

Kohti saumatonta ja tietoturvallista kommunikaatiota 5G:ssä ja sen jälkeen tulevissa generaatioissa

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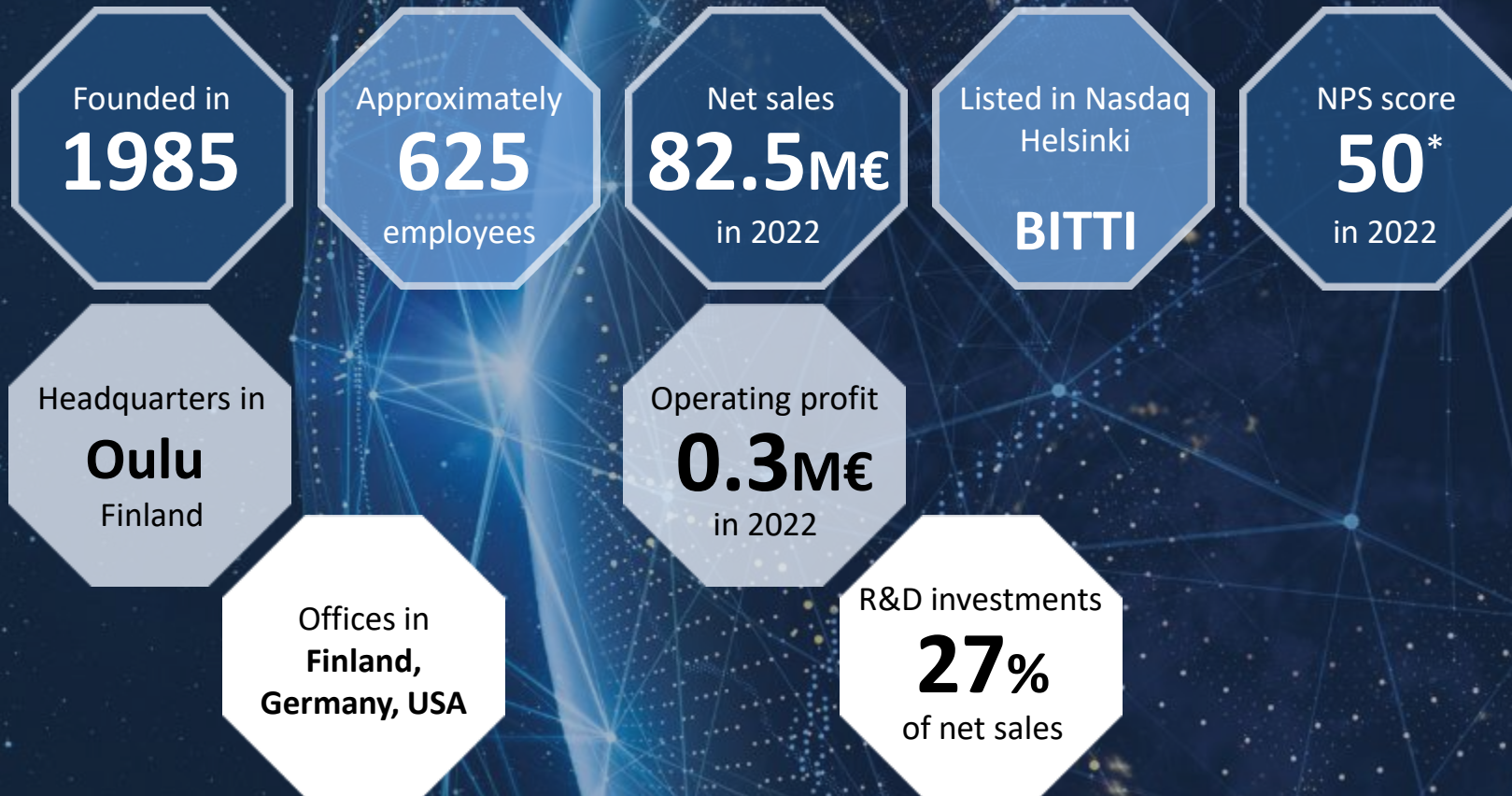


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About Bittium

Bittium is a high-tech company specializing in Tactical & Secure Communications, Engineering Services, and Medical Technologies.

Key Figures



Business Segments

Defense & Security

- Military radio and communication solutions
- Secure mobile communication solutions
- Secure connectivity and mobile working

Engineering Services

- R&D services for demanding connected solutions

Medical

- Medical devices for measuring and monitoring biosignals
- Platforms and analysis tools

BITTIUM VETURI PROGRAM 

Seamless and Secure Connectivity Ecosystem

BUSINESS
FINLAND



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Mission

Seamless and cyber secure connectivity and communications is enabled by 2030s in end-to-end vertical domains by creating trustworthy, secure and resilient E2E connectivity architectures and products until lifecycle services.

