Shaping resilient IT
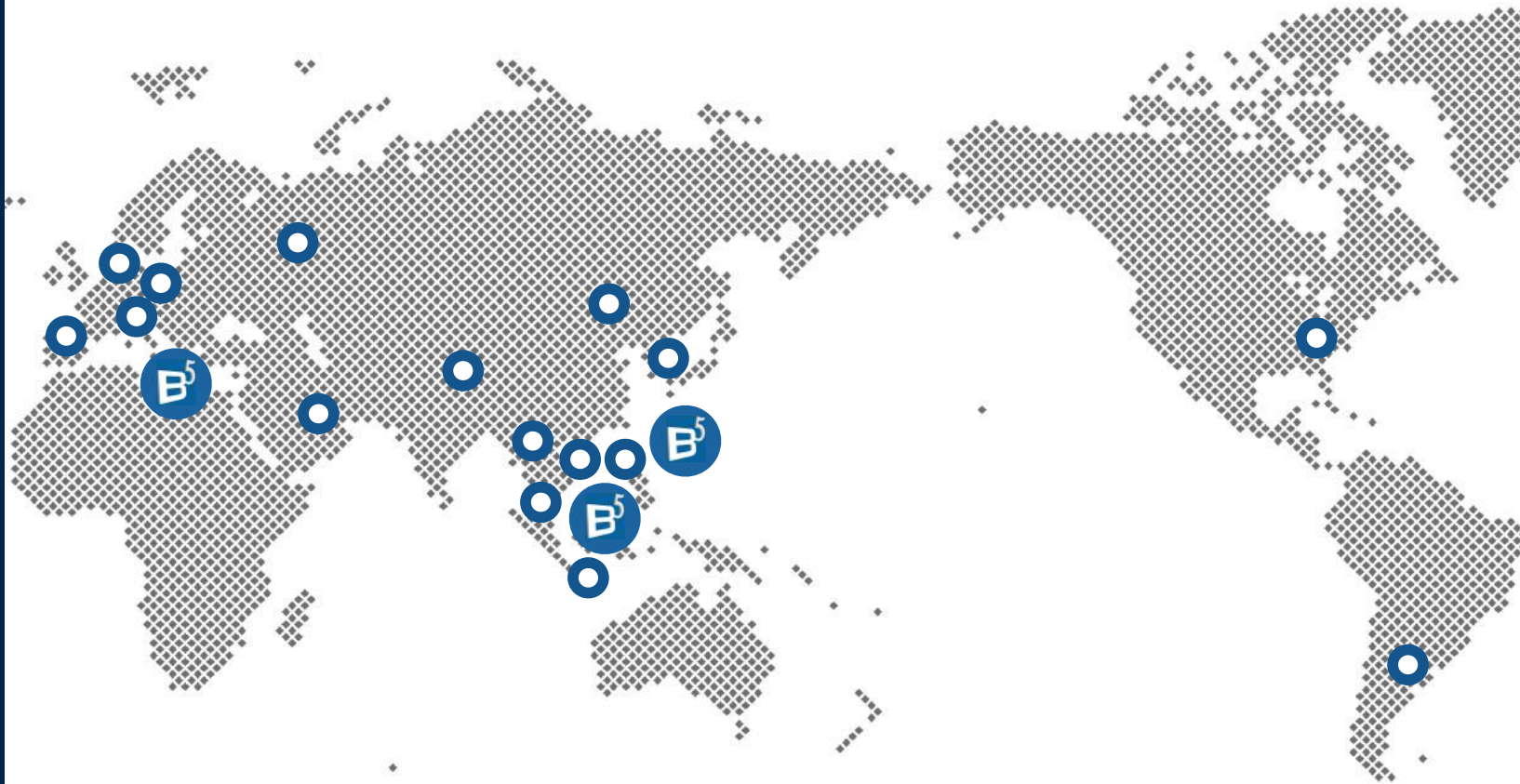
We navigate with our customers the stormy cyber seas

