

Developing Sustainable National Institutions



EOD Capability Development Framework

*Nationally owned, sustainable EOD capability
through targeted engagements, technical
excellence, institutional development, and
impactful partnerships.*

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Multi-Phased Capability Development Model

The EOD Capability Development Framework illustrates a scalable pathway for developing sustainable national EOD capability through the integration of technical proficiency and institutional development. It provides a structured approach to strengthening national EOD systems while remaining adaptable to country-specific needs, priorities, existing capabilities, and available resources.



Although presented as a progressive model, the framework is not intended to be prescriptive. Individual technical assistance, assessments, workshops, training events, or institutional development activities from any phase may be implemented independently or combined across multiple phases to support targeted requirements or comprehensive national capability development programs.

Guiding Principles

National Ownership

Sustainable EOD capability must be led, managed, and maintained by national institutions.

Institutional Development

Long-term capability depends on governance, doctrine, leadership, quality management, and resource planning; not technical training alone.

Tailored Assistance

Programs are designed around national priorities, existing capabilities, and operational requirements rather than a standardized sequence.

Partnership

Success is achieved through collaboration with national authorities, donors, implementing partners, and regional organizations.

Sustainability

Activities should reduce long-term reliance on external support while strengthening national self-sufficiency.

Continuous Improvement

Capability development is iterative. Assessment, mentoring, validation, and refinement continue throughout implementation.

Phased Implementation

Implement the Complete Framework When:

- A country is transitioning from active clearance operations to residual explosive ordnance management and requires a sustainable national EOD capability.
- A national authority is establishing or rebuilding an EOD capability following conflict, instability, or institutional reform.
- A government seeks to transform externally supported EOD activities into a nationally owned and managed capability.
- A donor or national authority is implementing a multi-year program to develop national EOD institutions, operational capability, and long-term sustainability.
- A comprehensive assessment identifies deficiencies across multiple components of the national EOD system, including personnel, training, doctrine, governance, quality management, and sustainment, that require an integrated development approach.

Implement Individual Components When:

- A national EOD capability exists but requires improvement in a specific technical or institutional area.
- A country requires specialized training or mentoring to address an identified capability gap.
- A national authority is updating doctrine, standards, SOPs, or training curricula to align with current operational requirements or international standards.
- An existing EOD school or training center requires assistance to improve instructor capability, course quality, or accreditation.
- An assessment identifies deficiencies within a specific element of the EOD system that can be addressed through targeted technical assistance.
- A program seeks to strengthen a specific institutional function, such as quality management, operational assurance, logistics, or sustainment.
- A donor-funded project has discrete objectives that can be achieved without implementing a comprehensive national capability development program.

In-Country Mentors

Experienced U.S. military EOD veterans will embed within the partner nation to serve as the Country Manager for multi-year capability development engagements. The In-Country Mentor provides daily advising, leadership mentoring, coordination with national authorities, oversight of institutional development activities, and continuity between training events to ensure sustained progress toward national ownership.

- Permanent or long-term presence.
- Country Manager.
- Relationship builder.
- Ensure continuity.
- Coordinates the overall program.
- Focused on institutional development.

Mobile Training Teams

Deployable teams of experienced U.S. military EOD veterans will deliver specialized technical instruction, advanced capabilities, assessments, validation exercises and quality assurance in support of national capability development. The MTT provides focused expertise at key points throughout the framework while working alongside the In-Country Mentor to strengthen national institutions and operational capability.

- Temporary, mission-specific deployments.
- Delivers specialized expertise.
- Conducts training and validation.
- Reinforces and expands capability.
- Focused on technical delivery.

Training Courses

Explosive Ordnance Disposal Level 1

Foundational training for personnel entering national EOD teams and conducting assigned operations under team-leader supervision.

Course Description

The EOD Level 1 Course develops the knowledge, safety discipline and practical skills required to conduct authorized Level 1 EOD tasks under supervision. Training combines classroom instruction, practical exercises and live demolition operations to prepare personnel for entry-level employment within a national EOD capability.

