

The Information Security Forum (ISF) and Information security for external suppliers: a common baseline

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What is the ISF?

An international association of some 300 leading global organisations, which...

- addresses key issues in information risk management through research and collaboration
- develops practical tools and guidance
- is fully independent, not-for-profit organisation and driven by its
 Members
- promotes networking within its membership

The leading, global authority on information security and information risk management



ISF Members Public administration and defence

Arbeids- og velferdsetaten Bergen Kommune (The Municipality of Bergen) Centrelink **Danish Tax and Customs** Administration **Department of Health & National Health Service Department of Social & Family Affairs** Finnish Communications Regulatory Authority Finnish Tax Administration Foreign & Commonwealth Office GOVCERT.NL **Government of Ontario** Government of South Australia

Infocomm Development Authority of Singapore Manitoba Provincial Government **Maritime Provinces** National Institute of Standards and Technology **National Patient Safety Agency National Policing Improvement** Agency (NPIA) Norwegian Tax Administration **Parliamentary Information** Communications Technology RDW Region Hovedstaden **Revenue Commissioners** South African Revenue Service The Government of British

Geographical coverage

The ISF currently has Members in...

- Australia
- Belgium
- Canada
- Chile
- Denmark
- Faroe Islands
- Finland
- France
- Germany
- Greece

- India
- Ireland
- Italy
- Latvia
- Luxembourg
- Netherlands
- New Zealand
- Norway
- Saudi Arabia
- Serbia

- Singapore
- South Africa
- Spain
- Sweden
- Switzerland
- Turkey
- United Arab Emirates
- United Kingdom
- United States of America



Currently 31 ISF Members in the United States

(ISC)²

AAA Insurance Company

Alcatel-Lucent

Apollo Group

Baxter Healthcare Corporation

Bechtel Corporation

Boeing

Bristol-Myers Squibb

Cargill Incorporated

Citigroup

Fidelity Information Systems

Goldman Sachs & Co

Guardian Life Insurance Company of

America

Honeywell International

HP Enterprise Services

ITT Corporation

Kraft Foods

Marsh & McLennan Companies,

Inc.

Microsoft Corporation

National Institute of Standards

and Technology

Northrop Grumman Corporation

Pemco Corporation

Procter & Gamble Services

Company

RSA

State Farm Mutual Automobile

Insurance Company

Sungard Data Systems, Inc.

Towers Watson

USAA

Vanguard

Verizon

XL Group plc.





What services does the ISF provide?

ISF Services - an overview











2. ISF Research Programme



3. Knowledge and Information Exchange

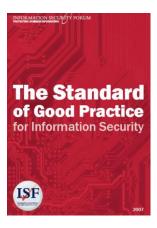
ISF 22nd Annual World Congress 17 – 20 September 2011 Berlin, Germany

4. ISF Annual World Congress, USF Chapter Meetings





The Standard of Good Practice for Information Security



Specialist Tools

The ISF's specialist tools are the result of research projects covering specific challenges in information security.

Tools available include:

- Continuous Benchmarking Service
- Security and Legislation Database
- Third party security assessment tool (TPSAT)
- Security Function Diagnostic
- Return on Security Investment Calculator (ROSI)
- Best Practices in Endpoint Security Checklist
- Information Risk Analysis Methodology
- Risk Analyst Workbench



Research & reports over the past 12 months

- Solving the data privacy puzzle
- Reporting information risk
- Network convergence
- Protecting information in the end user environment
- Threat Horizon 2012
- Information security assurance
- Security audit of business applications
- Information security maturity modelling
- Information security governance
- Information security principles

- The information lifecycle Information security for external suppliers
- Beyond the clear desk policy
- Benchmark reports:
 - Critical BusinessApplications
 - The impact of information security investment
 - Consolidated benchmark results
 - Cross reference to ISO/IEC 27002, CObIT version 4.1



The 2011 work programme (Q1)

Workshop-based research and development projects:

- Cloud computing Avoiding the seven deadly sins (End Jan)
- Organisational Governance (End June)

