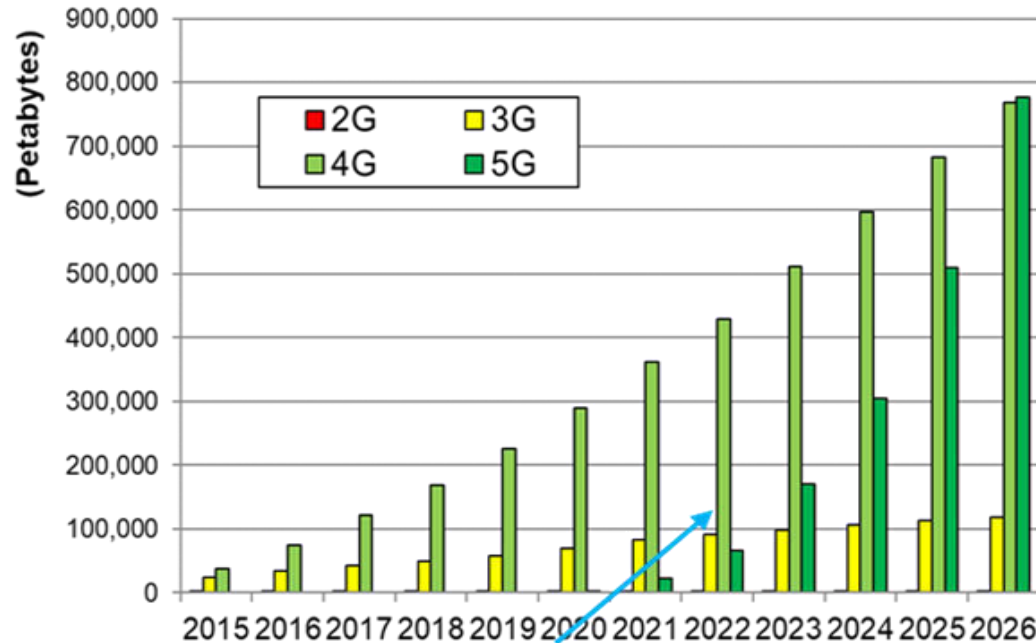


## Mobile video streaming services are driving ever greater video traffic consumption on 4G networks



# Market: 4G Traffic Continues to Increase

Traffic by Wireless Protocol



**2016:** Mobile video represented 48%

**2025:** Mobile video captured 78%

**2022:** 5G traffic starts to grow dramatically

*“5G will not overtake 4G till 2026 thus extending 4G’s return on investment. This is where the money is for the next few years.”*

Source: ABI Research CY2018 Network Technology & Market Tracker Data (Published Feb 2019)

# 5G: Cloud Mobile Video Gaming

LIQUIDSKY

verizon



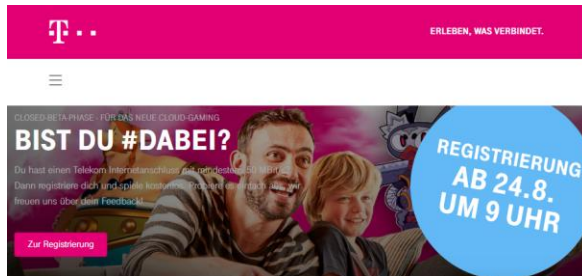
MAGENTA GAMING

T-Mobile



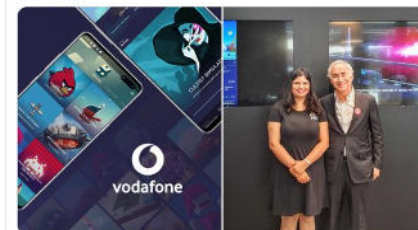
Sprint

Deutsche Telekom's cloud gaming service MagentaGaming will launch by the end of the week



Hatch  
@playhatchglobal

Vodafone users in Spain can now get a 3-month Hatch Premium free trial! 🎮📱 Exclusively available for Vodafone users in Spain. Download Hatch from Google Play and start playing to experience 5G gaming – game on, Spain! 🇪🇸 @VodafoneGroup @Vodafone\_es #WeAreAllPlayers #PlayHatch



Antonio Coimbra



Vodafone Partners with Hatch ahead of 5G Launch

Mobile gaming is emerging as an early consumer 5G battleground

*Analysis Mason forecast 1.3B mobile active cloud gaming users by 2025*

Mobile operators are aiming to leverage 5G Cloud market inflection to monetize mobile gaming services

# 5G: Cloud Mobile Video Gaming

LIQUIDSKY

playpion

HATCH

MAGENTA GAMING

HATCH

verizon

Deutsche Telekom's cloud gaming service will launch by the end of the year

BIST DU #DABEI?

STADIA

November 19th

Sprint

afone Partners Hatch ahead of launch

Analysis Mason forecast 1.3B mobile active cloud gaming users by 2025

Mobile operators are aiming to leverage 5G Cloud market inflection to monetize mobile gaming services

# Cloud Market Leader

## Traffic Management and Cloud Data Management



Examples of active engagements across the globe



# Product Portfolio

## TRAFFIC MANAGEMENT

### *Manage and Monetize Mobile Video Traffic*

- Managing the competing challenges of delivering a superior mobile subscriber QoE cost effectively.

#### **PRODUCT MODULES**

- **RAN Congestion Management Module**
- **Video Traffic Savings Module**
- **TCP Acceleration Module**
- **IP Traffic Management Module**

## STRATUM: CLOUD DATA MANAGEMENT

### *Shared Cloud Network Data Layer Platform*

- Securely store and utilize ANY subscriber data across virtualized front end applications.

#### **PRODUCT**

- **Stratum** – scalable, telco grade data platform enables single point reliable, scalable storage of app and profile data

# Traffic Management Portfolio

## Learning-Based IP Traffic Acceleration

- Improve Network Quality Ranking

Network Acceleration

RAN Congestion Management

## Machine Learning Congestion Detection & Relief

- Reduce Congested Cells by >15%

## Congestion & QoE-Driven Optimization

- Increase video consumption by > 25%

Encrypted Video Management

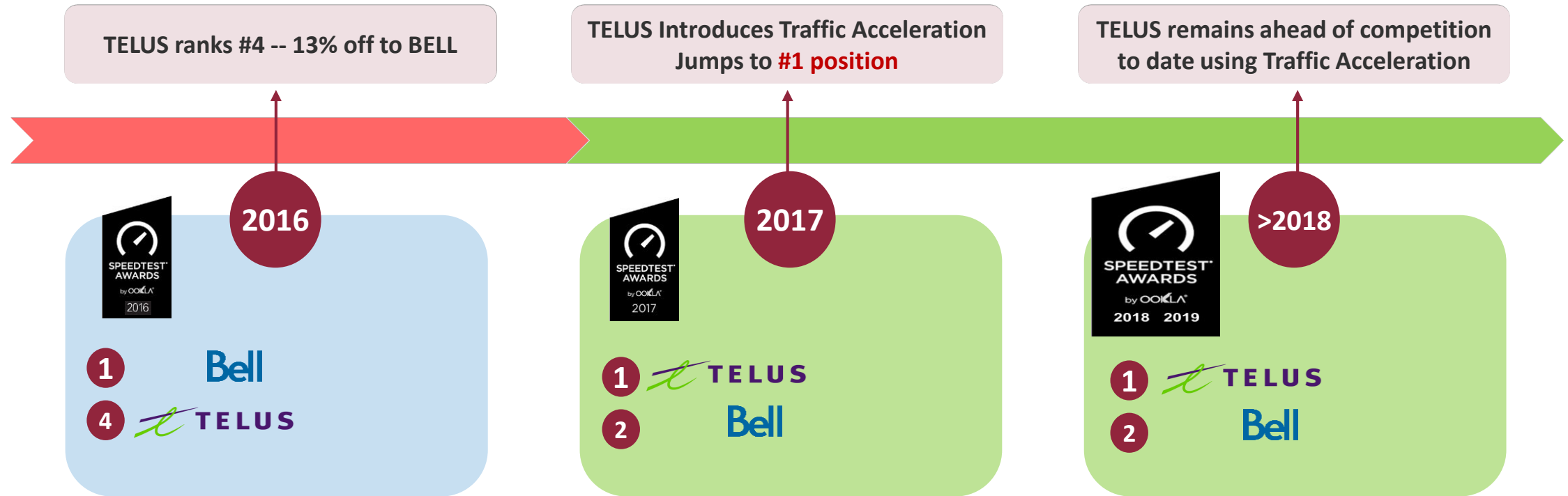
Cloud Gaming Optimization

## Classification & QoS-Driven Application Delivery

- Foster per-user data application consumption by 20% (YoY)

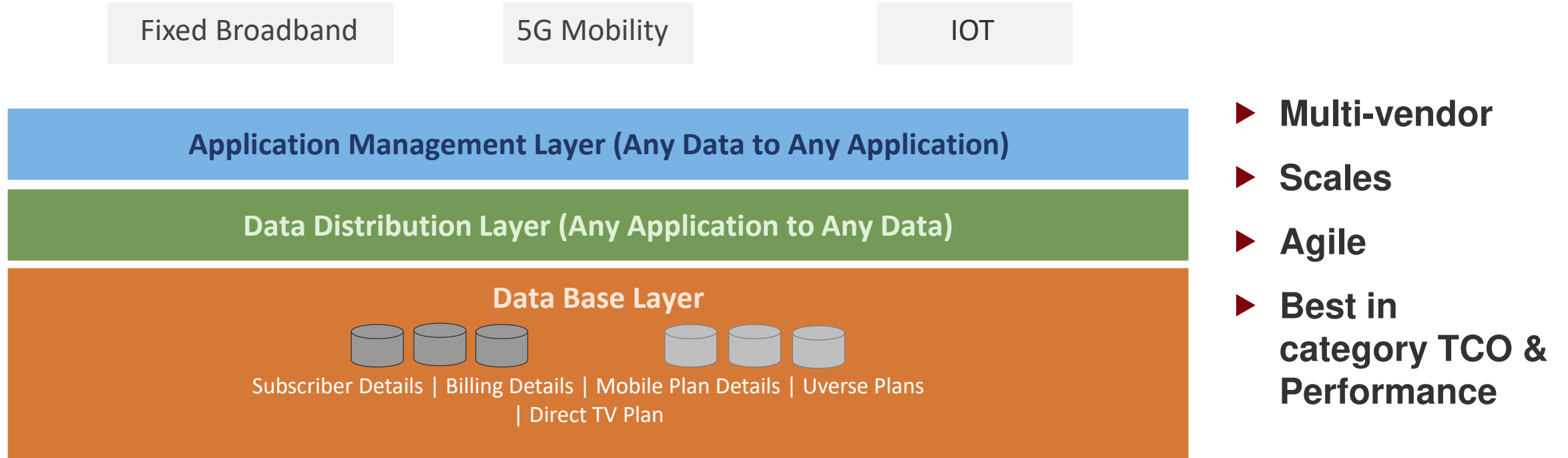
**Strong Customer Value Proposition based on Key Performance Indicators**

# Traffic Management: Delivering Customer Value



Fastest Network: A Customer Competitive Priority

# Stratum: Compelling Customer Value Proposition



**Strong early stage sales momentum – option to deploy standalone  
or integrated with Policy and Access Control products**

# Customer Growth Strategy

Products Sold						
Tier 1 EMEA SP	Engagement Status	TCP Opt+ Proxy Svc	MO + STM	IPTF	SD-RCM	Stratum
Egypt	Deployment	☑	☑		★	☑
Germany	Deployment					☑
Ireland	Deployment	☑	☑	☑		
Italy	Deployment	☑	☑		★	
New Zealand	Deployment	☑	☑			
Romania	Deployment	☑	☑			
South Africa	Deployment	☑	☑			★
Spain	Deployment	☑	☑			
United Kingdom	Deployment	☑	☑	☑		
Democratic Republic of Congo	Deployment	☑	☑			
Lesotho	Deployment	☑	☑			
Ghana	Deployment	☑	☑			
Hungary	Deployment	☑	☑			
India	Deployment	☑	☑			

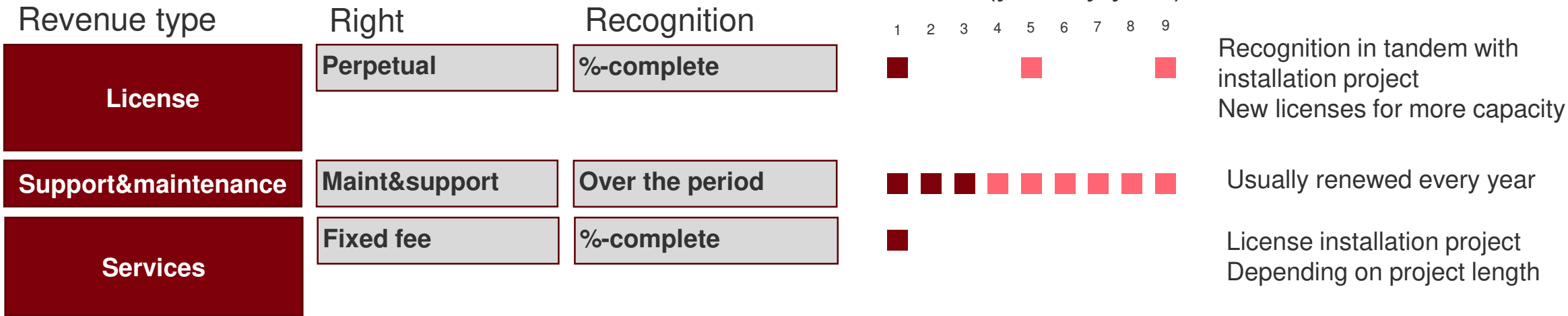
☑ Deployed

★ Trial Ongoing

Example of how we land with our initial platform  
and then expand our presence over time

