Cooperation, Coordination, and Collaboration (3Cs)

MITRE recommends stakeholders consider the degree of partnering that is optimal for each topic

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Elements	Cooperation	Coordination	Collaboration		
Vision and Relationships	 Basis for cooperation is usually between individuals but may be mandated by a third party Organizational missions and goals are not taken into account Interaction is on an as-needed basis; may last indefinitely 	 Individual relationships are supported by the organizations they represent Missions and goals of the individual organizations are reviewed for compatibility Interaction is usually around one specific project or task of definable length 	 Commitment of the organizations and their leaders is fully behind their representatives New, shared mission and goals are created One or more projects are undertaken for longer-term results 		
Structure, Relationships and Communication	 Relationships are informal; each organization functions separately No joint planning is required Information is conveyed as needed 	 Organizations involved take on needed roles, but function relatively independently of each other Some project-specific planning is required Communication roles are established and definite channels are created for interaction 	 New organizational structure and/or clearly defined and interrelated roles that constitute a formal division of labor are created More comprehensive planning is required that includes developing joint strategies and measuring success in terms of impact Beyond communication roles and channels for interaction, many levels of communication are created, as clear information is a keystone of success 		
Authority and Accountability	 Authority rests solely with individual organizations Leadership is unilateral and control is central All authority and accountability rests with individual organizations, which act independently 	 Authority rests with the individual organizations, but there is coordination among participants Some sharing of leadership and control There is some shared risk, but most of the authority and accountability falls to the individual organizations 	 Authority is determined by the collaboration to balance ownership by the individual organizations with expediency to accomplish purpose Leadership is dispersed, and control is shared and mutual Equal risk is shared by all organizations in the collaboration 		
Resources and Rewards	 Resources (staff time, dollars, and capabilities) are separate, serving the individual organizations' needs Source: Mattessich and Johnson (2018) Collaboration: What Makes It W	 Resources are acknowledged and can be made available to others for a specific project Rewards are mutually acknowledged 	 Resources are pooled or jointly secured for a longer-term effort that is managed by the collaborative structure Organizations share in the projects; more is accomplished collectively than could have been accomplished individually 		

PPPs can use the 3Cs framework to clarify which items require what level of partnership

- The PPP can identify a list of solutions that resonate with priority problems the partnership has raised
- Then the PPP can consider what level of partnership is required to deliver what level of impact for any given solution
 - Some solutions can provide value through cooperation or even coordination
 - In some cases, an enhanced version of that solution could provide even greater value through cooperation
- Like portfolio management, use of 3Cs refines where the greatest opportunity lies for a given approach or investment
 - 3Cs (esp. emphasis on cooperation or coordination) can indicate to the USG sponsor that a PPP (collaboration) may or may not be
 viable or valuable for their situation, depending on how much USG is actually willing to cede in partnering
 - By clarifying when and to what extent the stakeholders are willing to partner, the boundaries for the PPP and its likely impact are clarified
- The following slide illustrates the 3Cs continuum for a project

Example of 3Cs for DHA CyberLOG PPP

Legend:
DHA
MDMs
Joint

Needs/solutions from co-design mapped to the 3Cs, showing different paths forward

Theme	Cooperation	Coordination	Collaboration
MDE Priorities	 Align buyers, contracts, and RMF on requirements Develop and share standard requirements for MDE types 	 Share DHA MDE priority roadmap Use DHA MDE priorities to inform new product development roadmap 	Shape DHA MDE priorities via emerging tech and needs
RMF Incentives	 Request info on MDE cyber characteristics as part of acquisition requirements Respond to acquisitions with known-secure MDE 	 Align incentives for MDM investment in RMF / procure pre-assessed MDE Participate in traditional acquisitions 	 Non-traditional acquisitions e.g., partnership-driven, CRADA, OTA
RMF Clarity	 Provide transparency and clarity on RMF expectations: publish website with guides, templates, roadmap Publish devices completed and in-process in CSTAR Align inheritance expectations w/CyberLOG, CSD, MTFs 	 Deliver on roadmap of RMF changes Provide publicly-available dashboard of RMF-approved MDE Obtain guidance at DHA/MDM events 	Co-design RMF roadmap for impact and feasibility
Improved Security	 Raise internal awareness of RMF, resources available, and develop RMF savvy Provide clear and consistent guidance Improve hardening of MDE post-510K / during RMF 	 Provide education/guidance on RMF Clarify maintenance, patching Inform patching strategy and improve Improve pre-510K security by design 	 Co-design community-based models (e.g., threat-based) Co-develop patching strategy
Risk Tolerance	Align and train DHA components on acceptable riskMake risk tolerance transparent (clarify and share)	 Obtain input on risk tolerance for innovative MDE tech 	 Co-develop risk tolerance for innovative MDE tech (pre-510K)
Accelerated RMF	 Grandfather in requirements at time of device intake Represent device security posture accurately Provide guidance on how to be DoD-compliant Develop MDE compliant to known requirements 	 Define flexible RMF approaches, tailored to MDE categories Inform standard requirements for new device types 	 Co-develop standard requirements for new device types