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Klaus Mäntysaari, Vice President, Connectivity solutions
Solid and trusted partner since 1985

Quality: Certified management system - Processes, Quality & Environment

Trust and security: Trusted partner for global customers

Continuity: 30 years of leading edge technology turnkey project experience

1985
- Bittium Founded 1985
- First radio channel emulator

1990
- First GSM and Tetra radio variants

1995
- Mobile WiMax development
- First turnkey cellular phone

2000
- Customer virtual small cell product development line

2005
- Bittium Tough Mobile
- First Terrestrial/Satellite smartphone format

2010
- Mobile WiMax development

2015
- Customer virtual small cell product development line

NMT
GSM
EDGE
HSPA
3G
LTE-A, 5G, IoT
4G
Selected references

BITTIUM TOUGH MOBILE
LTE smart phone

adidas miCoach
SMART RUN
Smart watch

TERRESTRIAL SATELLITE SMART PHONE

RUGGEDIZED TABLET

BITTIUM TACTICAL ROUTER
A high-data-rate IP network

BITTIUM RADIO HEAD I & III
for creating BITTIUM TAC WIN MANET and Point-to-Multipoint networks

BITTIUM RADIO HEAD IV
Integrated beam steering antenna

BITTIUM TOUGH VoIP TERMINAL
product family for tactical communications

BITTIUM IoT DEVICE PLATFORM
wireless connectivity and various sensors

BITTIUM SECURE IoT GATEWAY
Roadmap

Now:
A secure and trusted connectivity solutions R&D partner

2016
- LTE Small cell development
- LTE Macro cell development
- IoT development
- LTE device development
- TacWin
- Secure connectivity SW

2016 5G Test Network in Oulu

2018 5G PoC
- in winter Olympics in South Korea
- 5G Proof of Concept
- u05G concept validated

2020 5G Launch
- in summer Olympics in Japan
- Trusted, secure 5G base station, device and IoT solutions developer for telecom and vertical customers

High Value Add, secure and trusted end to end connectivity solution provider for customer trusted and secure communication solution needs
Bittium value add to 5G development

- Trust, Security, Confidentiality, Flexibility, Agility, Transparency in the Way of Working
- Competitive Quality system as basis for high customer satisfaction and quality experience.
- Domain specific special requirements competence
- End to end system design experience in network infrastructure and mobile devices development
- End to end security design experience
SUMMARY:
5G and Micro-operator (license) concept is a great opportunity

Development platform to design 5G/IoT products and solutions

Business platform to create new digital services

Business to build secure, reliable domain specific small cell networks and services
Connectivity to be trusted.