Focus Areas



Secure Encryption Technologies



Highly Secure Communications in the Future Networks



Secure End-to-End Verticals



Scaled Sensor Fusion Applications



Significant Development Models Improvement



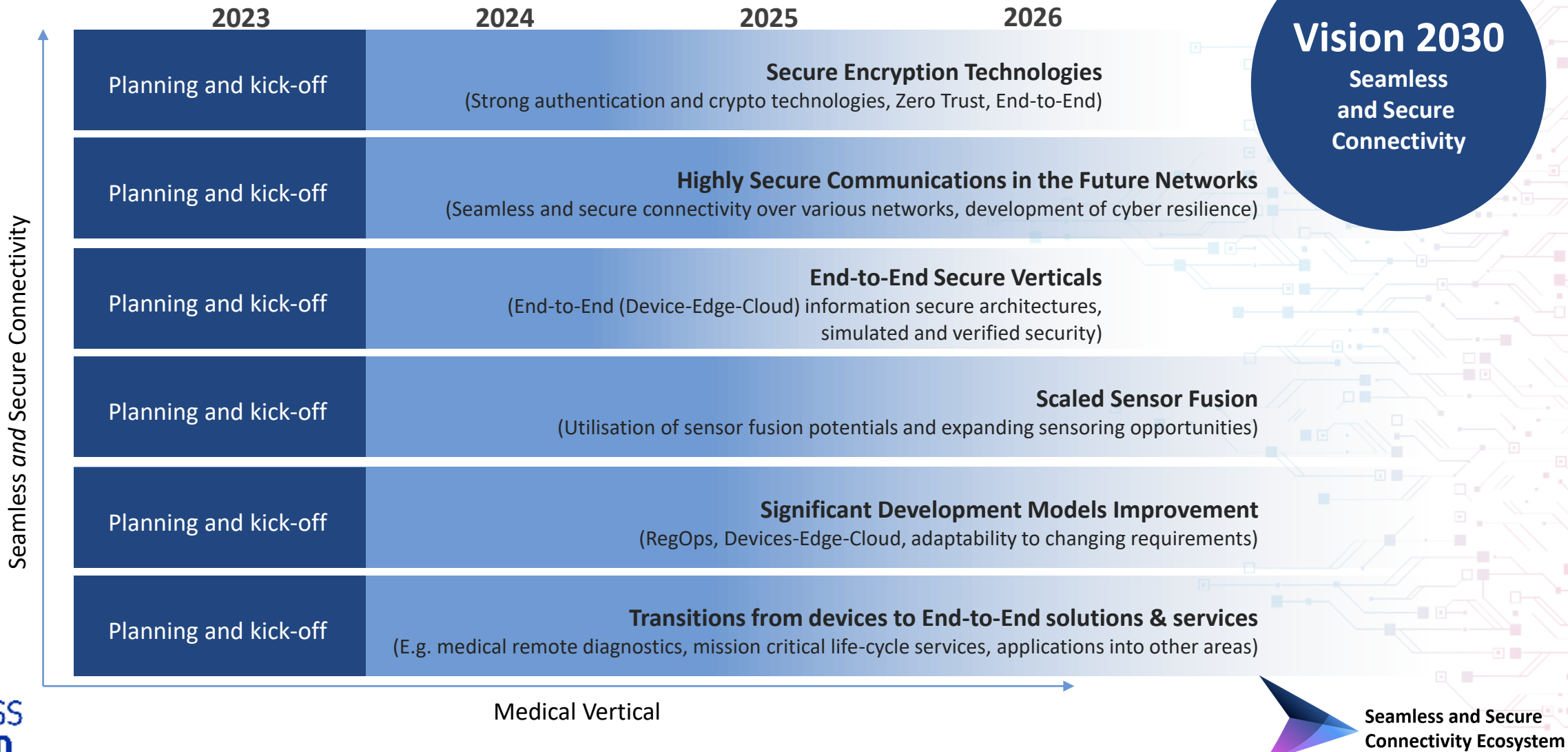
Transitions from Devices to E2E Services

Program Targets

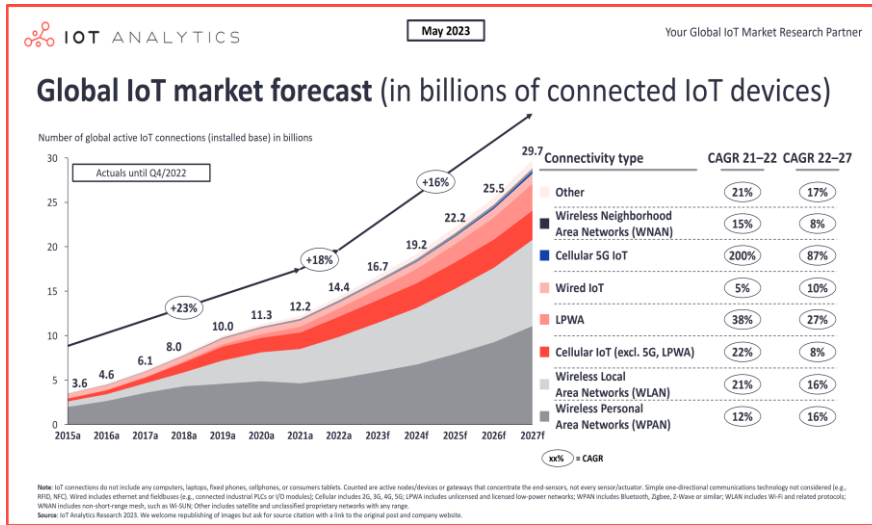
1. To develop applicable 5G and beyond end-to-end digital infrastructures, systems and processes to achieve *interoperable*, *seamless* and *secure connectivity* and as a result cyber resilience for information security attacks
2. To advance *creation of medical end-to-end diagnostics (life-cycle) solutions* with the help of software intensive and machine learning/artificial intelligence technologies and significant improvement of development models.
 - Application into other mission critical areas (life-cycle solutions)



