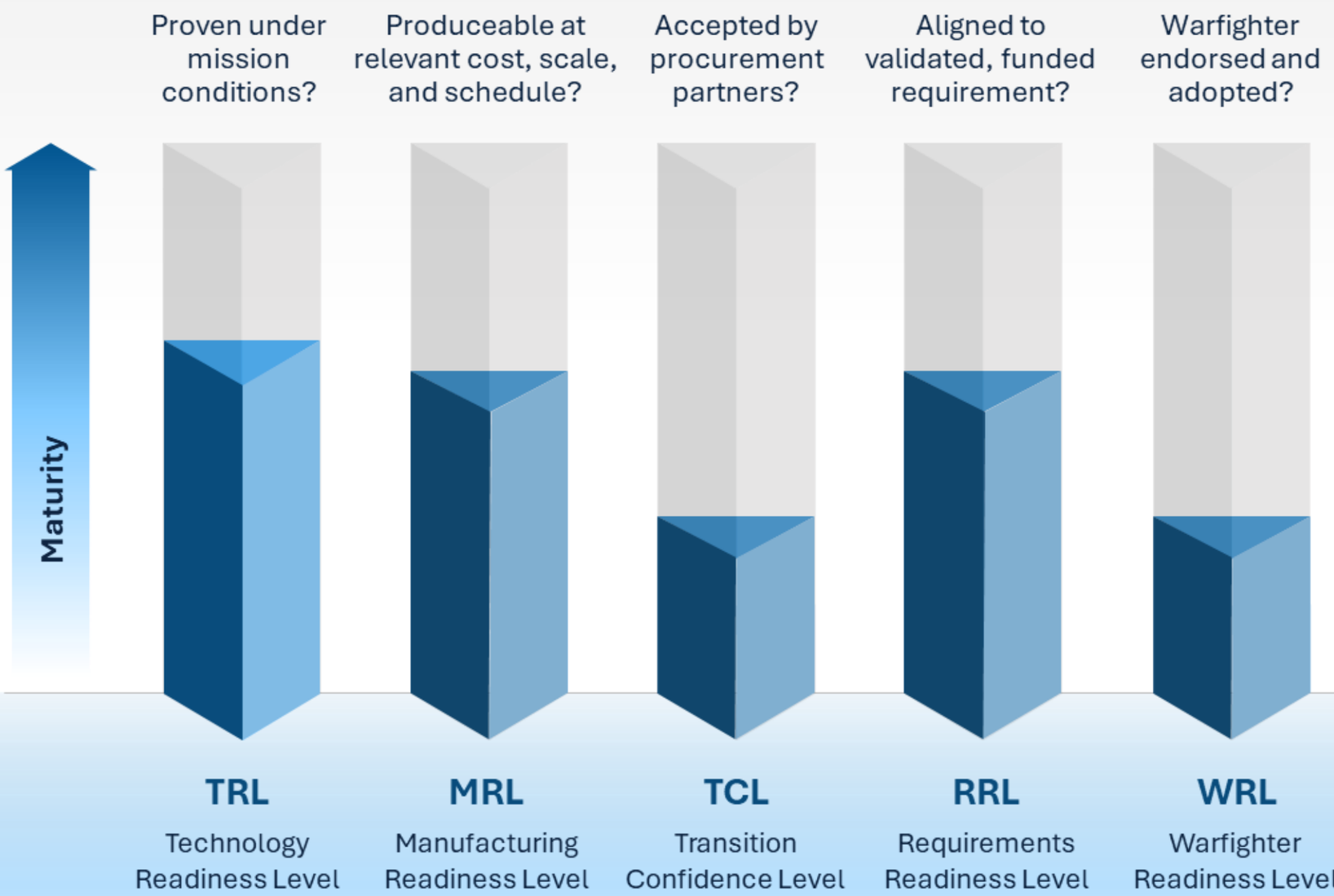
Transition Maturity Framework (TMaF)



Single framework for tracking transition maturity and providing information needed for acceptance to all stakeholders: innovators, acquisition, requirements and operators

The Transition Maturity Framework (TMaF) is a comprehensive defense acquisition framework developed to streamline the transition of innovative technologies from research labs to active deployment with U.S. Warfighters. The framework addresses persistent challenges by providing a structured acquisition approach that includes streamlined methodologies, advanced data-driven decision-making tools, and collaborative processes.