Blu5 Group

Blu5 Group
Global Reach

Facts & Figures

✓ Founded in **2007** by **security professionals**

✓ Teamed by **patent-inventor engineers** *(40+ patents)* in **Cyber Security**

✓ **Agile company** for rapidly changing scenarios

✓ **Over 20 years experience** collaborating **with Governments**

✓ Over **18 Countries** presence

✓ **Award-winning** Technologies

Industry Footprints

Gov Mil & Space

Remote Control

Nano-Satellites

Critical Communications

Finance & Banking

ATM & POS Enhancement

Infrastructure Optimisation
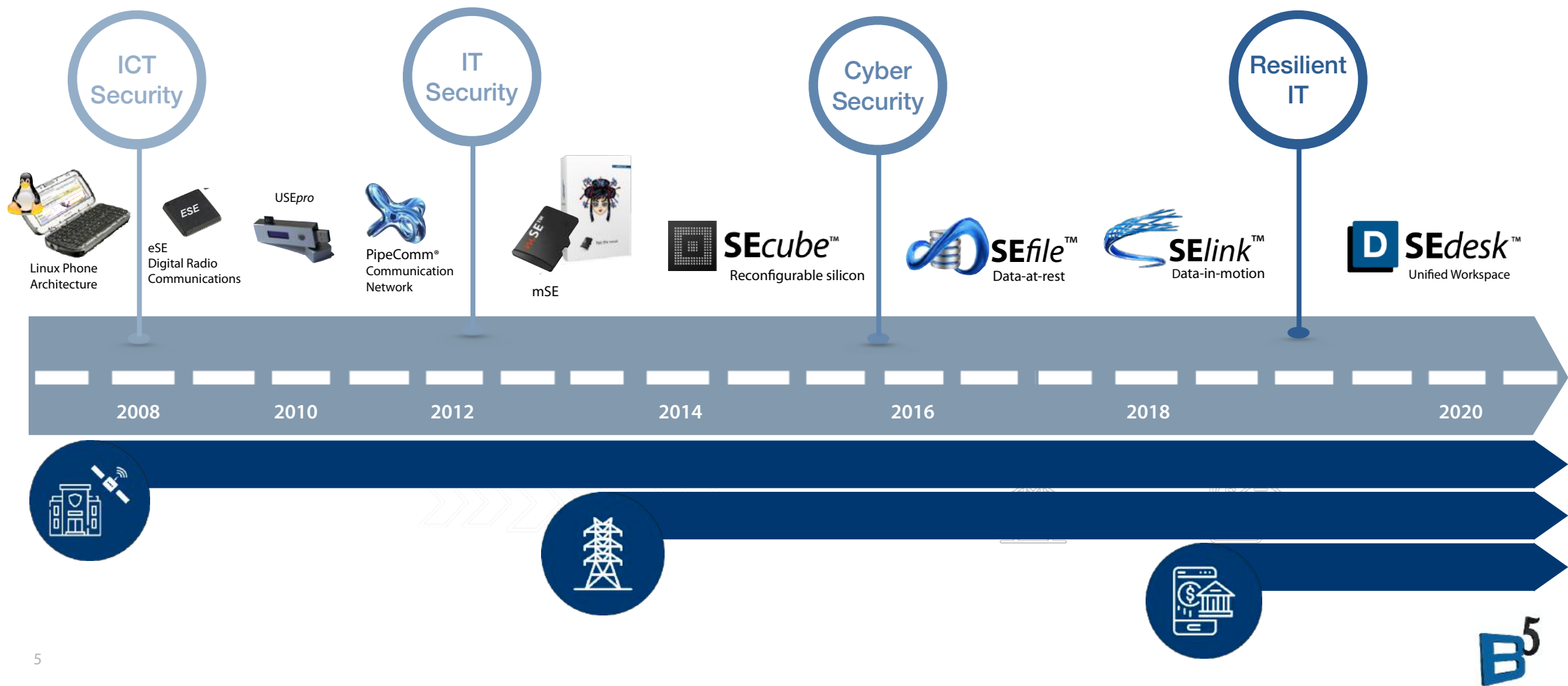
Security Enhancement

Anti-phishing

Critical Infrastructures

Remote Control

Secure IoT

Security Enhancement

We have come a long way

"We raise industry standards by assessing capabilities and processes through our solutions, while maintaining B5 status as innovation leader"

Antonio Varriale, **B5 Group CTO**

ICT Security

IT Security

Cyber Security

Resilient IT

Linux Phone Architecture

eSE
Digital Radio Communications

USE*pro*

PipeComm®
Communication Network

mSE

SE*cube*™
Reconfigurable silicon

SE*file*™
Data-at-rest

SE*link*™
Data-in-motion

D **SE***desk*™
Unified Workspace

2008   2010   2012   2014   2016   2018   2020

B⁵

Endorsements

✓ Scientific papers (secube.eu)

✓ Publications (Springler, *Resilience of Cyber-Physical Systems*)

✓ Open source projects (secube.eu)

