Version 1.0

NIST PRIVACY FRAMEWORK CORE

January 16, 2020

Certain Categories or Subcategories may be identical to or have been adapted from the Cybersecurity Framework. The following legend can be used to identify this relationship in the table. A complete crosswalk between the two frameworks can be found in the resource repository at https://www.nist.gov/privacy-framework.



The Function, Category, or Subcategory aligns with the Cybersecurity Framework, but the text has been adapted for the Privacy Framework.



The Category or Subcategory is identical to the Cybersecurity Framework.

Function	Category	Subcategory
IDENTIFY-P (ID-	Inventory and Mapping (ID.IM-P): Data	ID.IM-P1: Systems/products/services that process data are
P): Develop the	processing by systems, products, or services	inventoried.
organizational understanding to manage privacy risk for individuals	is understood and informs the management of privacy risk.	ID.IM-P2: Owners or operators (e.g., the organization or third parties such as service providers, partners, customers, and developers) and their roles with respect to the systems/products/services and components (e.g., internal or external) that process data are inventoried.
arising from		ID.IM-P3: Categories of individuals (e.g., customers, employees or
data		prospective employees, consumers) whose data are being processed
processing.		are inventoried.
		ID.IM-P4: Data actions of the systems/products/services are
		inventoried.
		ID.IM-P5: The purposes for the data actions are inventoried.
		ID.IM-P6: Data elements within the data actions are inventoried.
		ID.IM-P7: The data processing environment is identified (e.g., geographic location, internal, cloud, third parties).
		ID.IM-P8: Data processing is mapped, illustrating the data actions and associated data elements for systems/products/services, including components; roles of the component owners/operators; and interactions of individuals or third parties with the systems/products/services.
	Business Environment (ID.BE-P): The	ID.BE-P1: The organization's role(s) in the data processing
	organization's mission, objectives,	ecosystem are identified and communicated.

Function	Category	Subcategory
	stakeholders, and activities are	ID.BE-P2: Priorities for organizational mission, objectives, and
	understood and prioritized; this	activities are established and communicated.
	information is used to inform privacy	ID.BE-P3: Systems/products/services that support organizational
	roles, responsibilities, and risk	priorities are identified and key requirements communicated.
	management decisions.	
	Risk Assessment (ID.RA-P): The	ID.RA-P1: Contextual factors related to the systems/products/services
	organization understands the privacy risks	and the data actions are identified (e.g., individuals' demographics and
	to individuals and how such privacy risks	privacy interests or perceptions, data sensitivity and/or types, visibility
	may create follow-on impacts on	of data processing to individuals and third parties).
	organizational operations, including	ID.RA-P2: Data analytic inputs and outputs are identified and
	mission, functions, other risk management	evaluated for bias.
	priorities (e.g., compliance, financial),	ID.RA-P3: Potential problematic data actions and associated problems
	reputation, workforce, and culture.	are identified.
		ID.RA-P4: Problematic data actions, likelihoods, and impacts are
		used to determine and prioritize risk.
		ID.RA-P5: Risk responses are identified, prioritized, and
		implemented.
	Data Processing Ecosystem Risk	ID.DE-P1: Data processing ecosystem risk management policies,
	Management (ID.DE-P): The	processes, and procedures are identified, established, assessed,
	organization's priorities, constraints, risk	managed, and agreed to by organizational stakeholders.
	tolerance, and assumptions are	ID.DE-P2: Data processing ecosystem parties (e.g., service
	established and used to support risk	providers, customers, partners, product manufacturers, application
	decisions associated with managing	developers) are identified, prioritized, and assessed using a privacy
	privacy risk and third parties within the	risk assessment process.
	data processing ecosystem. The	ID.DE-P3: Contracts with data processing ecosystem parties are
	organization has established and	used to implement appropriate measures designed to meet the
	implemented the processes to identify,	objectives of an organization's privacy program.
	assess, and manage privacy risks within	ID.DE-P4: Interoperability frameworks or similar multi-party
	the data processing ecosystem.	approaches are used to manage data processing ecosystem privacy
		risks.