# Revenue Model

■ Typically part of an initial agreement  
■ Typically part of renewal/extension



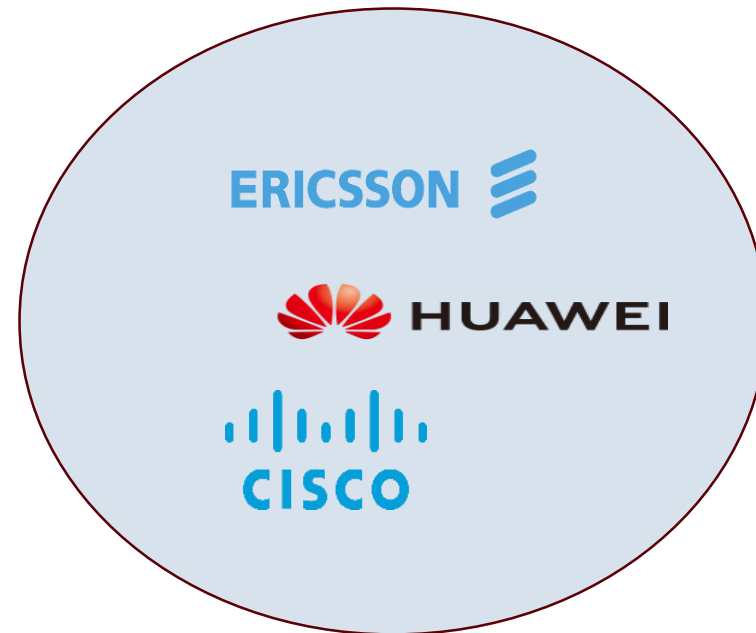
## Example: USD 2.3 Million agreement for Video Traffic Management<sup>1</sup>

- ▶ Perpetual software licenses and professional services of USD 2.0 million, being recognized over third quarter 2019 to first quarter 2020
- ▶ Support and maintenance services recognized during 2020 and 2021.

<sup>1</sup>As announced in Aug 2019:  
<https://www.enea.com/press-releases/Item/?pressrelease=CFF34DDE556137EE>



# Competitive Landscape



**Competitive landscape is broad and often divides between specialist vs. generalist**

# 5G: Investing in Strategic Sales Partnerships



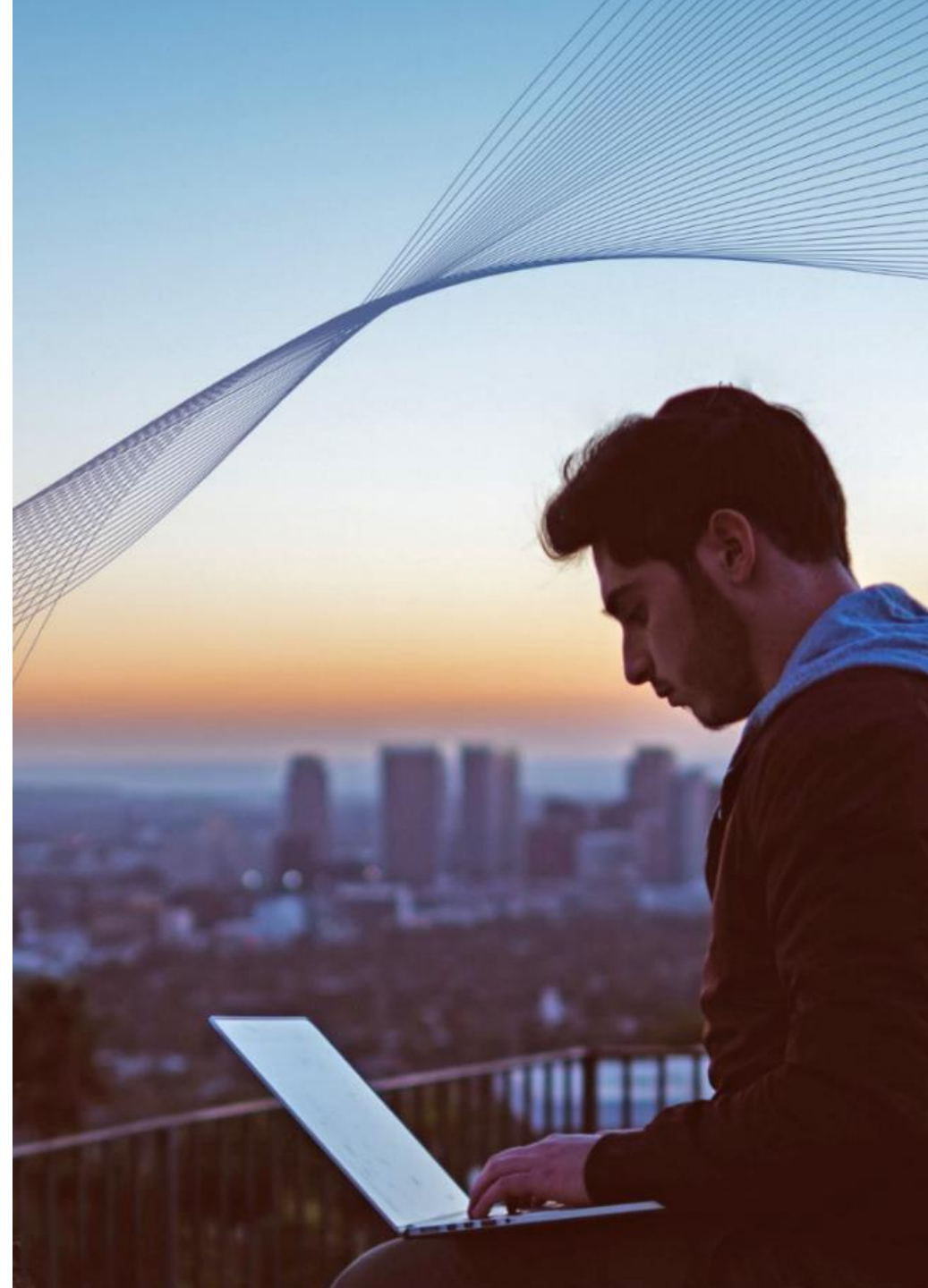
- ▶ **5G system suppliers lead the engagement**
  - ▶ Enea leads side by side positioning and selling Best-in-Breed Cloud software modules and related customer benefits
    - ▶ e.g. Video Streaming, Mobile Gaming, Traffic Visibility
  - ▶ **Objective:** Expand our GTM partnerships with market leading 5G system suppliers



# Mobile Video Management

## Key takeaways

- ▶ **Ambition:** Enea will maintain and grow our leadership position in the Traffic Management and Cloud Data Management Domains.
- ▶ **Market:** Video drives 4G network traffic and data management use cases which will grow exponentially with new 5G services.
- ▶ **Products:** Proven leader in deploying a portfolio of cloud software products that delivers quantifiable customer value.
- ▶ **Advantage:** Well positioned to address our customer emerging 5G business and technology requirements.





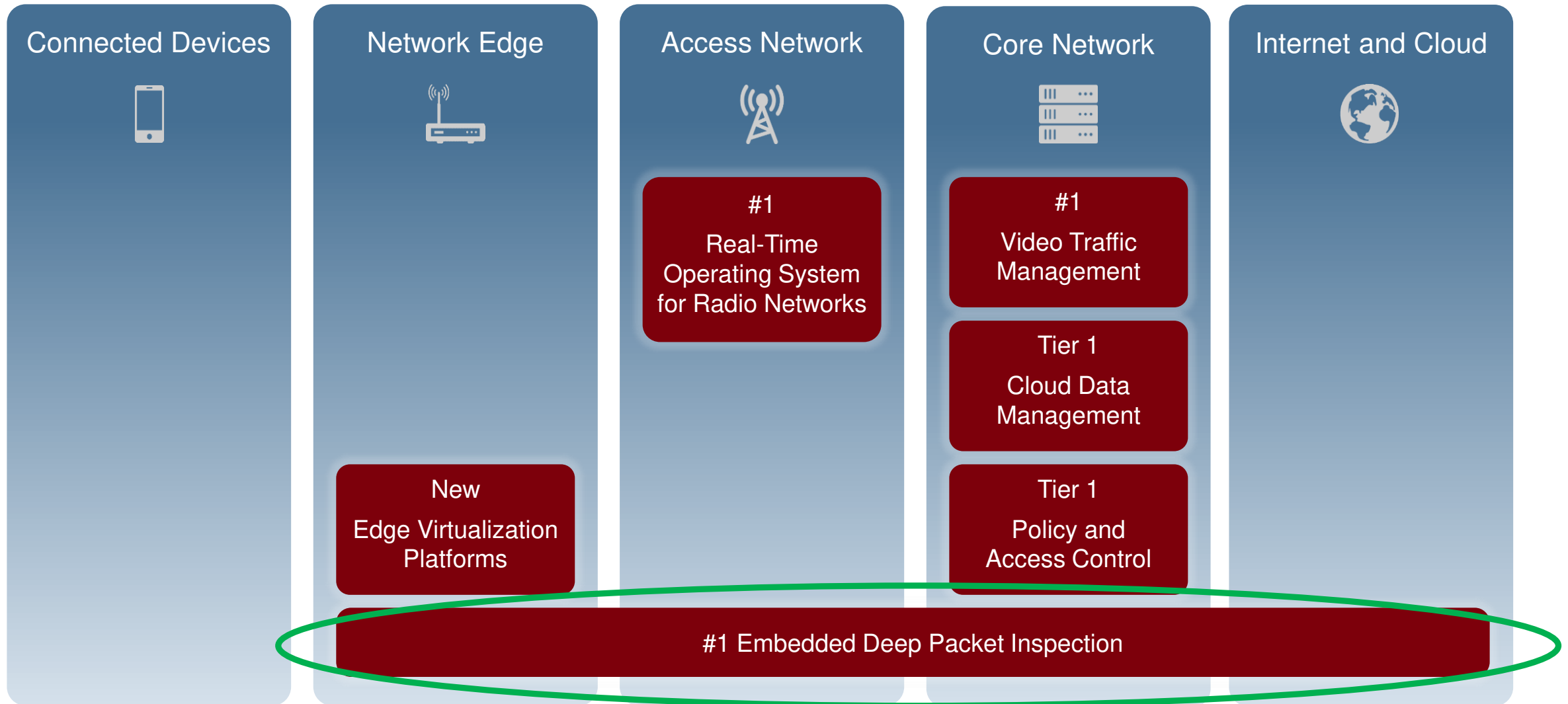
# Embedded DPI for Cybersecurity

Jean Philippe Lion

Head of Business Unit Deep Packet Inspection



# Leading Positions in Select Segments



# Enterprise Cybersecurity: Traffic Visibility is Key

- ▶ Firewalls and signature-based anti-virus are not enough to stop attacks
- ▶ Security Operations Centers focus on discovering and containing breaches
- ▶ Latest solutions use a combination of:
  - Machine learning / artificial intelligence
  - User and traffic behavior analysis
  - User scoring

