



Integrated Training Area Management

STEWARDSHIP REPORT 2017



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This Report

The Stewardship Report on the U.S. Army Europe Integrated Training Area Management program is published annually and reports performance and accomplishments for all program components.

The report covers the period from January 1 to December 31, 2017. For further information and an electronic version of this and our previous reports, visit our website or Facebook page:

<https://srp.usareur.army.mil>

<http://www.facebook.com/usareur.srp>

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7th ATC Organization



Joint Multinational Readiness Center



7th Army NCO Academy



Joint Multinational Simulation Center



International Special Training Center



Training Support Activity Europe



Combined Arms Training Center



Grafenwoehr Training Area

Our Mission

7th Army Training Command (7th ATC) provides dynamic training, preparing U.S., NATO and partner-nation forces to execute Unified Land Operations and contingency missions.

7th ATC is uniquely organized to support the U.S. Army's training requirements for units stationed in or forward deployed to Europe. As the Army's only unified training command, we have an organic ability to provide training from the individual Soldier through to Joint Task Force Headquarters.

Location Matters

We are centrally located among the highest concentration of U.S. allies and partners in the world. By routinely training together with 7th ATC, allies and partners build trust, develop interoperability and set the conditions for creating the strong coalitions that will guarantee peace and security in the region.

Exportable Training Anywhere, Anytime

7th ATC's expeditionary training teams bring efficient and effective training solutions anywhere they are needed in Europe, Africa and beyond.

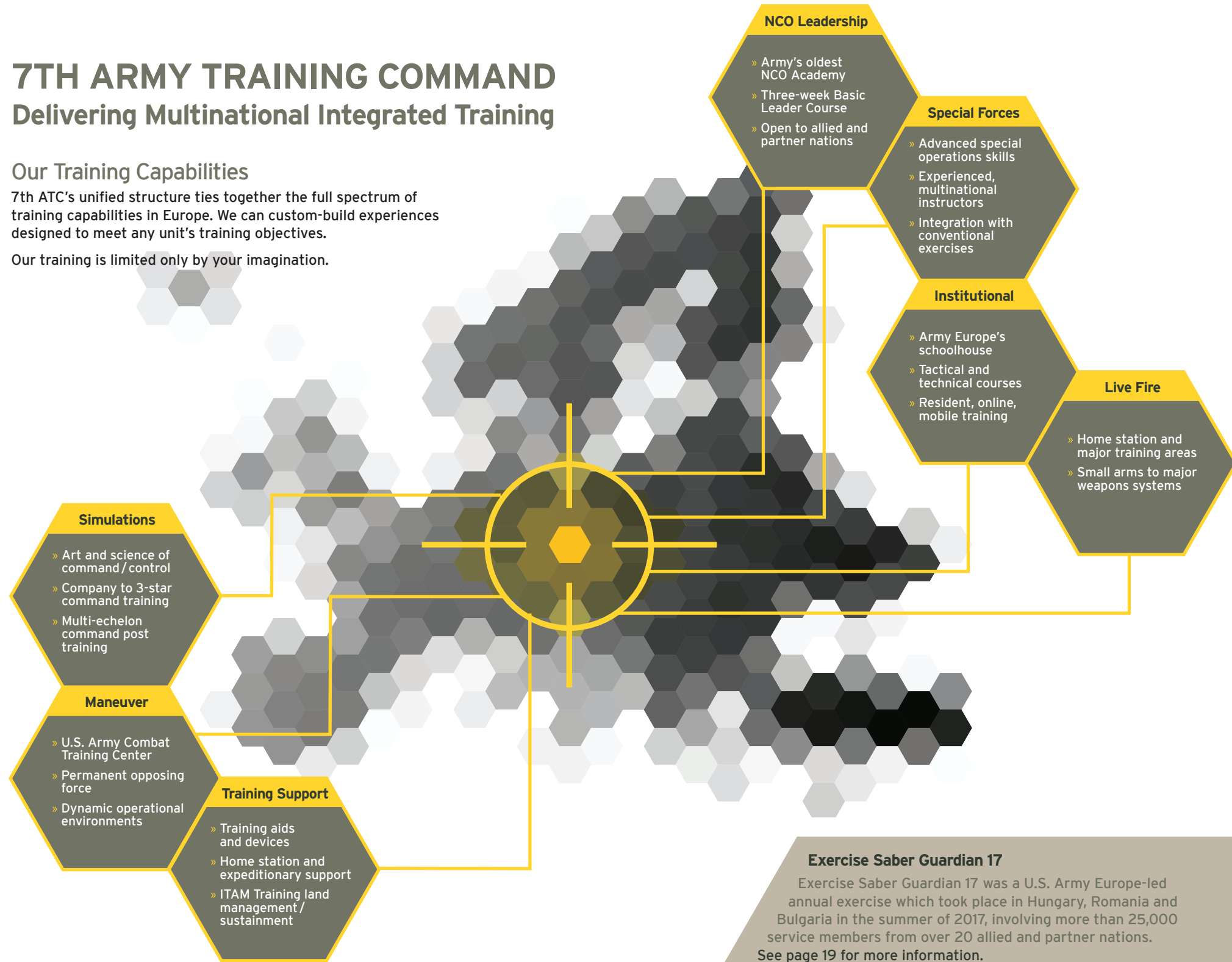
7TH ARMY TRAINING COMMAND

Delivering Multinational Integrated Training

Our Training Capabilities

7th ATC's unified structure ties together the full spectrum of training capabilities in Europe. We can custom-build experiences designed to meet any unit's training objectives.

Our training is limited only by your imagination.



Exercise Saber Guardian 17
 Exercise Saber Guardian 17 was a U.S. Army Europe-led annual exercise which took place in Hungary, Romania and Bulgaria in the summer of 2017, involving more than 25,000 service members from over 20 allied and partner nations. See page 19 for more information.

LETTER FROM THE COMMANDER

I am pleased to present the annual Stewardship Report on the U.S. Army Europe Integrated Training Area Management (ITAM) program for 2017.

7th Army Training Command (7th ATC) is the U.S. Army's largest overseas training command. By integrating a unified training command with sound land management techniques, 7th ATC provides realistic and relevant training to U.S. Army, Joint Service, NATO and allied units and leaders.

7th ATC is conscious of a very special and a very certain responsibility. Simply put, we must sustain the training land platform and continually enhance training realism for the Soldier. ITAM has proven that managing land for realistic military training and for biodiverse ecosystems are not mutually exclusive principles. ITAM has set the model for achieving sustainability by following proven best land management practices and using innovative technologies.

We cannot achieve this mission alone. Integration is a key theme of the 2017 Stewardship Report. None of the accomplishments cited in this report could have been achieved without the dedication of our valued partners.

7th ATC's commitment to stewardship remains steadfast. The Command's intention is to provide a candid assessment of our achievements and challenges. We are always pleased to receive feedback; the ITAM contact details can be found on the contents page.

Army Strong, Strong Europe!

Antonio A. Aguto Jr.
 Brigadier General, U.S. Army
 Commanding



**Army Strong,
 Strong Europe!**

CONTEXT WHO WE ARE

U.S. Army General Curtis Scaparrotti, Commander,
U.S. European Command and Supreme Allied Commander Europe,
April 26, 2017



**"We're stronger together
when we're working together."**



U.S. Army Europe

USAREUR Mission

USAREUR trains and leads Army Forces in support of U.S. European Command and Headquarters, Department of the Army by:

- » Training and preparing full spectrum capable forces for global employment
- » Strengthening alliances and building partner capacity and capability
- » Providing Army Service Component Command and Title 10 support
- » Continually seeking to improve the readiness and quality of life of our Soldiers, Army Families and Civilian workforce

[facebook.com/USArmyEurope](https://www.facebook.com/USArmyEurope)
twitter.com/USArmyEurope



7th Army Training Command

7th ATC Mission

Headquartered in Grafenwoehr, Germany, 7th ATC is the U.S. Army's largest overseas training command. Our combat maneuver and simulation centers, live-fire ranges, classrooms and facilities provide realistic, tailor-made training solutions to U.S., NATO and partner-nation units and leaders.