Research based projects:

- Consumerisation: Securing the next generation of end user environment (End March)
- Threat Horizon 2013 (End Feb)
- Standard of Good Practice update (End May)

Information risk management tools:

Information Risk Analysis Methodology - Risk Analyst's Workbench v1.0 (Ongoing)

Briefing Papers:

Cyber citizenship (End March)

Training workshops:

- Information Risk Analysis Methodology (IRAM)
- Protecting information in the end user environment
- Security audit of business applications



Agenda



- The project
- The need for a standard
- Baseline security controls
- ISF and ISO: way forward
- Wrap-up



Previous ISF work

Major area of interest:

- Managing third party access
- Securing remote access
- Managing information risks from outsourcing
- Information risk management in outsourcing and offshoring
- Information security in third party relationship management





No longer third parties – external suppliers

THIRD PARTIES

- A confusing term
- Difficult to explain
- Has particular legal meanings
- Poorly defined

EXTERNAL SUPPLIERS

- Easier to define
- No legal meaning
- Aligns our terminology with other organisations

'An organisation that provides goods or services to an acquiring organisation.'



Deliverables

- Executive overview
- ISF report
- Two ISO draft standards
 - Purchasing organisation
 - Third party organisation
- External Supplier baseline maturity assessment tools
- Data analysis pack





External Supplier Baseline
Maturity Assessment Tool
(BMAT)
version 1.0

This workbook contains the dataset dollected at IBF Member Work Groups on the topic of third party information security management standards.

The workbook presents the analysis of responses. To preserve anonymity, only aggregate data is presented up Member material is included in this workbook.

If you have any queries, or require assistance in using this workbook, please contact the IBF Research and Benrices Team on: -44 (1007-213 3372 or email is finfe@securityforum.org.



The need for a standard...

- There are many out there:
 - Outsourcing standards (IAOP OSP v8.0, Healthcheck)
 - Security Standards (SOGP, ISO 2700X series, BITS SIG)
 - IT Standards (COBIT, ITIL, ISO 20000)
 - Other standards (ISO 28000, ISO 25999 / ISO 27031)
 - Auditing standards (SAS 70, ISAE 3402)

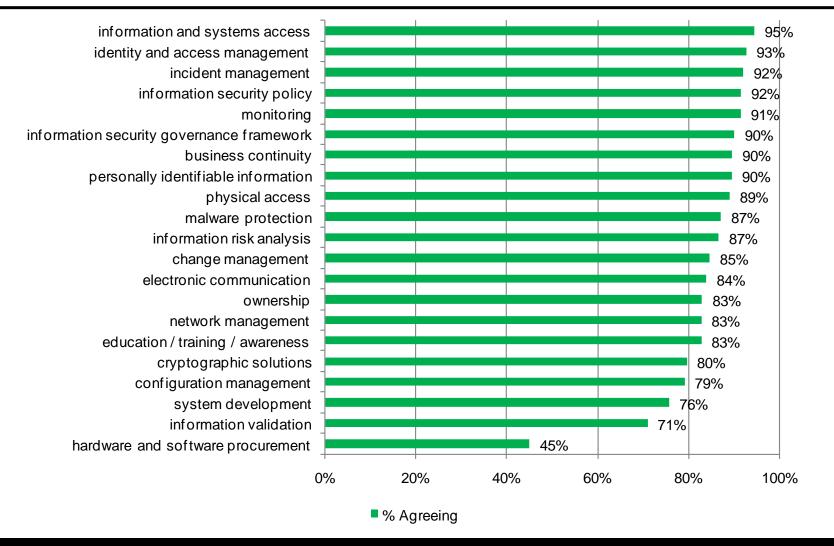
- Many of these standards:
 - Address different topics at different levels of detail
 - Are written independently of others
 - Offer differing certification or accreditation procedures
- Some standards:
 - Offer lists of controls others provide no controls
 - Controls may not be mandatory