**SECURITY  
BREACH**

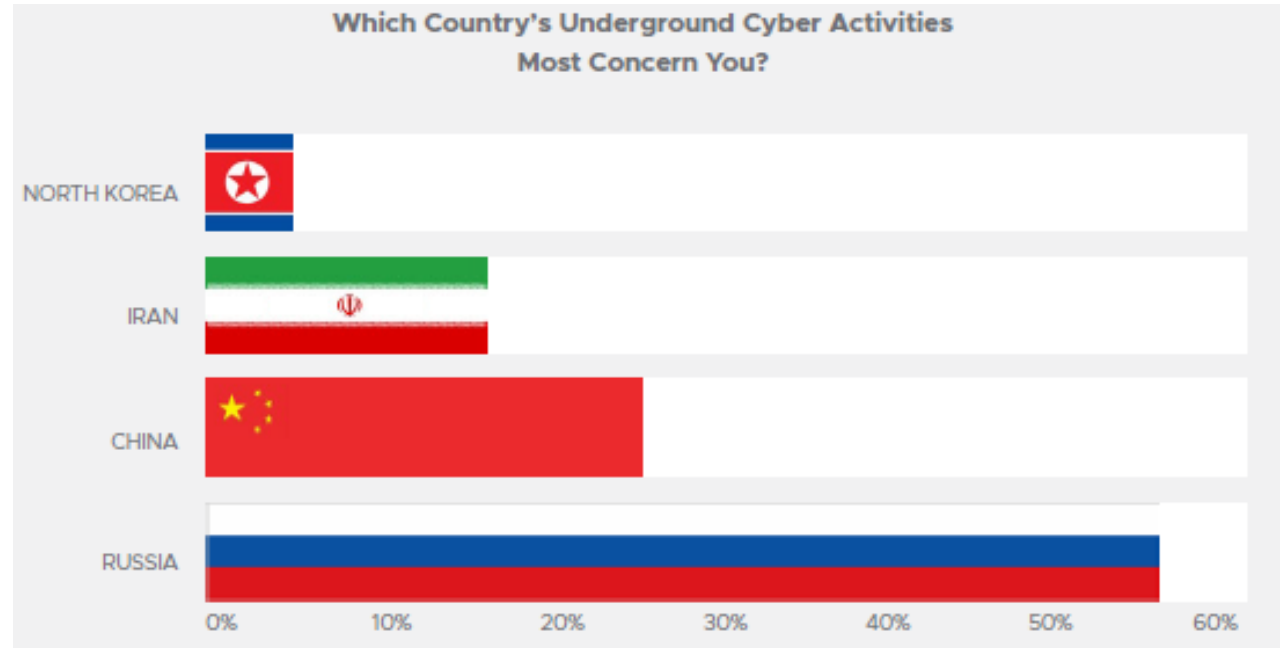


**Relevance for Enea DPI:**  
**Qosmos technology provides detailed traffic information that helps identify breaches**



# National Cyber Defense: a Strategic Priority

- ▶ Geopolitical tension lead to more cyberattacks
- ▶ Attack targets: corporate espionage, elections, critical infrastructure and personal information

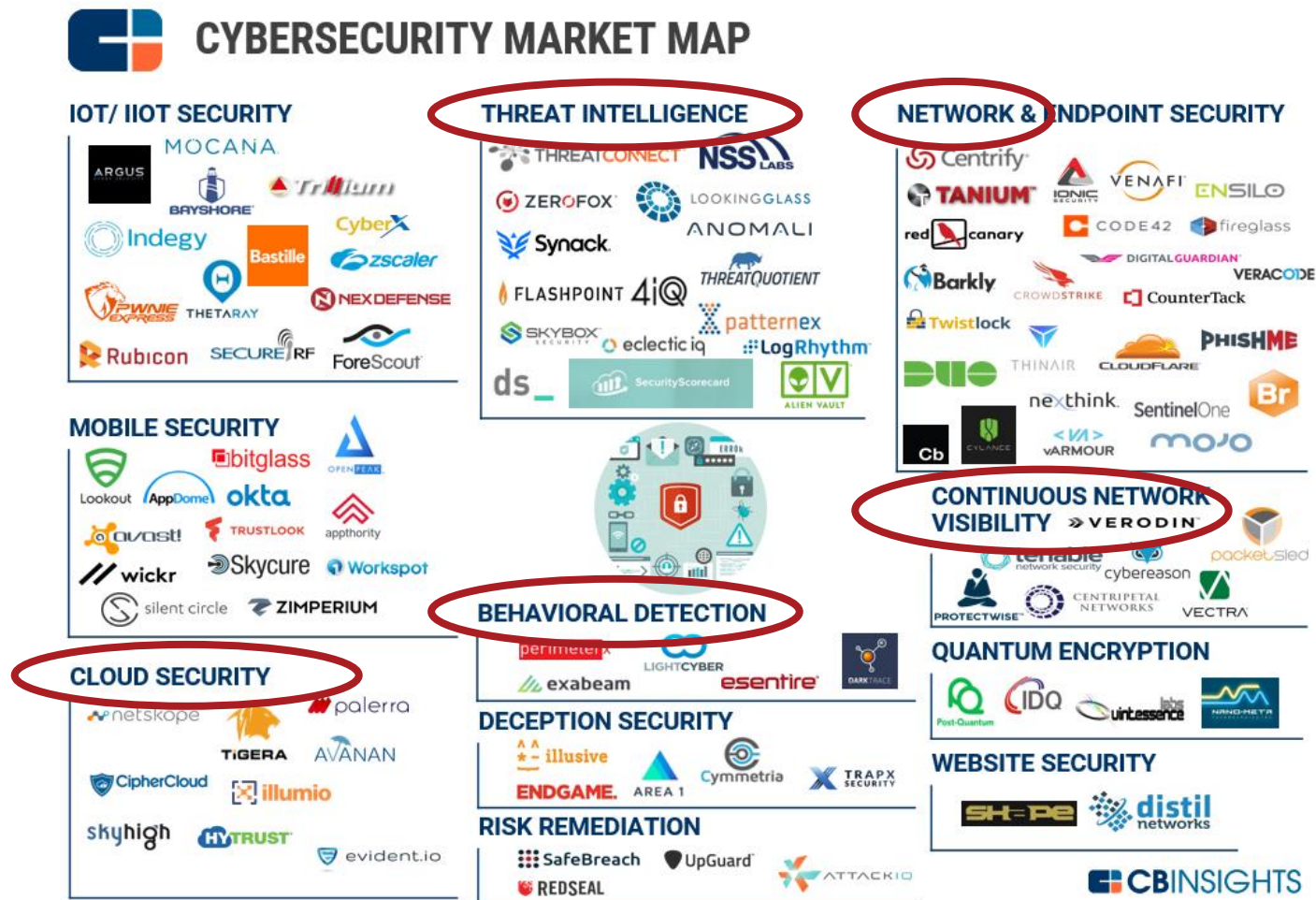


Source: Carbon Black

**Relevance for Enea DPI:**  
Qosmos technology provides detailed traffic information that helps prevent attacks by nation states

# Enea DPI Market: Cybersecurity Vendors

- ▶ Growing number of threats and vendors
- ▶ New cybersecurity use cases emerge continuously
- ▶ Fragmented market with specialized vendor categories
- ▶ Several vendor categories are relevant for Enea embedded DPI



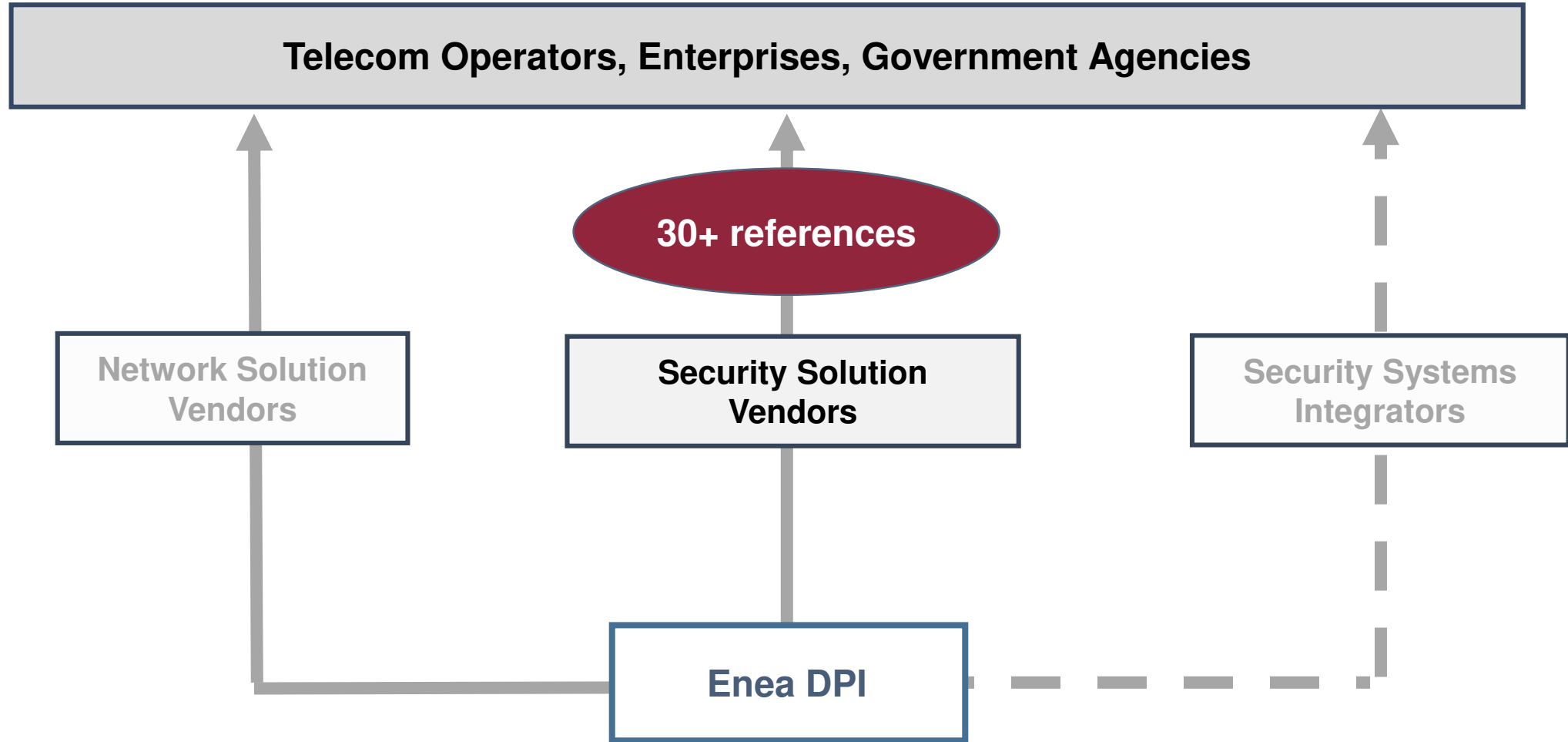
Enea's position: # 1 Embedded DPI

# Competitive Overview of the DPI Engine Market

Competitor	Market Focus
Rhode & Schwarz ipoque	Cybersecurity, Telecom
Sandvine NAVL	Cybersecurity, Telecom
In-house DPI	Control over technology

*Note: open source (nDPI) is not a competitor*

# Go-to-Market Model



# Product Portfolio and Value Proposition

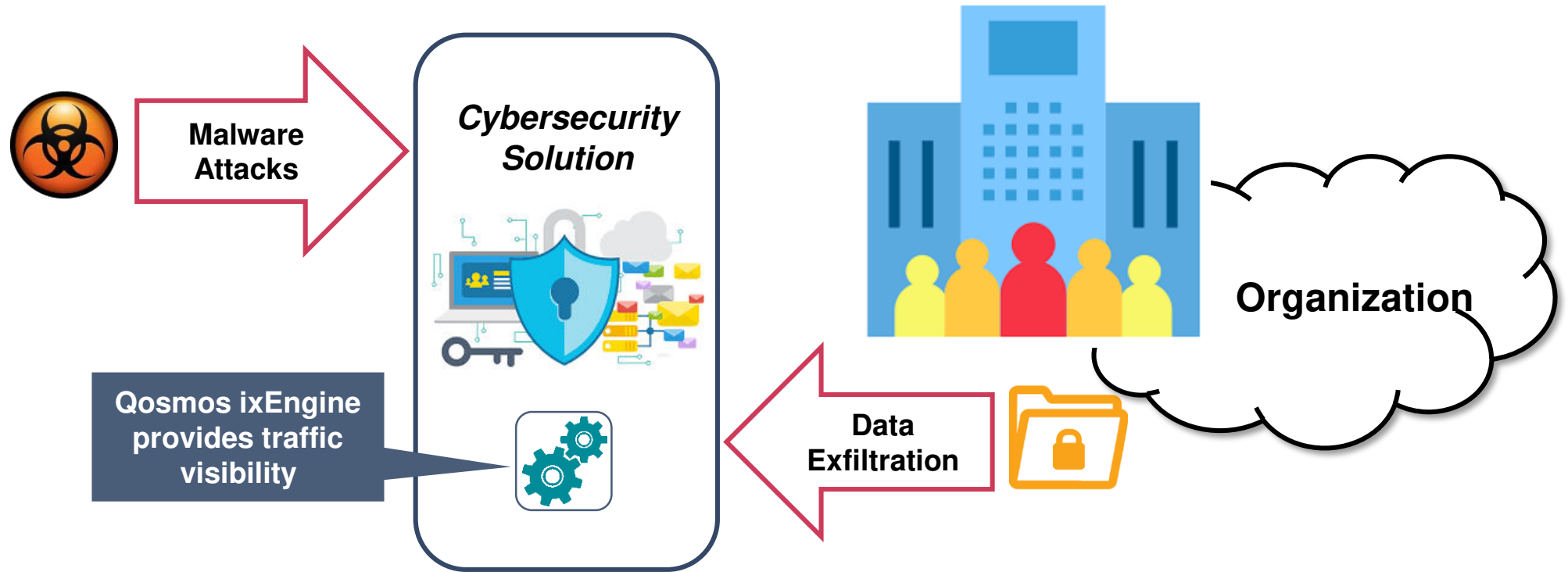
	Product
<b>Qosmos ixEngine</b>	<b>ixEngine SDK:</b> Classification and metadata extraction C libraries <b>ixEngine Extension Modules:</b> CSM, Deep File Inspection, GTP Lib, Rule Engine
<b>Qosmos Probe</b>	<b>Probe Platform:</b> Application SW for metadata extraction and delivery
<b>Services</b>	<b>Professional Services:</b> Integration support, custom development, training <b>Maintenance &amp; Support:</b> Protocol updates, bug fixing and technical support

