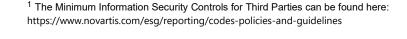


Minimum Information Security Controls for Third Parties¹

Version 3.0

April 2022

Information Security and Risk Management



Minimum Information Security Controls for Third Parties²

1. Governance and Compliance

- Third Party shall implement and maintain an information security program, consistent with security industry practice and standards, to protect the systems and network infrastructure, as well as the confidentiality, integrity, availability, and resiliency of data, at minimum, as set forth in this document.
- Third Party shall ensure that it has nominated an appropriate individual to hold accountability on behalf of Third Party for ensuring technical and organizational compliance with information security controls.
- Third Party's information security program must include a governance framework with supporting risk management policies that will enable and support risk management.

2. Business Continuity

- Third Party shall have appropriate business continuity and disaster recovery plans to ensure timely recovery of its IT systems involved in any operation with data, in any form, supporting the services provided to Novartis, in the event of a disaster or other significant disruptive event
- Third Party shall ensure that its disaster recovery plans are periodically tested and updated to ensure they are up-to-date and effective.
- Third Party shall ensure that technologies and processes used for data backup and recovery
 are regularly tested and have sufficient protection against any disruptive cyber-attacks.

3. Media Handling

- Procedures for the handling and storage of data shall be established by Third Party to protect data from unauthorized disclosure or misuse.
- Third Party shall ensure media is disposed of securely and safely when no longer required, using formal procedures with proper documentation.
- Third Party shall ensure that system documentation is protected against unauthorized access.

4. Exchange of Data

 Third Party shall maintain the confidentiality, integrity, availability and resiliency of data and systems hosting or accessing such data within its organization and within any external entity; this includes exchange agreements, physical media in transit, electronic messaging and the protection of data associated with the interconnection of business information systems.

5. Access Control

 Third Party must have an access control policy that ensures that only authorized users that have a business need that is approved will have access to Novartis data.

² Capitalized expressions used in this document have the same meaning as in the latest version of the Novartis Third Party Code (available at https://www.novartis.com/esg/reporting/codes-policies-and-guidelines) unless expressly defined in the attached glossary, stated otherwise or the context requires otherwise. In this document, reference to "Third Party" or "Third Parties" is limited only to such third parties that would be classified as falling under the definition of "Suppliers" in the Novartis Third Party Code.



Third Party shall review user access rights to ensure that the allocation and use of privileges
are controlled and restricted where necessary and as applicable to Novartis data or any
systems storing such data.

6. Cryptographic Control

 Third Party must have developed and implemented policy on use of cryptographic controls for appropriate protection of data, whilst ensuring compliance with applicable statutory, regulatory and contractual requirements.

7. Communications and Network Security

 Third Party shall ensure that networks under Third Party's control are adequately managed, controlled and protected from threats and vulnerabilities, and shall maintain the confidentiality, integrity, and availability of data and prevent the unauthorized access to such systems and applications used to process data at rest or in transit.

8. Security Training and Awareness

- Third Party shall ensure that all its Workers, contractors and agents are aware of information security threats and concerns, their responsibilities and liabilities, and are equipped to support organizational security policy in the course of their work.
- Third Party will ensure that, all Workers, contractors and agents shall receive appropriate information security and data protection awareness training.
- Third Party shall ensure that its Workers use institutional e-mail addresses (as opposed to personal email or communication platform accounts) for any correspondence containing or relating to Novartis data.

9. Physical and Environmental Security

- Third Party shall ensure that appropriate information security perimeters and entry controls are in place to prevent unauthorized physical access, damage and interference to Third Party's premises and data including all end user devices.
- Third Party shall ensure that equipment is properly inventoried and maintained to ensure its continued information security.

10. Protection of Organizational Records

- Third Party shall ensure their information security program includes policies that cover data retention and data destruction consistent with security industry practice.
- Third Party shall ensure appropriate controls are implemented to prevent the loss, destruction, or falsification of records during their retention period.
- Third Party agrees that upon the request of Novartis or as otherwise required by law, it shall dispose (e.g. erase, destroy or render uninterpretable) all Novartis data that Third Party, its affiliates or subcontractors hold (excluding any and all copies of the Novartis data residing on Third Party's standard backup media, providing that such backup media are secured according to recognized and then-current data privacy practice and security industry practice). Third Party shall provide to Novartis report with appropriate level of detail on Novartis data stored on backup media upon Novartis request at no additional costs to Novartis. Novartis shall have the right to receive a copy of Novartis data in the form and within the timeframe specified by Novartis before its disposal.
- Where requested by Novartis, Third Party shall certify in writing that these actions have been completed.
- The following shall be considered as exceptions to this disposal requirement:
 - Third Party must keep Novartis data on file for legal or regulatory purposes; such Novartis data shall then be removed as soon as the legal retention periods have expired



- Novartis data which Novartis has requested Third Party to keep archived for legal hold or other comparable purposes
- Where Novartis has agreed in writing with Third Party specific return/destruction/retention requirements in respect of certain Novartis data, in which case, such specific requirements will apply.

11. Technical Vulnerability Management

- Third Party shall have a vulnerability management program that monitors and maintains the information security state of the Third Party environment.
- Third Party shall establish and maintain policies that demonstrate adequate application of updates and patch management of Third Party IT systems.
- Third Party shall create and maintain hardware and software inventories and conduct regular vulnerability scans.

12. Information Security Incident Management

- Third Party will ensure that management responsibilities and procedures are established to
 ensure a quick, effective and orderly response to security incidents and to report and manage
 information security incidents and weaknesses including appropriate reporting.
- Third Party will promptly inform Novartis in case of a security incident related to Novartis data.

13. Monitoring

- Third Party must monitor its environment to detect and respond to information security incidents or other unauthorized activities.
- Third Party shall ensure audit controls are implemented within the Third Party environment under Third Party's control to enable independent audits/testing of appropriate audit data on operational systems while minimizing the risk of disruption to processes.

14. Configuration and Change Management

 Third Party shall have a change management process that ensures that the impact of changes is understood prior to rollout, includes criteria for establishing the success or failure of a change, and ensures that any roll-back procedures for failed changes are approved before changes are made.

15. Harmful Code Prevention

 Third Party shall develop policies to manage the risks associated with the malicious use of harmful code and implement anti-malware defenses.

