



## Update on High Assurance encryption

Senetas continues to invest in research and development and to ensure it remains at the leading edge of encryption technology for the safe transmission of government, corporate and personal information. Among one of our latest projects is one where we are working in cooperation with the Australian Government on

design and development of a high speed network encryption platform to meet High Assurance requirements. These are the classified information conduits used by governments to keep vital information secret while it is being transmitted locally and globally.

On completion it will potentially open new markets for Senetas within the Australian government and defence sector, plus those of our allies. The new encryption platform, while still obviously a work in progress, is one of the most exciting developments for the Senetas engineering team.

Taken together with new product developments, such as our CS100, multicast functionality and our new secure monitoring service MonitorStream (reported inside this newsletter); our latest acquisition of Focus Europe to establish the Senetas Europe subsidiary; and appointments of new resellers in Germany, Singapore and the Philippines; this has obviously been a very busy period for the team.



## Senetas Releases **CS100**

*"a category killer ... the first offering of 100 Mbps performance at such a low pricepoint."*

John DuBois, CEO

# SECURED

by **SENETAS**

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# Quantum encryption secures World Cup link

**Durban, South Africa** – In the first use of ultra secure quantum encryption at a world public event, a critical communications link was protected by Hybrid Quantum Encryption for the duration of the FIFA World Cup competition in Durban.



The award-winning Cerberis hybrid quantum encryption solution, jointly developed by Australia's Senetas Corporation and Geneva-based, id Quantique, has been deployed by Durban's eThekweni Municipality and the Centre for Quantum Technology (CQT), a research group of the University of KwaZulu-Natal (UKZN), to secure one of the most crucial links of Durban's ICT FIFA initiatives.

Known as the 'quantumStadium project' it uses quantum mechanical methods to distribute ultra secure encryption keys that encrypt the link between Durban's Moses Mabhida Stadium and the offsite Joint Operations Centre. The hybrid solution comprises layer 2 encryption using globally-accredited AES 256-bit algorithms, but features a quantum-based key distribution system to provide ultra high data security for communications via telephone, internet, video, data and email traffic travelling across the fibre optic link at up to 1 Gigabit per second.

"With the use of the Cerberis solution to secure Swiss elections in Geneva since 2007, this new operation clearly establishes IDQ and Senetas as world leaders in this new industry," said the CEO of id Quantique, Gregoire Ribordy.

"In our industry, we are often prohibited from discussing actual security deployments, but operations like the Durban one have the advantage of illustrating the potential of quantum cryptography technology."

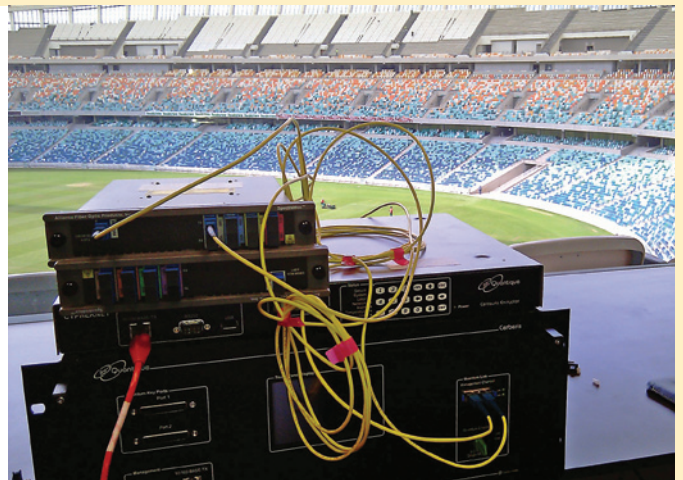
Senetas CEO, John DuBois said the deployment of the Senetas/idQuantique solution for the world event would add further public recognition to this network security technology now installed on four continents. He praised the work done since 2008 to help position the City of Durban to become Africa's 'smart city'.

"We applaud Professor Francesco Petruccione and his University team as well as the municipality of eThekweni, for their vision to secure a range of e-services travelling around the city on a fibre-optic backbone," Mr DuBois said.



*The unveiling of the quantumStadium project: Prof. Francesco Petruccione with Minister Naledi Pandor*

Professor Francesco Petruccione, Head of the CQT, said, "South Africa has the potential to lead Africa through advancements in Science and Technology. Global milestones, such as the quantumStadium project, entrench us as world-class players in research and development".