## Unique Selling Points

- ▶ **Large number of protocols classified (3,200+) and Metadata extracted (5,000+)**
- ▶ **Capacity to manage high throughput**
- ▶ **Designed for optimal integration**
- ▶ **Flexible pricing**
- ▶ **Strategic partnership**

# Use Case Example:

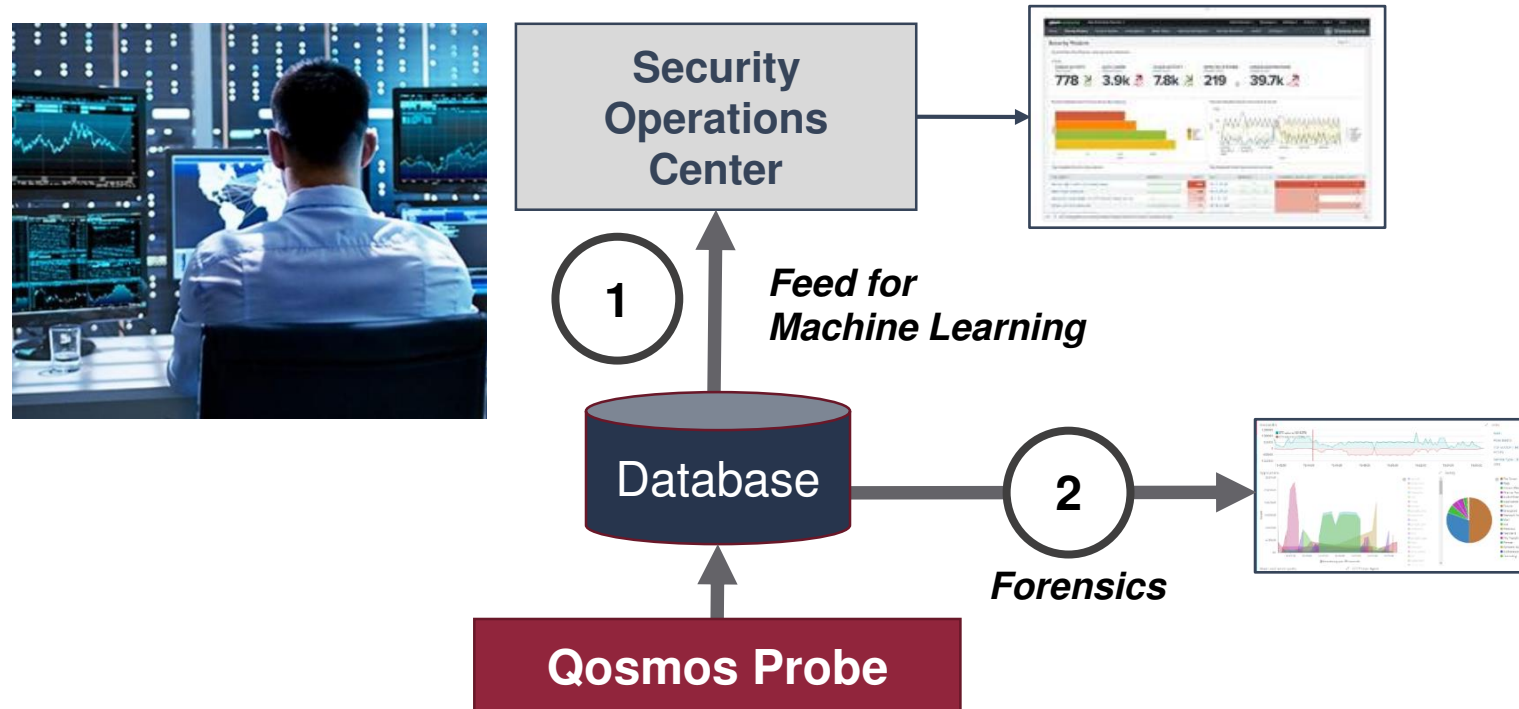
## Qosmos ixEngine for Malware Prevention and Data Loss Prevention





# Use Case Example:

## Qosmos Probe Provides Traffic Intelligence for Cyber Threat Hunting



### ► Benefits for Security Operation Centers:

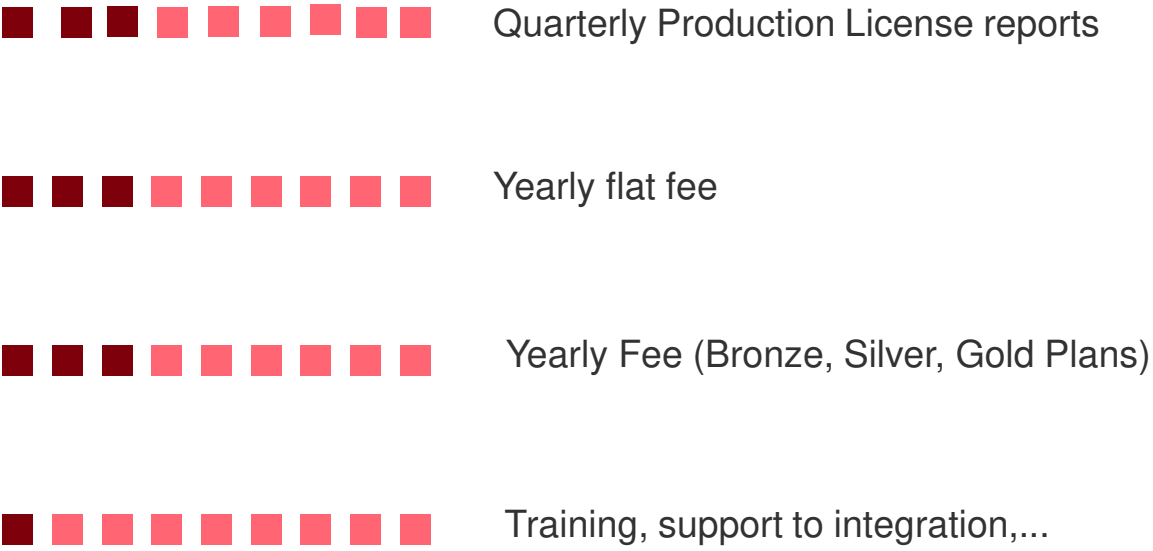
1. Improved threat hunting, based on detailed, real-time traffic information
2. Reduced size of forensic data, by up to 150x compared to full packet capture

# Revenue Model

Revenue type	Right	Recognition
License (Dev Lic & Prod Lic)	Perpetual (Volume based)	Time of delivery
	Perpetual (Unlimited volume)	Over the period
Support&maintenance	Upgrades&support	Over the period
Services	Fixed fee	%-complete

## Model (year by year)

1 2 3 4 5 6 7 8 9



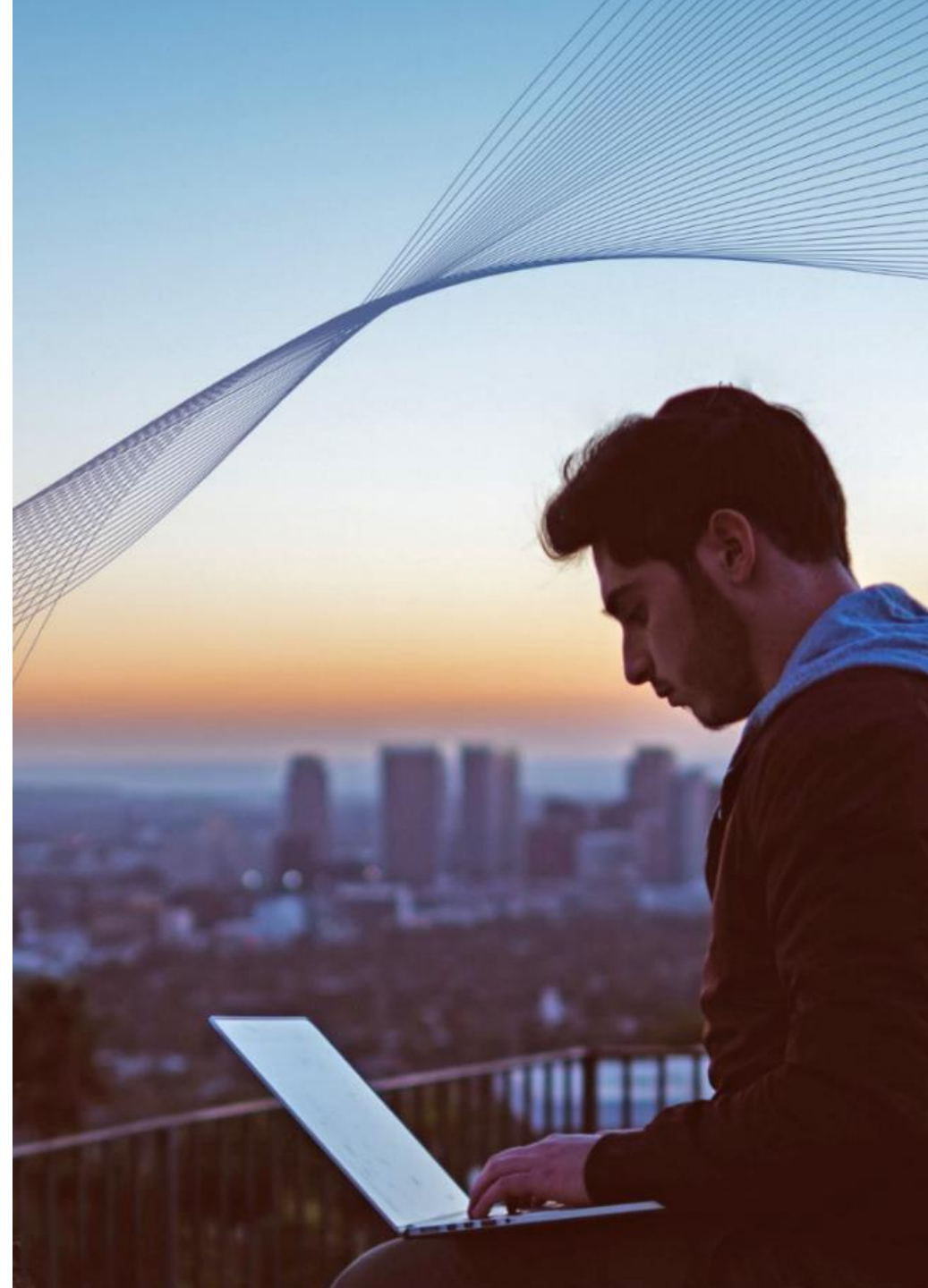
### Example: New 450 KEUR agreement for Cybersecurity Solution Vendor (start-up)

- ▶ 3 years contract
- ▶ Yearly flat fee including Dev License + unlimited Prod Licenses + S&M (Bronze Plan) : 150 K€ / year