TMaF will continue to evolve to align with the August 20, 2025 memorandum signed by the Secretary of Defense in accordance with Executive Order 14265, "Modernizing Defense Acquisition and Spurring Innovation in the Defense Industrial Base."

Scale	Technology Readiness Level (TRL): Proven under mission conditions?	Manufacturing Readiness Level (MRL): Produceable at relevant cost, scale, and schedule?	Transition Confidence Level (TCL): Accepted by procurement partners?	Requirements Readiness Level (RRL): Aligned to validated, funded requirement?	Warfighter Readiness Level (WRL): Warfighter endorsed and adopted?
9	**Actual system proven through successful mission operations.** ▪ Actual application of the technology in its final form and under mission conditions, such as those encountered in operational test and evaluation. Examples include using the system under operational mission conditions.	**Pilot line capability demonstrated; Ready to begin Low-Rate Initial Production.** ▪ The system, component, or item has been previously produced, is in production, or has successfully achieved low-rate initial production. Technologies should have matured to TRL 9. This level of readiness is normally associated with readiness for entry into Full-Rate Production (FRP). All systems engineering/design requirements should have been met such that there are minimal system changes. Major system design features are stable and have been proven in test and evaluation. **(Level 10) Full-Rate Production demonstrated and lean production practices in place.** ▪ Technologies should have matured to TRL 9. This level of manufacturing is normally associated with the Production or Sustainment phases of the acquisition life cycle. Engineering/design changes are few and generally limited to quality and cost improvements. A system, components, or items are in full-rate production and meet all engineering, performance, quality, and reliability requirements. The manufacturing process capability is at the appropriate quality level.	▪ Transition to PEO funding and acquisition strategy completed.	▪ Technology meets Funded JCIDS or Service validated requirement; CNS (for Software Acquisition pathway); technology addresses validated eKPP or related JPR, KPP, KSA from Capability Development Document (CDD), Enterprise Capability Document (ECD), or Service equivalent.	▪ The project is fielded to operational units and becomes an integral part of the military culture. Warfighters endorse its use, and it is fully embedded in Doctrine, Organization, Training, Materiel, Leadership and Education, Personnel, Facilities, and Policy (DOTMLPF-P). This ensures the technology is fully embraced and operationally effective.
8	**Actual system completed and qualified through test and demonstration.** ▪ Technology has been proven to work in its final form and under expected conditions. In almost all cases, this TRL represents the end of true system development. Examples include developmental test and evaluation of the system in its intended weapon system to determine if it meets design specifications.	**Pilot line capability demonstrated; Ready to begin Low-Rate Initial Production.** ▪ The system, component, or item has been previously produced, is in production, or has successfully achieved low-rate initial production. Technologies should have matured to TRL 9. This level of readiness is normally associated with readiness for entry into Full-Rate Production (FRP). All systems engineering/design requirements should have been met such that there are minimal system changes. Major system design features are stable and have been proven in test and evaluation.	▪ Signed transition agreement between PM and technology developer. ▪ Transition funding committed.	▪ Technology meets Unfunded JCIDS or Service validated requirement; technology addresses validated eKPP or related JPR, KPP, KSA from Capability Development Document (CDD), Enterprise Capability Document (ECD), or Service equivalent (ref unfunded requirement (UFR) lists).	▪ Training programs are developed to familiarize warfighters with the technology. Projects with a warfighter on the development team progress quicker, as they provide input from the end-user perspective during the design phase. This ensures warfighters have the necessary skills and knowledge to effectively use the technology.
7	**System prototype demonstration in an operational environment.** ▪ Prototype near, or at, planned operational system. Represents a major step up from TRL 6, requiring demonstration of an actual system prototype in an operational environment such as an aircraft, vehicle, or space. Examples include testing the prototype in a test bed aircraft.	**Capability to produce systems, subsystems, or components in a production representative environment.** ▪ System detailed design activity is nearing completion. Material specifications have been approved and materials are available to meet the planned pilot line build schedule. Manufacturing processes and procedures have been demonstrated in a production representative environment. Detailed producibility trade studies are completed and producibility enhancements and risk assessments are underway. Technologies should be on a path to achieving TRL 7.	• Integration strategy defined. • Transition cost estimate complete. • Potential funding sources identified.	▪ Technology meets Pre-validated (i.e., draft) JCIDS or Service requirement; technology addresses eKPP or related JPR, KPP, KSA from Capability Development Document (CDD), Enterprise Capability Document (ECD), or Service equivalent.	▪ The technology is deployed in limited operational trials, with warfighters providing feedback on usability and effectiveness. Money is allocated to purchase the project at scale, supporting the warfighter's ability to execute the mission. This involves warfighters in the evaluation process to ensure the technology meets their needs.
