



## CYBER SECURITY APPROACH NOTE

Hindustan Zinc has established a well-entrenched and comprehensive Information Security Framework which includes Policies, Standard Operating Procedures (SOPs), and Technology Standards. Hindustan Zinc has also established an effective security assessment and audit process for preventing cyber-attacks, and implementation of security-by-design and privacy-by-design in HZL's business and technology landscape has further strengthened the framework.

The note covers the following aspects:

- A. Context Setting (Importance of Cyber Security)
- B. Leadership & Governance Structure
- C. Information Security Planning
- D. Information Security Operations
  - a. Cyber resilience
  - b. Social engineering and security awareness
  - c. Data privacy
  - d. Operational Technology security
  - e. Cloud security
  - f. Data Leakage Prevention
  - g. Third party risk management
  - h. Governance, risk management and compliance
- E. Other core aspects

#### A. IMPORTANCE OF CYBER SECURITY

Recent years have witnessed a spate of high-profile data breaches and cybersecurity events at global companies. This has triggered many corporate crises, transforming cybersecurity and cyber risks into a corporate governance issue for Boards. With regulators making it clear that cybersecurity is not merely an IT issue, companies worldwide have started embracing it as an integral component of their enterprise-wide risk management structure. Against this backdrop, cyber risk oversight has become explicitly material to the investor's ability to understand a company's strategy.

Amid this transforming business eco-system, we, at Hindustan Zinc, have forged aggressively and responsibly ahead towards enhancing our cybersecurity risk posture. Our efforts have yielded tangible outcomes, with the Company being ranked the highest in the metals and mining sector in the Corporate Sustainability Assessment 2023 by Standard & Poor Global. This award also endorses our success on the cybersecurity front.

Maintaining tight cybersecurity across our operations is an ongoing process, and we remain committed to ensuring that our technology and control systems are protected from attacks. We shall continue to ensure that confidential information remains safe, data integrity is protected, and business continuity is maintained in the Company in case of any disastrous event.

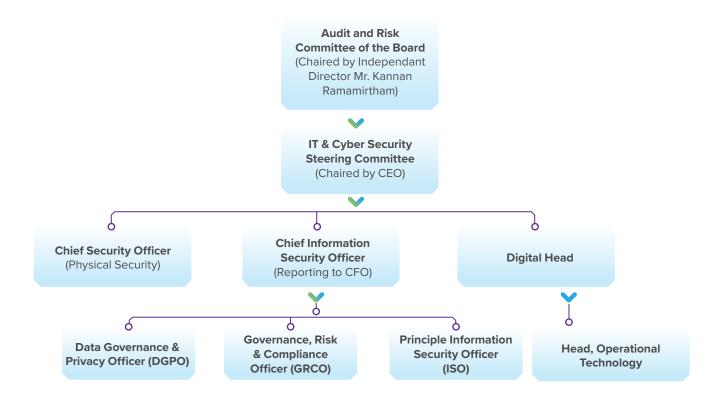
#### **B. LEADERSHIP & GOVERNANCE STRUCTURE**

To ensure the highest levels of cybersecurity and to drive continuous strengthening of the same, we have in place a robust enterprise risk management framework. Board Level- The Board's Audit and Risk Committee has the responsibility of overseeing cybersecurity governance. It reports to the Board every quarter, and is responsible for all business risks, including cyber risk. It is chaired by our Independent Director Mr. Kannan Ramamirtham during the year 23-24.

Executive Level - The IT & Cyber Security Steering Committee is mandated with the task of setting up expectations, providing direction and support, and reviewing and monitoring the progress and maturity of the cybersecurity posture of the organisation. This is done in alignment with the Company's vision and strategy. The Committee is chaired by the Chief Executive Officer (CEO), and comprises leaders from all the business functions, including IBU heads, Chief Financial Officer (CFO), Chief Human Resource Officer (CHRO), Chief Information Officer (CIO) and Chief Commercial Officer (CCO) among others.