# Embedded DPI for Cybersecurity

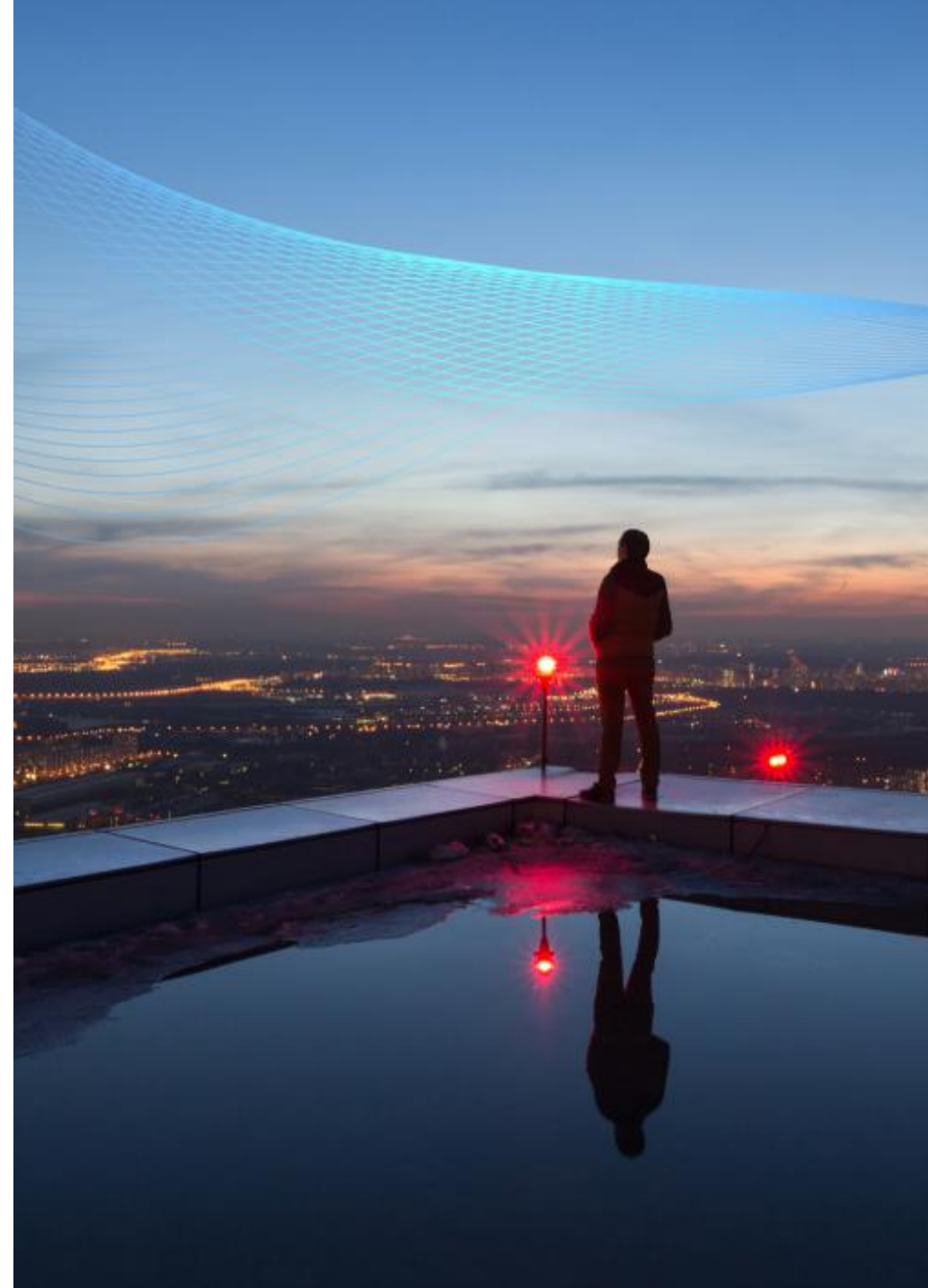
## Key takeaways

- ▶ Cybersecurity is a growing market
- ▶ Traffic classification is key in most cybersecurity solutions
- ▶ Enea is the leading vendor of embedded deep packet inspection
- ▶ Our ambition: expand addressable market and maintain #1 market position



# Agenda

- 1:00 PM ▶ **Business and Strategy Update**
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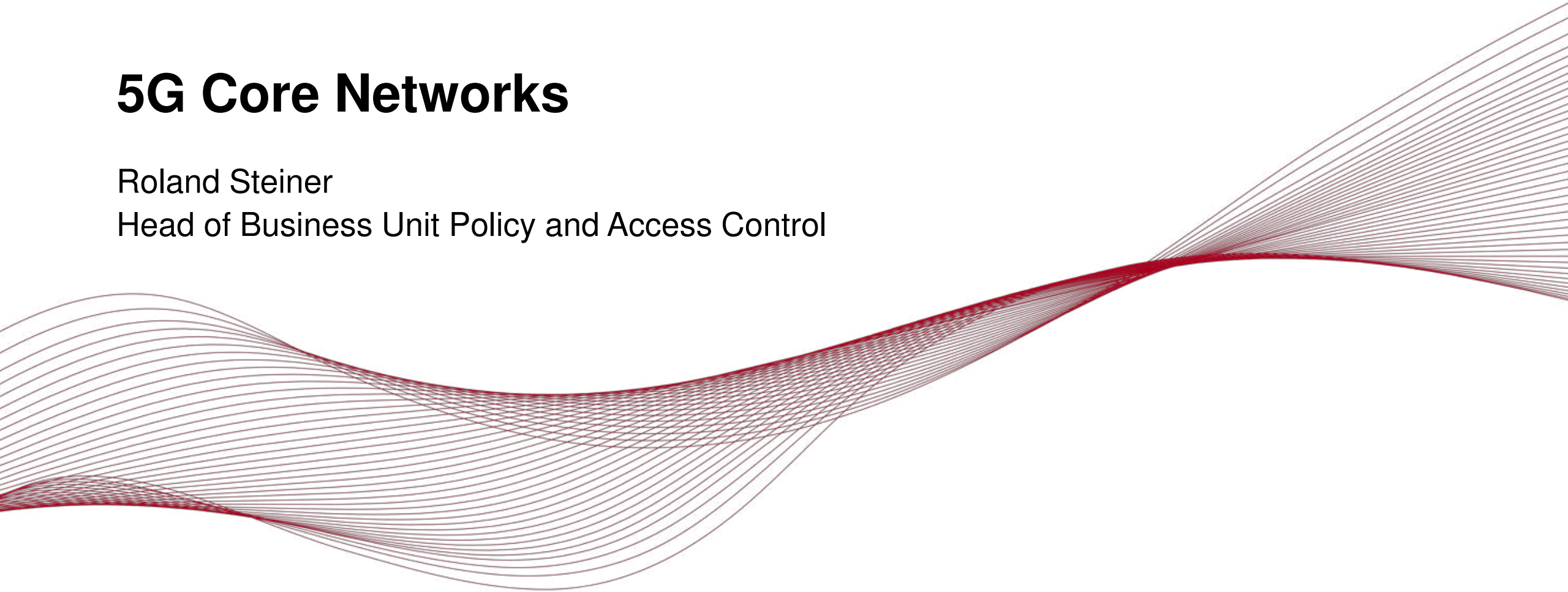




# 5G Core Networks

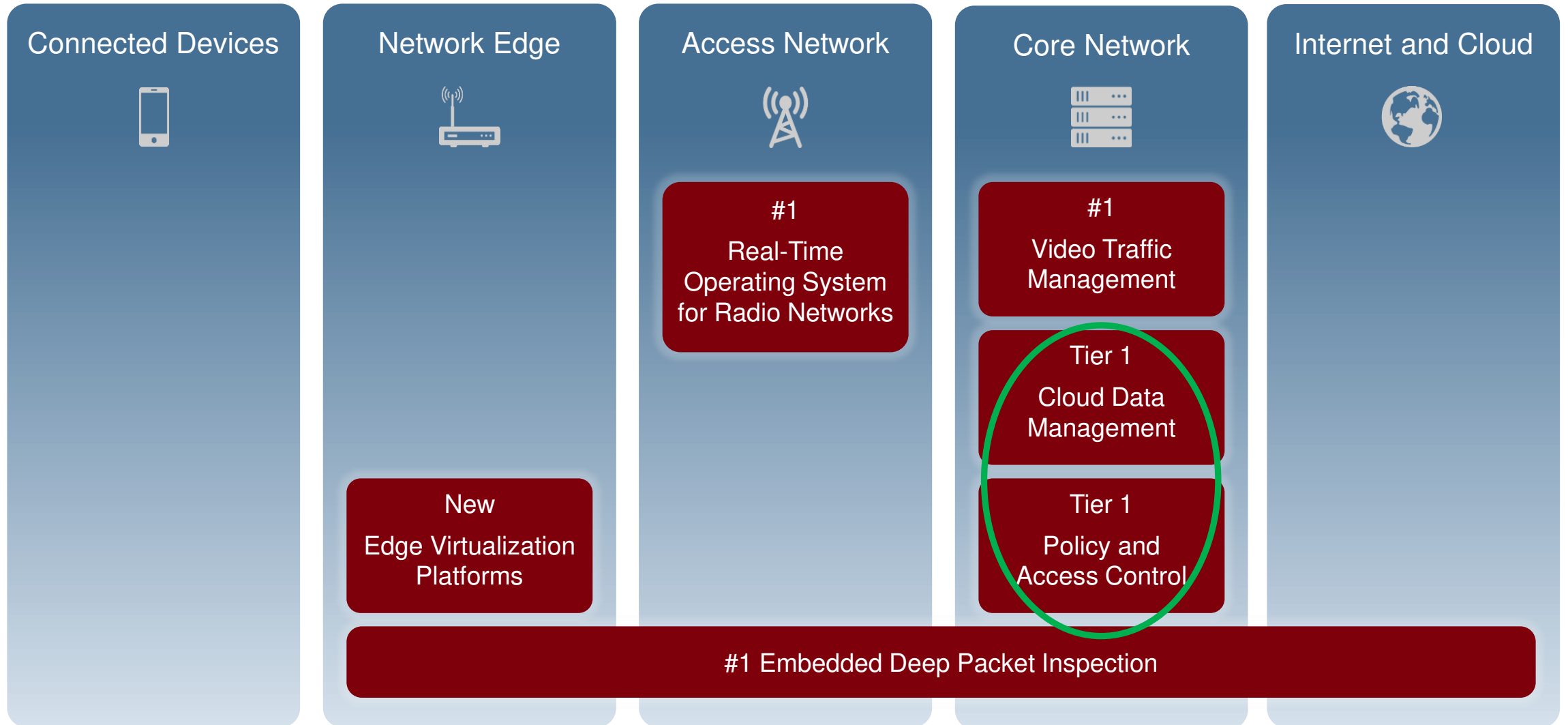
Roland Steiner

Head of Business Unit Policy and Access Control





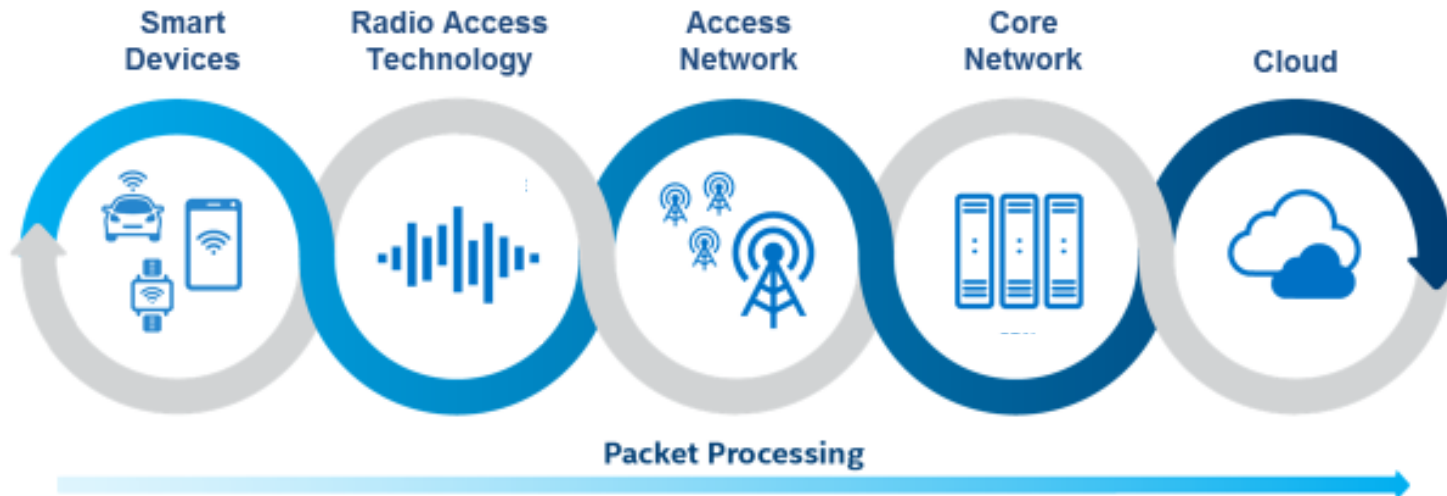
# Leading Positions in Select Segments





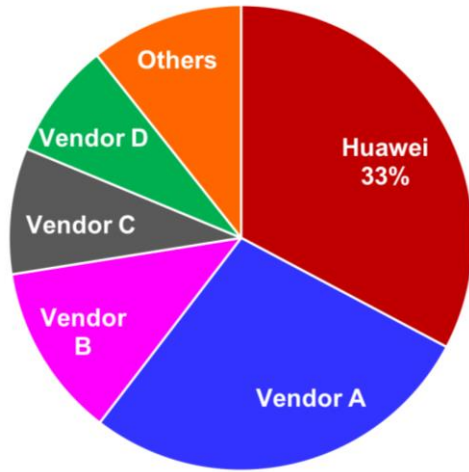
# 5G Requires a New Core Network

- ▶ With 5G speed and latency will be improved
- ▶ Latency is important for interactivity (remote surgery, gaming, ...)
- ▶ But 5G also will converge fixed, wireless and mobile networks in the Cloud



- ▶ Lower latency, other access technologies and Cloud support, 5G Core is required