✓ Core technology approved EAL6+ and NIST compliant

✓ Validated technologies used in Cybersecurity challenges and programs

INDUSTRY

SE*link*™

High Encryption Speed

**ZERO Byte
Encryption Overhead
Negotiation Overhead 278 Bytes**

SE*link*™

**Evolving Session Keys
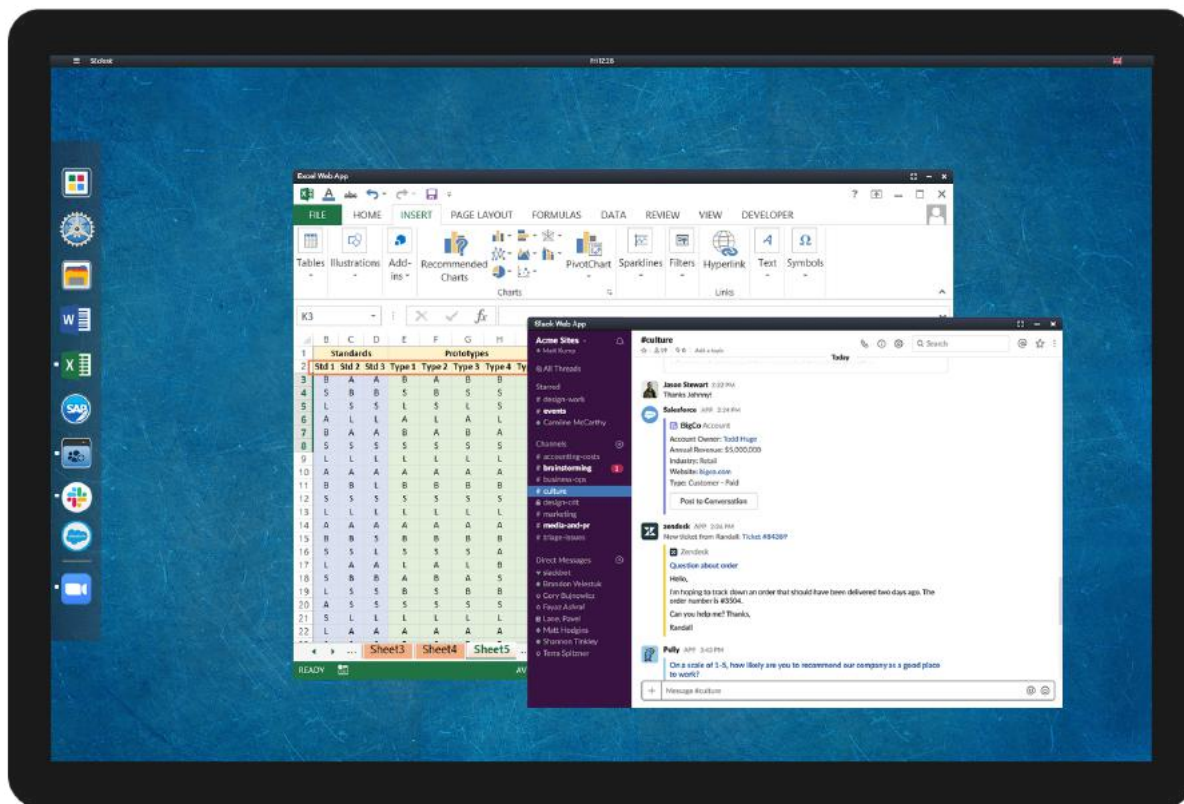Quantum-Safe**

**Service-Level Routing
Device Virtual Sensing**

Standard

Lower Encryption Speed

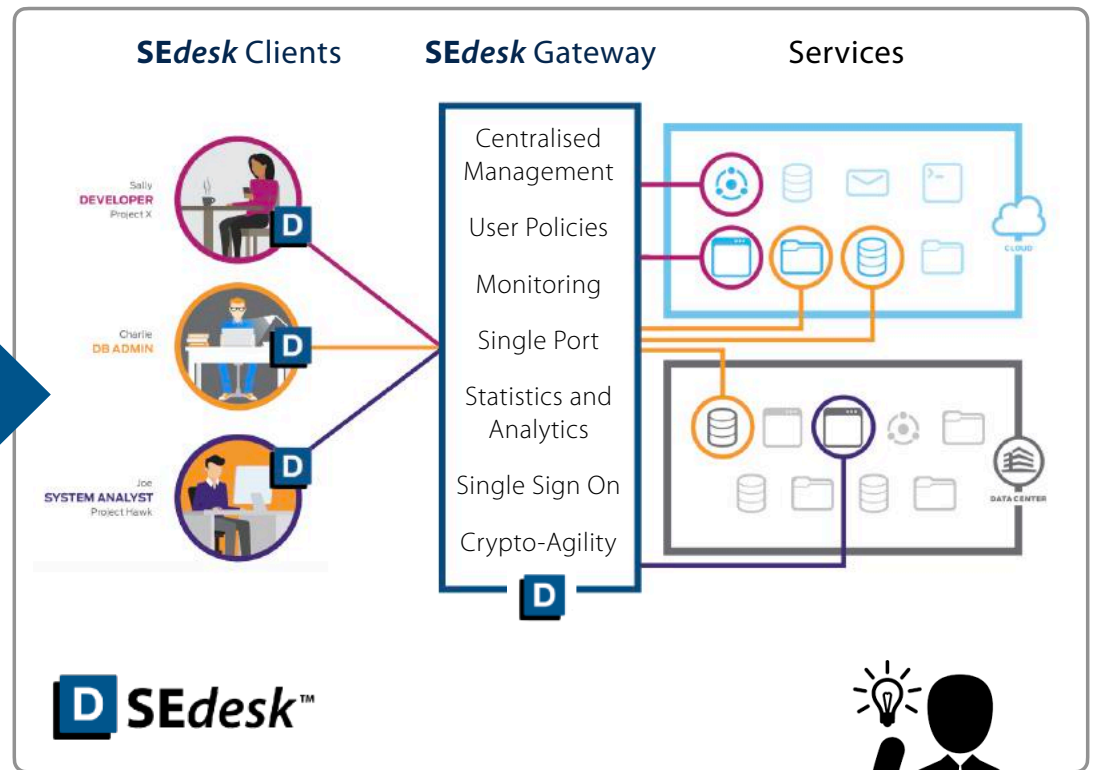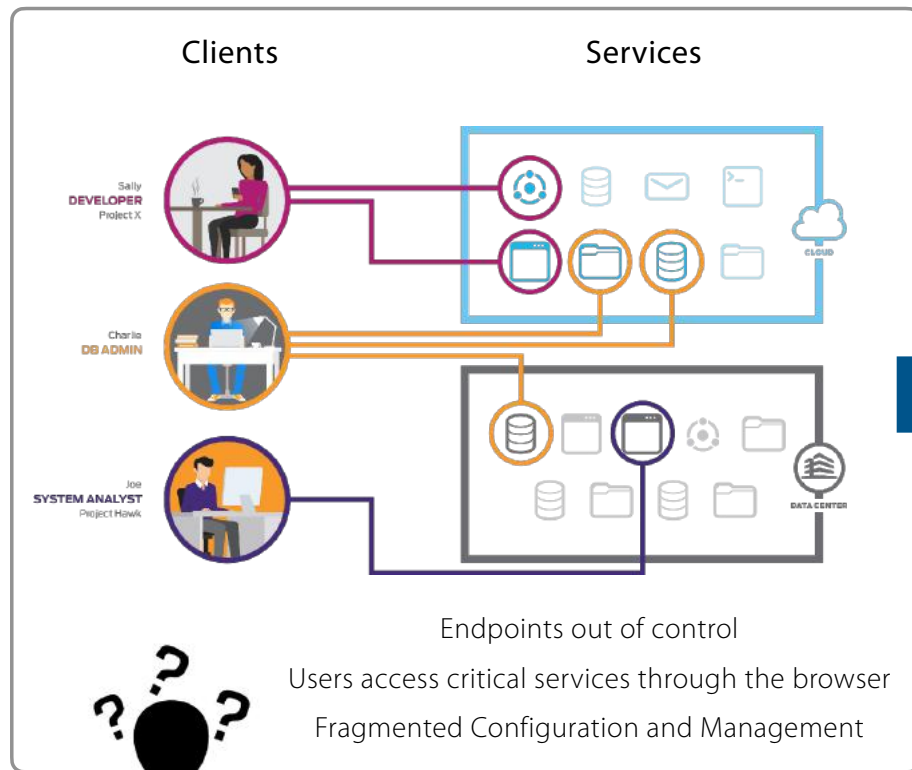40 Bytes Encryption Overhead
Negotiation overhead
6656 Bytes