Operational level- The Chief Information Security Officer (CISO) is responsible for setting up cybersecurity vision and strategy for HZL, defining cybersecurity governance framework, and executing programmes to ensure that confidentiality, integrity, and availability of all information assets are well protected. The CISO is accountable to the IT and Cyber Security Steering Committee as well as the Audit and Risk Management Committee of the Board on all cybersecurity-related issues

The PISO (Principal Information Security Officer), reporting to the CISO, is responsible for operationally driving cybersecurity programmes to ensure that business objectives are achieved.

The Data Governance & Privacy Officer (DGPO), reporting to the CISO, is responsible for establishing the data governance framework and drive data governance and privacy management throughout the data lifecycle.

The Governance, Risk & Compliance Officer (GRCO), reporting to the CISO, is responsible for driving IT Risk Management and overall compliance to adopted governance frameworks, including Sarbanes-Oxley Act (SOX) and Disaster Recovery (DR)/Business Continuity Plan (BCP).

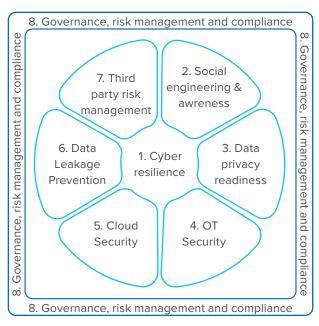
Head OT Cyber Security, reporting to Digital Head and working closely with CISO, is responsible for implementation of cybersecurity in OT system. OT cybersecurity consists of cybersecurity in SCADA/PLC, Industry 4.0 & Digitalization Initiatives and Laboratory Information Management Systems (LIMS).

The Chief Security Officer (CSO) is responsible for the physical security of the Company's assets, which include information assets. The CSO is a senior-level executive, who is accountable to the HZL IT & CYBER SECURITY STEERING COMMITTEE and works closely with the CIO and CISO

#### C. INFORMATION SECURITY PLANNING

#### **Information Security Management Framework**

Under HZL's Enterprise Risk Management (ERM) framework, Hindustan Zinc has established a robust Information Security Management Framework which is depicted below:









Based on this framework, information security strategy, long-term roadmap and annual information security plan is prepared.

Below is the list of industry standards, laws, acts and best practices which are referred to while preparing our Framework.

- IMS (integrated Management Systems) with ISMS (ISO27001 :2022), BCMS (ISO22301 :2019), PIMS (ISO27701 :2019), Risk management ISO31000:2018,
- 2. NIST Security Framework
- COBIT
- 4. Information Technology Act, 2000
- IT General Controls under Sarbanes-Oxley (SOX)
  Compliance Framework
- Reasonable Security Practices and Procedures and Sensitive Personal Data or Information Rules, 2011
- 7. Section 43A & IT rules of Information Technology Act of India.
- 8. Digital Personal Data Protection Act, 2023
- 9. Supreme Court of India's verdict on Right to Privacy as a Fundamental Right, 28th August 2017.
- European General Data Protection Regulation (GDPR).

- 11. OECD (Organization for Economic Co-Operation and Development) Privacy Guidelines
- 12. US Privacy Act 1974
- 13. Australian Privacy Act 1988
- 14. Aadhaar Act, 2016
- 15. SEBI (LODR) Regulations, 2015
- 16. Securities Contract (Regulation) Rules, 1957
- 17. Indian Companies Act, 2013
- 18. IEC 62443
- 19. Vedanta Information Security Standards
- Cert-IN directions, Sub: Directions under subsection (6) of section 70B of the Information Technology Act, 2000 relating to information security practices, procedure, prevention, response, and reporting of cyber incidents for Safe & Trusted Internet (No. 20(3)/2022-CERT-In)
- Cert-IN directions, Sub: Key Roles and Responsibilities of Chief Information Security Officers (CISOs) in Ministries/Departments and Organisations managing ICT operations (No. 6(12)/2017-PDP-CERT-In)

The Information Security Framework is reviewed annually by Hindustan Zinc Information Security team in consultation with external expert agencies to incorporate applicable regulatory requirements, prevailing industry knowledge and emerging threats and risks.