6	**System/subsystem model or prototype demonstration in a relevant environment.** ▪ Representative model or prototype system, which is well beyond that of TRL 5, is tested in a relevant environment. Represents a major step up in a technology's demonstrated readiness. Examples include testing a prototype in a high-fidelity laboratory environment or in simulated operational environment.	**Capability to produce a prototype system or subsystem in a production relevant environment.** ▪ This MRL is associated with readiness for a Milestone B decision to initiate an acquisition program by entering into the Engineering and Manufacturing Development (EMD) Phase of acquisition. Technologies should have matured to at least TRL 6. The majority of manufacturing processes have been defined and characterized, but there are still significant engineering and/or design changes in the system itself.	▪ Transition technical goals approved by acquisition PM and technology developer. ▪ Transition schedule estimate developed. ▪ Project included in PM plans as a potential source.	▪ Technology meets the needs expressed in the Chairman's Risk Assessment or similar Joint Capability Development assessment or study.	▪ The technology is adopted across relevant units, with continuous adaptation and support to address emerging challenges. Project developers coordinate with educational institutions to develop and mature training packages, ranging from "on the job training" to curriculum development for new career fields. This ensures the necessary infrastructure and training are in place to support widespread use.
5	**Component and/or breadboard validation in relevant environment.** ▪ Fidelity of breadboard technology increases significantly. The basic technological components are integrated with reasonably realistic supporting elements so it can be tested in a simulated environment. Examples include high-fidelity laboratory integration of components.	**Capability to produce prototype components in a production relevant environment.** ▪ Manufacturing strategy refined and integrated with Risk Management Plan. Identification of enabling/critical technologies and components is complete. Prototype materials, tooling, and test equipment, as well as personnel skills, have been demonstrated on components in a production-relevant environment, but many manufacturing processes and procedures are still in development.	▪ Expressed interest from PM office. ▪ Active communication with named PM contact.	▪ Technology meets the needs expressed in Combatant Command Integrated Priority List (IPL) or similar statement of support from one or more combatant commanders (memo, public statements, etc.).	▪ Policies and procedures are developed to support the technology's integration, with warfighters involved in shaping guidelines and training. This shaping includes deployment, employment, and disposition policies as well as the affiliated initial design and development of the Mission Essential Task List (METL) inputs. The project is inserted into a collective training event under operational conditions to understand its fit within doctrine and Tactics, Techniques, Procedures (TTPs). Feedback is captured for senior leaders making acquisition decisions.
4	**Component and/or breadboard validation in laboratory environment** ▪ Basic technological components are integrated to establish that they will work together. This is relatively low-fidelity compared to the eventual system. Examples include integration of "ad hoc" hardware in the laboratory.	**Capability to produce the technology in a laboratory environment.** ▪ This level of readiness acts as an exit criterion for the Materiel Solution Analysis (MSA) Phase approaching a Milestone A decision. Technologies should have matured to at least TRL 4. This level indicates that the technologies are ready for the Technology Development Phase of acquisition. Producibility assessments of design concepts have been completed. Key design performance parameters have been identified as well as any special tooling, facilities, material handling and skills required.	▪ Target PMs briefed and provided progress updates. ▪ Key transition stakeholders named. ▪ Relevant programs named.	▪ Technology meets the needs expressed in formal DoD or Services strategies for capability development, budgeting, or concepts of operations.	▪ Leadership and education efforts focus on building advocacy among key personnel. Leaders are trained to understand and communicate the technology's benefits. This is a critical step to transition from a science and technology project to a program of record, indicating support by end-users for adoption and purchase at scale.
