

## Crosswalk ISO/IEC 42005 Information technology - Artificial intelligence - AI system impact assessment to NIST AI RMF (1.0)

AI RMF 1.0 Function	ISO/IEC DIS 42005
GOVERN 1: Policies, processes, procedures, and practices across the organization related to the mapping, measuring, and managing of AI risks are in place, transparent, and implemented effectively	5.1 General 5.10 Recording and reporting 5.12 Monitoring and review
GOVERN 2: Accountability structures are in place so that the appropriate teams and individuals are empowered, responsible, and trained for mapping, measuring, and managing AI risks.	5.6 Allocating responsibilities 5.11 Approval process
GOVERN 3: Workforce diversity, equity, inclusion, and accessibility processes are prioritized in the mapping, measuring, and managing of AI risks throughout the lifecycle.	-
GOVERN 4: Organizational teams are committed to a culture that considers and communicates AI risk.	5.4 Timing of AI system impact assessment 5.6 Allocating responsibilities
GOVERN 5: Processes are in place for robust engagement with relevant AI actors.	6.7 Relevant interested parties
GOVERN 6: Policies and procedures are in place to address AI risks and benefits arising from third-party software and data and other supply chain issues.	-
MAP 1: Context is established and understood.	6.2 Scope of the AI system impact assessment 6.3.3 AI system purpose 6.3.4 Intended use 6.3.5 Unintended uses 6.6.1 Geographical area and languages 6.6.2 Deployment environment complexity and constraints 6.7 Relevant interested parties
MAP 2: Categorization of the AI system is performed.	5.5 Scope of the AI system impact assessment 6.2 Scope of the AI system impact assessment 6.3.1 AI system description 6.3.2 AI system functionalities and capabilities 6.4 Data information and quality 6.5 Algorithm and model information
MAP 3: AI capabilities, targeted usage, goals, and expected benefits and costs compared with appropriate benchmarks are understood	6.3.1 AI system description 6.3.2 AI system functionalities and capabilities 6.3.3 AI system purpose 6.3.4 Intended use 6.3.5 Unintended uses

MAP 4: Risks and benefits are mapped for all components of the AI system including third-party software and data.	-
MAP 5: Impacts to individuals, groups, communities, organizations, and society are characterized.	6.8.1 General 6.8.2 Benefits and harms 6.8.3 AI system failures and reasonably foreseeable misuse
MEASURE 1: Appropriate methods and metrics are identified and applied.	-
MEASURE 2: AI systems are evaluated for trustworthy characteristics.	5.8 Performing the AI system impact assessment 6.8 Actual and reasonably foreseeable impacts 6.8.3.3 Impact of reasonably foreseeable misuse of AI system
MEASURE 3: Mechanisms for tracking identified AI risks over time are in place.	5.9 Analysing the results of the AI system impact assessment 5.12 Monitoring and review
MEASURE 4: Feedback about efficacy of measurement is gathered and assessed.	5.9 Analysing the results of the AI system impact assessment 5.12 Monitoring and review
MANAGE 1: AI risks based on assessments and other analytical output from the MAP and MEASURE functions are prioritized, responded to, and managed.	-
MANAGE 2: Strategies to maximize AI benefits and minimize negative impacts are planned, prepared, implemented, documented, and informed by input from relevant AI actors.	-
MANAGE 3: AI risks and benefits from third-party entities are managed.	-
MANAGE 4: Risk treatments, including response and recovery, and communication plans for the identified and measured AI risks are documented and monitored regularly.	-