Security of Information and Innovation

May 2021

Security of information

Ferreycorp

1. Risks related to information systems

The main risks related to information systems for Ferreycorp are:

Interruption of business operations

Events associated with the Interruption of business operations due to IT and environmental threats:

- Prime & Rentals
- Spare parts
- Workshop and Field Services
- Specialized Workshop Services
- Logistics
- Industrial Fuels
- Accounting
- Financial services
- Human Resources

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Fraudulent operations

Events associated with illegal activities or dishonest practices that harm the Corporation's companies. Includes: deception, counterfeiting, fraud, etc

- Appropriation of money
- Inventory appropriation
- Payments to suppliers
- Employee payments
- Client payments

Leak or loss of sensitive information

Eventos asociados a la salida no controlada de información hacia personas y/o empresas no autorizadas.

- Información Estratégica
- Información de Productos y Servicios
- Información sobre Cotizaciones
- Información Técnica
- Información Financiera
- Información de Comercial
- Información de Recursos Humanos

Legal, Regulatory and Reputational Compliance

Events associated with contractual breach with partners, legal requirements and negative exposure of the Corporation's brands.

- Fines and penalties.
- Damage to image and reputation

2. Scope of the Information Security Management System

Dealer Intelligence Network (DIN)

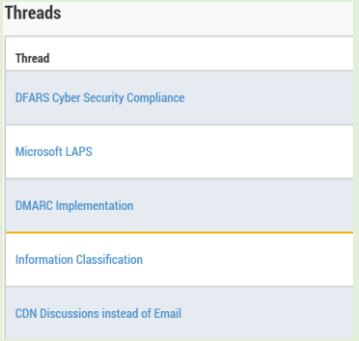
We are part of the DIN, whose purpose is to share cyber threats of interest to Caterpillar and its dealers. The objectives of the DIN are:

- Reduce the impact of threats and proactively protect our organizations
- Share data and intelligence, which allows us to implement security controls.
- Reveal common trends, patterns, and threats.