7th ATC provides dynamic training, preparing forces to execute Unified Land Operations and contingencies in support of the Combatant Commands, NATO, and other national requirements. It is a unique institution, efficiently and effectively providing innovative multinational training solutions for an uncertain future.

We are centrally located among the highest concentration of U.S. allies and partners in the world.

[facebook.com/7thATC](https://www.facebook.com/7thATC)
twitter.com/7thATC



Training Support Activity Europe

TSAE Mission

TSAE identifies, acquires, manages and provides state-of-the-art home station, rotational and expeditionary training support and visual information capability as directed by USAREUR to prepare 7th ATC forces to win in any operating environment, and serves as 7th ATC's point of contact for training support.

[facebook.com/TrainingSupportActivityEurope](https://www.facebook.com/TrainingSupportActivityEurope)



Sustainable Range Program

SRP Mission

The U.S. Army's Sustainable Range Program (SRP) comprises the ITAM program and the Range and Training Land Program. The SRP's mission is to maximize the capability, availability and accessibility of ranges and training land to support doctrinal training, mobilization and deployments.

[facebook.com/USAREUR.SRP](https://www.facebook.com/USAREUR.SRP)



Integrated Training Area Management

ITAM Mission

ITAM is a management and decision-making process that integrates training and other mission requirements for land use with sound natural resource management practices.

ITAM is a core program within the Army's SRP under the direction of the Chief, Training Support Systems Division, Office of the Deputy Chief of Staff, G-3/5/7.

ITAM:

- » Develops methods to maintain natural environments that are resilient and resistant to military use
- » Provides capabilities to establish land condition monitoring on training lands (Range and Training Land Assessment)
- » Provides an awareness program for land users (Sustainable Range Awareness)
- » Provides means to apply training loads to land capabilities, resulting in land management that ensures that training does not stop due to non-compliance with environmental laws (Training Requirement Integration and Geographic Information System)
- » Sustains the Army's live training capability (Land Rehabilitation and Maintenance)

CONTEXT ITAM MISSION

CONTEXT 2017 ITAM PRIORITIES

ITAM Mission Maximize the capability, availability and accessibility of training land to support doctrinal training, mobilization and deployments

Lines of Effort

Objectives

1 Training Requirements Integration	Provide a training support procedure that integrates training requirements with management of natural and cultural resources
2 Range and Training Land Assessment	Characterize and monitor an installation's natural resources, geospatially and temporally
3 Land Rehabilitation and Maintenance	Implement preventive and corrective land repair projects that ensure availability, accessibility and capability of training lands
4 Sustainable Range Awareness	Promote visibility of environmentally sensitive issues and instill a stewardship ethic among unit commanders, ground troops and neighboring communities
5 Geographic Information System	Provide accurate, complete and standardized spatial data. GIS data and products adhere to Federal, DoD and Army spatial data standards

TENETS

OUTREACH

INTEGRATED
MANAGEMENT

INFORMATION
EXCELLENCE

- » Integrated management of a training land platform capable of supporting a trained and ready force
- » Enhanced multinational interoperability / standardization and partnership capacity
- » Authoritative information, proactively disseminated to training planners

USAREUR ITAM is proud to support:



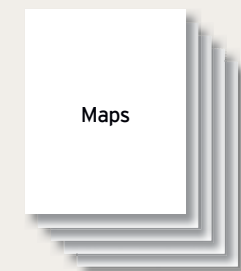
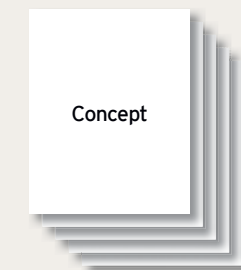
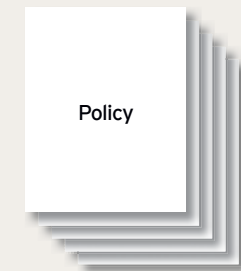
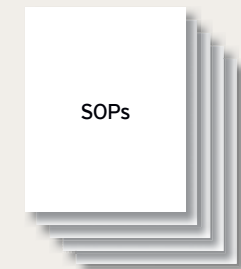
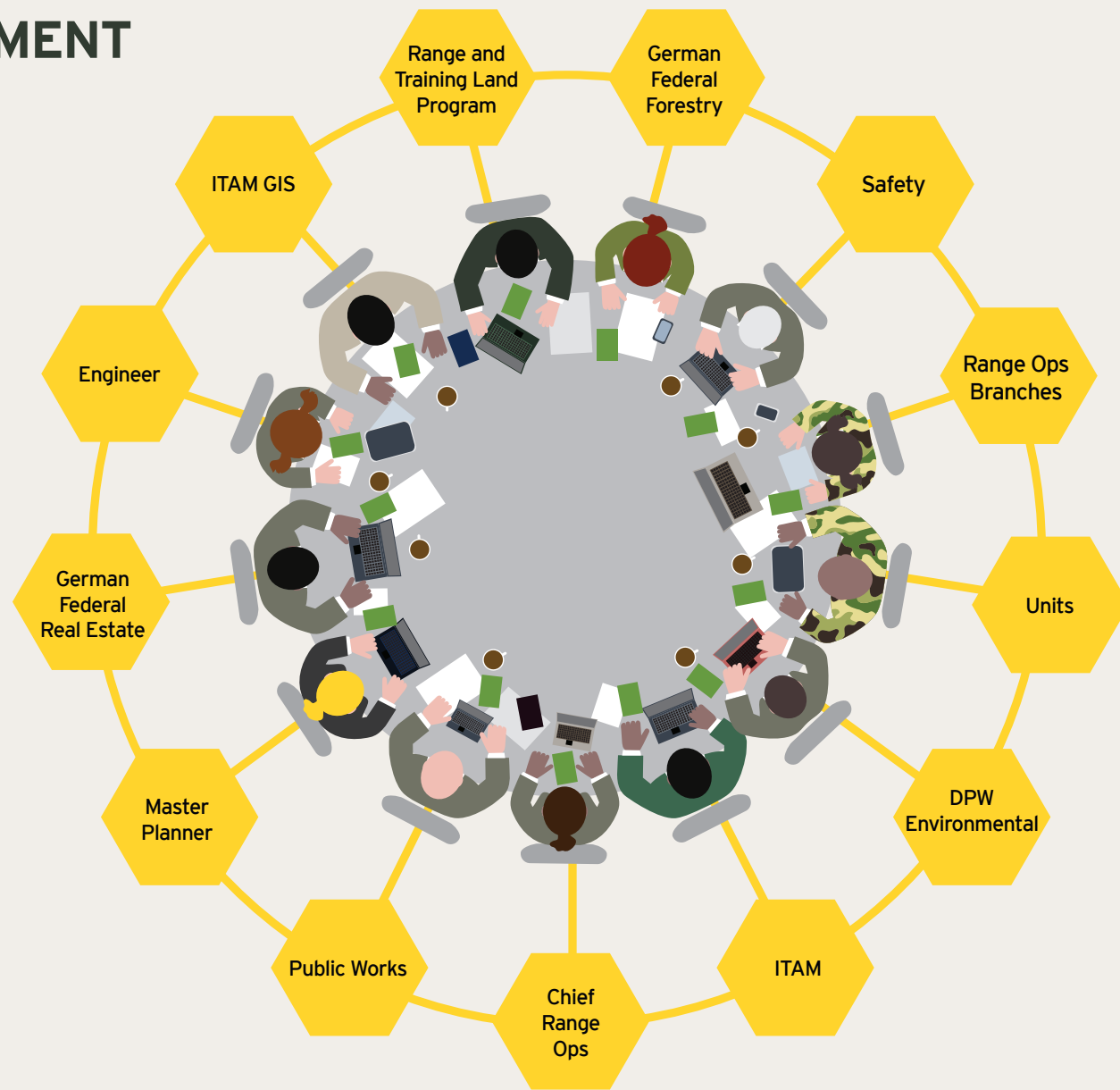
ITAM IN PRACTICE INTEGRATED MANAGEMENT

Integrated Management is the first principle of the U.S. Army Sustainable Range Program.