#### **Standards and Certifications:**

HZL is an ISO Certified Organization and has established, implemented, maintains, and continually improves the integrated management system (IMS) in accordance with the requirements of the International Standards ISO 27001:2022, ISO/IEC 27701:2019, ISO 22301:2019, ISO 31000:2018 across all the sites  $\cdot$ 





#### **Information Security Policies**

Hindustan Zinc has a robust information security policy, disaster recovery policy & data governance policy and all policies are defined incorporating various applicable frameworks and domains pertaining to Information Security, Risk Management, Disaster Recovery & Business Continuity Management, and Data Privacy.

All policies and procedures are reviewed annually by competent personnel in Information Security Function. All the approved and enforced policies are made available to employees and business partners over Intranet Portal. Communication is also sent to all stakeholders when any change is carried out in any of these policies or procedures.

Policies defined by Hindustan Zinc are categorized under the following areas:

- Information Security Management Policies
- **Data Privacy Policies**
- 3. Risk Management Policies.
- 4. **Business Continuity Management Policies**
- Incident Response & Emergency Preparedness Plan

Standard Operating Procedures, Standards and Guidelines are further prepared in line with these policies.

#### D. INFORMATION SECURITY OPERATION

Information Security Operations at Hindustan Zinc consists of following domains:

- Cyber resilience
- Social engineering and security awareness
- C. Data privacy
- Operational Technology security d.
- Cloud security
- f. Data Leakage Prevention
- Third party risk management
- Governance, risk management and compliance

#### **Cyber resilience**

Our end-to-end cyber resilience programme covers 24X7 security incident monitoring plan, incident detection, response and recovery playbooks, hand-shake with Organization Crisis management plan, and associated decision/communication matrix for cross-functional stakeholders, such as human resources, corporate communications, legal, business and information security. We have put in place cyber insurance and incident response retainer services to protect from any lowprobability high-impact cyber-attacks. We conduct annual executive cyber drills and purple teaming for continuous improvement of the cyber resilience programme.

#### **Social Engineering and Security Awareness**

To build the team's capability to identify and report breaches, Hindustan Zinc has prepared a holistic cybersecurity awareness plan, which is executed continually throughout the year. All new joiners are mandated to attend cybersecurity training during on-boarding process. An online awareness training capsule on self-service mode is available to all users. Our business ethics and Code of Conduct (CoC) also has a cybersecurity element with which employees must comply as it is linked with their annual performance evaluation. Information Security function tracks and monitors the status of training conducted by user and accordingly carries out periodic follow-up to propagate it further.

We conduct extensive security awareness for all employees and business partner employees who have access to Hindustan Zinc's systems or are working on the Company's premises. We engage with them quarterly through security awareness communications as well as end-to-end social engineering simulations, including various scenarios such as phishing, baiting, pre-texting, quid-pro-quo, scare-ware/fraudware, etc. As part of social engineering simulation exercises, offenders are issued advisory letters from CHRO's office sensitizing them about the risks and warning about further punitive action in case of repeat offense. Our efforts are geared towards making these security awareness communications informative and engaging. We also conduct monthly stand-up sessions and executive briefings on cybersecurity at various locations.

#### **Data Privacy**

A privacy information management system (PIMS) is in place in the Company, and we also conduct data discovery to identify personally identifiable information (PII) collection, storage, processing, transfer, etc. We have further established privacy policies, procedures, consent management and data subject rights management to strengthen our data privacy readiness. We conduct privacy impact assessments for business processes involving large-scale personal information, besides conducting privacy awareness for our employees.

#### **Operational Technology Security**

We have made large investments in phased upgradation of our operational technology systems/ plant technical systems to the latest versions. This is aimed at preventing cyber attackers from exploiting any vulnerabilities that may exist in legacy systems. We further intend to conduct vulnerability scanning of operational technology systems to ensure that known vulnerabilities declared by original equipment manufacturers (OEMs) are identified and remediated.







#### **Cloud Security**

At Hindustan Zinc, we take cloud security very seriously and perform risk-based remediation of security issues related to our assets (be it virtual machines, applications, services, etc.) hosted in corporate laaS (infrastructure as a service) cloud or SaaS (Software as a service) solutions. We further ensure that all cloud-hosted assets are integrated with security operations centre (SOC) for 24X7 security monitoring. We have implemented a web application firewall, which ensures that our crown jewel applications have an automated protection layer against web-based attacks.