Core Subject Areas

- EOD roles, IMAS requirements and authorization limits.
- Explosive theory, ordnance recognition and fuzes.
- Safety, equipment, team operations and reporting.
- Demolition fundamentals, firing systems and explosive handling.
- EOD response, search and safe access.
- Disposal techniques, protective works and post-blast procedures.

Practical Application

- Prepare and initiate demolition charges using electric and non-electric firing systems.
- Conduct live disposal of designated explosive ordnance and construct protective works.
- Conduct open-pit burning of small-arms ammunition.
- Complete mentored EOD response scenarios under team-leader supervision.

WHO SHOULD ATTEND

Military, police, civil-defense and mine-action personnel selected for entry-level EOD duties.

COURSE OUTCOME

Graduates are prepared to conduct authorized Level 1 EOD tasks safely under supervision and progress to advanced EOD training.

COUNTRY DELIVERY: Course length, class size, interpretation, equipment and practical activities are tailored through a country-specific assessment.

Contribution to National EOD Development

STANDARDIZE	OPERATIONALIZE	PROGRESS
Establishes a common foundation in safety, terminology, procedures and reporting.	Develops supervised response and disposal skills for designated Level 1 tasks.	Creates a structured starting point for advanced EOD training and national instructor development.

Explosive Ordnance Disposal Level 2

Progressive training for EOD Level 1 personnel conducting authorized Level 2 assessment, movement, render-safe and multiple-item disposal operations.

Course Description

The EOD Level 2 Course develops the technical knowledge and practical skills required to conduct authorized Level 2 EOD operations. Training emphasizes advanced ordnance recognition, risk assessment, reconnaissance, movement, limited render-safe procedures, and multiple-item disposal while preparing personnel to support Level 3 operations.

Core Subject Areas

- Level 2 roles, IMAS requirements and authorization limits.
- Advanced explosive theory, fuzes, weapon effects and explosive trains.
- Ordnance recognition, threat assessment and EOD decision-making.
- Reconnaissance, search, detection, remote handling and operational planning.
- Movement, transportation, storage and ammunition accountability.
- Demolition planning, initiation systems and multiple-item disposal.

Practical Application

- Conduct reconnaissance, search and hazard assessment using authorized equipment.
- Assess, package, transport and account for explosive ordnance.
- Conduct authorized render-safe and multiple-item disposal operations.
- Apply post-shot, misfire and emergency procedures during mentored scenarios.

WHO SHOULD ATTEND

Qualified EOD Level 1 military, police, civil-defense and mine-action personnel selected for authorized Level 2 duties.

COURSE OUTCOME

Graduates are prepared to conduct authorized Level 2 assessment, movement, render-safe, transportation, storage and disposal operations while supporting Level 3 activities.

COUNTRY DELIVERY:

Course length, class size, interpretation, equipment and practical activities are tailored through a country-specific assessment.

Contribution to National EOD Development

ASSESS	OPERATE	PROGRESS
Develops advanced identification, threat assessment and risk-based decision-making for complex EOD tasks.	Builds authorized movement, render-safe, storage, transport and multiple-item disposal capability.	Prepares personnel to support Level 3 operations and continue through a structured national EOD pathway.

Explosive Ordnance Disposal Level 3

Advanced training for qualified EOD Level 2 personnel who will plan, lead and assure complex conventional EOD operations.

Course Description

The EOD Level 3 Course develops the advanced technical, operational and leadership competencies required to conduct and supervise complex conventional EOD operations. Training emphasizes technical assessment, render-safe planning, remote operations, specialized disposal techniques and mission leadership while preparing personnel to lead EOD teams and assure operational quality.

Core Subject Areas

- Level 3 responsibilities, IMAS requirements and organizational authorization.
- Advanced explosive theory, ordnance analysis and fuzes.
- Technical assessment, reconnaissance, detection and diagnostic techniques.
- Render-safe planning, remote equipment and specialized procedures.
- Demolition planning, low-order techniques and controlled disposal operations.
- Leadership, risk management, quality assurance and mission planning.