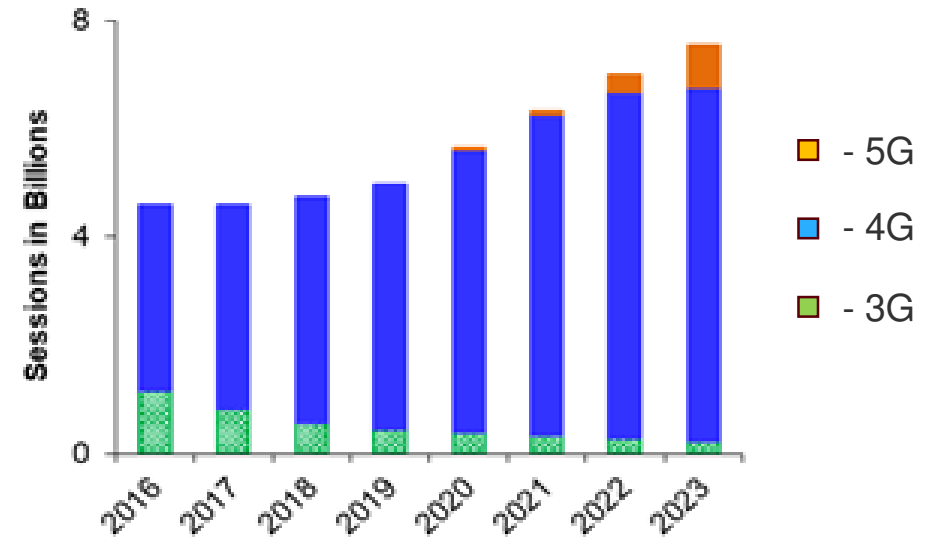
# Core Network Market by Vendor and Generation



Source: Dell'Oro Group

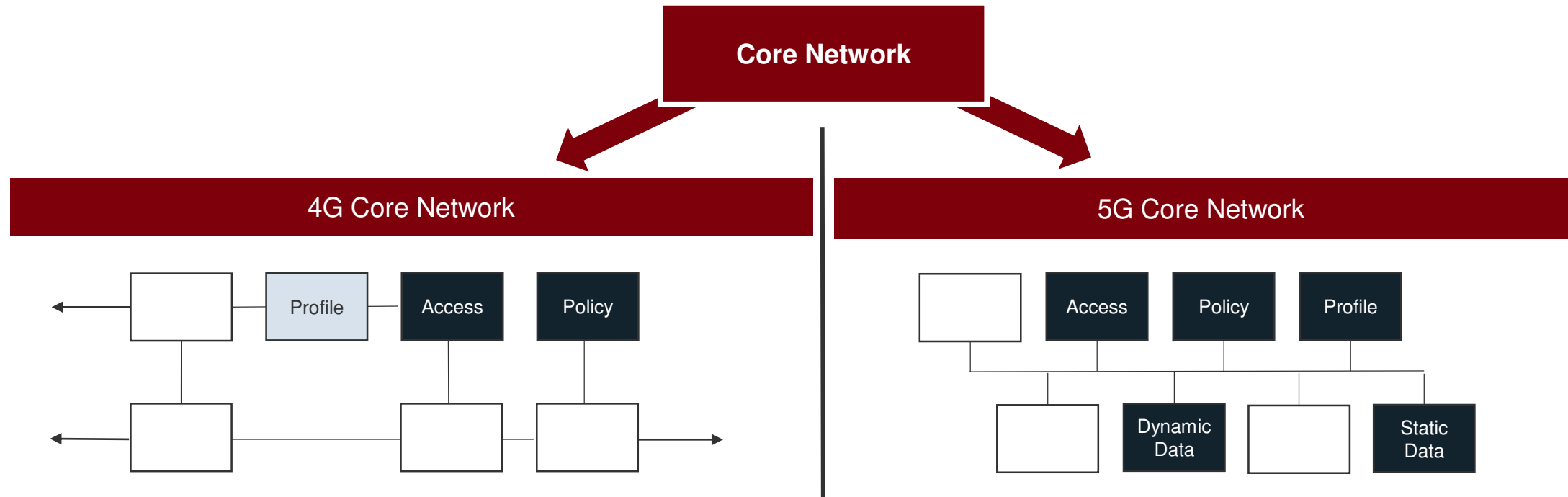
- ▶ Annual sales in 2018 hit a record high of USD 2.7 billion
- ▶ Huawei and Ericsson are dominating the market
- ▶ Other players are Nokia, Cisco, ZTE, Mavenir, and Affirmed

- ▶ Majority of installed based is still on 4G Core
- ▶ But almost all new tenders are for 5G Core
- ▶ Rollout of 5G Core will start in 2020



Source: Dell'Oro Group, Wireless Packet Core Five Year Forecast January 2019

# Data Management in 5G Core Networks



- ▶ Applications using subscriber information
- ▶ Enea only offered selected applications

- ▶ Increased relevance of Data Management
- ▶ Enea has a complete offering for this domain

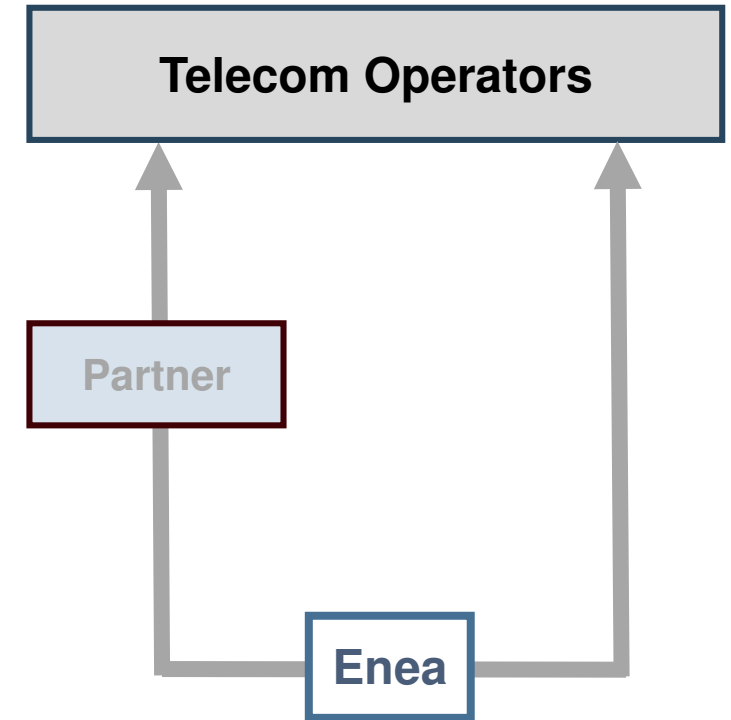
# Go-to-Market Model

## Mainly indirect business via Core Network vendors

- ▶ Most 5G tenders require an entire Core Network
- ▶ Complementing partner portfolio with Enea applications
- ▶ Engaged with established players and challengers

## Best-of-breed for selected accounts via Enea sales force

- ▶ Direct business with Tier 1 operator in Germany and the US
- ▶ Worldwide opportunities for 5G Data Management



# Data Management Competition

- ▶ Nokia is the market leader
- ▶ Followed by Ericsson and Huawei
- ▶ Most core vendors do not have an offering
- ▶ Targets for Enea to partner
- ▶ Competition by specialists

**Enea to become the #1 independent  
Data Management vendor for 5G**

Profile	Company
System Vendor	<ul style="list-style-type: none"><li>• Nokia</li><li>• Ericsson</li><li>• Huawei</li><li>• ZTE</li><li>• Samsung</li></ul>
Core Network Specialist	<ul style="list-style-type: none"><li>• Cisco</li><li>• Mavenir</li><li>• Affirmed</li></ul>
Data Management Specialist	<ul style="list-style-type: none"><li>• HP</li><li>• Oracle</li></ul>

# Unique Selling Proposition

## Best in class software

Future-proof  
cloud-native  
architecture

Linear and  
cost-efficient  
scalability

In service  
with Tier 1  
operators

## Easy to do business

Presence in  
Europe and  
the US

Integrated  
with partner  
products

Configuration  
for simple  
integration

## Attractive alternative supplier

Reduce  
dependency  
on vendors

Organization  
experienced  
with Telcos

Innovative  
and agile  
approach

## Focus on your core business <sup>1)</sup>

Competitive  
pricing with  
one platform

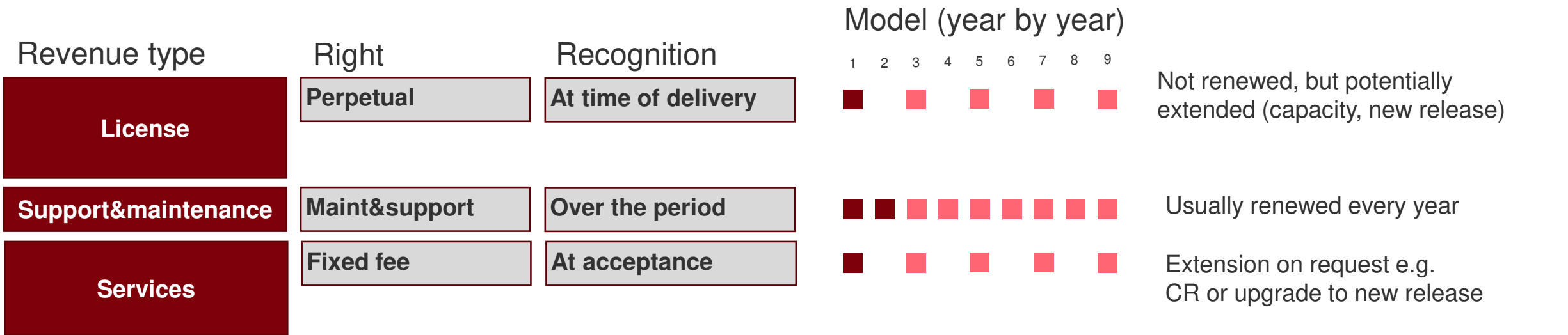
More cost  
efficient than  
own R&D

Track record  
for quality  
software

*1) relevant for vendors interested in partnering*

# Revenue Model

■ Typically part of an initial agreement  
■ Typically part of renewal/extension



## Example: New 1.5 MEUR agreement for German Tier 1 operator <sup>1)</sup>

- ▶ Perpetual license and services approximately 45 percent of total deal value, to be mainly recognized in 2019
- ▶ Support and maintenance recognized over 2020 and 2021

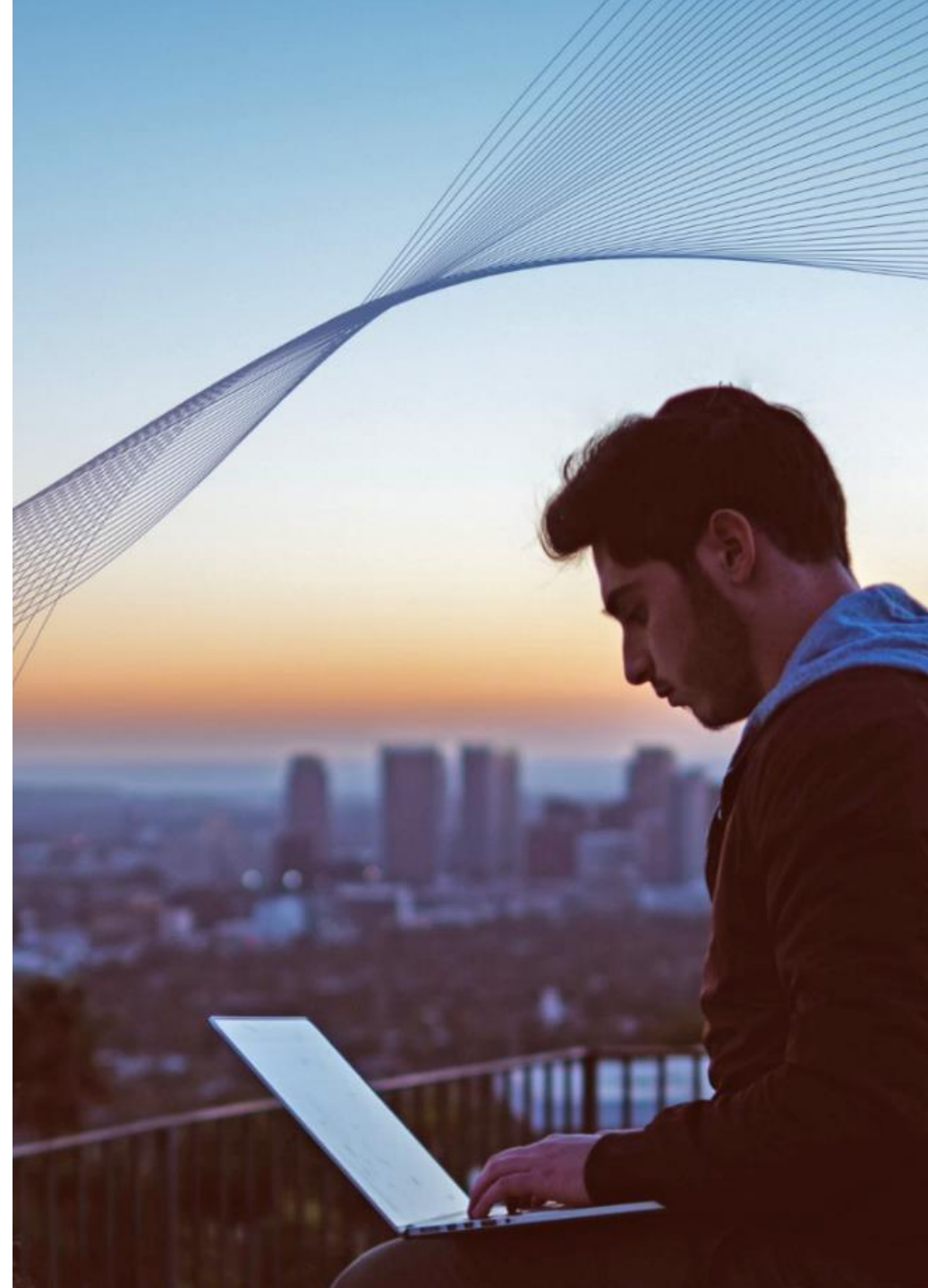
<sup>1)</sup>As announced in Jul 2019:  
<https://www.enea.com/press-releases/Item/?pressrelease=A7B42FE5715FB1A9>