#### **Data Leakage Prevention**

We have performed detailed data flow analysis (DFA) along with our business/functional teams, to identify critical data and crown jewels. Based on this analysis, we have implemented comprehensive data leakage prevention (DLP) capability, covering various communication channels such as web, email, mobile devices, etc. We conduct regular DLP rule-base reviews and fine-tuning to ensure alignment with DFA.

#### **Third Party Risk Management**

We have identified the third parties that pose cybersecurity related risks to HZL and have put in place the required governance structure to address and mitigate the same. We annually perform risk assessment of high-risk third parties (including any new third party vendors getting introduced to Hindustan Zinc's environment) to ensure that the risks are measured and mitigated, and appropriate security clauses are incorporated in third-party contracts.

#### **Governance, Risk Management and Compliance**

As a risk-driven organisation, we carry out detailed risk assessment across the organisation. We have successfully implemented a robust risk management framework, which helps the organisation to consider the full range of risks it faces. Hindustan Zinc is certified in the ISO 31000:2018 risk management framework.

#### **E. OTHER CORE ASPECTS**

- 1. Incident management and Response
- 2. Business Continuity & Disaster Recovery (BCP/DR)
- 3. Vulnerability Management
- 4. Escalation, Performance Evaluation and Reporting
- 5. Continual Improvement

### 1. Incident management and response

#### **Incident Management**

Information Security and Data Incidents are generated mainly through following channels:

 24 x 7 Monitoring of critical IT Assets through SIEM (Security Incident and Event Management) Services.

- Daily Monitoring of Data Movement using End Point, Email and Web Channels through DLP (Data Leakage Prevention) tools.
- Incident reported by end user to a designated email id.
- Incidents picked up by Internal Security
  Organization including breach of business code of
  conduct or IT acceptable usage policy.

HZL has well defined processes for detecting and reporting incidents relating to exceptional situations in day-to-day administration of IT and information security related areas. All the security incidents are tracked & monitored till logical closure including root cause analysis and action plan to mitigate them in future. Hindustan Zinc has well-defined Incident Management & Data Breach Policy which is circulated among all employees. This applies to all employees and business partners. Hindustan Zinc has set up a common e-mail id <a href="https://dx.ncbi.nlm.ncbi

Hindustan Zinc has also implemented multiple best-inclass tools and technologies to continuously monitor critical IT assets and data movement. Such tools automatically generate incidents based on the rules. These incidents are tracked and resolved by the IT Operations Team under guidance from Information Security Organization.

#### **Data Incident Management**

Hindustan Zinc has also implemented a robust data governance structure in line with various global standards and framework. Data Governance Program consists of:

- Defining Data Governance Framework, Policies, Procedures
- Implementation of Best-in-Class Tools & Technologies
- 3. Data Incident Management
- 4. Data Governance Awareness and Capability Building

As part of this program, Hindustan Zinc has implemented a DLP tool across all channels of data communication, to detect and prevent any potential data leakages. Robust rules sets have been configured on DLP tools which has been arrived at based on Data Flow Analysis (DFA) in discussion with respective business functions. DLP tool is implemented in blocking mode.

Adedicated DLP Desk is also established to continuously detect, evaluate, and action data incidents as reported





by DLP tool. Potential leakage incidents are shared to line manager for evaluation and accordingly incident is confirmed as leakage. Action is taken in line with policy in case of any data leakage.

Effectiveness of overall program is assessed under Data Governance assessments. Such assessments includes physical security aspects and compliance to Clear Desk Policy.

#### **Incident Response & Emergency Preparedness Plan**

Hindustan Zinc has a well-defined Incident & Crisis Management Response Plan to meet any emergency arising due to Cyber Incident. Under this plan various teams and roles are created and roles & responsibilities are defined for all the teams and their members. Plan also covers aspect of incident arising during office hours and non-office hours.