Practical Application

- Conduct advanced technical assessments and develop appropriate courses of action.
- Plan and supervise authorized render-safe, movement and remote operations.
- Lead demolition and controlled disposal operations using appropriate safety controls.
- Supervise EOD teams and complete quality assurance and operational reporting.

WHO SHOULD ATTEND Qualified EOD Level 2 military, police, civil-defense and mine-action personnel selected to lead complex EOD operations.	COURSE OUTCOME Graduates are prepared to lead authorized Level 3 EOD operations, supervise subordinate personnel, manage operational risk and assure technical quality.
COUNTRY DELIVERY: Course length, class size, interpretation, equipment and practical activities are tailored through a country-specific assessment.	

Contribution to National EOD Development

LEAD	ASSURE	SUSTAIN
Develops the technical judgment and leadership required to plan and command complex EOD operations.	Builds supervision, certification, quality-management and organizational risk-control capability.	Creates senior operators able to develop procedures, mentor personnel and strengthen national EOD institutions.

Advanced Explosive Theory

Advanced theoretical training for EOD Level 3+ personnel responsible for technical assessment, planning, supervision and risk-informed decision-making.

Course Description

The Advanced Explosive Theory Course develops an advanced understanding of explosive science, munition effects and energetic materials to support technical assessment and EOD planning. Training emphasizes explosive behavior, hazard analysis and effects-based decision-making in accordance with IMAS and IATG guidance. This course is theory-based and does not authorize render-safe procedures or Free-From-Explosive certification.

Core Subject Areas

- Explosive chemistry, energetic materials and reaction mechanisms.
- Explosive performance, sensitivity and detonation characteristics.
- Blast physics, fragmentation and hazard effects.
- Shaped charges, EFPs, initiation systems and insensitive munitions.
- Commercial explosives, propellants, rocket motors and ageing hazards.
- Hazard classification, FFE principles and environmental considerations.

Applied Technical Analysis

- Analyze explosive characteristics and expected performance.
- Assess blast, fragmentation and explosive effects.
- Evaluate ageing, degradation and emerging hazards.
- Apply hazard classification and effects-based technical analysis.

WHO SHOULD ATTEND Qualified EOD Level 3/3+ personnel, senior technicians, supervisors and technical advisers.	COURSE OUTCOME Graduates apply advanced explosive theory to improve technical assessment, planning and risk-informed EOD decision-making.
COUNTRY DELIVERY: Course length, class size, interpretation and technical emphasis are tailored through a country-specific assessment.	

Contribution to National EOD Development

DEEPEN Builds advanced national expertise in explosive science, munition effects and energetic-material hazards.	ANALYZE Strengthens technical assessment, risk analysis and effects-based planning for complex EOD tasks.	ADVISE Develops senior personnel able to support supervision, standards, authorization and technical decision-making.
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Bulk Demolitions

Specialists live-range training for EOD Level 3 personnel responsible for planning, supervising and conducting bulk demolition operations above 50 kg NEQ.

Course Description

The Bulk Demolitions Course develops the planning, supervisory and technical skills required to conduct controlled bulk demolitions above 50 kg NEQ. Training emphasizes demolition planning, explosive calculations, range management, safety controls and post-demolition accountability through supervised live-range operations.

Core Subject Areas

- Governing standards, authorization and range leadership.
- Ordnance assessment, demolition planning and explosive calculations.
- Demolition-site selection, danger areas and protective measures.
- Range command, communications and emergency management.
- Electric and non-electric initiation systems and demolition procedures.
- Environmental protection, post-demolition inspection and reporting.

Practical Application

- Develop demolition plans and explosive calculations for bulk demolitions.
- Prepare demolition stacks and initiation systems.
- Command supervised live-range demolition operations.
- Conduct post-demolition inspections, explosive accounting and reporting.