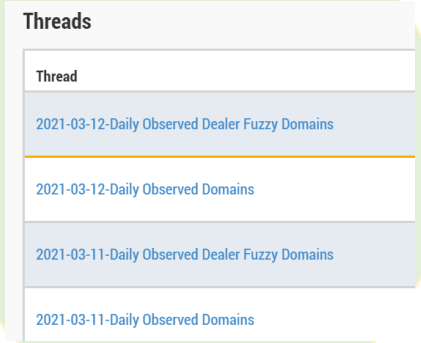
News about Cybersecurity

CATERPILLAR Dealer Network
CYBER DEFENSE NETWORK

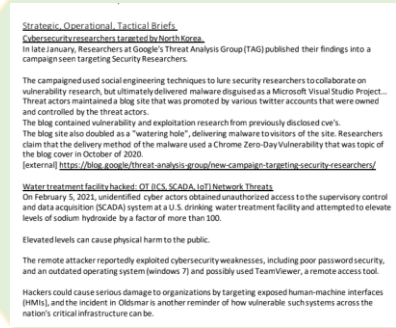
Best Practices



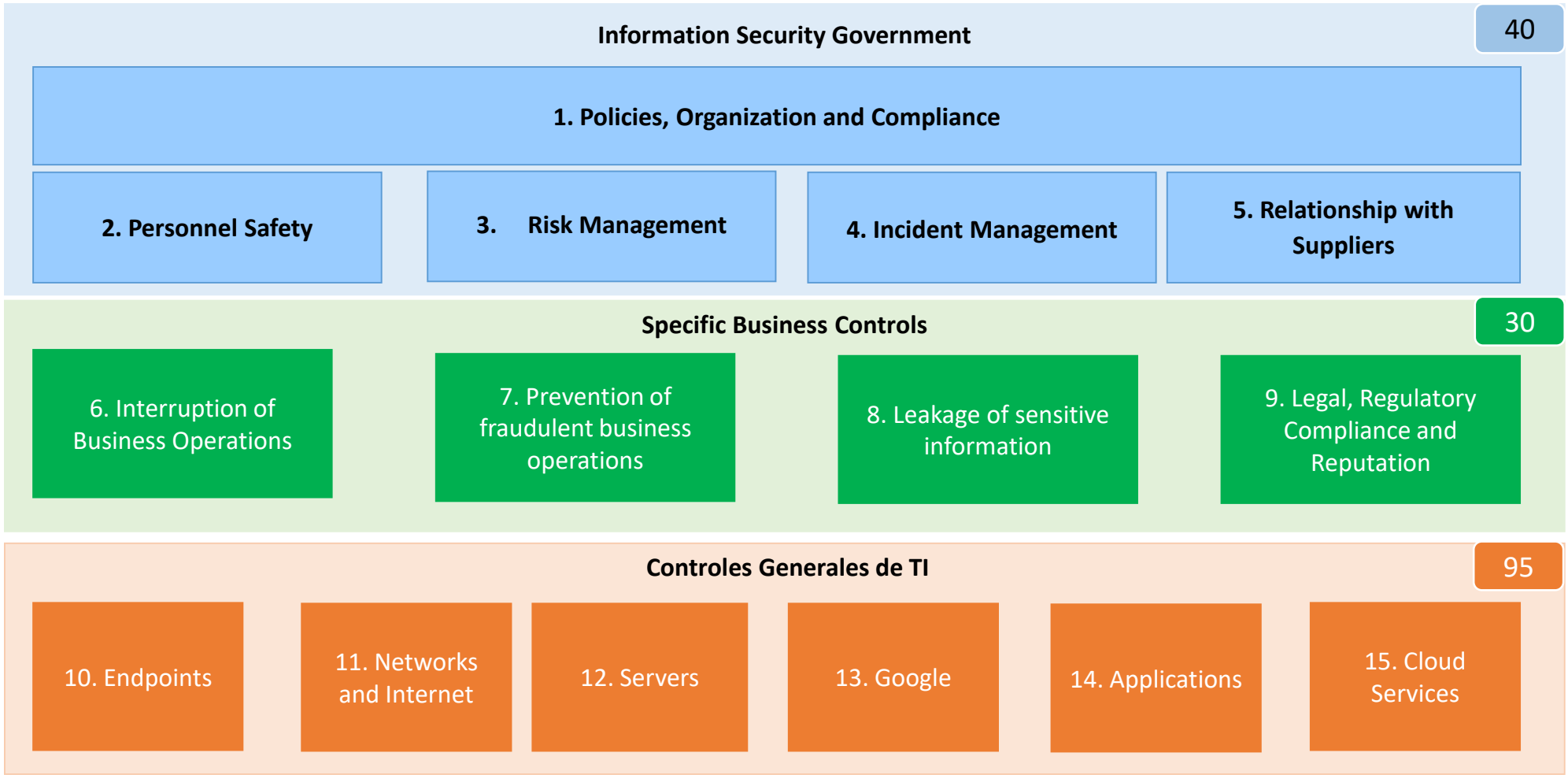
Threats and vulnerabilities



DIN Meet



3. Information Security Management Model



Total N° of controls **165**

N° of controls related to cybersecurity **67**

4. Current Situation

Self-evaluation

At the end of February 2021, a self-evaluation was carried out to measure and analyze the impact of the following topics:

Information Security Government	
Policies, Organization and Compliance	
Personnel Safety	
Risk Management	
Incident Management	1
Relationship with Suppliers	
Specific Business Controls	
Business Operations Interruption	2
Fraudulent Operations Prevention	
Information Loss / Leak Prevention	
Legal and Regulatory Compliance	
General IT Controls	
Endpoints	
Servers	
Connectivity	1
Google	
Applications	1
Cloud Services	

1. Strengthen network security monitoring and cloud services and integrate it into incident management
2. After the departure from SAP Hana, it is required to develop and test a DRP for SAP and complementary systems.

5. Roadmap

2017 - 2020

Information Security Government

- **Information Security Government**
  - Security Policies
  - Compliance revisions
- **Personnel Safety**
  - Staff Awareness
- **Risk Management**
  - Vulnerability Analysis - Ethical Hacking
  - Vulnerability Analysis - Web Applications
- **Incident Management**
  - Incident management process
- **Relationship with suppliers**
  - Security in integration with suppliers

Specific Business Controls

- **Business Operations Interruption**
  - DRP (DBS, SAP R3)
- **Fraudulent Operations**
  - Segregation of duties - HR
  - Segregation of Duties - Purchasing (SAP Hana)
  - Segregation of Duties - Sales (SAP Hana)
  - Segregation of Duties - Treasury (SAP Hana)
- **Information leakage**
  - Information Leak Prevention
  - Rules preventing impersonations
  - Double Factor Authentication
- **Legal and regulatory compliance**
  - Compliance with the Data Protection Law
  - Compliance Authorized Economic Operator
  - BASC Operator Compliance

General IT Controls

- **Endpoints**
  - Antimalware endpoints and servers
  - Endpoint intrusion prevention
  - Secure configuration for endpoints
- **Servers**
  - Secure configuration for servers
  - Vulnerability and patch management
  - Privileged access on servers
- **Conectivity**
  - Firewall, IPS
  - Wireless Security
  - Routers and switch security updates
- **Google**
  - Antimalware, Antispam , 2FA
  - Monitoring of improper access
  - Google Drive Security
- **Applications**
  - Periodic access reviews
  - Block unused accounts / terminated staff
  - Access controls in business applications
  - Encryption of sensitive data - Central Covid
- **Cloud Services**