Function	Category	Subcategory
		ID.DE-P5 : Data processing ecosystem parties are routinely assessed using audits, test results, or other forms of evaluations to confirm
		they are meeting their contractual, interoperability framework, or
		other obligations.
GOVERN-P (GV-P):	Governance Policies, Processes, and	GV.PO-P1: Organizational privacy values and policies (e.g.,
Develop and	Procedures (GV.PO-P): The policies,	conditions on data processing such as data uses or retention
implement the	processes, and procedures to manage and	periods, individuals' prerogatives with respect to data processing)
organizational	monitor the organization's regulatory,	are established and communicated.
governance	legal, risk, environmental, and operational	GV.PO-P2: Processes to instill organizational privacy values within
structure to	requirements are understood and inform	system/product/service development and operations are established
enable an ongoing	the management of privacy risk.	and in place.
understanding of		GV.PO-P3: Roles and responsibilities for the workforce are
the organization's		established with respect to privacy.
risk management		GV.PO-P4: Privacy roles and responsibilities are coordinated and
priorities that are informed by		aligned with third-party stakeholders (e.g., service providers,
privacy risk.		customers, partners).
privacy risk.		GV.PO-P5: Legal, regulatory, and contractual requirements
		regarding privacy are understood and managed.
		GV.PO-P6: Governance and risk management policies, processes, and procedures address privacy risks.
	Risk Management Strategy (GV.RM-P):	GV.RM-P1: Risk management processes are established, managed,
	The organization's priorities, constraints,	and agreed to by organizational stakeholders.
	risk tolerances, and assumptions are	GV.RM-P2: Organizational risk tolerance is determined and clearly
	established and used to support	expressed.
	operational risk decisions.	GV.RM-P3: The organization's determination of risk tolerance is
	l '	informed by its role(s) in the data processing ecosystem.
	Awareness and Training (GV.AT-P): The	GV.AT-P1: The workforce is informed and trained on its roles and
	organization's workforce and third parties	responsibilities.
	engaged in data processing are provided	GV.AT-P2: Senior executives understand their roles and
	privacy awareness education and are	responsibilities.
	trained to perform their privacy-related	GV.AT-P3: Privacy personnel understand their roles and
	duties and responsibilities consistent with	responsibilities.

Function	Category	Subcategory
	related policies, processes, procedures,	GV.AT-P4: Third parties (e.g., service providers, customers,
	and agreements and organizational	partners) understand their roles and responsibilities.
	privacy values. Monitoring and Review (GV.MT-P): The	GV.MT-P1: Privacy risk is re-evaluated on an ongoing basis and as key
	policies, processes, and procedures for	factors, including the organization's business environment (e.g.,
	ongoing review of the organization's privacy	introduction of new technologies), governance (e.g., legal obligations,
	posture are understood and inform the	risk tolerance), data processing, and systems/products/services
	management of privacy risk.	change.
		GV.MT-P2 : Privacy values, policies, and training are reviewed and any
		updates are communicated.
		GV.MT-P3 : Policies, processes, and procedures for assessing
		compliance with legal requirements and privacy policies are
		established and in place.
		GV.MT-P4: Policies, processes, and procedures for communicating
		progress on managing privacy risks are established and in place. GV.MT-P5: Policies, processes, and procedures are established and in
		place to receive, analyze, and respond to problematic data actions
		disclosed to the organization from internal and external sources (e.g.,
		internal discovery, privacy researchers, professional events).
		GV.MT-P6: Policies, processes, and procedures incorporate lessons
		learned from problematic data actions.
		GV.MT-P7: Policies, processes, and procedures for receiving, tracking,
		and responding to complaints, concerns, and questions from
		individuals about organizational privacy practices are established and
CONTROL D/CT	Data Duagasing Policies Duagases and	in place.
CONTROL-P (CT-P): Develop and	Data Processing Policies, Processes, and Procedures (CT.PO-P): Policies, processes,	CT.PO-P1: Policies, processes, and procedures for authorizing data processing (e.g., organizational decisions, individual consent), revoking
implement	and procedures are maintained and used to	authorizations, and maintaining authorizations are established and in
appropriate	manage data processing (e.g., purpose,	place.
activities to enable	scope, roles and responsibilities in the data	CT.PO-P2: Policies, processes, and procedures for enabling data
organizations or	processing ecosystem, and management	review, transfer, sharing or disclosure, alteration, and deletion are
individuals to	commitment) consistent with the	established and in place (e.g., to maintain data quality, manage data
manage data with		retention).