3	**Analytical and experimental critical function and/or characteristic proof of concept.** ▪ Active research and development is initiated. This includes analytical studies and laboratory studies to physically validate analytical predictions of separate elements of the technology. Examples include components that are not yet integrated or representative.	**Manufacturing Proof of Concept Developed.** ▪ This level begins the validation of the manufacturing concepts through analytical or laboratory experiments. Experimental hardware models have been developed in a laboratory environment that may possess limited functionality.	▪ Specific project technical goals established. ▪ Target acquisition programs identified. ▪ Potential transition stakeholders identified.	▪ Technology aligns to Joint Concept of Operations.	▪ The technology is assessed for its fit within existing organizational structures, with adjustments made to align with current processes. Tests allow developers to gather diagnostic data, with warfighter participation critical for replicating realistic conditions and offering operationally informed feedback.
2	**Technology concept and/or application formulated.** ▪ Invention begins. Once basic principles are observed, practical applications can be invented. Applications are speculative and there may be no proof or detailed analysis to support the assumptions. Examples are limited to analytic studies.	**Manufacturing Concepts Identified.** ▪ This level is characterized by describing the application of new manufacturing concepts. Applied research translates basic research into solutions for broadly defined military needs.	▪ Project initiated. ▪ TRL goals established (baseline).	▪ Technology aligns to Joint or Service need expressed in lessons learned or warfighter feedback from experimentation, exercises, or operations (e.g., JLLIS).	▪ Warfighter consultation and validate end user requirements. Warfighters engage in discussions about the technology's implications for Doctrine and Organization. Service labs and industry must gain support from Combatant Commands (CCMDs) and/or Service Energy Offices (SEOs), demonstrated by a letter of support. This assesses how the technology fits within existing command structures and roles.
1	**Basic principles observed and reported.** ▪ Lowest level of technology readiness. Scientific research begins to be translated into applied research and development. Examples might include paper studies of a technology's basic properties.	**Basic Manufacturing Implications Identified.** ▪ Basic research expands scientific principles that may have manufacturing implications. The focus is on a high-level assessment of manufacturing opportunities. The research is unfettered.	▪ Working Group interest expressed. ▪ Active tech discovery. ▪ Acknowledged gap.	▪ Technology aligns with a general Joint or Service need expressed in studies or analysis. Or an informal, promising "idea" or "user story" relayed by "boots on the ground" (i.e., Lessons Learned, Field Reports, informal warfighter feedback, etc.).	▪ Warfighters are introduced to the technology concept, with initial discussions and briefings raising awareness and gauging interest. DOD innovation investments are aligned with warfighter needs, ensuring the technology aligns with current and future operational concepts. This could be a "technology pull" if Warfighter has an existing requirement the technology solves or could be a "technology push" if there is not a codified, existing requirement.

Scale	Technology Readiness Level (TRL): Proven under mission conditions?	OE-I Critical Activities
9	**Actual system proven through successful mission operations.** ▪ Actual application of the technology in its final form and under mission conditions, such as those encountered in operational test and evaluation. Examples include using the system under operational mission conditions.	
8	**Actual system completed and qualified through test and demonstration.** ▪ Technology has been proven to work in its final form and under expected conditions. In almost all cases, this TRL represents the end of true system development. Examples include developmental test and evaluation of the system in its intended weapon system to determine if it meets design specifications.	
7	**System prototype demonstration in an operational environment.** ▪ Prototype near, or at, planned operational system. Represents a major step up from TRL 6, requiring demonstration of an actual system prototype in an operational environment such as an aircraft, vehicle, or space. Examples include testing the prototype in a test bed aircraft.	▪ Define the OE and system performance criteria ▪ Plan the relevant environment validation experiment/test/demonstration (consider integration into operational experiment or exercise - e.g., Artic Edge) ▪ Enhance capability to create prototype close to the operational system concept ▪ Execute relevant lab environment high fidelity breadboard validation
6	**System/subsystem model or prototype demonstration in a relevant environment.** ▪ Representative model or prototype system, which is well beyond that of TRL 5, is tested in a relevant environment. Represents a major step up in a technology's demonstrated readiness. Examples include testing a prototype in a high-fidelity laboratory environment or in simulated operational environment.	▪ Define the OE and system performance criteria ▪ Plan the relevant environment validation experiment/test/demonstration (consider integration into operational simulation - e.g., AFSIM) ▪ Enhance capability to incorporate realistic supporting elements ▪ Execute relevant lab environment high fidelity breadboard validation
5	**Component and/or breadboard validation in relevant environment.** ▪ Fidelity of breadboard technology increases significantly. The basic technological components are integrated with reasonably realistic supporting elements so it can be tested in a simulated environment. Examples include high-fidelity laboratory integration of components.	▪ Define the OE and system performance criteria ▪ Plan the relevant environment validation experiment/test/demonstration ▪ Enhance system fidelity capability to incorporate realistic supporting elements ▪ Execute relevant lab environment high fidelity breadboard validation
4	**Component and/or breadboard validation in laboratory environment** ▪ Basic technological components are integrated to establish that they will work together. This is relatively low-fidelity compared to the eventual system. Examples include integration of "ad hoc" hardware in the laboratory.	▪ Define the OE and system performance criteria ▪ Plan the validation experiment/test/demonstration ▪ Integrate low fidelity version of system components in lab ▪ Execute lab environment breadboard validation
3	**Analytical and experimental critical function and/or characteristic proof of concept.** ▪ Active research and development is initiated. This includes analytical studies and laboratory studies to physically validate analytical predictions of separate elements of the technology. Examples include components that are not yet integrated or representative.	