ITAM strives to bring the many military and non-military stakeholders together to proactively find win-win solutions which benefit military training and the environment.

Training Area Working Groups are quarterly installation meetings which provide an open forum for all stakeholders to discuss training area and live-fire range management. Themes include management topics, such as:

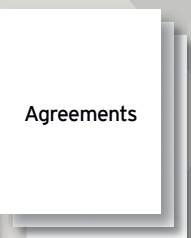
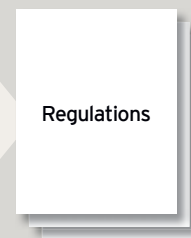
- » Annual hunting and forest harvest maps
- » Reconfiguration project ideas
- » Changes in training area utilization by units
- » Requests to add or extend off-limit areas
- » Safety concerns
- » Grazing and associated fauna, flora and habitat management issues



Training Area Level

Command Level

Supranational Level



Themes

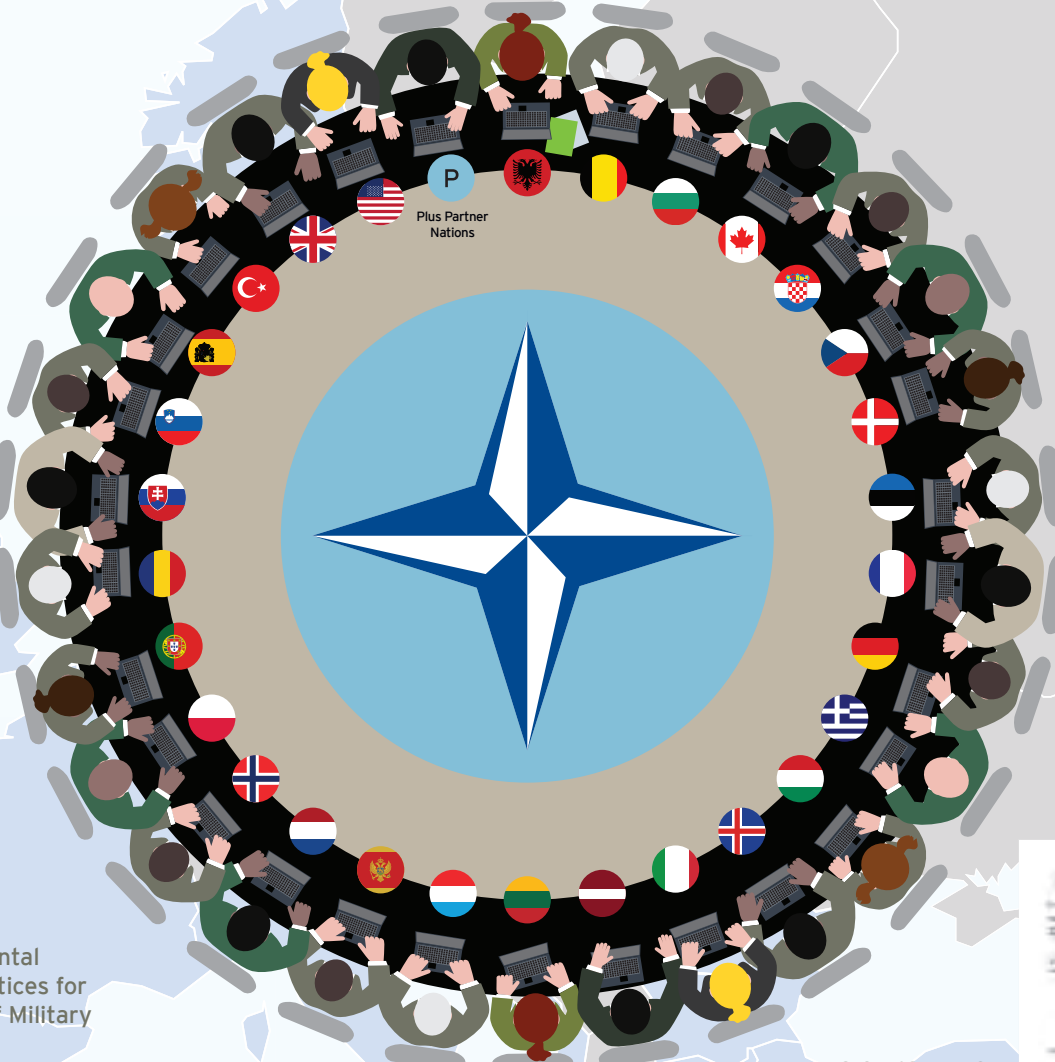


ITAM IN PRACTICE DELIVERING NATO STANDARDS

In 2017, ITAM continued to provide significant support to North Atlantic Treaty Organization (NATO) Working Groups and Panels, which have made significant progress in developing environmental protection (EP) policies and doctrine.

Addressing EP considerations as an integral part of planning and executing NATO military activities can significantly support mission success. Within NATO, the Environmental Protection Working Group (EPWG) has produced NATO EP policy and multiple EP Standardized Agreements (STANAGs).

U.S. and NATO EP policy, guidance documents and resources promote common standards and procedures for environmental management, which support interoperability, simplify compliance with environmental laws and contribute to the mission. As multinational exercises and operations become the norm for U.S. forces, EP standards will provide a 'common language', ensuring sustainability of the environment and the mission.



Publication

USAREUR ITAM, in cooperation with the Netherlands Armed Forces, published 'Sustainability for Defense', an overview of NATO's EP initiatives. This publication appears in the September-December 2017 edition of the U.S. Army Engineer School Journal *Engineer*. (<http://www.wood.army.mil/engrmag>)

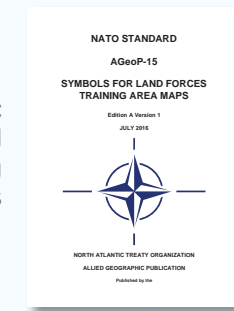
Training

NATO provides support for one EP distance learning and two EP resident courses:

- » Advanced Distance Learning O33, Introduction to Environmental Awareness, is available on the NATO Joint Advanced Distributed Learning platform. (<https://jadl.act.nato.int>)
- » The M3-77 Environmental Management for Military Forces Course, hosted by the NATO School in Oberammergau, Germany, is a two-week course aimed at officers, operational planners and civilian equivalents involved with EP. (<http://www.natoschool.nato.int>)
- » The NATO Military Environmental Protection, Practices, and Procedures Course, hosted by the Military Engineering Centre of Excellence in Ingolstadt, Germany, is a one-week course aimed at commissioned and non-commissioned officers and civilian equivalents engaged in EP activities. (<http://www.milengcoe.org>)



Other policies / STANAGs that support EP considerations:

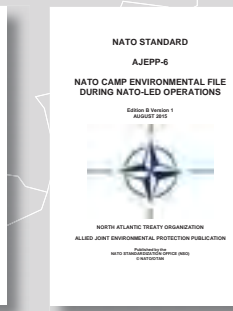
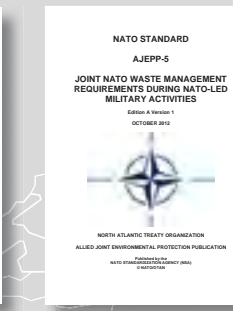
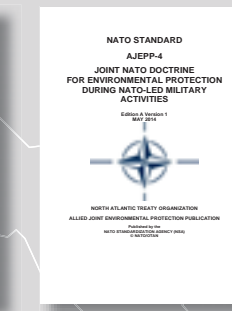
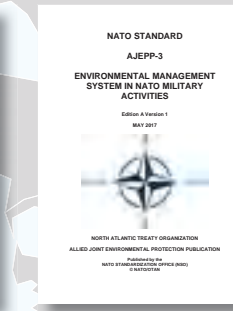
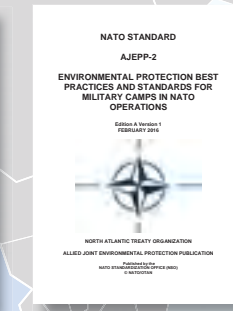


STANAG 3833:
Symbols for Land Forces Training Area Maps



STANAG 2594:
Best Environmental Protection Practices for Sustainability of Military Training Areas

MC 0469 NATO Environmental Protection Policy



Themes



ITAM IN PRACTICE PROJECT CATALOG

USAREUR ITAM executed numerous high-impact projects in 2017. ITAM projects maximize the availability, accessibility and capability of USAREUR's training land platform.