**SSL/TLS
HTTPS
VPN**

Single Session Key
Vulnerable to modern attacks

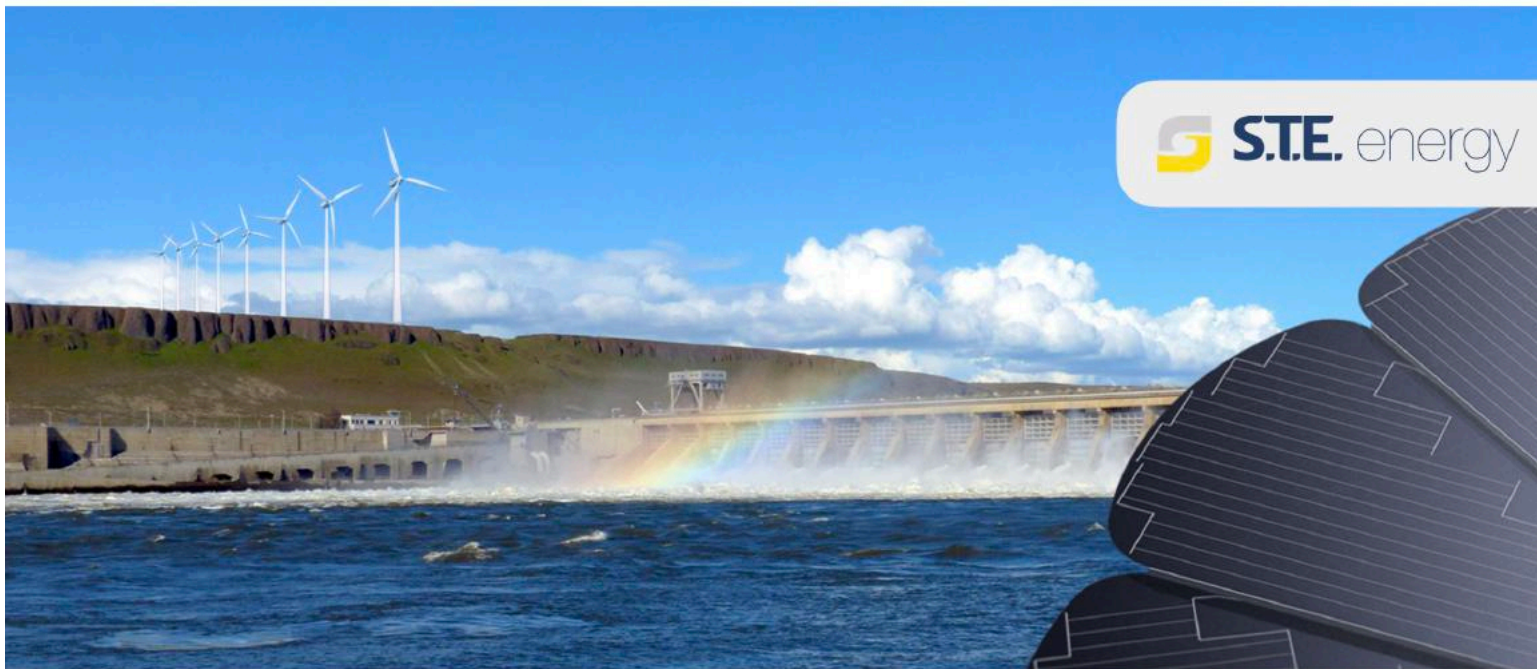Not applicable

SEdesk™
Secure Unified Workspace

www.sedesk.eu

Access to web and SaaS applications through **browser-less** isolated environment delivering **secure true desktop** experience

SEdesk™
Secure Unified Workspace

www.sedesk.eu

Clients · Services

Endpoints out of control
Users access critical services through the browser
Fragmented Configuration and Management

SEdesk Clients · SEdesk Gateway · Services

Centralised Management
User Policies
Monitoring
Single Port
Statistics and Analytics
Single Sign On
Crypto-Agility