WHO SHOULD ATTEND Qualified EOD Level 3 personnel selected for bulk demolition authorization.	COURSE OUTCOME Graduates are prepared to plan, supervise and conduct authorized bulk demolition operations within approved organizational limits.
COUNTRY DELIVERY: Course length, class size, interpretation, explosive support and practical activities are tailored through a country-specific assessment.	

Contribution to National EOD Development

AUTHORIZE	CONTROL	SUSTAIN
Establishes a structured pathway for written authorization of national bulk-demolition supervisors.	Strengthens range command, demolition planning, safety and emergency-management systems.	Develops national capacity to dispose of large explosive stocks safely and accountably.

Basic Chemical Ordnance

Specialist training for EOD Level 3 personnel supporting operations involving suspected chemical ordnance within Basic-level authority.

Course Description

The Basic Chemical Ordnance Course develops the knowledge and practical skills required to safely recognize, assess and support operations involving suspected chemical ordnance. Training emphasizes hazard recognition, protective measures, detection, contamination control and specialist coordination. The course does not authorize intrusive sampling, render-safe procedures, neutralization or final disposal.

Core Subject Areas

- IMAS framework, responsibilities and Basic-level authority.
- Chemical-agent properties, toxicology and hazard recognition.
- PPE selection, use and operational limitations.
- Ordnance recognition, detection and monitoring.
- Hazard assessment, zoning and contamination control.
- Casualty management, reporting and specialist coordination.

Practical Application

- Select and use PPE and contamination-control procedures.
- Operate detection equipment and establish hazard zones.
- Assess suspected chemical ordnance and implement protective measures.
- Conduct casualty support, decontamination and specialist handover.

WHO SHOULD ATTEND

Qualified EOD Level 3 personnel selected for Basic Chemical Ordnance duties.

COURSE OUTCOME

Graduates are prepared to recognize suspected chemical ordnance, establish protective controls and coordinate safe response actions within Basic-level authority.

COUNTRY DELIVERY:

Course length, class size, interpretation, equipment and practical activities are tailored through a country-specific assessment.

Contribution to National EOD Development

PROTECT	CONTROL	COORDINATE
Builds disciplined use of PPE, detection, zoning and contamination controls for suspected chemical hazards.	Develops safe initial actions, reporting and non-intrusive measures within authorized limits.	Strengthens escalation, casualty support and handover to national authorities and specialist teams.

Explosive Ordnance Technical Publications Development

Building sustainable national systems for accurate, standardized explosive-ordnance technical documentation.

Course Description

This course prepares personnel to develop, maintain and manage national explosive ordnance technical publications. Training emphasizes technical examination, data collection, standardized documentation and publication management through a guided publication-development project.

Core Subject Areas

- Technical publication purpose, standards and lifecycle management.
- Munition examination, identification and technical data collection.
- Photography, imagery, technical research and documentation.
- Technical writing, formatting and hazard information.
- Quality assurance, revision control and document management.
- Publication planning, databases and long-term sustainment.

Practical Application

- Conduct technical examinations of representative explosive ordnance.
- Collect and validate technical data, imagery and research.
- Develop a technical publication using approved templates.
- Conduct quality assurance and incorporate reviewer feedback.

WHO SHOULD ATTEND

EOD specialists, technical intelligence personnel, instructors, engineers and publication managers responsible for national ordnance reference systems.

COURSE OUTCOME

Graduates are prepared to develop standardized technical publications and support a sustainable national publication management system.

COUNTRY DELIVERY:

Course length, class size, interpretation and practical activities are tailored through a country-specific assessment.

Contribution to National EOD Development

DOCUMENT	CONTROL	SUSTAIN
Creates standardized, technically accurate explosive-ordnance reference products for operational and training users.	Establishes review, approval, revision, numbering and archive processes that protect publication integrity.	Builds an enduring national capability to update publications as threats, inventories and technical information change.

Operational Management

Management training for EOD leaders responsible for planning, coordinating, supervising and sustaining operational capability.

Course Description

The Operational Management Course prepares EOD leaders to plan, coordinate and manage safe, effective day-to-day operations. Training emphasizes operational leadership, mission planning, resource management, risk management, organizational procedures and continuous improvement to strengthen operational readiness and performance.