Department of the Army and U.S. Army Europe continued to provide strong funding support to the ITAM program in fiscal year 2017. This funding plays a critical role in sustaining and enhancing the USAREUR training land platform.



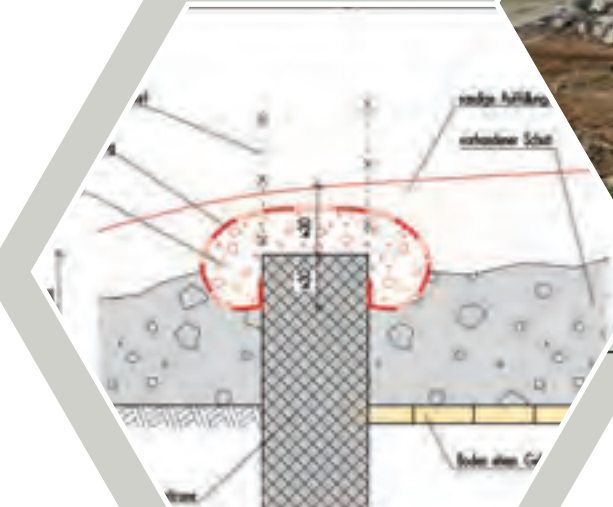
Bulk Materials, Grafenwoehr
Bulk materials for land repair and maintenance (e.g. stakes, top soil, seed and gravel), and signage, were procured in support of tasks executed by in-house Directorate of Public Works Buildings and Grounds resources on maneuver land.



Regional Support Center, USAREUR
This support included GIS data development and acquisition, implementation of Army geospatial data standards, creation of standard training area mapping products, technical GIS support and development of GIS applications and GIS analysis.



Erosion Control Repair and Maintenance, JMRC Hohenfels
The project repaired stormwater infrastructure near the Short Takeoff and Landing Airstrip, and in the Geroldsee Valley, and included the maintenance of 18 settling basins. This ensures a resilient and resistant maneuver training land platform in support of 2017 rotations and exercises.



Repair Erosion Control Infrastructure, JMRC Hohenfels
Infrastructure was damaged during a storm event and continued to deteriorate. Work included repair of five basins and 2km of ditches in the NW corner of the training area.



Maneuver Trail Repair Oberdachstetten
The project repaired 1.9km of maneuver trail that was poorly maintained over the past 10 years and cleared severe levels of encroaching vegetation.



Encroaching Vegetation Clearance Oberdachstetten
The maneuver area required extensive removal of thistle which restricted dismounted utilization. Two protected bird species are also resident and known to breed in the maneuver area.



Stormwater Drainage, JMRC Hohenfels
Work included installation of drainage ditches, culverts and low-water crossings, and expansion of two basins to increase the stormwater holding capacity. The project increased maneuver land resiliency and prevented off-post flooding of local communities in the NW corner of the training area where the highest amounts/intensities of precipitation occur.

Maneuver Area Reactivation, JMRC Hohenfels
The project removed 25ha of encroaching vegetation in maneuver areas, increased open maneuver lands and increased 'Green Light' time on drop zones for U.S. and multinational partners.

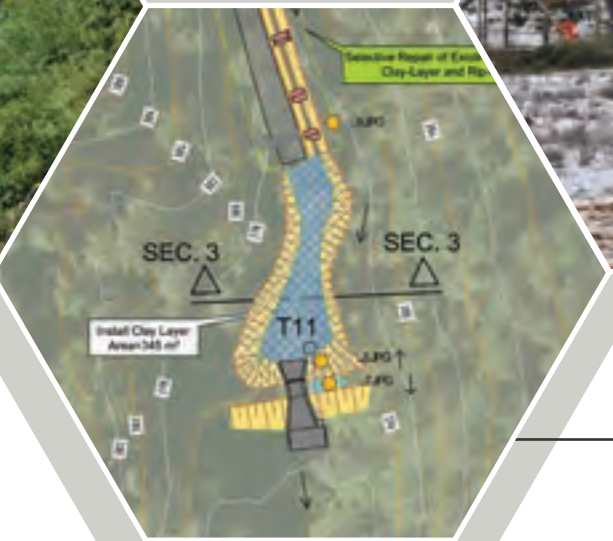


New Off-Limits Areas Management Policy

This policy provides guidance and procedures on the life cycle management of off-limits areas in the maneuver and range areas at Grafenwoehr and the Joint Multinational Readiness Center Hohenfels Training Areas.

The procedures contained in this policy will enhance the availability, accessibility and capability of USAREUR's major military training areas while ensuring forestry, environmental and safety requirements are met.

The Training Area Working Groups, which include all key training land management stakeholders, are the primary forums to vet and make recommendations to the Commander Operations Group (COG) or Chief Range Operations. The COG and the Chief Range Operations are the only approval authorities for the designation or modification of an off-limits areas.



ITAM IN PRACTICE PROTECTING BIODIVERSITY

“There is a special importance of military training grounds for the protection and maintenance of our biodiversity in Europe.”

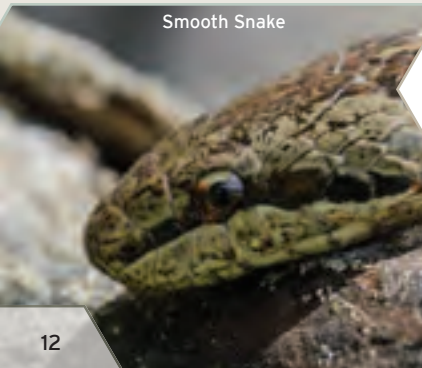
German Federal Agency for Nature Conservation (BfN)