Crisis communication strategy is available to communicate about incident with internal & external interested parties.

Below are the teams.

- Incident Response Team
- · Crisis Management Team
- Business Continuity manager
- Communication management team

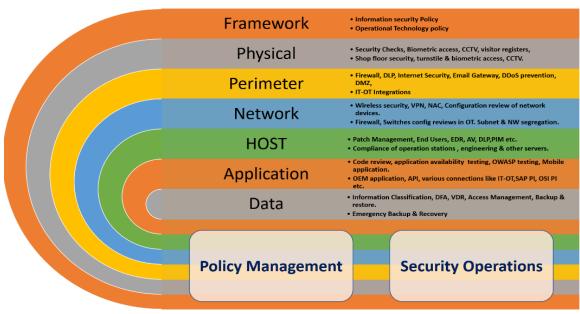
In case of any disruption, Crisis Management Team would be the key SPOC for handling all incidents at HZL and would coordinate with staff members to handle crises/incidents including ransomware.

#### 2. Vulnerability Management

Risks and vulnerabilities are identified and addressed across the information technology (IT), operational

technology (OT) and digital landscape, in line with the Company's vulnerability management policy. Internal and external vulnerability assessment and penetrating testing (VAPT) programme, surveillance audit, as well as assessment of IT general controls (ITGC) are carried out by globally reputed and recognised third-party agencies on an annual basis. Our vulnerability management programme is structured across all the layers of defencein-depth covering policy & framework, physical, perimeter, network, application, and data security. Vulnerability identification, monitoring and tracking of mitigation actions and continuous compliance are achieved through various assessments. We conduct various assessments during the year to identify vulnerabilities, threats, shortcomings, and associated risk/impact. It includes governance & framework review, red teaming exercise as part of physical security assessment, VAPT testing, data governance and compliance assessment, surveillance audit under various ISO frameworks and assessment of ITGC by statutory auditor under applicable financial compliance frameworks. VAPT including simulated hacker attacks is conducted at least twice a year and is put together by Hindustan Zinc's information security function and group Management Assurance Services (MAS) function. It is conducted for defining, identifying, classifying, and prioritising vulnerabilities in computer systems, applications, and network infrastructures. This helps us in conducting the assessment by providing necessary knowledge, awareness, and risk background to understand the threats to our environment and react appropriately. At the conclusion of each assessment, observation tracker is prepared for all identified vulnerabilities with clear-cut mitigation timelines and ownership, based on criticality of observation. This is rigorously monitored, reviewed and reported to various forums.

Following is the defence-in-depth layers considered as part of the program to identify risks and vulnerabilities.











**Framework** [Level-0] Vulnerability Management Program checks the relevance and effectiveness of frameworks, policies and procedures. and risks in control designing.

**Physical Security** [Level-1] Dedicated Red-Teaming is part of Vulnerability Management Program where a third-party person tries to intrude physical security of office & plant premises. Exercise is not limited to information system but also covers impact on other areas of business.

**Perimeter Security** [Level-2] External penetration testing is carried out for perimeter devices. Various attack frameworks are used to assess vulnerabilities. Possibility of lateral movement is also envisaged. Configuration reviews are also carried out for all devices.

**Network Security** [Level-3] Various scans are carried out to identify vulnerability in Wireless Security, VPN, Network Access Controls, VLAN etc. Configuration reviews are done for all network devices with reference to various benchmarks like CIS.

**Host** [Level-4] We have Host / Computing Devices Assessment Program where we identify vulnerabilities in operating systems and configuration of baselining & security policy. End computing devices are also scanned to identify vulnerabilities. Identification of Rogue & un-approved Software and tracking of Compliance Level are part of this program. Under this program, host system of VIP user is also scanned to identify vulnerability.

**Application Security** [Level-5] Method is put in place to identify vulnerabilities in all application including webbased applications and mobile applications.

Dedicated approach is created to assess security of Commercially-Off-The-Shelves (COTS) applications and SaaS (Software as a Service) applications.