# 5G Core Networks

## Key Takeaways

- ▶ 5G Core market will start to take off 2020
- ▶ Drivers are Cloud, low latency and access independence
- ▶ Complementing portfolio of domain vendors
- ▶ Direct and indirect sales through partners
- ▶ Become #1 independent Data Management vendor



*Enea is a world-leading supplier of innovative software components for telecommunications and cybersecurity*

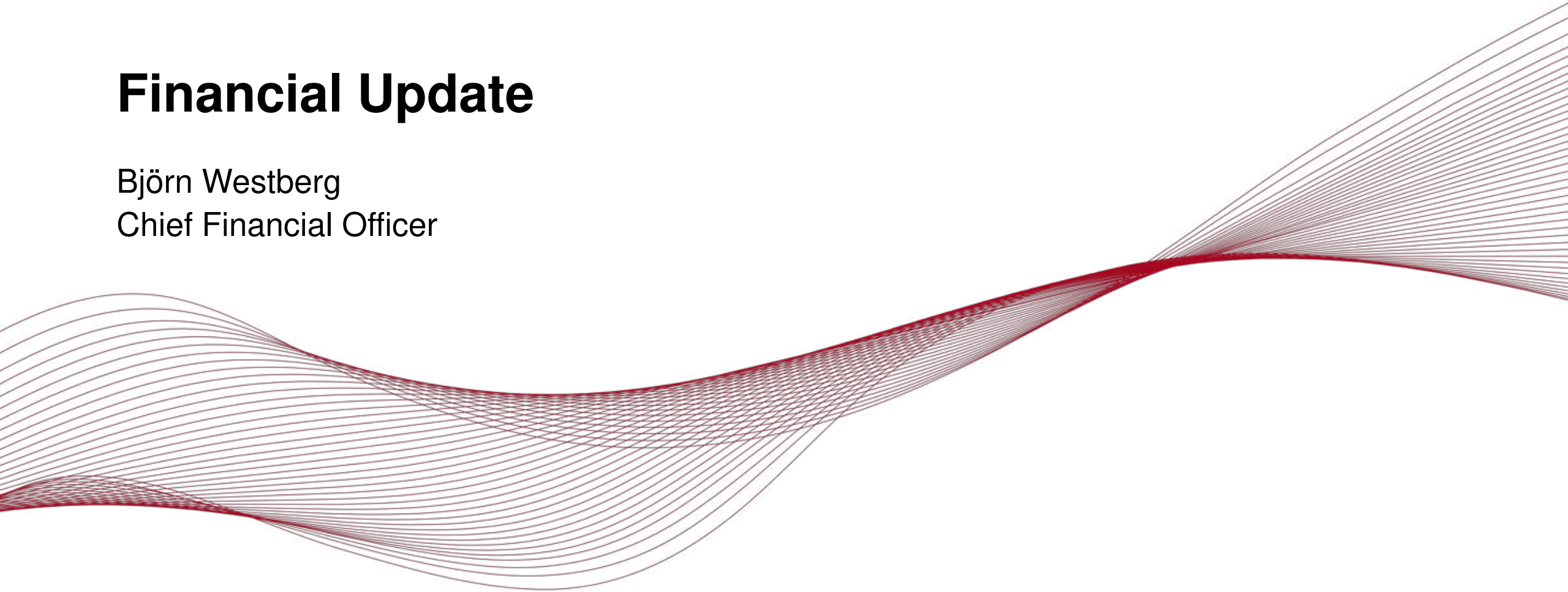


**ENEAA**



# Financial Update

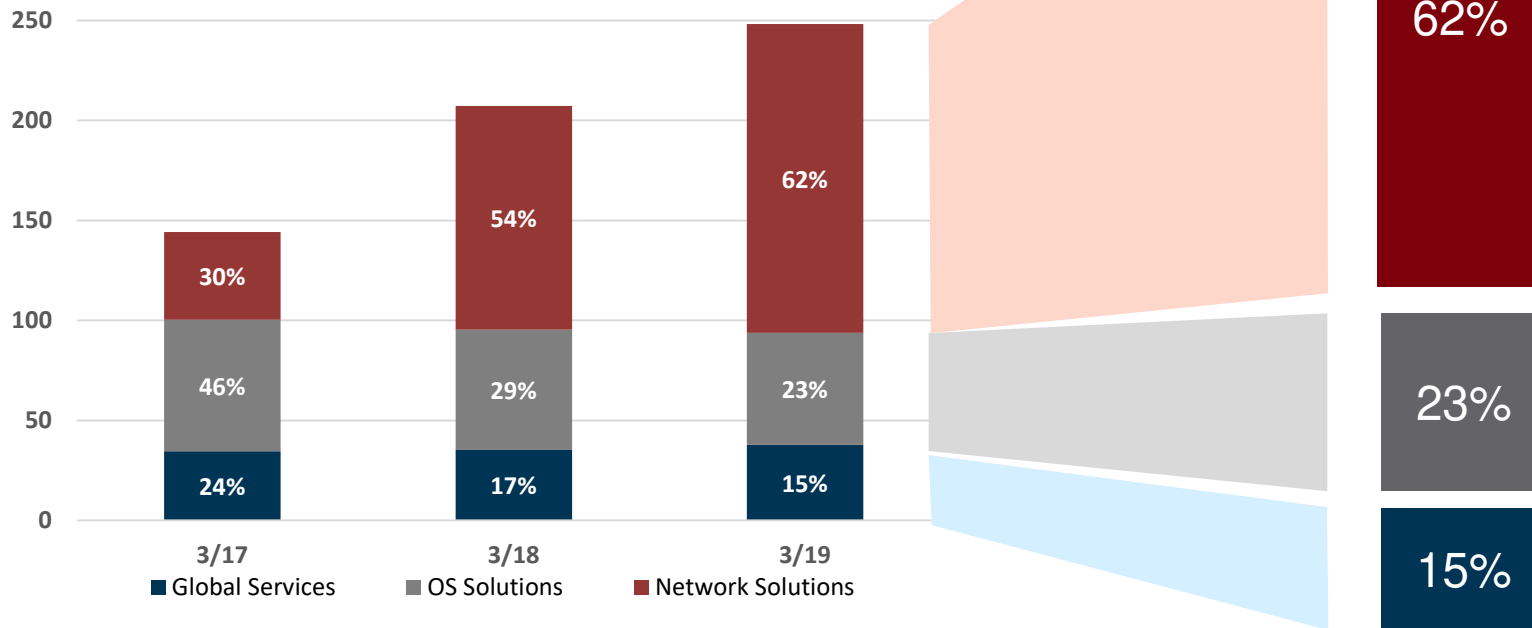
Björn Westberg  
Chief Financial Officer





# Significant Growth in Network Solutions

Revenue per Product group (MSEK)



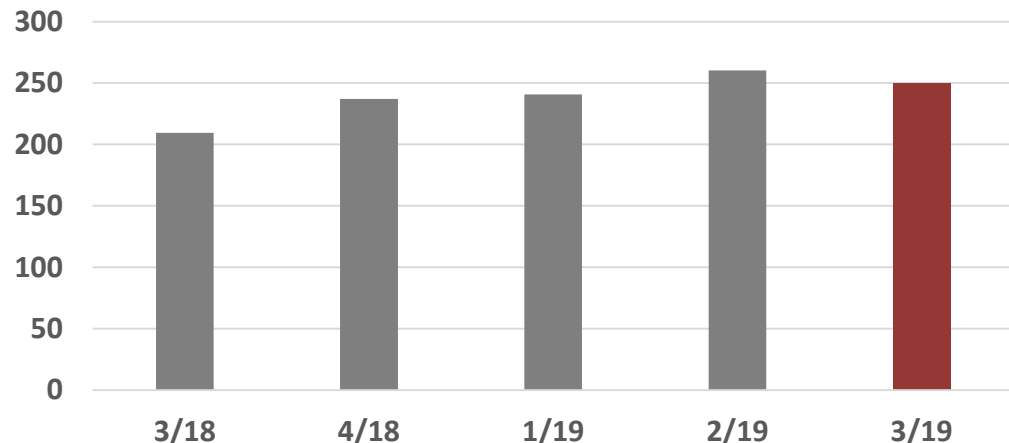
- ▶ **Network Solutions +38% in Q3**
  - PAC<sup>1)</sup> business major contributor
  - 6 percent organic growth in other products
  - <sup>1)</sup> Policy and Access Control
- ▶ **Operating System Solutions -7% in Q3**
  - sales decline in key accounts as expected
- ▶ **Global Services +7% in Q3**

▶ Last years acquisitions drive growth in Network Solutions, now representing 62 percent of total revenue

# Strong Sales Growth and High EBIT Margin

Revenue

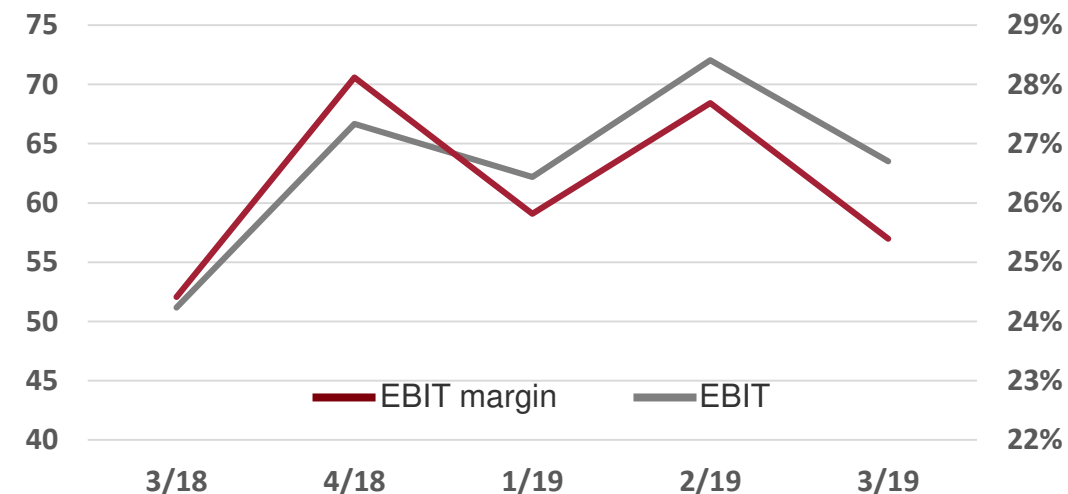
MSEK



## Highest revenue in a third quarter

- Network solutions increased by 38% (organic 6%)
- Operating systems decreased by 7%
- Global services increased by 7%
- Overall 19% growth  
- driven by the Policy & Access Control (PAC) business

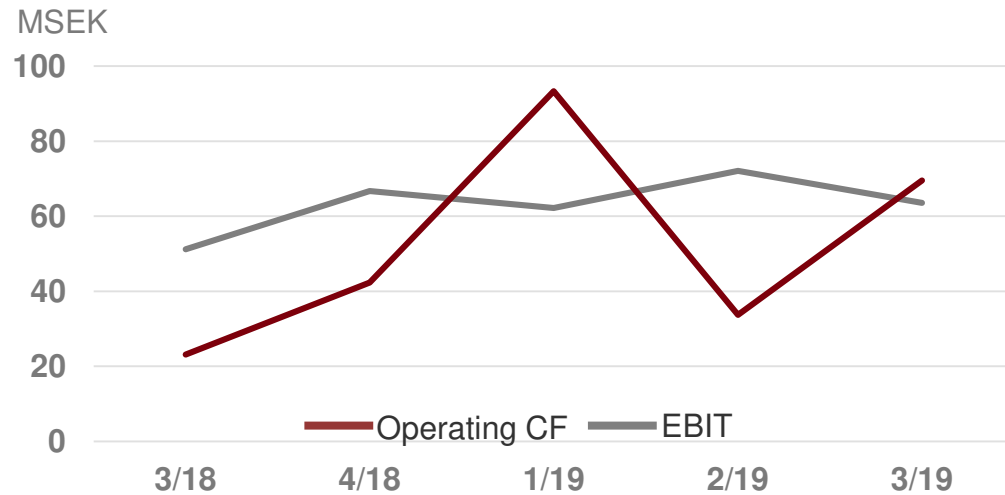
MSEK



## Highest Operating profit (EBIT) in a third quarter

- Margin improvement to 25.4% (24.4)
- Gross margin 71.1% (73.9) decrease as higher D&A
- Opex increased 10% (PAC full quarter) while sales +19%