Conservation and military training hand in hand

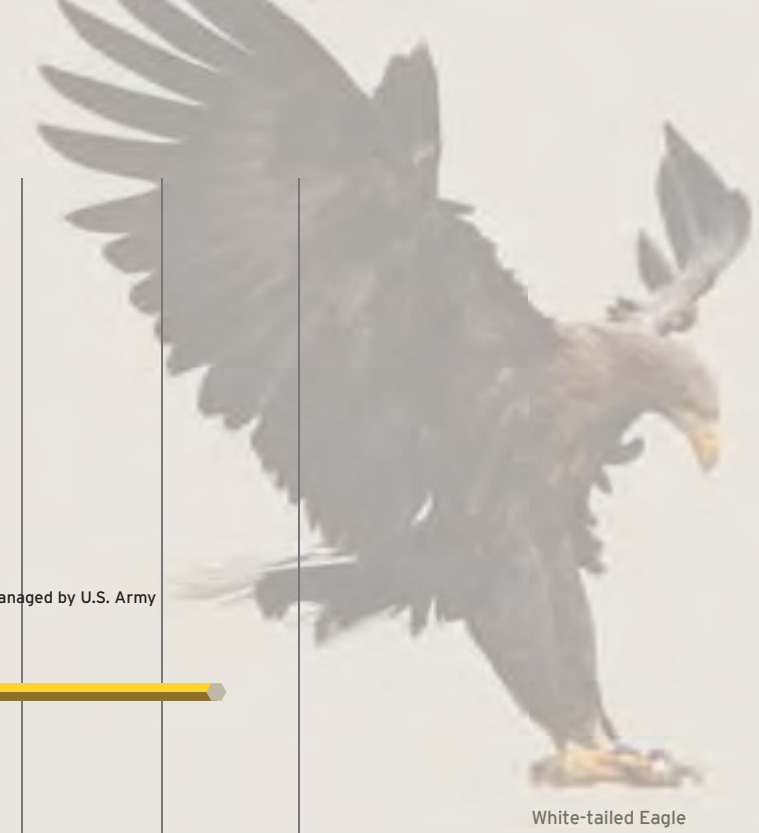
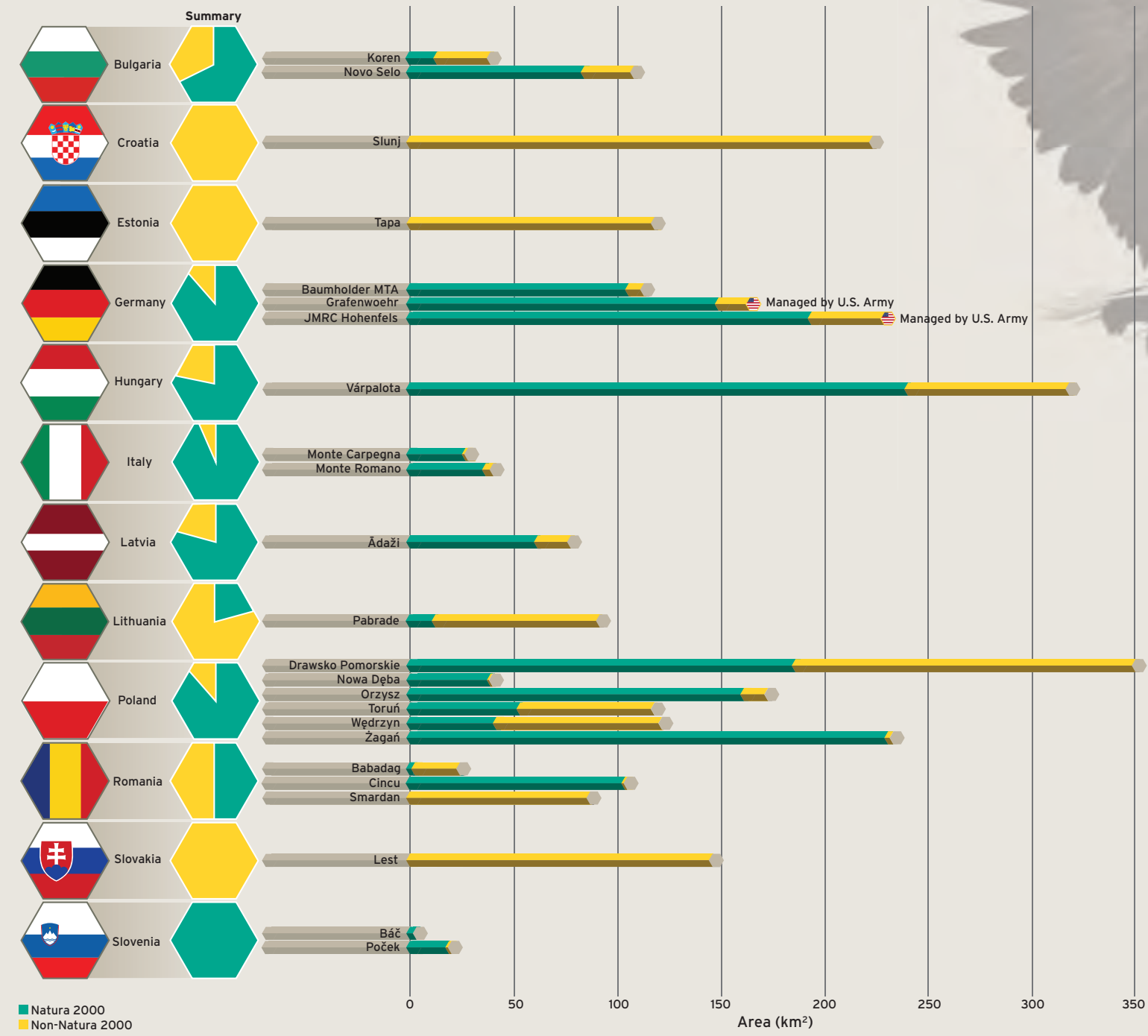
Most military training areas contain habitats which are of EU community importance and have been integrated into the Natura 2000 network of protected areas. These include habitats which feature unique characteristics and occur only when specific conditions are present, such as nutrient-poor soil or areas with regular disturbance – conditions which exist as a result of long-term military training use and ongoing management measures.

As these habitats rely on military use and, in some cases, active management measures, any changes in military training requirements, particularly those which may result in changes in land use or abandonment of training grounds, require evaluation to determine any necessary modifications to the land management regime. Surveying and monitoring of indicator species (e.g. birds, grasshoppers, butterflies) is conducted to identify any potential impacts to the ecosystem.

The military invests in the evaluation and use of best available management measures and techniques, which protect important habitats and endangered species, while simultaneously keeping training areas open. This allows military training requirements to be fulfilled and enables mission readiness.



Select Training Areas as Part of the Natura 2000 Network



White-tailed Eagle

MULTINATIONAL INTEGRATION 2017 EVENTS CALENDAR

“When it comes to security, no one goes their own way in this world alone. Security is always best when provided by a team.”

Secretary James Mattis, published on Feb 20, 2017. Mattis warns of the ‘arc of instability’ on Europe’s edge in remarks to the Munich Security Conference.

Topic	Location	Date	Proponent
Ecological Stewardship Display	Eschenbach, Germany	11-20 Jan	
Slovenia Theater Security Cooperation Visit	Ljubljana, Slovenia	17-19 Jan	
Romania Mapping Support	Cincu, Romania	13-16 Feb	
Portugal Mapping Support	Lisbon, Portugal	20-24 Feb	
Georgia Mapping Support	Tbilisi, Georgia	12-16 Mar	
Germany Local Training Areas Mapping Support	Germany	24-28 Apr	
NATO School Support	Oberammergau, Germany	04 May	
Austrian Open Land Management Workshop	National Park Neusiedler See - Seewinkel, Austria	15-19 May	
Italy Geospatial Meeting	Florence, Italy	05-09 Jun	
Esri User Conference	San Diego, California	10-14 Jul	
Esri Portal and ArcGIS Server Administrator Training	Little Rock, Arkansas	24-28 Jul	
Ukraine Mapping Support	Yavoriv, Ukraine	13-18 Sep	
Poland Mapping Support	Zagan and Torun, Poland	25-29 Sep	
Germany Local Training Areas Mapping Support	Germany	26-29 Sep	
Poland Mapping Support	Drawsko Pomorskie, Poland	16-20 Oct	
NATO School Support	Oberammergau, Germany	18 Oct	
Ukraine Mapping Support	Yavoriv, Ukraine	18-24 Oct	
LIDAR Data Transfer and GIS Training	Poczek, Slovenia	23-26 Oct	