*Durban world cup Stadium with Cerberis*

The quantumStadium project extends the quantumCity initiative aimed at providing quantum based communication security within the eThekweni's optical fibre optic network. Since 2008, the City of Durban has been positioned to become the Smart City of Africa. This vision includes the development of an optical fibre communication backbone to provide citizens with e-services such as online learning, health advice, internet business solutions, public sector productivity tools and surveillance. These facilities increase the dependence on online communication and therefore the quantumCity was proposed to enhance this experience with cutting edge communication security solutions.

City Manager, Dr Michael Sutcliffe, believes that quantum information and communication technology will not only boost the transformation of the Municipality into a high-tech information-driven organization, but also turn Durban into an incubator for future technologies.

The City's vision is to extend this solution to the private sector, in turn transforming Durban from Africa's Smart City to the world's first quantum city.



## Senetas Europe Established London base for sales push

**London, UK:** Senetas Corporation has acquired a UK-based encryption solutions business to lead its efforts to aggressively grow the Senetas share of the high speed network encryption market in United Kingdom and Europe.

Senetas CEO, John DuBois said Senetas Europe Limited ([www.senetas-europe.com](http://www.senetas-europe.com)) had become a 100%-owned subsidiary of the Australian listed company from 5 July 2010. This followed the acquisition of Focus Europe Limited a highly-regarded encryption solutions business based in Basingstoke, the hi-tech corridor south-west of London.

Mr DuBois said Senetas Europe would benefit from the extensive technical experience and industry knowledge of three key employees who will lead the European sales effort: Gareth Jones (General Manager), Pete Smith (Manager Encryption Solutions) and Graham Wallace (Government Accounts Manager and Product Specialist).

"This is a significant move for Senetas to have direct representation in the largest single market, apart from the USA, for our Layer 2 encryption products. The team has experience in our encryption technology, as well as that of our competitors, and their blue chip customer base includes Government, Finance and Enforcement Agencies.

"Having this permanent presence in the UK enables us to seek further security accreditations for our encryption hardware. Such approvals will be vital additions to our FIPS and Common Criteria certifications and key to our success in UK and EU government and defence sales," Mr DuBois said.

Gareth Jones said: "We're pleased to be part of the Senetas team in Europe. Senetas offers a complete family of security solutions at the highest data throughputs across major network topologies. In our experience Senetas also provides an unsurpassed level of technical capability in its design and engineering group, as evidenced by its ongoing achievement of rigorous international security accreditations for its hardware.

"With increased focus on security across European government agencies and financial enterprises, we are confident that the Senetas Europe business model with a combination of direct sales and reseller channels can win an increasing share of the growing network security market," Mr Jones said.

From its Melbourne, Australia headquarters Senetas produces security solutions to suit all network topologies, including Layer 2: Ethernet, Fibre Channel, ATM, Link, SONET; and Layer 3 – IPSec; plus the world's first hybrid Quantum encryption platform, now deployed on four continents.

Senetas Europe will also offer a unique Software As A Service (SAAS) solution, Senetas MonitorStream, which provides secured, automated monitoring in real time for standard operating systems, CPUs, real and virtual memory, disk performance, network performance, disk space, critical processes and Web URL availability. It reduces business costs and improves time management and network capacity planning by enabling automatic event response to correct or prevent problems before end-users are impacted.



Senetas Europe team L-R: Graham Wallace, Pete Smith and Gareth Jones

# Corporate Social Responsibility

Following successful completion of encryption product re-designs to ensure compliance with relevant RoHS (Restriction of Hazardous Substances) directives, Senetas continues to further "green" the business with more efficient usage of power and the introduction of CSR initiatives.

RoHS, first adopted by the European Union in 2003, came into effect from July 2006, and restricts the use of lead, mercury, cadmium, chromium and some flame retardants used in plastics.

Senetas CEO, John DuBois said "RoHS compliance is a staged process, but we needed to be compliant to ensure our future capability to sell products to Europe and parts of Asia. Not only was this an expensive exercise for Senetas to replace components that were end-of-life due to RoHS, but we had to ensure our contract manufacturing processes also complied and other issues such as high product reliability remained unaffected."