# Stable Cash Flows

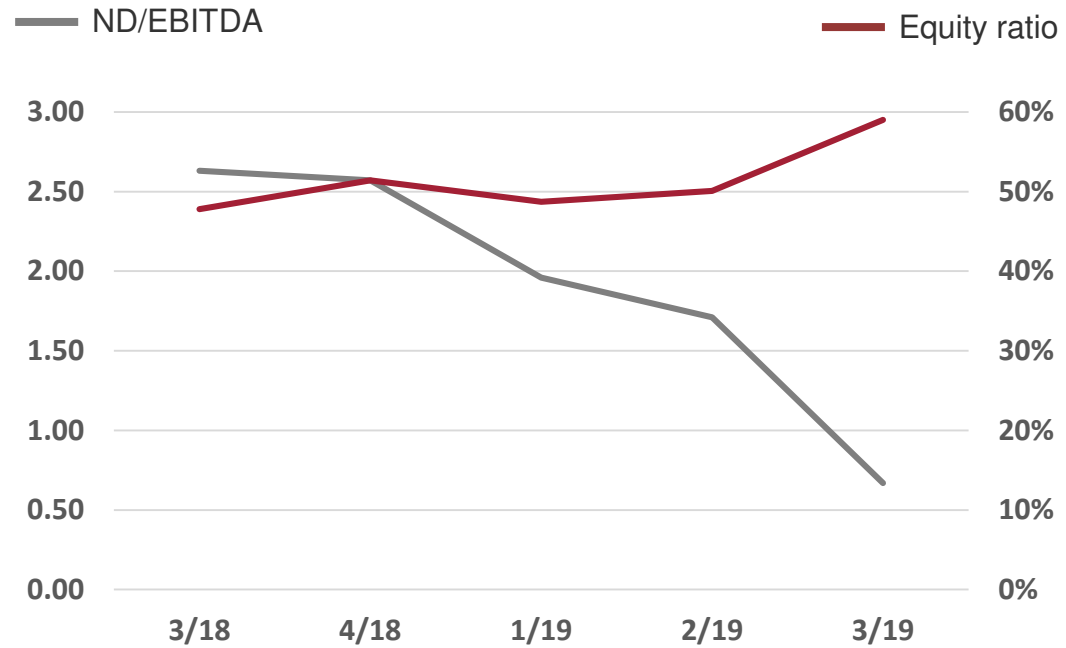


## Operating cash flow of 70 MSEK in Q3

- Significant part recurring revenue
- Including a Working capital change of -9 MSEK (Net working capital was 107 MSEK 30 Sep 2019)

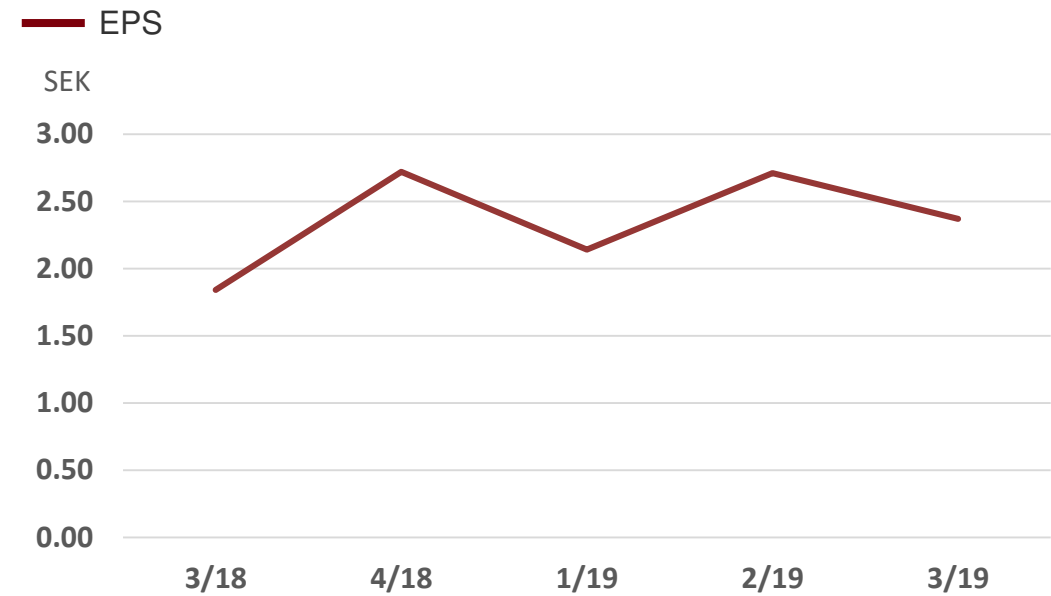
- ▶ Stable operating cash flow on a 12-month basis, some working capital variations by quarter

# Solid Financial Position



Net debt to EBITDA down to 0.67 from 2.62 Q3 2018  
Equity ratio up to 59.0 from 47.8 Q3 2018

- Net profit generation
- The new share issue



Q1-Q3 EPS of SEK 7.21 vs 4.61 Q1-Q3 2018

► Overall, solid financial position with strong financial KPIs



# Stable Financials – Facilitating Growth

(MSEK)	30 Sep 19
Interest bearing debt	574.7
Remaining purchase price	47.9
Cash	395.7
Net debt	226.9
EBITDA	338.6



- Completed in October:
- Bond loan (500 MSEK) redemption
  - New bank loan of 250 MSEK

Net debt to EBITDA of 0.67 (19-Q3)

Significant interest reduction

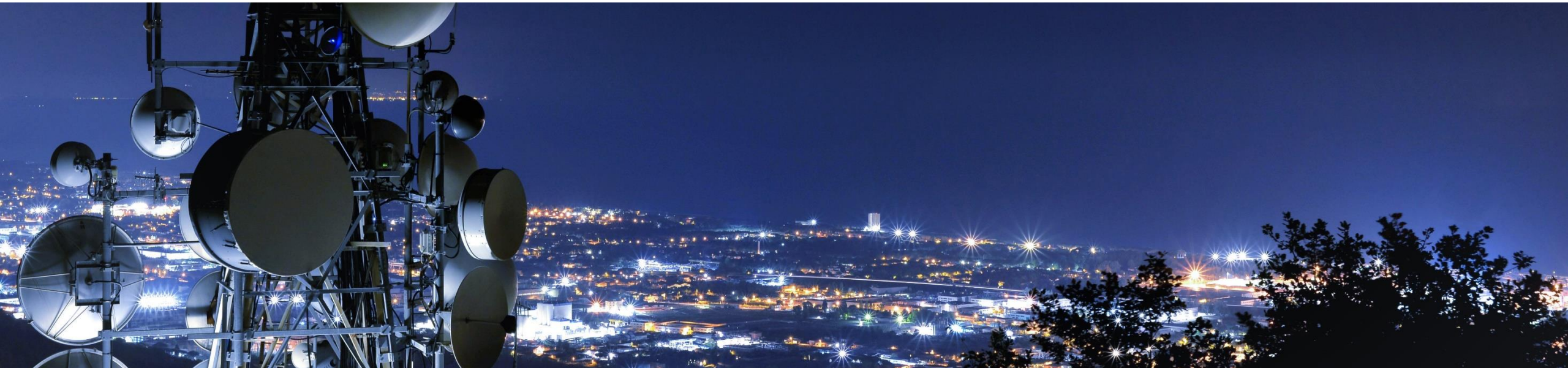
- Bond loan had 5.25%

Positive EPS effect from 2020

- ▶ New efficient financing structure creating large headroom for growth and increased borrowing flexibility

# Financial Outlook 2019

Our objective for the full year 2019 is to achieve revenue growth over 2018 and an operating margin exceeding 20 percent.





# Concluding Remarks

Jan Häglund  
President and Chief Executive Officer



# Positioned for Profitable Growth

## Market Position

**Select markets in telecommunication (4G and 5G) and cybersecurity**, working with leading customers and gaining top positions in key niche segments.

## Business Model

**Pure play software company** with high gross margin and significant recurring revenues, unencumbered by hardware legacy.

## Go-to-Market Model

**Extensive market reach** through own sales force complemented with multiple global partners, combining both direct and indirect sales at a global scale.

## Growth Strategy

**Innovation and leadership in key technology and product areas** through own R&D investments complemented with strategic acquisitions.

## Track Record

**Proven track record** in innovation (unique technology), strategy execution (portfolio and business expansion) and financial development (21 quarters of growth). We deliver on promises.

## Financial Position

**Solid financial position** with a robust balance sheet, attractive revenue mix, significant earnings capacity and strong cash flows.

## Management

**Experienced management team and board**, with deep technical, market and customer understanding.

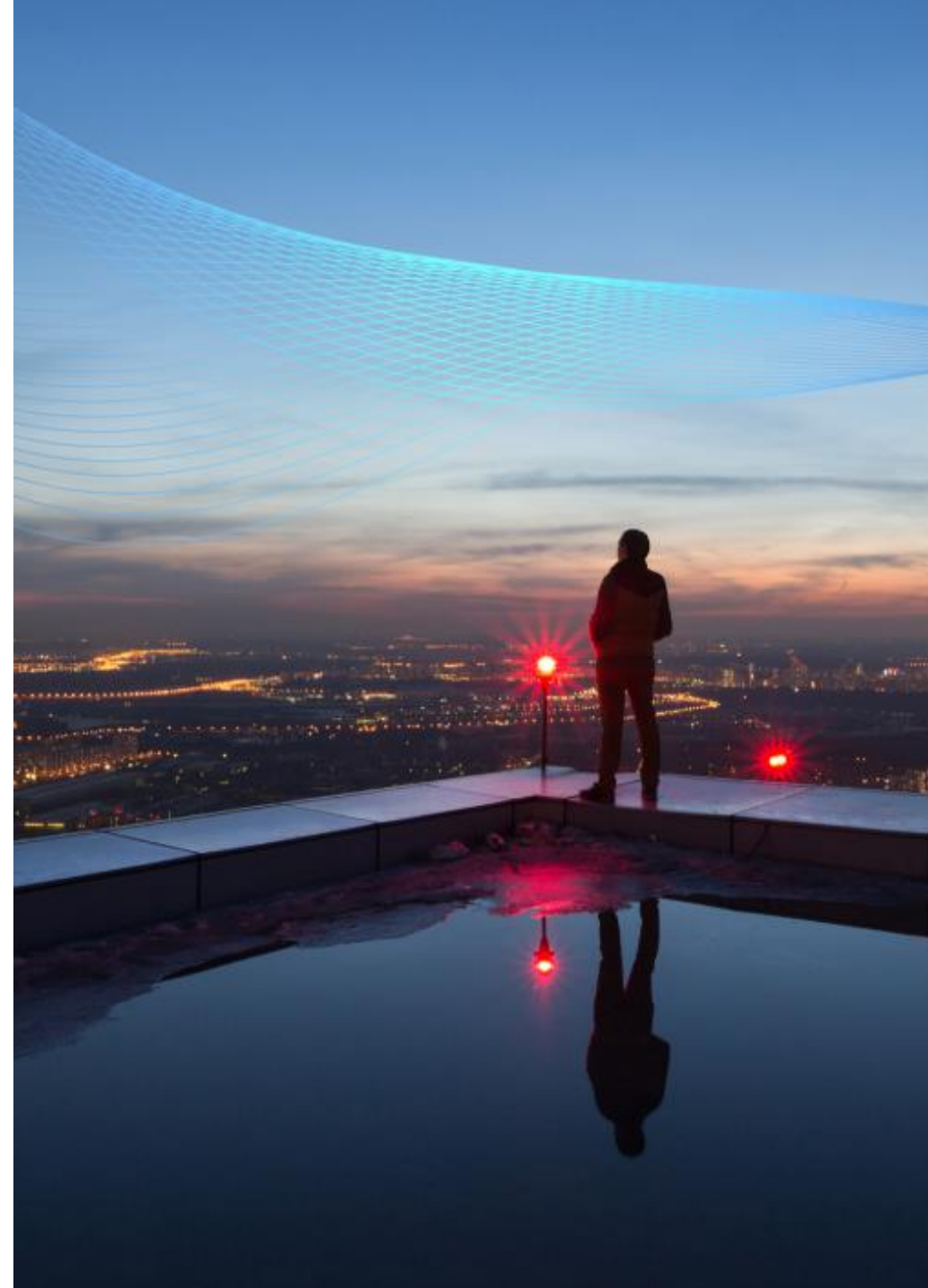


# Question and Answer Session



# Agenda

- 1:00 PM ▶ **Business and Strategy Update**
  - ▶ **Video Traffic Management**
  - ▶ **Embedded DPI for Cybersecurity**
- 2:30 PM ▶ **Coffee Break**
- 2:50 PM ▶ **5G Core Networks**
  - ▶ **Integration of Acquisitions**
  - ▶ **Financial Update**
  - ▶ **Concluding Remarks**
  - ▶ **Question and Answer Session**
- 4:15 PM ▶ **Snacks and Mingle**



# Thank you!

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