2	**Technology concept and/or application formulated.** ▪ Invention begins. Once basic principles are observed, practical applications can be invented. Applications are speculative and there may be no proof or detailed analysis to support the assumptions. Examples are limited to analytic studies.	
1	**Basic principles observed and reported.** ▪ Lowest level of technology readiness. Scientific research begins to be translated into applied research and development. Examples might include paper studies of a technology's basic properties.	

Scale	Manufacturing Readiness Level (MRL): Produceable at relevant cost, scale, and schedule?	OE-I Critical Activities
9	**Pilot line capability demonstrated; Ready to begin Low-Rate Initial Production.** ▪ The system, component, or item has been previously produced, is in production, or has successfully achieved low-rate initial production. Technologies should have matured to TRL 9. This level of readiness is normally associated with readiness for entry into Full-Rate Production (FRP). All systems engineering/design requirements should have been met such that there are minimal system changes. Major system design features are stable and have been proven in test and evaluation. **(Level 10) Full-Rate Production demonstrated and lean production practices in place.** ▪ Technologies should have matured to TRL 9. This level of manufacturing is normally associated with the Production or Sustainment phases of the acquisition life cycle. Engineering/design changes are few and generally limited to quality and cost improvements. A system, components, or items are in full-rate production and meet all engineering, performance, quality, and reliability requirements. The manufacturing process capability is at the appropriate quality level.	
8	**Pilot line capability demonstrated; Ready to begin Low-Rate Initial Production.** ▪ The system, component, or item has been previously produced, is in production, or has successfully achieved low-rate initial production. Technologies should have matured to TRL 9. This level of readiness is normally associated with readiness for entry into Full-Rate Production (FRP). All systems engineering/design requirements should have been met such that there are minimal system changes. Major system design features are stable and have been proven in test and evaluation.	
7	**Capability to produce systems, subsystems, or components in a production representative environment.** ▪ System detailed design activity is nearing completion. Material specifications have been approved and materials are available to meet the planned pilot line build schedule. Manufacturing processes and procedures have been demonstrated in a production representative environment. Detailed producibility trade studies are completed and producibility enhancements and risk assessments are underway. Technologies should be on a path to achieving TRL 7.	▪ Plan and execute production representative environment demonstration ▪ Finalize system design ▪ Materials specs and availability
6	**Capability to produce a prototype system or subsystem in a production relevant environment.** ▪ This MRL is associated with readiness for a Milestone B decision to initiate an acquisition program by entering into the Engineering and Manufacturing Development (EMD) Phase of acquisition. Technologies should have matured to at least TRL 6. The majority of manufacturing processes have been defined and characterized, but there are still significant engineering and/or design changes in the system itself.	▪ Conduct prototype production relevant environment demonstration ▪ Work with program office to define manufacturing requirements to support Milestone B decision ▪ Identify system engineering/design changes
5	**Capability to produce prototype components in a production relevant environment.** ▪ Manufacturing strategy refined and integrated with Risk Management Plan. Identification of enabling/critical technologies and components is complete. Prototype materials, tooling, and test equipment, as well as personnel skills, have been demonstrated on components in a production-relevant environment, but many manufacturing processes and procedures are still in development.	▪ Conduct technology production relevant environment demonstration ▪ Develop Manufacturing Strategy ▪ Identify enabling/critical technologies and components ▪ Identify and document key design performance parameters ▪ Identify special tooling/facilities/material handling/skills