Among CSR initiatives Senetas uses partly green power; has Carbon offsets via Climate Friendly; provides free worker health checks and free influenza vaccine for staff; pays income protection insurance for all staff; encourages staff participation in the Global Corporate Challenge, which encourages people to walk at least 10,000 steps per day ([www.gettheworldmoving.com](http://www.gettheworldmoving.com)); sponsored a staff member in the Oxfam walk by matching the donations contributed by other staff; and matched staff

donations to the Red Cross after the Victorian bushfires of 2009.

Apart from employing standard office practices to minimize energy consumption, Senetas encourages recycling, use of electronic brochures and reports, copy paper reduction or re-use and a preference for electronic communications rather than post.

The company also encourages the use of public transport and alternative transport options, which has seen a number of Melbourne-based staff exchange car spaces for salary and leave vehicles at home in favour of bicycle power.

## New naming convention

Senetas recently decided to streamline naming conventions for its Encryption Security Platform, which means that encryptors formerly marketed as CypherNet and CypherStream will now be known as the CN and CS family of encryptors.

A CS10 is a 10 megabit per second (10Mbps) small footprint encryptor suitable for SMEs and for branch office to head office encryption. Meanwhile Senetas' popular CN1000 is a rack-mounted Layer 2 enterprise encryptor securing business data in motion at up to 1 Gigabit per second (1Gbps).

## Senetas further expands partner network

**Germany** – Senetas has appointed experienced fibre optics security company, FiSEC as a reseller of its high speed CypherNet encryption technology throughout eastern Europe.

FiSec GmbH, based in Starnberg outside Munich, has extensive experience in the fibre optic monitoring and security throughout the EU since its establishment in July 2005. FiSEC Managing Director Thomas Hohendanner has 15 years experience in optical IT and is a co-founder of ADVA AG and Tera Gate AG.

Apart from Germany, FiSEC will represent Senetas encryption technology in the Eastern bloc, including Russian Federation, Hungary, Croatia, Slovenia, Czech Republic, Belarus, Ukraine, Romania, Austria, Poland, Lithuania and Bulgaria.

**Singapore** – Experienced Singapore-based IT consultancy group, Teleconsult has been appointed fulfilment channel partners to represent the Senetas encryption products in Singapore as well as Indonesia, Malaysia and Brunei Darussalam.

Announcing the arrangement during a visit to Singapore, Senetas CEO, John DuBois said Teleconsult, through its Teleconsult

International training arm, had also agreed to work with Senetas to create and deliver a range of Asian-focused IT training programs in the region. He said this was expected to generate revenues over time for Senetas based on a royalty model.

**Philippines** – Senetas has signed a new reseller agreement with Manila-based Infosight Solutions Corporation in a move to secure the local business process outsourcing market where sensitive data is transmitted to and from major global corporations, often unencrypted. Infosight is targeting markets such as Healthcare, Insurance, Banking and Financial Services.

# Secure MonitorStream SAAS launched

Senetas has developed a unique Software As A Service (SAAS) solution, Senetas MonitorStream. It provides secured, automated monitoring in real time across a range of business critical systems and applications for mid-sized enterprises. This marks the first joint development by Senetas' Consulting and Security divisions.

Senetas General Manager – Consulting Larry Wilson said the solution, which had been in development over the past 18 months could monitor and report on standard operating systems, CPUs, real and virtual memory, disk performance, network performance, disk space, critical processes and Web URL availability.

In a move taking advantage of the expertise of both Senetas consulting division and its world leading encryption hardware division, Larry Wilson said MonitorStream reduced business costs and improved time management. Among its features are automatic event response to correct or prevent problems before administrators can respond and before end-users are impacted.

“Essentially our solution saves business the salaries and on-costs associated with employing and training staff to perform network monitoring. Our solution runs in the cloud over an encrypted link to improve capacity planning by anticipating

resource over-utilization, by generating proactive events and reports against forecasted growth models. This can be followed by system reconfiguration for better performance or timely acquisition of new hardware to prevent system slowdowns and outages.

It builds on the company's established skill sets in the IBM Tivoli environment and Senetas can provide an end-to-end solution covering design, deployment, configuration, licences, deployment and training. All these components can be provided by Senetas effectively acting as an IBM Tivoli Monitoring 'one-stop-shop'.