Topic	Location	Date	Proponent
OACSIM FY17 Army IGI&S Training & Workshop	Little Rock, Arkansas	20-24 Mar	
HQDA ITAM Management Review	Fort Eustis, Virginia	03-07 Apr	
Range and Training Land Program Workshop	Redstone Arsenal, Alabama	07-11 Aug	
ITAM Workshop	Redstone Arsenal, Alabama	21-25 Aug	
HQDA ITAM Management Review	Fort Eustis, Virginia	18-22 Sep	
Exercise Capable Logistician 19 Initial Planning Conference	Drawsko Pomorskie, Poland	16-20 Oct	
Montenegro Sustainable Training Area Management	Podgorica, Montenegro	16-20 Jan	  
NATO Evaluation, Analysis and Reporting Cell	Bratislava, Slovakia	06-09 Feb	
Baltic Regional Environmental Workshop	Riga, Latvia	20-24 Mar	
Denmark Theater Security Cooperation Visit	Copenhagen, Denmark	08-10 May	
NATO Joint Geospatial Standards Working Group Panel	Prague, Czechia	08-11 May	
Bulgaria Theater Security Cooperation Visit	Sofia, Bulgaria	15-19 May	
3rd European Conference for Defense and the Environment	Helsinki, Finland	31 May-02 Jun	
Cold Regions EPHW Working Group	Oksbøl, Denmark	05-09 Jun	
NATO Environmental Protection Working Group Panel	Amsterdam, The Netherlands	05-09 Jun	
EUCOM Environmental Workshop	Germany	19-23 Jun	
Ukraine Theater Security Cooperation	Kiev and Yavoriv, Ukraine	07-11 Aug	
Natura 2000 Workshop	Riga, Latvia	28 Aug-01 Sep	
Sustainable Training Area Management Workshop	Udine, Italy	11-15 Sep	
Cold Regions EPHW Working Group	Oslo, Norway	25-26 Sep	
Danish Familiarization Visit to 7th ATC	Grafenwoehr, Germany	25-26 Oct	
Sustainable Training Area Management Workshop	Pretoria, South Africa	13-17 Nov	
Bulgarian Familiarization Visit to 7th ATC	Grafenwoehr, Germany	05-06 Dec	
NATO Environmental Protection Working Group	Brussels, Belgium	11-15 Dec	

MULTINATIONAL INTEGRATION 2017 PARTNER EVENTS

- European Deterrence Initiative**
Training area and range scoping to support execution of EDI funds which are designated to increase capability, presence, readiness and responsiveness and to deter further destabilization in Central and Eastern Europe.
- Theater Security Cooperation**
Activities conducted with allies and friends to build relationships and capabilities for self-defense and coalition operations, and provide U.S. forces with peacetime and contingency access.
- Mapping Site Visits**
Site reconnaissance visits conducted by mapping experts to survey training area and range features.
- NATO / DoD / Army Courses**
Sustainable training area management instruction blocks provided at multinational and U.S. military leadership courses.



EVENTS SPOTLIGHT



Sustainable Training Area Management Workshop Udine, Italy: 11–15 Sep

This event included representatives from the Friuli Venezia Giulia regional government, Pordenone provincial government, Italian Army Regional Command, Italian Army HQ Rome, U.S. ODC Rome, U.S. Air Force Aviano, and U.S. Army Vicenza units. The event achieved its primary objective of constructive dialogue and relationship building with Italian military and civilian representatives.



Danish Familiarization Visit to 7th ATC Grafenwoehr: 25–26 Oct

7th ATC, in cooperation with Garrison Environmental and German Federal Forestry, provided the Danish Ministry of Defense with briefings and a field tour. The visit successfully shared best practices and procedures, with an emphasis on complex management considerations for Natura 2000 habitats.



Ukraine Mapping Support Yavoriv, Ukraine: 18–24 Oct

GIS Analysts traveled to Yavoriv, Ukraine, to support Range Ops, Joint Multinational Training Group, Ukraine, with GPS/GIS support and training. ITAM's monitoring and mapping activities support future live-fire range development projects and the generation of surface danger zones.



Sustainable Training Area Management Workshop Pretoria, South Africa: 13–17 Nov

Hosted by U.S. Africa Command and the Council for Scientific and Industrial Research, this ITAM workshop assisted training area managers and users in long-term sustainability by developing and implementing integrated training area management interventions.



Bulgarian Familiarization Visit to 7th ATC Grafenwoehr: 05–06 Dec

Familiarization visit for Bulgarian military and non-military EP SMEs, including the opportunity to visit Grafenwoehr Training Area and engage with SMEs on sustainable training area management. A shared challenge is balancing EP requirements with evolving military training requirements.

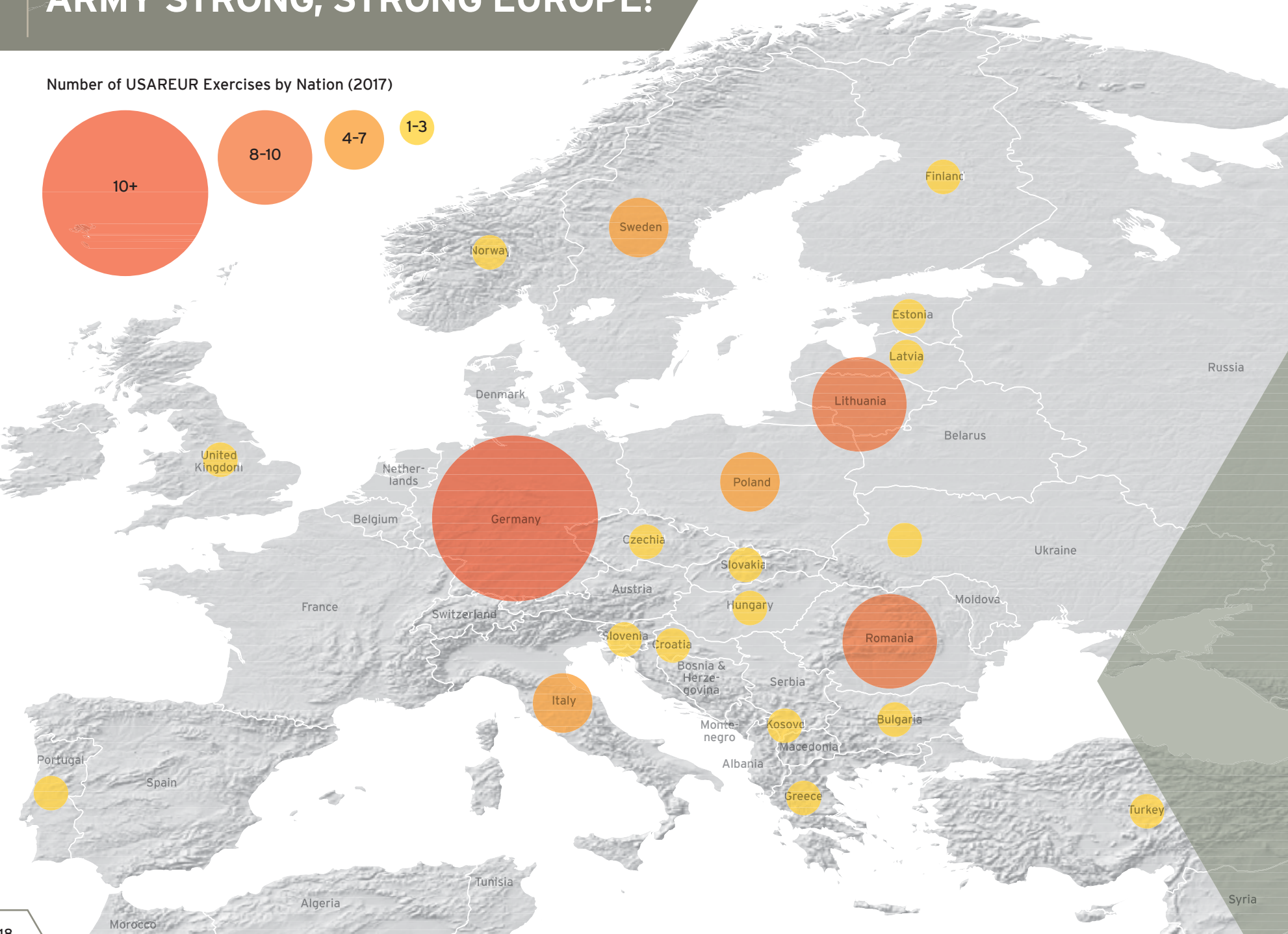
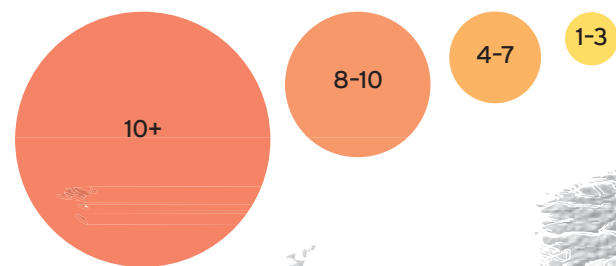


NATO Environmental Protection Working Group (EPWG) Brussels, Belgium: 11–15 Dec

The EPWG scope includes joint EP standardization, security monitoring, personnel awareness, protection during exercises and operations, and sustainability and synergies with Smart Energy. During this annual meeting, EP national experts reviewed operations, exercises, standards and military activities to further advance EP in NATO.