4	**Capability to produce the technology in a laboratory environment.** ▪ This level of readiness acts as an exit criterion for the Materiel Solution Analysis (MSA) Phase approaching a Milestone A decision. Technologies should have matured to at least TRL 4. This level indicates that the technologies are ready for the Technology Development Phase of acquisition. Producibility assessments of design concepts have been completed. Key design performance parameters have been identified as well as any special tooling, facilities, material handling and skills required.	▪ Demonstrate ability to produce technology in a lab environment ▪ Develop producibility assessments of design concepts ▪ Identify and document key design performance parameters ▪ Identify special tooling/facilities/material handling/skills
3	**Manufacturing Proof of Concept Developed.** ▪ This level begins the validation of the manufacturing concepts through analytical or laboratory experiments. Experimental hardware models have been developed in a laboratory environment that may possess limited functionality.	▪ Design experimental hardware models ▪ Plan and execute lab-level manufacturing experiments ▪ Prototype component production in relevant environment demonstration
2	**Manufacturing Concepts Identified.** ▪ This level is characterized by describing the application of new manufacturing concepts. Applied research translates basic research into solutions for broadly defined military needs.	▪ Identify and document new manufacturing concepts of project's scientific principles
1	**Basic Manufacturing Implications Identified.** ▪ Basic research expands scientific principles that may have manufacturing implications. The focus is on a high-level assessment of manufacturing opportunities. The research is unfettered.	▪ Analyze manufacturing implications of project's scientific principles and incorporate into reports/studies

Scale	Transition Confidence Level (TCL): Accepted by procurement partners?	OE-I Critical Activities
9	▪ Transition to PEO funding and acquisition strategy completed.	
8	▪ Signed transition agreement between PM and technology developer. ▪ Transition funding committed.	▪ Finalize and sign transition agreement ▪ Verify funding commitment with program office
7	• Integration strategy defined. • Transition cost estimate complete. • Potential funding sources identified.	▪ Co-develop integration strategy with program office ▪ Complete transition cost estimate and work with program office to secure funding commitment ▪ Identify potential funding sources
6	▪ Transition technical goals approved by acquisition PM and technology developer. ▪ Transition schedule estimate developed. ▪ Project included in PM plans as a potential source.	▪ Finalize transition technical goals with program office and secure approval ▪ Co-develop transition schedule estimate with program office ▪ Verify with program office PM that the project is being considered for integration into the program baseline as a potential source
5	▪ Expressed interest from PM office. ▪ Active communication with named PM contact.	▪ Onboard Program of Record PM ▪ Conduct discussions with potential program offices to determine if their portfolios have performance requirements/gaps/opportunities to leverage the advanced technology ▪ Conduct deep dive discussions with program PM to determine transition technical goals ▪ Initiate cost estimate planning
4	▪ Target PMs briefed and provided progress updates. ▪ Key transition stakeholders named. ▪ Relevant programs named.	▪ Set up recurring engagements with program office PM POC ▪ Create and maintain a transition stakeholder tracker ▪ Potential transition stakeholders identified—set up a communication plan to engage stakeholders
3	▪ Specific project technical goals established. ▪ Target acquisition programs identified. ▪ Potential transition stakeholders identified.	▪ Verify TRL goals are established (baseline) from TRL 2 ▪ Establish specific project technical goals ▪ Review potential transition pathways and identify potential program offices (see list of PEOs, org charts) ▪ Reach out to program offices to present project and request a PM POC to help with transition; add the PM to OE-I project team ▪ Identify transition stakeholders (S&T, acquisitions, requirements communities)
2	• Project initiated. • TRL goals established (baseline).	
1	• Working Group interest expressed. • Active tech discovery. • Acknowledged gap.	

Scale	Requirements Readiness Level (RRL): Aligned to validated, funded requirement?	OE-I Critical Activities
9	▪ Technology meets Funded JCIDS or Service validated requirement; CNS (for Software Acquisition pathway); technology addresses validated eKPP or related JPR, KPP, KSA from Capability Development Document (CDD), Enterprise Capability Document (ECD), or Service equivalent.	