Mr Wilson said Senetas would provide the SAAS for one all inclusive, monthly fee, which includes supported by Senetas consultants with a unrivalled depth of experience in Enterprise Systems Management.



Some members of Senetas' Consulting team at their annual golf day held at the end of the financial year.

## John DuBois speaks

CEO John DuBois has been invited to speak on a number of occasions recently addressing the ACPO-APA International Policing Conference in Manchester, UK in June; a NATO-sponsored meeting in Gdansk, Poland on the commercial potential of quantum encryption; and undertaking rounds of media interviews in Australia as well as Indonesia, Brunei and Singapore, where he was featured in a six minute business interview on CNBC Asia.

As part of a series of media interviews in South East Asia, Senetas CEO John DuBois was featured for six minutes in a live interview on CNBC Asia. John spoke from Singapore with the host of CNBC's Cash Flow program, Oriel Morrison, who was in their Sydney studios. They discussed encryption, the vulnerability of optical fibre and Google's response to alleged hacking by China.

Mr DuBois warned business and government leaders in the region that fibre optic networks were still vulnerable to fibre tapping and showed them an optical tapping device, readily



available on the Internet, which can intercept voice, video and data streams. Interviews were conducted in Jakarta (Indonesia), Bandar Seri Begawan (Sultanate of Brunei) and Singapore with a number of articles published and radio and television interviews conducted.

# Senetas Releases CS100 new rack-mount encryptor

MELBOURNE , June 15, 2010 – Senetas Corporation, the world-leading designer and developer of high speed network encryption hardware, today released Senetas CS100, a new cost-effective branch office encryptor designed to run at 100 Mbps, fully interoperable with the company's ultra-high-speed network encryption hardware.

Senetas CEO, John DuBois said the CS100 with its RRP of AUD 8100, "is a category killer...the first offering of 100 Mbps performance at such a low pricepoint."

He said CS100 was the result of ongoing R&D effort to further extend the company's small, paperback-sized 10 Mbps CS encryption platform, originally known as CypherStream. But rather than use the smallest footprint for this faster device, the CS100 employs a thin (1U) 19" standard rack-mount design to allow it to be installed into communications racks for small to mid-sized businesses and to provide branch to head office security for enterprise customers.

The CS100 is configurable for either Layer 2 Ethernet or Layer 3 IPSec networks and delivers 100 Mbps data throughput, secured by industry standard AES 256 bit encryption algorithms. It is also crypto-agile, meaning it can be used with custom algorithms, which are required by governments such as Japan, Korea and parts of South East Asia.

Mr DuBois said CS100 was an evolutionary product which had been extensively tested internally and well exceeded its nominal speed rating, "it runs at a true 100 Mbps over IPSec and offers very low latency of only one millisecond, which is an excellent result."

Mr DuBois said the encryptor was built by Senetas to the Common Criteria EAL4+ standard and is due to be submitted for EAL certification next financial year. Senetas CS100 uses the same automated key management functionality as the faster CN family of encryptors, has a tamper proof rack mount design, and has passed all required regulatory testing.

**The CS100 with RRP of AUD 8,100 "is a category killer ... the first offering of 100 Mbps performance at such a low pricepoint."** John DuBois, CEO

## Senetas 10 Gbps Multicast Encryptor

Senetas has seen increased interest in its new multicast encryptor (Patent Pending) designed to secure converged networks and protect the "triple play" of voice, video and data.

The Senetas encryptor accredited to Common Criteria EAL4+ and FIPS 140-2 Level 3 secures data in motion from a host to all members of a multicast group at rates from 10Mbps (CN1000) up to 10 Gigabits per second (CN3000).



*Senetas chief technologist,  
Julian Fay*

Senetas chief technologist, Julian Fay said it was designed to provide the highest level of information security to applications including video conferencing, internet based TV, online gaming and distribution of critical business applications.

Mr Fay said the new encryptor functionality could also be deployed to protect military multicast traffic, as it used the AES256-bit algorithm, approved by the U.S. Government National Security Agency in 2003 to protect classified information up to the 'top secret' level.

The Senetas solution employs an innovative approach to solve the problem of maintaining secrecy in large dynamic groups that requires a group key management infrastructure.