

IT for a Sustainable and Secure World

TELVENT

Security: An IT Challenge

November, 2007 José I. Del Barrio Executive Vice President Global Services



Security is a basic human need. Without security, the social order would simply collapse. And the desire for security is growing – also within the area of IT security. More than ever our society is dependent on the proper functioning of information and communications technology.





At Telvent, our services and products are aimed at the users of information technology products.

Those are primarily the public administration at federal, state and municipal level, in addition companies and private users.

Our goal is to promote IT security so that everyone can make the most of the opportunities opened up by the information society.









"Future challenges must be identified and countered commonly according to the idea of a comprehensive security"



Security is the framework over which the Information Technology is going to develop...

- IDC predicts that by 2010, while nearly 70% of the digital universe will be created by individuals, organizations (businesses of all sizes, agencies, governments, associations, etc.) will be responsible for the security, privacy, reliability, and compliance of at least 85% of that same digital universe.
- Information security and privacy protection will become a boardroom concern as organizations and their customers become increasingly tied together in real-time. This will require the implementation of new security technologies in addition to new training, policies, and procedures.
- IDC estimates that today, 20% of the digital universe is subject to compliance rules and standards, and about 30% is potentially subject to security applications.

Conclusion: We are attending a change in the Organizations, in the ITC's and in the way professionals do their jobs.





Security and Telvent



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Critical Infrastructures. Definition.

According to the National Strategy for Physical Infrastructure and Key Assets, as prepared by the US Department of Homeland Security (DHS),

Critical Infrastructures are defined as those physical and cyber based systems essential to the minimum operations of the economy and government. They include, but are not limited to, telecommunications, energy, banking and finance, transportation, water systems and emergency services, both government and private

In the U.S., with over 2 billion miles of cables, 2,800 power plants, 300,000 oil and gas producing sites, and 2 million miles of pipeline, electric and gas utility companies as well as pipeline and telecommunications companies have large assets bases to consider from both a security and an emergency preparedness perspective.



Security in Energy Infrastructure Management

March, 2007:

Telvent is participating in a collaborative exercise with the U.S. Department of Energy's National SCADA Test Bed (NSTB) on a joint security assessment project.

NSTB researchers at Idaho National Laboratory (INL) work in partnership with the private sector to assess and mitigate the threats posed by cyber attacks on critical infrastructure control systems.

NSTB security experts will test the SCADA OASyS DNA System by attacking it via a wide range of potential cyber vulnerabilities. The Test scenarios will be validated by industrial users to ensure that they accurately reflect real-world situations.



"Securing DCS/SCADA is a national priority. Disruption of these systems can have significant consequences for public health and safety. Both the private and public sectors have a role in securing SCADA systems"

(The National Strategy to Secure Cyberspace)





Security in Transportation Infrastructure Management (Enforcement)

Traffic management through digital image processing, radar detection and enforcement to ensure the increase security concern on driver's behavior

- Device controlled violations
- Homogeneous information processing system
- Secured (encrypted) storage files



The fundamental objective is to achieve Sustainable Mobility and a Secure City



Security in Transportation Infrastructure Management (ITS)

Road and Traffic Security: Surveillance, Control, and Vehicle Classification and Registration





Security in Transportation Infrastructure Management (ITS)









Security in IT Infrastructure Management: Data and Information Protection



Main components of IT Infrastructure Managed Security

Data and Information Protection

Data Centers

- Disaster Recovery and Business Continuity Planning
- Managed Services
- Data back-up, data integrity

Managed Security

- Consulting
- SOC (Security Operation Center)
- Auditing

The biggest demand for Managed Services comes from Companies looking to secure their network infrastructure. The market for Managed Security and Privacy Services, which along with business continuity services represent a key piece of next generation network roll-out, is set to grow at roughly 15% per annum through 2010. (The Butler Group)



A top view at the Security Services portfolio





Security in IT Infrastructure Management (ITS): Data and Information Protection

- Telvent manages more than 55,000 square meters of Data Center space in which more than 400 customers co-locate their critical IT Infrastructure
- Our main DC (Madrid2), manages more than 60% of the Internet traffic of the Iberian Peninsula. It is included in the Emergency Plan of the Spanish Industry Minister, and belongs to the Internet Early Warning Network System of the same Ministry
- Hosts the 7th SOC (Security Operations Center) of the Verisign Atlas Network







Security in IT Infrastructure Management (ITS): Data and Information Protection: MSS Verisign Global Network





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The Perfect Storm...







Security Spending



Spending on Security-Specific Software is already nearly \$40billion a year. By 2010 it will be \$65billion, or close to 5% of total IT spending.

Add the Software, Hardware and Networks needed to support those Security products and you are up over 10% of IT spending (IDC).





Homeland Security



LAECAP and @firma

- @firma allows the secure personal signature of any document or electronic administration procedure with the same validity as the manual signature (Regulation 59/2003)
- @firma includes checking of the status of digital certificates revocation
- @firma is the accepted official validation tool for the electronic ID
- @firma has been implemented as the validation tool in the Public Administrations Ministry in Spain, under the regulation 59/2003



@firma provides specific integrated solutions for each Organization in between the Public Administration bodies



Border Control

As the European Union continues to expand, border security is becoming an increasingly critical issue; Nation states need to know exactly who is coming and going across their borders.

The changing threat environment means that continuing to improve national and international interoperability remains a priority so that integrated and coordinated threat detection, protection and response strategies and mechanisms can be effectively implemented across Europe.





Integrated eBorders: Market Size



Public Sector Market Forecast

Worldwide Projection for Integrated eBorders - Total Solutions



Sizing the Value Chain

Biometric HW & SW forecast is median of published numbers from 1BG, IDC, Frost & Sullivan Biometrics HW & SW includes Core Technology and Products





e-Immigration: Border Control Integral Concept



e-Immigration: Border Control Integral Concept: Document Verification and Authentication

- Installed in every entrance and exit check point to Schengen
- Automatically captures the data, verifies the authenticity of this data, and of the identity using biometric recognition techniques

 Biometrics is going to play an enormous part in developing integrated and coordinated threat detection, protection and response strategies

Objective: Determine a Secure Area in between the geographic borders of a Country

e-Immigration: Border Control Integral Concept: Document Verification and Authentication

e-Immigration: Border Control Integral Concept: Document Verification and Authentication Process

Results: Analysis and Filing

Verification

Conclusion

"Our nations clearly depend on the continuous and effective performance of a vast infrastructure to sustain our modern way of life.

This infrastructure is comprised of vital physical, human, and computer-based systems and assets that, if incapacitated or destroyed, would have a debilitating impact on national security, economic security, public health and safety, the environment, or any reasonable combination thereof."

(National Strategy for Control System Security; INL, prepared for US Department of Homeland Security)

IT for a Sustainable and Secure Work

Thank You!