8	▪ Technology meets Unfunded JCIDS or Service validated requirement; technology addresses validated eKPP or related JPR, KPP, KSA from Capability Development Document (CDD), Enterprise Capability Document (ECD), or Service equivalent (ref unfunded requirement (UFR) lists).	▪ Verify and document project meets a JCIDS validated Requirement or service/OSD policy goal
7	▪ Technology meets Pre-validated (i.e., draft) JCIDS or Service requirement; technology addresses eKPP or related JPR, KPP, KSA from Capability Development Document (CDD), Enterprise Capability Document (ECD), or Service equivalent.	▪ Validate need for a materiel/non-materiel approach to meet an OSD, Joint, Combatant Command, and/or Service defined capability need or service/OSD policy goal
6	▪ Technology meets the needs expressed in the Chairman's Risk Assessment or similar Joint Capability Development assessment or study.	▪ Validate the project's initial capabilities align to concepts of operation (CONOPS) to meet (1) an OSD, Joint, Combatant Command, and/or Service defined capability need with documented buy-in from service or CCMD staff at GO/FO level (Example: IPL or Capability Development Document (CDD)) and/or (2) a documented service/OSD policy goal
5	▪ Technology meets the needs expressed in Combatant Command Integrated Priority List (IPL) or similar statement of support from one or more combatant commanders (memo, public statements, etc.).	▪ Validate the project's initial capabilities align to concepts of operation (CONOPS) to meet needs for (1) an OSD, Joint, Combatant Command, and/or Service defined capability with documented buy-in from service or CCMD staff at working level (Example: an Initial Capabilities Document) and/or (2) a documented Service/OSD policy goal
4	▪ Technology meets the needs expressed in formal DoD or Services strategies for capability development, budgeting, or concepts of operations.	▪ Conduct research that connects the project's basic technologies to concepts of operation (CONOPS) for (1) a defined capability need mission and/or (2) a documented Service/OSD policy goal
3	▪ Technology aligns to Joint Concept of Operations.	▪ Conduct research that connects the project's basic technologies to concepts of operation (CONOPS) for a mission and/or OSD/Service policy goal
2	▪ Technology aligns to Joint or Service need expressed in lessons learned or warfighter feedback from experimentation, exercises, or operations (e.g., JLLIS).	▪ Conduct research in support of studies that connect basic technologies to combatant command, OSD, Joint or Service needs
1	▪ Technology aligns with a general Joint or Service need expressed in studies or analysis. Or an informal, promising "idea" or "user story" relayed by "boots on the ground" (i.e., Lessons Learned, Field Reports, informal warfighter feedback, etc.).	▪ Conduct initial research in support of studies that connect basic technologies to DoD-related needs

Scale	Warfighter Readiness Level (WRL): Warfighter endorsed and adopted?	OE-I Critical Activities
9	▪ The project is fielded to operational units and becomes an integral part of the military culture. Warfighters endorse its use, and it is fully embedded in Doctrine, Organization, Training, Materiel, Leadership and Education, Personnel, Facilities, and Policy (DOTMLPF-P). This ensures the technology is fully embraced and operationally effective.	▪ Conduct comprehensive training sessions to ensure warfighters are fully proficient with the technology ▪ Gather and document warfighter endorsements and testimonials to support cultural integration ▪ Review and update DOTMLPF-P to reflect the technology's integration
8	▪ Training programs are developed to familiarize warfighters with the technology. Projects with a warfighter on the development team progress quicker, as they provide input from the end-user perspective during the design phase. This ensures warfighters have the necessary skills and knowledge to effectively use the technology.	▪ Develop training programs and workshops to familiarize warfighters with the technology ▪ Include warfighters on the development team to provide input from the end-user perspective ▪ Conduct simulations and exercises to explore the technology's capabilities and gather feedback ▪ Consider leveraging OSD the Warfighter Touchpoint Tool for collecting feedback at demos/experiments/exercises (https://cristlgov.com/auth/signup)
7	▪ The technology is deployed in limited operational trials, with warfighters providing feedback on usability and effectiveness. Money is allocated to purchase the project at scale, supporting the warfighter's ability to execute the mission. This involves warfighters in the evaluation process to ensure the technology meets their needs.	▪ Organize limited operational trials with warfighters to gather feedback on usability, training, and effectiveness ▪ Secure funding commitments for full-scale deployment by demonstrating value and impact ▪ Document and analyze feedback to refine the technology, improve training TTP's and ensure it meets operational needs ▪ Consider leveraging the OSD Warfighter Touchpoint Tool for collecting feedback at demos/experiments/exercises ((https://cristlgov.com/auth/signup)