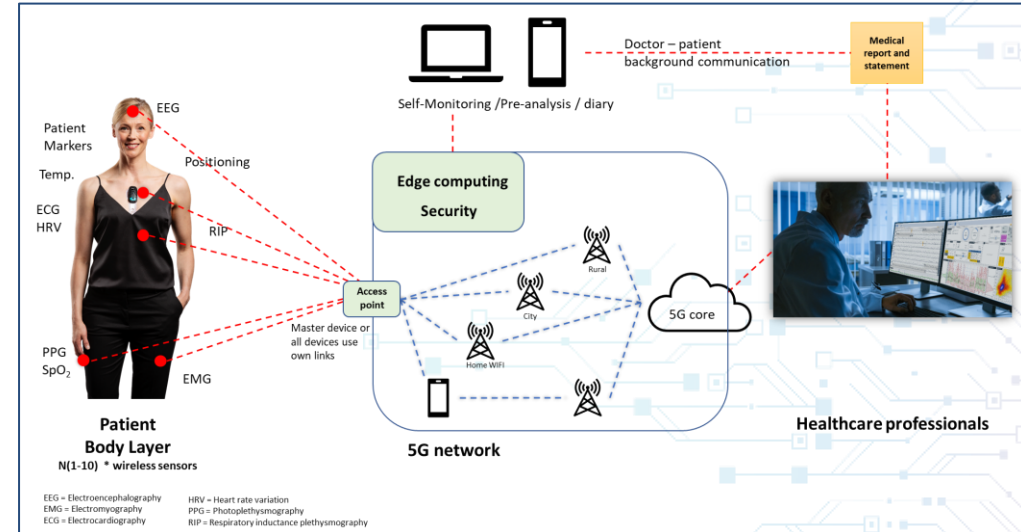
Program Roadmap



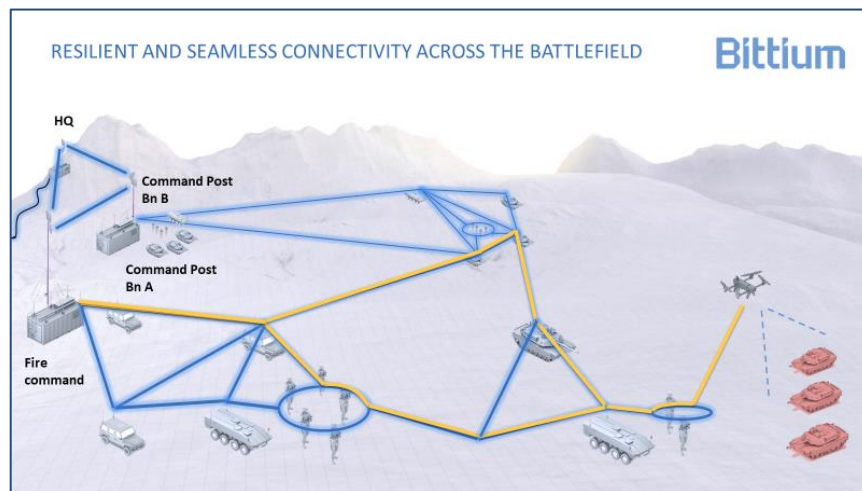
Examples of the Needs for Seamless and Secure Connectivity in 5G and Beyond



Source: IoT analytics, May 2023
<https://iot-analytics.com/wp/wp-content/uploads/2023/05/Global-IoT-market-forecast-in-billions-of-connected-IoT-devices.png>



Source: Bittium



Source: Bittium

- ### Examples for Research Themes in the E2E Context
- Roadmaps and technologies for future end-to-end secure encryption technology utilization
 - Quantum safe technologies (e.g. PQC)
 - Security approaches like Zero Trust
 - Scaled sensor fusion and related technologies
 - RegOps development methods
 - Intensive use of ML/AI or modern LLM methods in a regulated environments, while maintaining security and safety aspects

Join the Ecosystem

Development initiatives for co-innovation
and research collaboration

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**Seamless and Secure
Connectivity Ecosystem**

The background features a dark blue gradient with a complex network of glowing lines and nodes, resembling a globe or a data network. The lines are in shades of blue, purple, and pink, and the nodes are small squares and circles. The overall effect is a futuristic, high-tech aesthetic.

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