

# Cyber Threats



**PRESENTED TO  
CAS REINSURANCE SEMINAR  
BOSTON, MASSACHUSETTS  
JUNE 4, 2012**

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# Data Protection / Cyber Liability



May companies find security and privacy (data protection) is a board room, top-10 risk facing the enterprise.

- “Cyber liability” is composed of two defined risks:
  - **Security Liability** - unauthorized access/use of network; internally or externally.
  - **Privacy Liability** - violation of privacy laws or regulations that permit individuals to control the collection, access, transmission, use, and accuracy of their personally identifiable medical and/or financial information.
    - ✦ Most serious civil and regulatory exposure - personally identifiable non-public information.
    - ✦ Risks associated with disclosure or theft of confidential corporate data of company or others.
- Management of data protection risks involves brand and reputation risks, financial costs, and operational challenges.

# What Is the Corporate Risk?



- **2012 Towers Watson US Study - 153 risk managers surveyed most with annual revenue \$ 1+ Billion**
  - 72% did not have cyber insurance
    - ✦ 2/3 of those not insured believe:
      - No “significant data exposure”
      - Internal controls are “adequate”
    - ✦ Regular “penetration tests” done by < 50%

# Cyber Pearl Harbor?



- 2010 - Stuxnet variant targets / cripples Scada (supervisory control and data acquisition) systems that use software made by technology services company Siemens
  - Infected at least 14 industrial plants worldwide
  - Including the Bushehr nuclear power plant
- 2012 - Flame cyberattack targeting Middle East systems
  - In place since 2010?
  - Designed to steal information, not cripple systems
  - Kaspersky Labs:
    - ✦ Uncertain origins, but “state-sponsored cyber warfare” a possibility
    - ✦ “More developed countries are most vulnerable”

# Speaker: John Merchant



- **Present: Director of Network Security, Data Privacy and Technology Risk at Freedom Specialty Insurance Company.**
  - **Manages Cyber and Technology Liability lines of coverage:**
    - Product development,
    - Underwriting,
    - Production, and
    - Portfolio management
- **Prior: Hartford Financial Products where he managed the Cyber and E&O underwriting unit.**
- **10+ years of sales and marketing experience in the technology and services sector.**
- **Education: University of Connecticut. B.A. in Political Science**

# Speaker: Michael McCarthy



- **Present: Vice President Professional Liability at Axis Re US**
  - Treaty Underwriting since 2009
- **Prior: Vice President – Underwriting AEGIS**  
**Vice President, Everest Re**
  - Underwriting professional facultative and casualty treaty reinsurance
  - CNA underwriting fidelity, D&O, professional liability and related products
  - AIG - primary
- **Education: Syracuse University**
- **Holds: ARe and ChFC designations**

# Insurance of Cyber Liability



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# Underwriting



- **Key Factors**
  - Nature of Data
  - Number of Records
  - Industry – Regulatory exposure
  - Use of Vendors with access to Network
  - Contractual Provisions for Data Security
  - IT Security Controls
  - Policies and Procedures
  - Enterprise Data Risk Management position

# Information Gathering



- **Key Sources of Underwriting Info Include:**
  - New Business Application
  - Public filings (new SEC guidance took effect 1/1/12)
  - Sample contracts
  - Loss Runs
  - Google searches
  - Third party security assessments
    - ✦ NetDiligence
    - ✦ Verizon
    - ✦ Symantec

# Losses



- **Direct Costs:**
  - Notification, Forensics, Call Center, Credit Monitoring, Defense
  - Average cost per record approx. \$1.50 - \$5.00
    - ✦ NetDiligence 2010 Claims Report – actual insured losses
  
- **Indirect Costs:**
  - Customer Churn, In house investigations, lower customer acquisition rates, supply chain interruption
    - ✦ All business risk loss, so non-insurable

# Liability Coverage Offerings



- **Privacy**
  - Damages from Loss/Compromise of Sensitive 3<sup>rd</sup> Party Data
  - Statutory and Punitive
  - Can cover multiple privacy torts
- **Network Security**
  - Damages to Third Party due to breach of security
    - ✦ Virus transmission, DDoS attack
- **e-Media**
  - Damages to Third Party due to libel, slander, defamation, misuse or misappropriation of trademark, service mark or other IP
  - Can cover software code infringement in some cases

# Expense Coverages



- Expenses related to a loss of data
  - 46 states have breach notification laws
  - Companies may elect to provide some form of ID protection
    - ✦ Credit Monitoring
    - ✦ ID Theft Monitoring
    - ✦ ID Restoration
  - Network forensics should be performed
- Will not provide \$\$ for network security upgrades, improvements or 1<sup>st</sup> party remediation costs

# Regulatory Coverage



- **Regulatory Defense**
  - Federal and state regulatory agencies and AG's may launch an investigation if breach is large and/or sensitive enough
- **Regulatory Fines, Fees and Penalties**
  - FCRA, FACTA, HIPPA, HITECH, etc... - violations can lead to fines

# Industry Group Coverages



- **Payment Card Industry – Data Security Standard: “PCI-DSS”**
  - Visa, MasterCard, Discover and other card issuers have established this group to self-regulate data security
  - If a merchant transacts debit/credit cards, they **MUST** adhere to this standard
  - PCI can assess fines and penalties for **ANY** breach
  - Highest fine assessed was \$60MM – Heartland Payment Systems, 2010

# First Party Coverages



- **First Party Coverages**
  - **Network Business Interruption**
    - ✦ Loss of revenues due to an outage caused by a network security breach
  - **Cyber Extortion**
    - ✦ K&R type coverage for data
  - **Data Asset Loss/Restoration**
    - ✦ Costs to replace, restore or reconstruct 1<sup>st</sup> party data affected by a breach



# Insurance of Cyber Liability



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# Who's Buying?



- **The usual suspects**
- **Momentum suggest expanding markets by various measures**
- **'Appropriate Governance' threshold**

# And why are they buying?



- Legal, regulatory and governance standards changing
- Parties on both sides of the purchase are better educated
- Prevalence (read “necessity”) of technology solutions to product/service delivery
- Just read the news

# Who's Selling



- **Estimated 30+ markets, mostly competing for primary attachments**
- **Converging coverage based on legislative and legal development over last decade**
- **Distribution/intermediation has matured**

# Pricing



- **Credible data still evolving**
- **What rates are vs. what rates should be**
- **Rates are sufficient until they're not**

# Market Presence & Pedigree



- **Staffing/expertise**
- **Distribution**
- **Strategy and execution risks**
  - Coverage, pricing, limits and attachments
  - Target classes...growth projections
  - Claim handling
  - Third party vendors

# Reinsurance Structures



- Pro-rata, excess of loss for single product and multiproduct portfolios.....or none at all
- Like many aspects to this product, consensus still evolving
- Buyer-centric



# 2010/2011 CSI Computer Crime and Security Survey



- “...respondents did not feel their challenges were attributable to a lack of investment in security programs or dissatisfaction with security tools but rather that, despite all their efforts, they still could not be certain about what was really going on in their environments, nor whether all their efforts were truly effective.”

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