**Data Security** [Level-6] Hindustan Zinc Vulnerability Management Program is Data Centric, and objective is to identify risk in terms of Confidentially, Integrity & Availability of Data. Privacy and data risks (such as inappropriate data upload risks, data exfiltration risks etc.) is also considered in Vulnerability Management Program.

Hindustan Zinc has adopted various kinds of assessments under this Vulnerability Management Program, as listed below:

#### **Vulnerability Assessment**

Vulnerability Identification, monitoring and tracking of mitigation actions & continuous compliance level are being done through various assessments. Hindustan

Zinc carries out / undergoes following assessments during the year to identify vulnerabilities, threats, shortcomings, and associated risk/impact.

- Internal Vulnerability Assessment and Penetrating Testing (VAPT) Program undertaken by Information Security Function (Through Third-Party Expert Agency)
- External Vulnerability Assessment and Penetrating Testing (VAPT) Assessment through Group Management Assurance System (Through Third-Party Expert Agency).
- 3. Red Teaming Exercise as part of point # 2 above
- Surveillance Audit under ISO 27001, ISO 22301, ISO 31000, and ISO 27701 Framework Requirements (Through Surveillance Audit Partner).
- Assessment of IT General Controls (ITGC) by Statutory Auditor under Sarbanes-Oxley (SOX) Compliance Framework (Through Statutory Auditor).

All assessments are carried out by globally reputed and recognized third-party agencies on an annual basis. This is carried out by a team of certified and qualified personnel in various domains of cyber security and data governance.

Assessment covers the following for both IT and OT environment:

- 1. Overall IT Governance & Framework Review
- Physical Security Review as part of Red Teaming Exercise
- 3. Vulnerability Assessment and Penetration Testing
- a. Application Security (Including ERP)
- b. OSDB
- c. Networks
- d. Active Directory
- 4. Compliance Assessments
- 5. Data Governance

Assets for assessments are arrived at through a sampling methodology considering population and criticality of assets.

Vulnerability Assessment (VA) and Penetration Testing (PT) are carried out with combination of various automated tools and manual testing as appropriate and risk ratings are arrived at using globally recognized standards and rating systems like OWASP (Open Web Application Security Project) and CVSS (Common Vulnerability Scoring System). Penetration Testing is carried out using simulated hacking techniques such as Blackbox Testing, Whitebox Testing, Greybox



Testing, Red Teaming Exercise. As part of third-party vulnerability analysis, HZL conducts simulated hacker attacks.

At the conclusion of each assessment, an observation tracker is prepared for all the identified vulnerabilities with clear-cut mitigation timelines and ownership. This observation tracker consists of details like discovered vulnerabilities, severity, affected information system and kind of impact to the affected system. Severity of observation is categorized under High, Medium, Low and Information categories.

Observations are reported to various forums and progress is updated periodically to various forums as mentioned in the Information Security Governance Structure.

#### **Journey & Coverage of Vulnerability Assessment**

HZL started its structured and focused journey of Cyber Security way back in year 2010 and since then has evolved and matured in line with current threat landscape

#### **Vulnerability Treatment**

Treatment of vulnerabilities consists of identification and implementation of controls and measures as part of the agreed-upon observation tracker during assessment phase.

Each observation is assigned with owner and timelines for closure. Remediation timelines for such observations are aligned to Vulnerability Management Policy. Progress on remediation is tracked and monitored by Information security team.

Remediated observations are re-tested or verified based on system evidence, by the third-party agencies, as applicable. This is done by the same agency who carries out assessment.

Status of remediation progress and compliance are updated periodically to various forums and committees as mentioned in the Information Security Governance Structure.

#### **Information Security Administration**

From Information Security Administrative perspective, observations and points emanating from the below activities would form the part of regular operations.

- Risk Controls Matrix and Review Controls defined as part of Information Security Management
- Open observations reported through various assessments
- Actions emerging from Annual IT Risk Assessment and DR/BCP Reviews

Each control/action point is assigned to an owner for execution purpose. This may be a one-time or recurring activity.

Execution is tracked as part of CIO's review and reviews under various other internal/external forums.

