INFORMATION SECURITY IN A GLOBAL BANK

Secure Communication in the New Millennium

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OVERVIEW

◆ Today
  – Legacies, Geography, Cultures & Constraints
  – Resulting Situation
  – Forces For Change

◆ The Target
  – Customer Requirements
  – Technology and the Workforce
  – Communications, Networks and Connectivity
  – Planning

◆ Tomorrow
  – Evolution Plus Revolution
  – Make or Buy?

◆ Summary
TODAY

◆ **Legacies**
  - Mainframe Attitudes Toward Security
  - Client-Server Explosion
  - Regional Autonomy
  - Regional Optimization

◆ **Geography**
  - Business In 61 Countries
  - Most Time Zones
  - 24 X 6 Usage Of Distributed Assets
TODAY

◆ Cultures
  – Origin: Swiss Base, With Strong Non-Swiss Offices
  – Then: O’Connor, S.G. Warburg, Dillon Read, . . .
  – Culture Is Multi-culture

◆ Constraints
  – Customer Expectations & Image
  – Legal & Compliance Requirements In All Countries
  – Competitive Position
  – Sufficiently Secure
TODAY - RESULTING SITUATION

- 11 Different Host/Server Operating Environments

- 118,000 Nodes (WSs, Servers, M/Fs, Firewalls, Routers, PTRs, etc.)

- Over 200 Wan Links Spanning 32 Countries, Dial Connect To The Remaining 29

- Defending The Castle - Firewalls & Hardware Encryptors
  - Inside vs Outside

- IT Security Practices Are Mix Of Old And New
TODAY - FORCES FOR CHANGE

◆ Threat - Increased Capabilities At Lower Skill Levels
  ✦ Internal, External, Consortiums and Individuals

◆ Driving Compute Power Down Into Organization Requires Driving Security Down Into Organization
  ✦ IT Security’s Value Added?
  ✦ Information Ownership and Responsibility

◆ Internal And External Demand For Secure Remote Connectivity
  ✦ Bank Systems, Intranet, Internet
  ✦ Customers, Employees & Vendors
  ✦ E-Commerce, Travel, Work at Home

◆ Need For Rapid Expansion and/or Reconfiguration
  ✦ Business Opportunities
  ✦ Mergers, Acquisitions and Joint Ventures
THE TARGET - CUSTOMER REQUIREMENTS

◆ Complete Security
  – Swiss Bank In All Locations

◆ Simple, Easy Connections
  – Easy For Customer, Easy For The Bank

◆ No Limit On Functionality
  – Whatever The Customer Wants Within The Law

◆ Rapid Response & Total Support

◆ COMPETITIVE PRICING
THE TARGET - TECHNOLOGY & WORKFORCE

◆ Technology Moving At Awesome Speed
  – Adds Threats, as well as Functionality and Efficiency
  – Well Planned Leap-frogging

◆ Workforce Wants Improved Quality Of Life
  – Flexible Hours
  – Work At Home
  – Mobile Connectivity
  – Less Travel, More Video, Audio Conferences
THE TARGET - COMMUNICATION, NETWORKS AND CONNECTIVITY

◆ Virtual Network
  – Packet Loading Dock With Real-time Pricing?
  – Optimum Use Of All Transit Alternatives
    ✦ Dedicated, On-Demand, Internet, DSL, . . .
  – Carrier Independence, Bandwidth On Demand

◆ Authentication And Application Level Encryption
  – System Manages Cross-border Data Restrictions, Encryption Restrictions, Access Rights
  – Secure ID Cards, SmartCards, GPS, & Global Security Servers
  – Regional Entry Points Into “System”
  – Handles All User Classes The Same Way (“Single Sign-on”)
    ✦ Employees, Customers, Vendors

◆ Global Policies And Practices
THE TARGET - PLANNING

◆ How Do We Plan?
  – Consider The Worst
    ✦ “Discuss” Contingencies
  – Plan For The Difficult
  – Hope For The Best
  – Keep Options Open

◆ Define The Target And Revisit It Often
  – Changing Technology
  – Changing Business Demands
  – Changing Market
  – Changing And Growing Organization
TOMORROW - EVOLUTION PLUS REVOLUTION

- Incremental Changes To Meet The Immediate Needs Of The Businesses And The Evolving Environment

- Revolutionary Changes To Get To The New Level Of Functionality

- Constant Vigilance To Keep The Two In Sync

- Resources Sufficient To Keep The Progress Slope Positive
TOMORROW - MAKE OR BUY?

◆ Commercial Off-the-shelf Products From Vendors That Are Well Positioned

◆ Work With Vendors To Get The Products We Need Into Commercial Market

◆ Minimal In-house Development To Minimize Support Costs

◆ Concentrate on System Integration and Required Functionality

◆ Buy the Lock, Door and Installation, but Keep the Keys
  – Sufficient In-House Expertise To Certify Security
SUMMARY

◆ IT Security Focus on Value-Added Activities

◆ Compute Power and Security Accountability Must Stay Together

◆ Apply Advanced Technology to IT Security Functions
  – Virtual Network, Carrier Independence, Seamless Linkages
  – Globally Integrated Regions Providing Security Control
  – Robust Authentication & Application Level Encryption
  – System Manages Cross-Border and Access Levels

◆ “What A Long Strange Trip It Will Be!”