Function	Category	Subcategory
sufficient	organization's risk strategy to protect	CT.PO-P3: Policies, processes, and procedures for enabling individuals'
granularity to	individuals' privacy.	data processing preferences and requests are established and in place.
manage privacy		CT.PO-P4: A data life cycle to manage data is aligned and
risks.		implemented with the system development life cycle to manage
		systems.
	Data Processing Management (CT.DM-P):	CT.DM-P1: Data elements can be accessed for review.
	Data are managed consistent with the	CT.DM-P2: Data elements can be accessed for transmission or
	organization's risk strategy to protect	disclosure.
	individuals' privacy, increase manageability,	CT.DM-P3: Data elements can be accessed for alteration.
	and enable the implementation of privacy	CT.DM-P4: Data elements can be accessed for deletion.
	principles (e.g., individual participation, data	CT.DM-P5: Data are destroyed according to policy.
	quality, data minimization).	CT.DM-P6: Data are transmitted using standardized formats.
		CT.DM-P7: Mechanisms for transmitting processing permissions and
		related data values with data elements are established and in place.
		CT.DM-P8: Audit/log records are determined, documented,
		implemented, and reviewed in accordance with policy and
		incorporating the principle of data minimization.
		CT.DM-P9: Technical measures implemented to manage data
		processing are tested and assessed.
		CT.DM-P10: Stakeholder privacy preferences are included in
		algorithmic design objectives and outputs are evaluated against
		these preferences.
	Disassociated Processing (CT.DP-P): Data	CT.DP-P1: Data are processed to limit observability and linkability (e.g.,
	processing solutions increase disassociability	data actions take place on local devices, privacy-preserving
	consistent with the organization's risk	cryptography).
	strategy to protect individuals' privacy and	CT.DP-P2: Data are processed to limit the identification of individuals
	enable implementation of privacy principles	(e.g., de-identification privacy techniques, tokenization).
	(e.g., data minimization).	CT.DP-P3: Data are processed to limit the formulation of inferences
		about individuals' behavior or activities (e.g., data processing is
		decentralized, distributed architectures).
		CT.DP-P4: System or device configurations permit selective collection
		or disclosure of data elements.
		CT.DP-P5: Attribute references are substituted for attribute values.

Function	Category	Subcategory
COMMUNICATE-P	Communication Policies, Processes, and	CM.PO-P1: Transparency policies, processes, and procedures for
(CM-P): Develop	Procedures (CM.PO-P): Policies, processes,	communicating data processing purposes, practices, and associated
and implement	and procedures are maintained and used to	privacy risks are established and in place.
appropriate	increase transparency of the organization's	CM.PO-P2: Roles and responsibilities (e.g., public relations) for
activities to enable	data processing practices (e.g., purpose,	communicating data processing purposes, practices, and associated
organizations and	scope, roles and responsibilities in the data	privacy risks are established.
individuals to have	processing ecosystem, and management	
a reliable	commitment) and associated privacy risks.	
understanding and	Data Processing Awareness (CM.AW-P):	CM.AW-P1: Mechanisms (e.g., notices, internal or public reports) for
engage in a	Individuals and organizations have reliable	communicating data processing purposes, practices, associated privacy
dialogue about	knowledge about data processing practices	risks, and options for enabling individuals' data processing preferences
how data are	and associated privacy risks, and effective	and requests are established and in place.
processed and	mechanisms are used and maintained to	CM.AW-P2: Mechanisms for obtaining feedback from individuals (e.g.,
associated privacy	increase predictability consistent with the	surveys or focus groups) about data processing and associated privacy
risks.	organization's <u>risk</u> strategy to protect	risks are established and in place.
	individuals' privacy.	CM.AW-P3: System/product/service design enables data processing
		visibility. CM.AW-P4: Records of data disclosures and sharing are maintained
		and can be accessed for review or transmission/disclosure.
		CM.AW-P5: Data corrections or deletions can be communicated to
		individuals or organizations (e.g., data sources) in the data processing
		ecosystem.
		CM.AW-P6: Data provenance and lineage are maintained and can be
		accessed for review or transmission/disclosure.
		CM.AW-P7: Impacted individuals and organizations are notified about
		a privacy breach or event.
		CM.AW-P8: Individuals are provided with mitigation mechanisms (e.g.,
		credit monitoring, consent withdrawal, data alteration or deletion) to
		address impacts of problematic data actions.
PROTECT-P	Data Protection Policies, Processes, and	PR.PO-P1: A baseline configuration of information technology is
(PR-P): Develop	Procedures (PR.PO-P): Security and	created and maintained incorporating security principles (e.g.,
and implement	privacy policies (e.g., purpose, scope, roles	concept of least functionality).