SEdesk™

SEdesk™

Harnessing Data Analytics in Power plants while addressing Security concerns
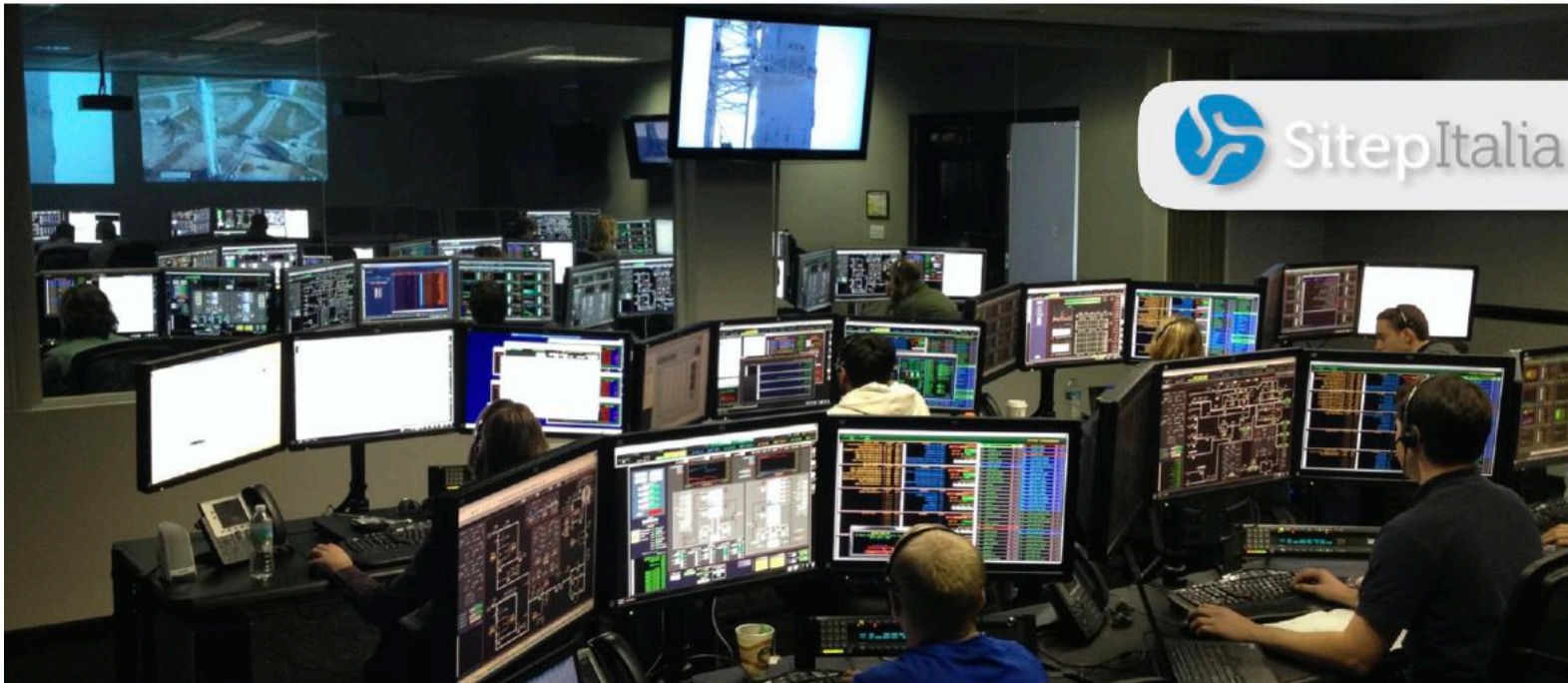
Challenge

Bridge the gap between IT and OT to **maximise efficiencies and cost savings of the IoT and the smart grid** balancing security, productivity and flexibility

Solution

SE*desk*™ unified workspace provides **secure remote access** to whitelisted resources and **on-device isolation** to **reduce the surface of attacks**

Secure Command & Control for non-lethal weapon installations

Challenge

Optimise the effectiveness of secure remote Command & Control for systems, designed to be deployed in multiple locations and potentially difficult to reach with suitable infrastructure

Solution

Securing connections between multiple sites critical systems with **hardware-based, military grade solution. Bypassing typical limitations of VPN** or other traditional networking tools

D SEdesk™

Kiosk industry catching up with changing security challenges and landscapes

Challenge

Allow customers to **complete** various day to day **transactions**, traditionally handled **by a teller**, without assistance at any time of the day, **providing extra piece of mind**.

Solution

Providing **secure remote access** and **isolation** to **financial services** on **self-serve kiosks, reducing the surface of attacks.**

SEdesk™

Securing your receivables in the Credit Management Space

Challenge

- Maintaining **trusted relations** with **late paying customers**
- Ensuring **protection of customer personal data, multiple communication links** and **payment transactions** in the area of **BYOD**

Solution

Providing securing remote access and on-device isolation to third party critical applications. **Bypassing** typical **limitations of VPN** or other traditional networking tools

The importance of connected data in Threat Intelligence

Challenge

- Producing **timely, actionable** and **relevant CTI** products
- **Dissemination of CTI** to various stakeholders, and integration with other systems
- **Privacy** and **legal implications** in **data sharing**

Solution

Providing securing remote access and on-device isolation to third party critical applications.
Bypassing typical **limitations of VPN** or other traditional networking tools