Core Subject Areas

- Operational leadership, organizational structures and accountability.
- Mission planning, coordination and operational execution.
- Personnel, logistics, readiness and resource management.
- Risk management, reporting and decision support.
- SOP development, document control and procedural improvement.
- Performance measurement, lessons learned and continuous improvement.

Practical Application

- Develop operational plans and allocate personnel and resources.
- Prepare logistics, communications and support arrangements for EOD operations.
- Develop or review SOPs and reporting procedures.
- Conduct after-action reviews and develop improvement plans.

WHO SHOULD ATTEND EOD team leaders, supervisors, operations officers and managers responsible for planning and supervising EOD operations.	COURSE OUTCOME Graduates are prepared to plan, coordinate and manage EOD operations while improving organizational readiness, safety and performance.
COUNTRY DELIVERY: The 10-day course, participant composition and workshop activities are tailored through a country-specific assessment.	

Contribution to National EOD Development

PLAN	CONTROL	IMPROVE
Translates national and organizational priorities into coordinated, resourced and executable EOD operations.	Strengthens leadership, accountability, readiness, risk management and standardized operational practices.	Builds reporting, lessons-learned and performance systems that sustain organizational effectiveness.

Capability Management

Strategic leadership training for senior personnel responsible for developing, governing and sustaining national EOD capability.

Course Description

The Capability Management Course prepares senior leaders to develop and sustain national EOD capability through effective governance, institutional development and long-term planning. Training emphasizes capability assessment, organizational development, workforce systems, resource management, quality assurance and strategic engagement to support nationally owned and sustainable EOD programs.

Core Subject Areas

- National capability assessment, gap analysis and development planning.
- Governance, organizational structures and policy frameworks.
- Workforce development, certification and succession planning.
- Resource management, equipment, lifecycle and sustainment.
- Standards, quality assurance and performance management.
- Strategic partnerships, donor engagement and national sustainability.

Practical Application

- Assess national EOD capability and identify institutional gaps.
- Develop a phased national capability development roadmap.
- Design governance, assurance and workforce systems.
- Prepare strategies supporting national ownership and long-term sustainability.

WHO SHOULD ATTEND Senior military, police and civil-defense leaders, ministry officials, national EOD commanders and personnel responsible for institutional development	COURSE OUTCOME Graduates are prepared to develop national EOD capability through effective governance, workforce development, resource management and long-term strategic planning.
COUNTRY DELIVERY: The 10-day course, participant composition and workshop activities are tailored through a country-specific institutional assessment.	

Contribution to National EOD Development

GOVERN Establishes clear authorities, organizational structures, policies and national accountability systems.	DEVELOP Builds workforce, training, certification, resources and assurance systems around national priorities.	SUSTAIN Creates a practical pathway from external assistance to nationally managed and continuously improving capability.
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Training Center Management

Institutional training-system development for personnel responsible for establishing, managing and sustaining professional training centers.

Course Description

The Training Center Management Course prepares personnel to establish, manage and continuously improve professional training centers that deliver high-quality, competency-based instruction. Training emphasizes curriculum development, instructor development, training operations, quality assurance and institutional sustainment to build effective national training systems.

Core Subject Areas

- Adult learning and competency-based training systems.
- Curriculum development, lesson planning and assessment.
- Instructor development, evaluation and certification.
- Training operations, scheduling, logistics and records management.
- Quality assurance, course evaluation and accreditation.
- Resource planning, staffing and long-term sustainment.

Practical Application

- Conduct a training-needs analysis and develop a competency-based course framework.
- Develop lesson plans, assessments and instructional materials.
- Design instructor development and certification systems.
- Prepare a training center operations and sustainment plan.

WHO SHOULD ATTEND Training center managers, curriculum developers, instructor supervisors, quality assurance personnel and organizational leaders responsible for institutional training systems.	COURSE OUTCOME Graduates are prepared to establish and manage professional training centers, develop competency-based curricula, prepare instructors and sustain effective national training systems.
COUNTRY DELIVERY: The 10-day course, participant composition and workshop activities are tailored through a country-specific training-system assessment.	