#### Escalation, Performance **Evaluation** and Reporting

#### **Escalation**

As part of our IT security framework we have developed an escalation process that enables employees to report anything suspicious or which is a threat to the organization, our intellectual property, our business documentation, our people, or our finances. As part of the escalation process all Information Security Incidents are reported at Myitsupport@vedanta.co.in and hzl.isms@vedanta. co.in mail ID. These incidents are then reviewed and analyzed by the IT & Cyber Security Steering committee. The escalation process is also regularly monitored by the same committee. Besides this, provision for reporting phishing mails has been given via a "Report Phishing" option in the mail menu itself.

#### **Performance Evaluation and Reporting**

Performance evaluation of Information Security is carried out based on following aspects:

- People
- **Process** b.
- Technology

For the workforce working in IT function, each employee has well-defined KRA/KPI as part of their Annual Goals and Performance Management process and requirements in line with Hindustan Zinc's Information Security Goals. Performance of employee is measured against these goals. Similarly, employees working on OT environment and managing OT systems also have KPI aligned to Hindustan Zinc's Information Security Goals in their Annual KRA/KPI Plan.

Effectiveness of processes and technologies is measured through various internal and external vulnerability assessments, management reviews and incidents are reported as mentioned earlier.

Observations reported under internal / external vulnerability assessments are first discussed and agreed upon with respective IT asset owner along with Information security team. These observations are subsequently deliberated with CISO and final observation tracker is prepared.

Observations reported as part of Information Security Administration are reviewed by CISO along with respective IT asset owner. This is further validated during surveillance audit of ISO certifications as well as during ITGC reviews conducted by Internal & Statutory Auditors as part of SOX compliance assessments.





Cyber incidents reported through SIEM and by End Users are evaluated by PISO and are further reviewed by CISO.

Data incidents reported through DLP and by End Users are evaluated by DGPO and are further reviewed by CISO.

Based on the criticality and impact, these observations and incidents are reported and discussed in following forums for direction and support to address them.

- I. HZL IT & CYBER SECURITY STEERING COMMITTEE
- II. Vedanta Group EXCO
- III. HZL Audit & Risk Committee
- IV. Vedanta Audit & Risk Committee

Compliance to observations as per agreed due dates is reported on a quarterly basis.

# Business Continuity & Disaster Recovery Plan (BCP/DR)

Hindustan Zinc recognizes that Business Continuity & Disaster Recovery is not only an IT subject, rather a business subject. Aligned to this thought, Hindustan Zinc has implemented ISO 22301 Disaster Recovery & Business Continuity Management Framework to prevent the interruption in operations of Hindustan Zinc's critical IT systems and to ensure that IT systems are continuously available to all the authorized users, all statutory & legal requirements are complied with, and organization's finance and reputational interests are protected.

Under ISO 22301 framework, Hindustan Zinc has defined and rolled out an effective BCP/DR. As part of

this process, Hindustan Zinc has carried out a Business Impact Analysis (BIA) for all critical IT systems and has defined RPO & RTO for these systems in collaboration and approval by respective system owners and functional business heads. Business Continuity Plan (BCP) has considered various risks including Technical Risk, Natural Disasters Risk, Human Risk, Risk related to External Partners.

Business Continuity Testing & Disaster Recovery Drills are carried out on a half yearly basis to test the readiness of recovery sites.

A Table-Top exercise is also carried out on half-yearly basis with a role play, which provides understanding and clarity to every member of BCP/DR teams about "Do's & Don'ts" to be considered during an incident.

Since threat landscape is extremely dynamic and business undergoes frequent changes, managing information security is a major challenge. In view of this, HZL has recognized that improving information security requires more than just fixing what is broke.

HZL has adopted a process of continuously measuring effectiveness of security operations - technology, people, and processes. HZL continually assesses the security controls defined under management framework and measures the results over time through bench-marking and maturity assessments HZL also takes into account strategic, tactical and operational threat intelligence from multiple sources to strengthen its cyber security posture, and nominates its employees to attend various events/forums from where knowledge can be gained around latest trends and techniques in this area. "Project Raksha" is the flagship program adopted by Hindustan Zinc.