Endpoint threat response through A.I. and Isolation
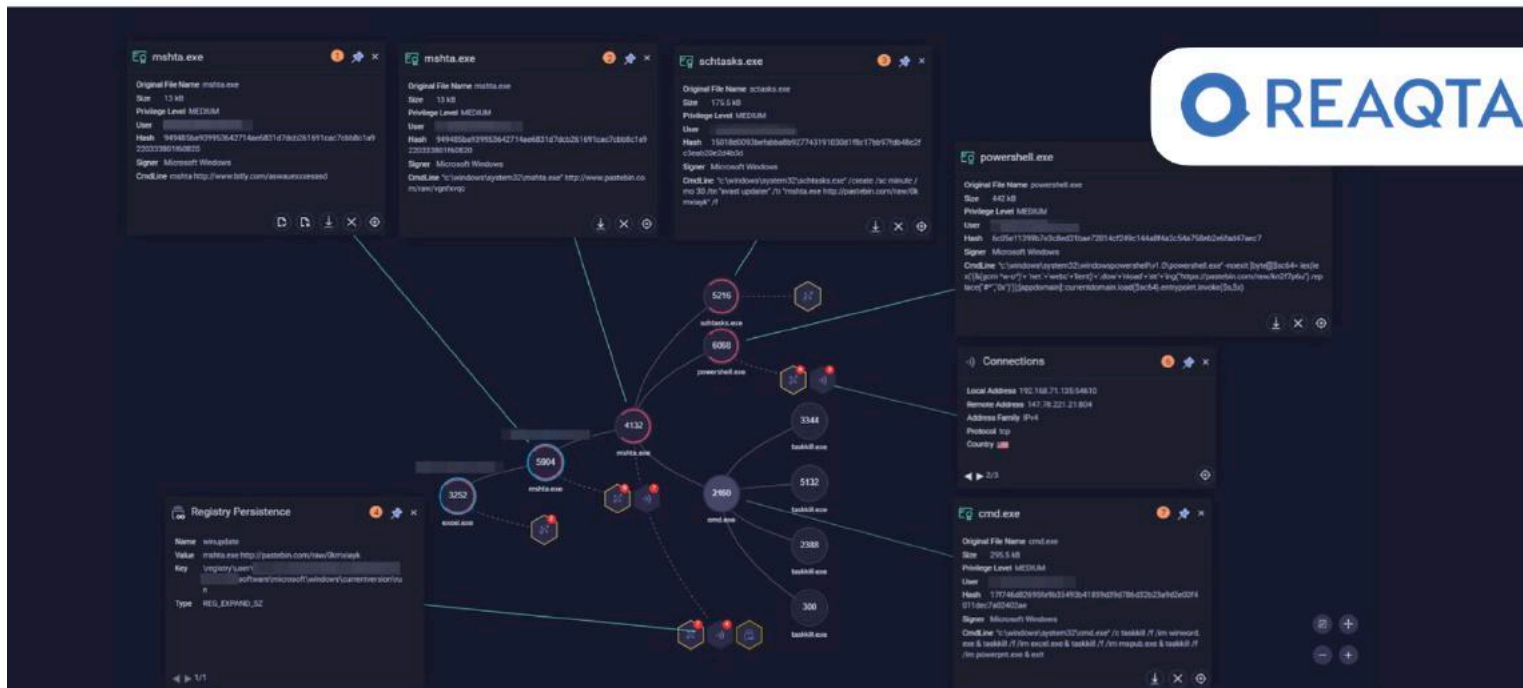
Challenge

- **BYOD** impacting the traditional security model of protecting the IT perimeter
- The **sheer amount of software** installed on the endpoint **creates vulnerabilities**

Solution

Providing securing remote access and on-device isolation to third party critical applications. **Bypassing** typical **limitations of VPN** or other traditional networking tools

![SElink™ logo]

Infrastructural Cost Reduction and Optimisation for ATM Networks

Challenge

- **Increase** ATM & POS network **ROI**
- Deliver **cost saving** while **supporting** BASE 24 **legacy requirements**
- **Enhance security, performance** and **flexibility** of the ATM & POS network

Solution

SE*link*™ system is a **service oriented secure virtual routing infrastructure,** able to replicate ATM clients and servers behaviours in a seamless way

B5

ATM Security Enhancement and Optimisation

Challenge

- ATM needs to be secured
- **Reduce bandwidth**
- Standard protocol not designed to face **new trends of cyber attacks**
- **Quantum Computing Era is real**

Solution

SE*link*™ protects data-in-motion. Optimised with **military-based techniques,** passing encrypted packets through narrow channels with **Zero Overhead,** Crypto Agility **ready for Quantum Cryptography**