MULTINATIONAL INTEGRATION ARMY STRONG, STRONG EUROPE!

Number of USAREUR Exercises by Nation (2017)

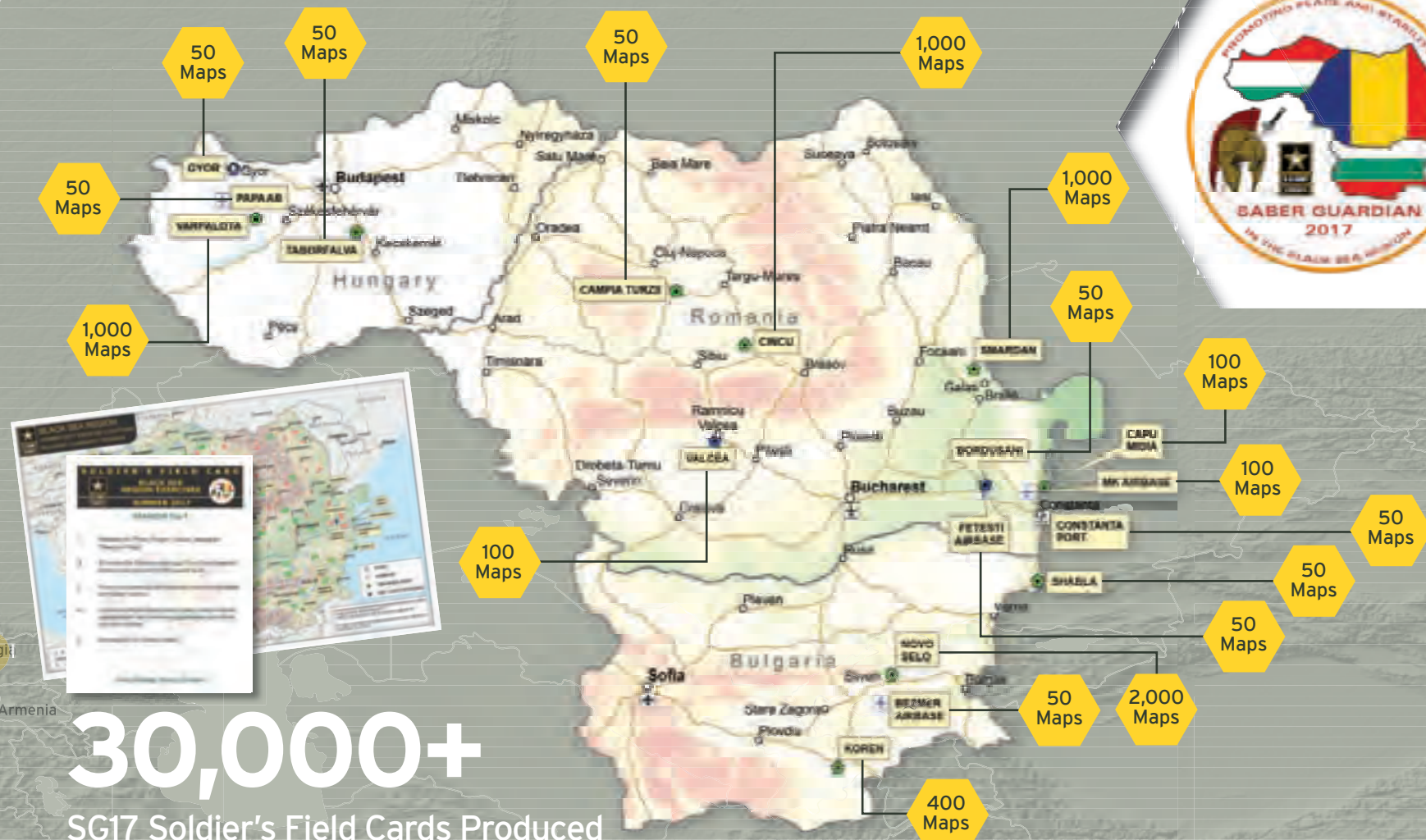


EXERCISE SABER GUARDIAN 17

Exercise Saber Guardian 17 was a U.S. European Command, U.S. Army Europe-led annual exercise which took place in Hungary, Romania and Bulgaria during summer 2017. It involved more than 25,000 service members from over 20 allied and partner nations. ITAM provided Soldier's Field Cards and maps in support of SG17.

SG17 was the largest 2017 exercise in the Black Sea Region, demonstrating the United States and NATO's superior joint and combined capabilities, and highlights our collective will to defend against regional aggression.

It represents deterrence in action.



30,000+

SG17 Soldier's Field Cards Produced



20+

Nations Involved



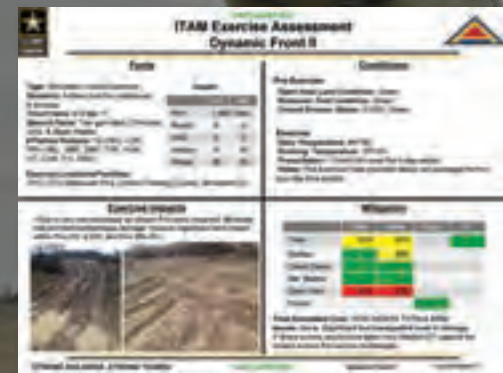
INTEGRATED TRAINING SELECT 2017 EXERCISES



Exercise Dynamic Front II Feb-Mar 2017

Nearly 1,400 participants from nine NATO nations took part in this two-week exercise at Grafenwoehr Training Area. The exercise focused on identifying limitations and solutions, while promoting Fires interoperability.

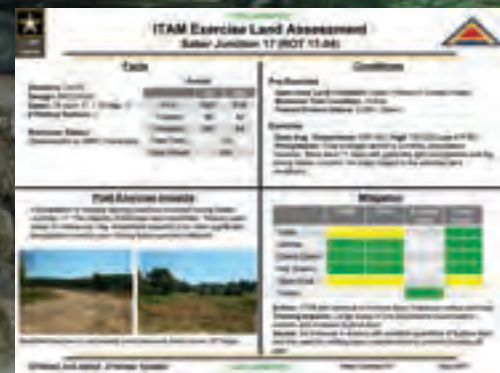
1,400
Soldier's Field Cards Produced
350
Maps Produced



Exercise Saber Junction 17 Apr-May 2017

Exercise Saber Junction 17 was a U.S. Army Europe directed exercise designed to assess the readiness of the U.S. Army's Stryker-based 2nd Cavalry Regiment to conduct unified land operations. Centered on Grafenwoehr and Hohenfels Training Areas, Saber Junction 17 included nearly 4,500 participants.

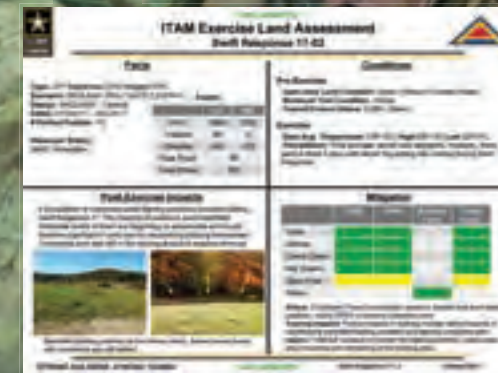
4,500
Soldier's Field Cards Produced
1,000
Maps Produced



Exercise Swift Response 17-02 Sep 2017

Swift Response 17-02 included approximately 6,000 participants from 12 NATO and European partner nations. The exercise featured multinational, airborne, joint forcible entry personnel and equipment drops; air assault operations; a force build-up using a short take-off and landing strip; and non-combatant evacuation operations.