BASELINE SECURITY CONTROLS



High-level control areas





Information security baseline arrangements

- Based on ISF Standard of Good Practice
- Based on the 21 Guidelines for Information Security
 - Aligned with the Benchmark
- Eleven specific controls highlighted
 - Identified by Members

Mandatory for all external suppliers

Domains

- Governance, Risk and Compliance
- 2. System management
- 3. Access management
- System monitoring and response
- 5. Network connectivity
- Electronic communication
- Business control
- 8. Development



Coverage by domain

Domain	Baseline information security arrangement
	Information security framework
Governance, Risk and	Information security policy
Compliance	Awareness / education
Compliance	Information risk management
	Accountability / ownership
	Robust resilient design
	Purchase of hardware and software
System management	Configuration and security settings
	Input / process / output validation
	Physical protection
Access management	Identity and access management
Access management	Access control
	Continuous monitoring of systems and networks
Security monitoring and	Change management
response	Malware protection
	Incident management
Electronic communications	Protection of electronic communications
Liectionic communications	Use of cryptographic solutions
Business control	Business continuity
	External supplier management
System development	System Development Life Cycle methodology



Coverage by domain

Domain	Baseline information security arrangement
Governance, Risk	Identification and protection of information that is
and Compliance	commercial, sensitive, regulated or personal in nature
System	Separation of primary functions
management	Separation of client databases / data sets
	Control of portable storage devices
Access	Privileged user management
management	Segregation of duties
Security	Patch management
monitoring and	e-discovery, e-forensic audit and trail of evidence creation
response	
Network	Network security
Connections	Control of network access / connectivity
Business control	Security audit and review



And there's a maturity model...

The baseline arrangements are described against five categories

- Non-existent
- Initial or ad-hoc
- Repeatable
- Managed
- Optimised

	Baseline arrangement	Does the external supplier	Initial or ad hoc	Repeatable	Managed	Optimised
Governance, Risk and Compliance	security monitor an information decisi influer organ strate information security governance organ strate information strate but no		Information security decisions are influenced by organisational strategy. An information security strategy is available but not integrated into the organisation	cisions are uenced by panisational strategic issues are not covered. Principles such ars those in ISO / IEC 27014 are considered.		Information security framework coupled to organisation governance framework and changes to support it as required
	Information security policy	Develop and distribute a comprehensive, approved information security policy to all individuals with access to the organisation's information and systems?	Policies are available at system / application level or locally. No integration of policies across organisation	Organisation-wide policy is approved by senior management / Board and available to all staff; updated regularly	Organisation-wide policy is aligned to other organisational policies and compliance metrics collected; updated regularly	Policy is linked to strategy and changes to support it as required
	Awareness/ education	Establish an information security awareness programme, supported by a range of education / training activities?	Training / education given at local level or by business unit / function. Messages may vary across organisation	Organisation-wide awareness / education programmes developed; staff are trained at least annually. A plan to create a security culture is implemented	Organisation-wide awareness / education, with generic and local content, regular updates and enhancements. Employees are tested and scores recorded. A security culture is emerging	Regular organisation- wide awareness / training and testing with immediate feedback for next cycle. Generic and local messages are supplemented by 'hot topics'. A security culture is established

Acquirers can specify external supplier maturity against this model

Non-existent not shown – it's blank!





Baseline maturity assessment tool

Baseline arrangement	Does the external supplier	Initial or ad hoc	Repeatable	Managed	Optimised	Level of maturity
Robust resilient design	Design and operate robust, resilient systems and networks that can cope with current and predicted levels of traffic, are supported by alternative facilities, incorporate firewalls and restrict network access to authorised individuals?	carried out on a system or network device level, using inconsistent approach or methodology	Capacity planning and demand forecasting carried out according to a consistent, agreed methodology and approach. Security considerations included in design requirements	forecasting. Security considerations applied to all designs.	Capacity planning and forecasting integral to design process; networks are monitored continuously and results used to update design requirements. Alternative facilities are designed to match demand. Security considerations are nonnegotiable	Non-exist
Separation of primary functions	Deploy servers that implement only one primary function (eg web server, transaction server or database servers should be implemented on separate servers)?	Certain functions (eg mail servers) are implemented on separate servers	Server builds for individual functions adopted organisation- wide; architecture and design for new build adopts this principle	Implemented across the organisation; all servers run one primary function. For virtualised environments, each virtual server instance implements only one primary function	for new clients	Non-existen Initial / ad-h Repeatable Managed Optimised Not applicab No answer Non-exist
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- Provides an easy to use tool
- Lists the baseline information security arrangements and provides descriptions of the maturity levels
- Acquirers and external suppliers can measure maturity