6	▪ The technology is adopted across relevant units, with continuous adaptation and support to address emerging challenges. Project developers coordinate with educational institutions to develop and mature training packages, ranging from "on the job training" to curriculum development for new career fields. This ensures the necessary infrastructure and training are in place to support widespread use.	▪ Develop, mature, and distribute detailed training packages in collaboration with CCMDs, SEOs, and educational institutions ▪ Establish a support system for continuous adaptation and troubleshooting to address emerging challenges ▪ Ensure infrastructure is in place to support widespread use, including facilities and logistics ▪ Consider leveraging OSD the Warfighter Touchpoint Tool for collecting feedback at demos/experiments/exercises (https://cristlgov.com/auth/signup)
5	▪ Policies and procedures are developed to support the technology's integration, with warfighters involved in shaping guidelines and training. This shaping includes deployment, employment, and disposition policies as well as the affiliated initial design and development of the Mission Essential Task List (METL) inputs. The project is inserted into a collective training event under operational conditions to understand its fit within doctrine and Tactics, Techniques, Procedures (TTPs). Feedback is captured for senior leaders making acquisition decisions.	▪ Involve warfighters in shaping policies and procedures to ensure practicality and acceptance ▪ Conduct field demonstrations under operational conditions to validate the technology's fit within doctrine ▪ Capture and analyze feedback from demonstrations to inform policy & training development and support acquisition decision-making in concert with CCMD and SEO POCs ▪ Consider leveraging OSD the Warfighter Touchpoint Tool for collecting feedback at demos/experiments/exercises (https://cristlgov.com/auth/signup)
4	▪ Leadership and education efforts focus on building advocacy among key personnel. Leaders are trained to understand and communicate the technology's benefits. This is a critical step to transition from a science and technology project to a program of record, indicating support by end-users for adoption and purchase at scale.	▪ Train leaders to understand and advocate for the technology, emphasizing its benefits and applications ▪ Secure endorsements from key leadership, CCMDs, and SEOs to support transition to a program of record ▪ Develop communication materials to effectively convey the technology's value to users and stakeholders ▪ Consider leveraging OSD the Warfighter Touchpoint Tool for collecting feedback at demos/experiments/exercises (https://cristlgov.com/auth/signup)
3	▪ The technology is assessed for its fit within existing organizational structures, with adjustments made to align with current processes. Tests allow developers to gather diagnostic data, with warfighter participation critical for replicating realistic conditions and offering operationally informed feedback.	▪ Conduct lab and field tests with warfighter participation to gather diagnostic data and feedback ▪ Assess the technology's fit within existing organizational structures and make necessary adjustments ▪ Begin planning with CCMD and SEO POCs for integrating the technology into existing inventory and logistics systems ▪ Consider leveraging OSD the Warfighter Touchpoint Tool for collecting feedback at demos/experiments/exercises (https://cristlgov.com/auth/signup)
2	▪ Warfighter consultation and validate end user requirements. Warfighters engage in discussions about the technology's implications for Doctrine and Organization. Service labs and industry must gain support from Combatant Commands (CCMDs) and/or Service Energy Offices (SEOs), demonstrated by a letter of support. This assesses how the technology fits within existing command structures and roles.	▪ Engage warfighters in discussions about the technology's implications for Doctrine and Organization ▪ Validate requirements the S&T project team has curated during RRL research activities ▪ Secure letters of support and POCs from CCMDs and/or Service Energy Offices to demonstrate stakeholder backing ▪ Assess how the technology fits within existing command structures and roles
1	▪ Warfighters are introduced to the technology concept, with initial discussions and briefings raising awareness and gauging interest. DOD innovation investments are aligned with warfighter needs, ensuring the technology aligns with current and future operational concepts. This could be a "technology pull" if Warfighter has an existing requirement the technology solves or could be a "technology push" if there is not a codified, existing requirement.	▪ Engage Warfighters from both the CCMDs and the Services' Supporting Commands to ensure joint mission execution and Organize/Train/Equip (O/T/E) presentation of forces perspectives ▪ Conduct initial briefings and discussions to raise awareness and gauge interest in the technology ▪ Align technology development with DOD innovation investments and warfighter needs ▪ Explore how the technology aligns with current and future operational concepts ▪ Leverage this information to conduct RRL research to identify initial requirements as possible