Contribution to Institutional Development

DESIGN Establishes competency-based curricula, assessments and training programs linked to organizational requirements.	DELIVER Builds qualified instructors, reliable operations and consistent systems for managing professional training.	SUSTAIN Creates quality-assurance, resource and succession systems that support long-term institutional capability.
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Workshops

Facilitated, high-impact workshops that enable national stakeholders to collaboratively develop the policies, plans, governance structures and institutional products required to build sustainable EOD capability.

National Plan Development

Strategic planning workshop for developing a nationally owned vision, priorities and implementation roadmap for sustainable EOD capability.

Workshop Description

The National Plan Development Workshop brings together national stakeholders to establish a shared vision, identify capability gaps and develop a phased roadmap for building and sustaining national EOD capability. The workshop aligns strategic priorities, governance and resources to support long-term national ownership.

Workshop Focus

- National capability assessment
- Strategic objectives and priorities
- Governance and stakeholder roles
- Resource planning
- Implementation roadmap
- Performance measures

Primary Participants

Senior government leaders, national authorities, EOD leadership, security stakeholders, finance and planning representatives.

Expected Outputs

- National capability vision
- Capability gap assessment
- Strategic objectives and milestones
- Governance framework
- National implementation roadmap

Force Management and Design

Capability design workshop for developing the organizations, workforce, equipment and support systems required to deliver national EOD capability.

Workshop Description

The Force Management and Design Workshop defines the personnel, organizational structures, equipment and infrastructure required to implement the approved national capability. The workshop produces a practical force-development plan aligned with national priorities and available resources.

Workshop Focus

- Mission and task analysis
- Organizational design
- Workforce requirements
- Equipment and infrastructure
- Career pathways
- Force development planning

Primary Participants

EOD commanders, operations and training leaders, human resources personnel, logisticians, planners and supporting ministries.

Expected Outputs

- Organizational structure
- Workforce model
- Equipment requirements
- Infrastructure requirements
- Phased force-development plan

Curriculum Development

Curriculum design workshop for developing nationally owned, competency-based training systems that generate and sustain EOD capability.

Workshop Description

The Curriculum Development Workshop develops a competency-based training framework aligned with national operational requirements. Participants create the structure, governance and development plan required to produce standardized national training and certification programs.

Workshop Focus

- Training needs analysis
- Competency framework
- Course architecture
- Learning objectives

- Assessment strategy
- Curriculum governance

Primary Participants

Training center leaders, instructors, subject matter experts, certification authorities and curriculum developers.

Expected Outputs

- Competency framework
- Course architecture
- Assessment strategy
- Program of Instruction
- Curriculum governance process

Doctrine and SOP Development

Doctrine development workshop for creating standardized policies, doctrine and operating procedures that support safe, consistent national EOD operations.

Workshop Description

The Doctrine and SOP Development Workshop develops the policies, doctrine and standardized procedures required to govern national EOD operations. The workshop establishes document-control processes and implementation plans that promote consistency, safety and continuous improvement.

Workshop Focus

Doctrine hierarchy

- Roles and authorities
- Operational procedures
- Safety and reporting
- Document control
- Implementation planning

Primary Participants

National authorities, EOD technical leaders, operators, quality management personnel, legal and policy representatives, and supporting agencies.

Expected Outputs

- Doctrine framework
- Standard operating procedures

- Roles and responsibilities
- Document-control process
- Implementation and compliance plan

Point of Contact Details

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A technically successful training program can still fail as capacity building if the institution cannot sustain what was built. Individual technicians transfer, instructors leave, equipment ages, and leadership changes. Sustainable capability exists when the institution can absorb those changes and continue to recruit, train, equip, manage, and develop its EOD force. The objective is not to build an American EOD program in another country, but to help partner nations establish EOD institutions they can own, operate, adapt, and sustain themselves.