External suppliers and the baseline arrangements

- Designed to be adopted in full by external supplier organisations
- Demonstrates commitment to information security
- Reduces the overall complexity of information security
- Allows the focused deployment of resources.

- Benefits:
 - Reduce negotiation required to set information security
 - focus on meeting the acquiring organisation's additional requirements
 - demonstrate their maturity to acquiring organisations
 - offer different levels of information security, based on the maturity required by the acquiring organisation.



ISF AND ISO: THE WAY FORWARD





ISO SC 27: Berlin October 2010

- Body charged with creating and maintaining ISO 270XX series
- ISF has liaison status with WGI so can:
 - Comment on drafts
 - Submit changes, new ideas
 - Work with national bodies

- ISF proposed that the results of this should become an ISO standard
- Very high interest
- Other projects in progress eg Outsourcing and supply chain, ISO 28000...





Outcomes from Berlin (1)

- Great support for the ISF proposal for a standard on third party relationships
- For legal reasons the term third party has been changed to external suppliers
- A new multi-part standard will be introduced, called 'Information security for supplier relationships'
- Common elements based on the ISF proposal
 - distinctly separate parts for ICT supply chain and outsourcing.

New ISO / IEC standard for information security in supplier relationships





Outcomes from Berlin (2)

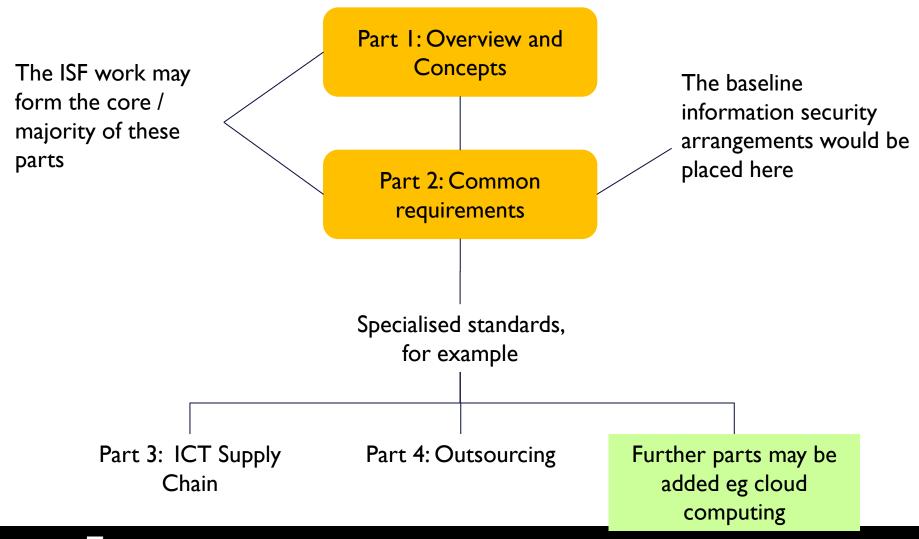
- The existing working draft standard on outsourcing (ISO / IEC 27036) will be absorbed by this new standard, but number retained
 - Allows progress to be made more quickly

- ISO keen to have ISF onboard (allowing for their internal rules), which is very encouraging
- Will require on-going ISF resources, and ISF to gain liaison status category C for SC27 WG4, as well as WG1 (already formally applied)

New ISO / IEC standard for information security in supplier relationships: ISF will have opportunity to shape



Potential form and content of the new standard





Thanks!



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