SEcube™

Pico-satellites for In-Orbit Validation of tomorrow's spacecraft technology

L-Università ta' Malta
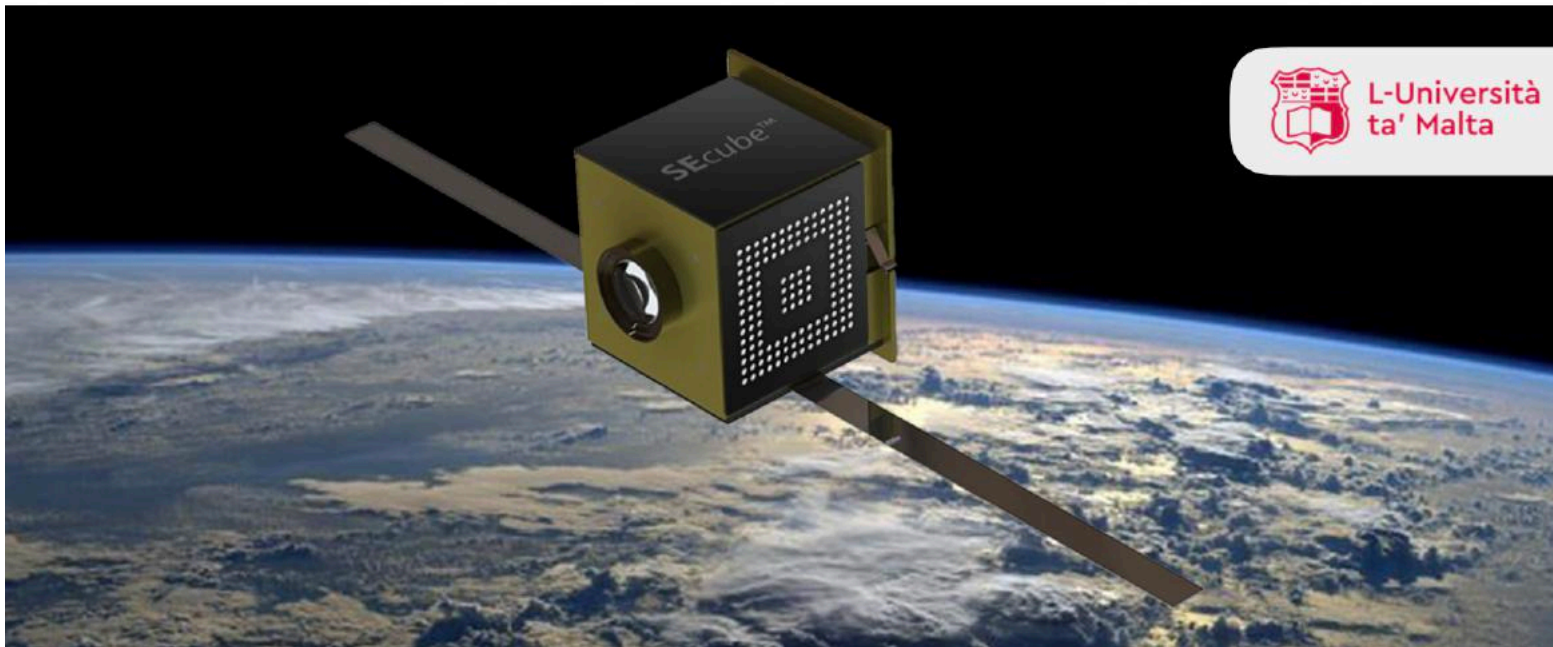
Challenge

- **Quantified reliability** of devices
- Space-validation of COTS components
- **Lowering costs** of in-orbit validation
- **Shorter time-to-market**

Solution

SEcube™, a **space resilient** System-on-Chip. **Adaptive** and **reconfigurable** it is suited for the design of small satellites requiring **reduced size** and l**ow power consumption**

SEcube™

Addressing the security challenges posed by Cyber-Physical Smart Water Systems
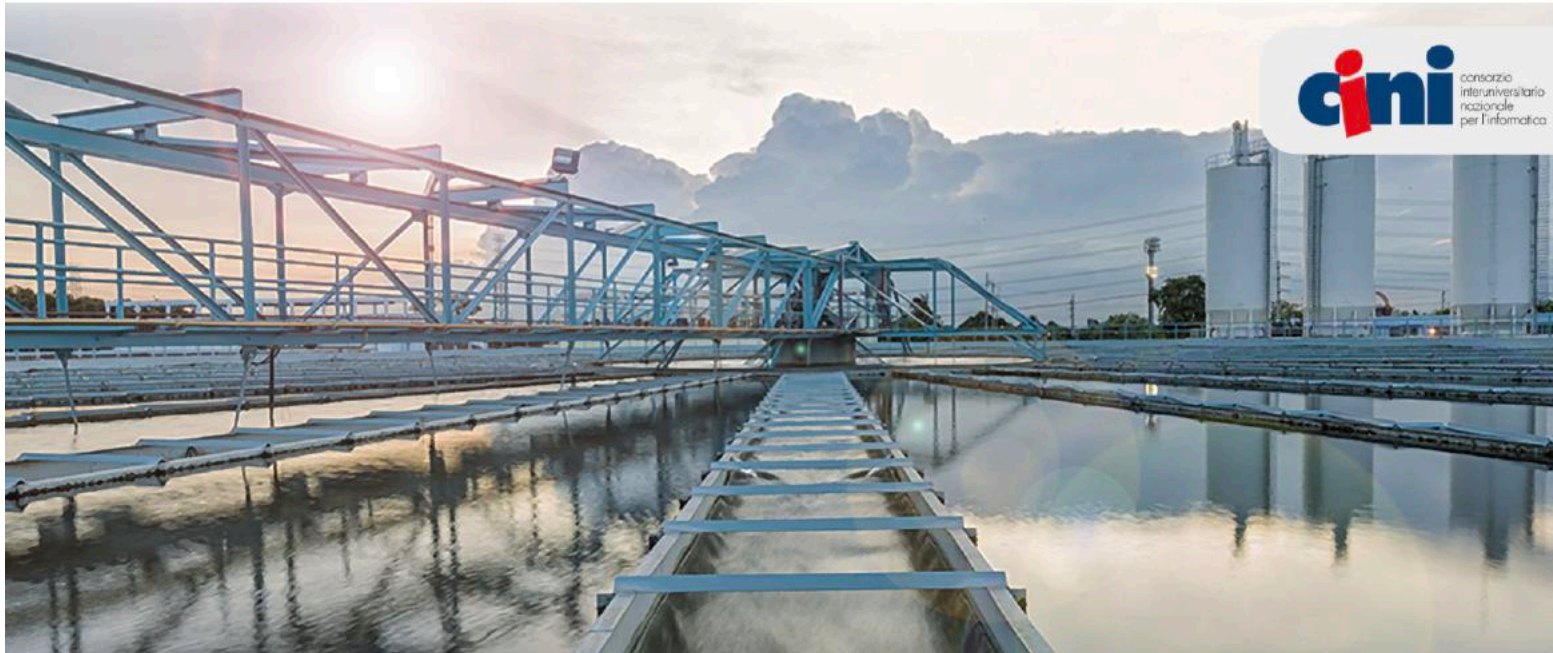
Challenge
- engineering the **integration** and **interoperability** of physical and computational elements
- **security** and **privacy** issues of smart CPS to meet **data protection regulations**