Function	Category	Subcategory
appropriate	and responsibilities in the data processing	PR.PO-P2: Configuration change control processes are established
data processing	ecosystem, and management	and in place.
safeguards.	commitment), processes, and procedures	PR.PO-P3: Backups of information are conducted, maintained, and
	are maintained and used to manage the	tested.
	protection of data.	PR.PO-P4: Policy and regulations regarding the physical operating
		environment for organizational assets are met.
		PR.PO-P5: Protection processes are improved.
		PR.PO-P6: Effectiveness of protection technologies is shared.
		PR.PO-P7: Response plans (Incident Response and Business
		Continuity) and recovery plans (Incident Recovery and Disaster
		Recovery) are established, in place, and managed.
		PR.PO-P8: Response and recovery plans are tested.
		PR.PO-P9: Privacy procedures are included in human resources
		practices (e.g., deprovisioning, personnel screening).
		PR.PO-P10: A vulnerability management plan is developed and
		implemented.
	Identity Management, Authentication,	PR.AC-P1: Identities and credentials are issued, managed, verified,
	and Access Control (PR.AC-P): Access to	revoked, and audited for authorized individuals, processes, and
	data and devices is limited to authorized	devices.
	individuals, processes, and devices, and is	PR.AC-P2: Physical access to data and devices is managed.
	managed consistent with the assessed risk	PR.AC-P3: Remote access is managed.
	of unauthorized access.	PR.AC-P4: Access permissions and authorizations are managed,
		incorporating the principles of least privilege and separation of
		duties.
		PR.AC-P5: Network integrity is protected (e.g., network
		segregation, network segmentation).
		PR.AC-P6: Individuals and devices are proofed and bound to
		credentials, and authenticated commensurate with the risk of the
		transaction (e.g., individuals' security and privacy risks and other
	Data Cassella (DD DC D) Data	organizational risks).
	Data Security (PR.DS-P): Data are	PR.DS-P1: Data-at-rest are protected.
	managed consistent with the	PR.DS-P2: Data-in-transit are protected.

Function	Category	Subcategory
	organization's risk strategy to protect	PR.DS-P3: Systems/products/services and associated data are
	individuals' privacy and maintain data	formally managed throughout removal, transfers, and disposition.
	confidentiality, integrity, and availability.	PR.DS-P4: Adequate capacity to ensure availability is maintained.
		PR.DS-P5: Protections against data leaks are implemented.
		PR.DS-P6: Integrity checking mechanisms are used to verify
		software, firmware, and information integrity.
		PR.DS-P7: The development and testing environment(s) are
		separate from the production environment.
		PR.DS-P8: Integrity checking mechanisms are used to verify
		hardware integrity.
	Maintenance (PR.MA-P): System	PR.MA-P1: Maintenance and repair of organizational assets are
	maintenance and repairs are performed	performed and logged, with approved and controlled tools.
	consistent with policies, processes, and	PR.MA-P2: Remote maintenance of organizational assets is
	procedures.	approved, logged, and performed in a manner that prevents
		unauthorized access.
	Protective Technology (PR.PT-P):	PR.PT-P1: Removable media is protected and its use restricted
	Technical security solutions are managed	according to policy.
	to ensure the security and resilience of	PR.PT-P2: The principle of least functionality is incorporated by
	systems/products/services and associated	configuring systems to provide only essential capabilities.
	data, consistent with related policies,	PR.PT-P3: Communications and control networks are protected.
	processes, procedures, and agreements.	PR.PT-P4: Mechanisms (e.g., failsafe, load balancing, hot swap) are
		implemented to achieve resilience requirements in normal and
		adverse situations.