5. Roadmap

Plan for 2021

Information Security Government

- **Policies, Organization and Compliance**
  - Security Policies - Policy update
  - Independent reviews (Marsh, Internal Audit)
- **Personnel Safety**
  - Staff Awareness - Material Update
  - Disciplinary process with HR for breach of policies
- **Risk Management**
  - Vulnerability Analysis - Ethical Hacking
  - Vulnerability Analysis - Web Applications
- **Incident Management**
  - Integrate Incident Management with Security Monitoring
  - Define security alert thresholds
  - Define specific management procedures (Ransomware, Attacks)
- **Relationship with suppliers**
  - Validate security controls integration with supplier networks

Specific Business Controls

- **Business Operations Interruption**
  - Disaster Recovery Plan - SAP Hana and Satellites
- **Fraudulent Operations**
  - Compliance monitoring of Segregation of Duties Rules
- **Information leakage**
  - Information Leak Prevention - (Google and USB)
- **Legal and regulatory compliance**
  - Compliance with the Data Protection Law

General IT Controls

- **Endpoints**
  - Antimalware on cell phones
  - Evaluation of software installed on endpoints
- **Servers**
  - Restriction of privileged access to servers and IT services
- **Google**
  - Security configuration review
- **Applications**
  - Restrict access in business applications
  - Fix web application vulnerabilities
  - Make adjustments to the Model Roles
- **Conectivity**
  - Network Security Monitoring
- **Cloud Services**
  - Cloud security monitoring

Ferreycorp

Innovation

Innovation

Culture and Develop of Capabilities

Leadership

Developing mindset leaders in customer-centric digital transformation

- Developing Program “Por los próximos 100 años”
- Planning “Cumbre de Innovación 2021”
- Performance Management in Innovation Projects
- 54 Priority Innovation and Transformation Initiatives

Talent

Aligning the leadership of middle management in customer-centric digital transformation.

- Innovation Tools (Toolkit) and workshops
- Innovation chanels: Portal de Innovación

Program “Por los próximos 100 años”*

Results

November 2020 – May 2021

510 leaders

21 sessions

- Cross to the Corp : **2**
- Digital Age skills: **6**
- Leadership skills: **7**
- Business Talks: **6**

May – Jul 2020

227 leaders

23 sessions

- Current environment: **3**
- Lead in Uncertain Times: **4**
- Business: **12**
- New ways of work: **4**

Satisfaction Survey Results (average)

4.5/5 Quality content

4.5/5 Quality speakers

4.6/5 Useful Therms

** “For the next 100 years”*

On the image:
Some participants of the “Por los próximos 100 años” Program explained above, ranging from managers and key personnel to invited speakers

Ferreycorp

POR LOS PRÓXIMOS 100 AÑOS

Program “Por los próximos 100 años”
Results

To the date

Developing of capabilities

82 workshops
~1300 participants

10 Innovation Agentes Sessions
~275 participants

Open Innovation circles & Tour Companies
~187 participants

Innovation

Customer Centric Prioritazed Initiatives

Digital Customer Experience

Facilitate the interaction between customers and Ferreycorp companies

- Centralized customer data Management.
- Digital customer self service portal for logistic services.
- Spare order tracking.

E-Commerce

Increase sales in certain lines and facilitating the shopping experience for our customers

- E-Commerce for spare parts.
- Direct purchase of spare parts through the integration of ERP.
- E-commerce platforms for subsidiaries.

Supply Chain

Delivering Products and services to customers at the required time and at the lowest possible cost

- Order traceability from purchase order to customer delivery.
- Shared services for corporate cargo.
- Optimization of warehouse management processes.

Innovation

Customer Centric Prioritazed Initiatives

Productivity

Optimize equipment productivity by taking advantage of digital solutions

- Maximize equipment/machinery connectivity
- Remote assistance and site monitoring to increase the availability and reliability of equipment

New products and digital services

To satisfy the needs of our clients through new product and services based on digitalization

- Customer centric marketplaces (Operators, Used equipment, Education)
- Quipu: Spare parts microcredits for small contractors.
- Autonomous trucks in mining pits
- Mining productivity solution platform based on multibrands equipment connectivity and information management.

Innovation

Open Innovation

Open Innovation Repository

During 2020 we had explored partnerships with 44 enterprises, 11 of them were startups and the remaining 33 were companies. We are currently collaborating with 6 of them in Innovation projects.

We use a Dashboard to follow up the initiatives and for knowledge management purpose.