Solution

SEcube™ System-on-Chip focuses on security in support of CPS for the management and protection of data to **preserve ownership rights** as well as **beneficial use of data**

SEcube™

Future-proof reconfigurable silicon
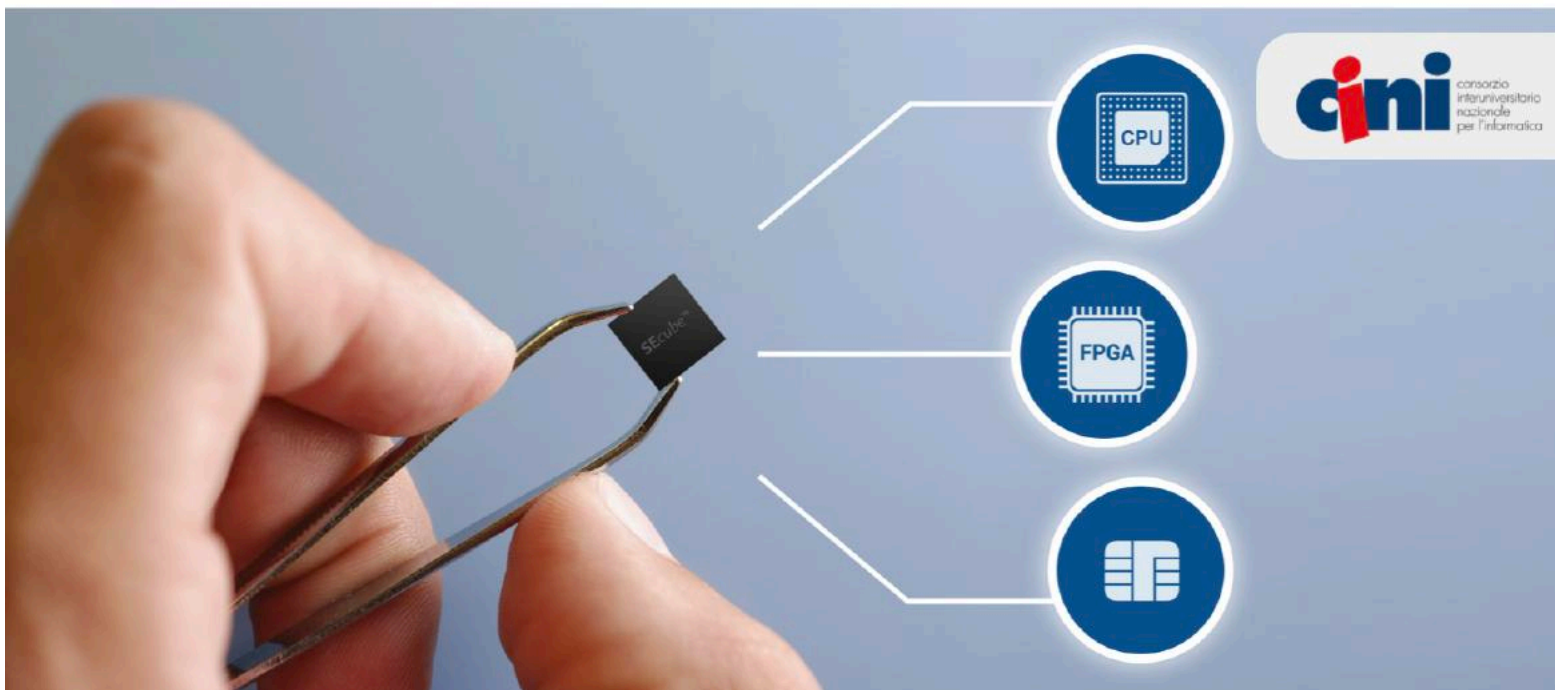
Challenge

- Pressure to develop systems to **meet evolving standards**
- **Extended designers' freedom** to system alterations after production **without hardware redesign**

Solution

SEcube™ is a **programmable** System-on-Chip with a **tamper resistant chip** and **FPGA** making it a fit to purpose solution for **fast prototyping** without hardware redesign, **rapid** application **developments**, **efficient** parallel **programming**

Blu5 Group

Shaping resilient IT

blu5group.com blu5group @blu5group blu5g