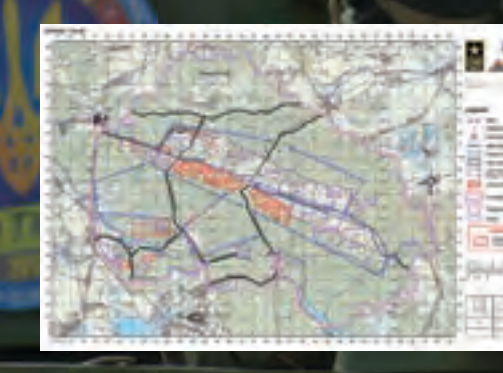
6,000
Soldier's Field Cards Produced
1,350
Maps Produced



Exercise Rapid Trident 17 Sep 2017

Based in Yavoriv, Ukraine, this annual multinational exercise was conducted between Ukraine, other Partnership for Peace nations, the U.S. and NATO allies. A main objective was to enable partners to work together with one mission: increased interoperability amongst 14 different nations to build on the goal of establishing a unified and strong Europe.

500
Soldier's Field Cards Produced
250
Maps Produced



Exercise Allied Spirit VII Oct-Nov 2017

Nearly 2,340 participants from the United States and approximately 1,700 from allied nations took part in this multinational exercise based in Hohenfels, designed to develop and enhance NATO nations' readiness and ability to work together and provide hands-on experience for testing secure communications.

4,040
Soldier's Field Cards Produced
1,000
Maps Produced



INTEGRATED TRAINING TRAINING CAPABILITIES

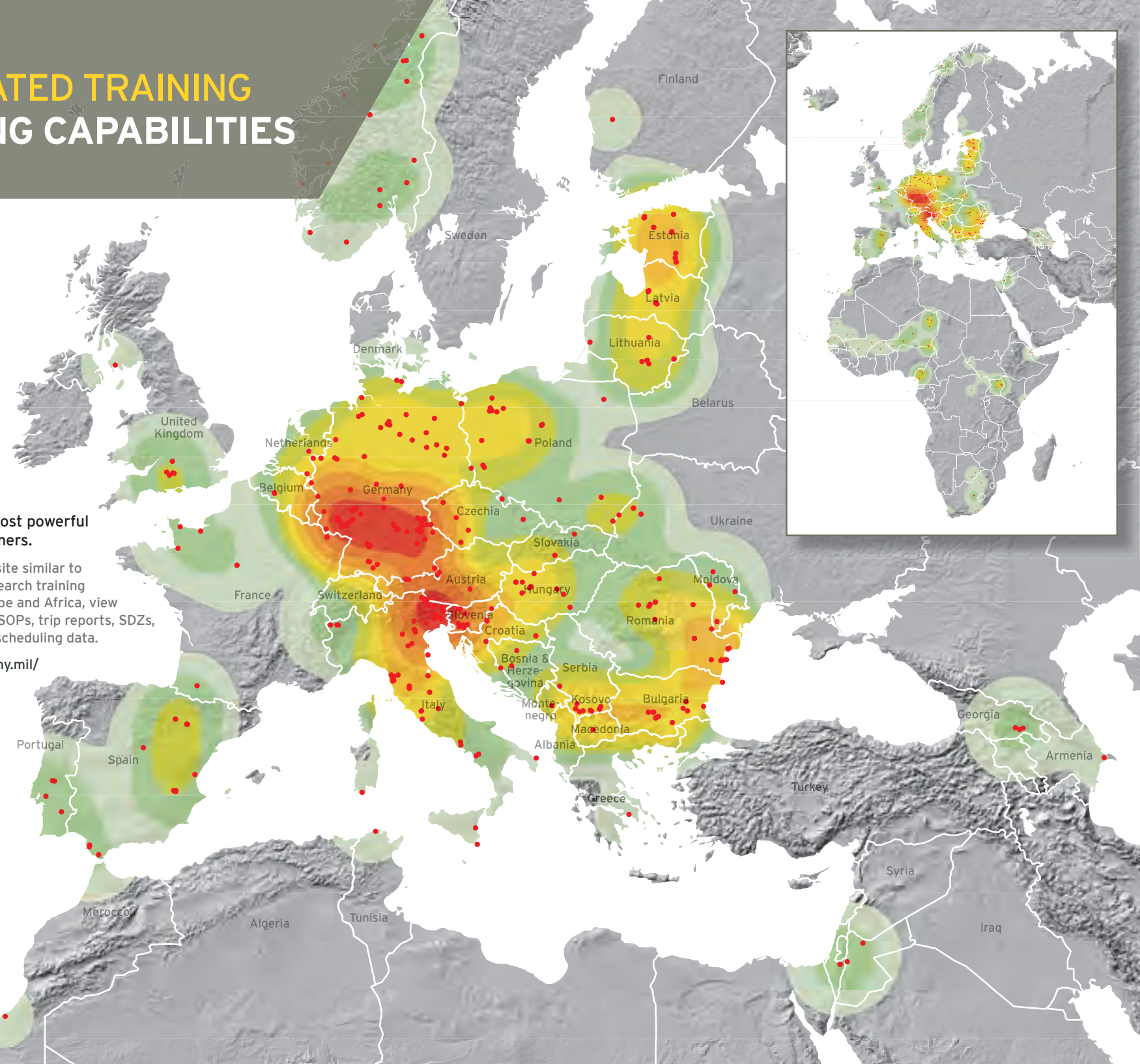
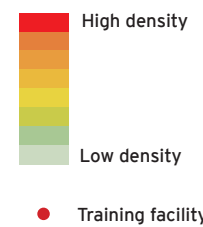


Tap In is USAREUR's most powerful portal for training planners.

Tap In is a NIPR CAC website similar to Google Maps. Users can search training facilities throughout Europe and Africa, view planning documents (e.g. SOPs, trip reports, SDZs, maps) and query RFMSS scheduling data.

Visit: <https://tapin.eur.army.mil/> or search "7ATC Tap In"

Training Capability



Visit: <https://tapin.eur.army.mil/> or search 7ATC Tap In

Just 'Tap In' to Training Capabilities



INTEGRATED TECHNOLOGIES WHO NEEDS WHAT?

10s

**Commanders /
Organization
Managers**

Commanders, Directors
and Program Managers



7th ATC
Overview
Training
Support Map



Tap In



Army Range
Mapper
Mobile App



Soldier's
Field Card
Mobile App



USAREUR
Environmental
Officer Guide
Mobile App



Training
Support
Mapping
Kiosks

1,000s

Planners

G3/S3, Master Gunners, Safety, Range and Training
Area Managers, SRP Personnel, Garrison Planners,
Environmental Officers and SMEs



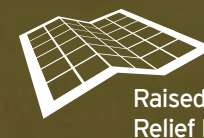
Soldier's
Field
Cards



Installation
Maps



Custom
Maps



Raised
Relief Maps



Annual
Reports



Map
Atlases



ITAM
Viewer



Studies



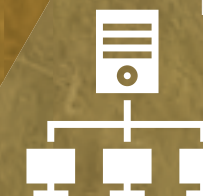
Drone
Surveys



ArcGIS
Online
Services



License Server



Data
Warehouse

10,000s

Viewers

U.S. Soldiers, Garrison
and HQ Civilians, Training
Support Civilians, Host-Nation
Agencies and select Foreign
Military Personnel

100s

GIS Analysts

Professional GIS Personnel
at SRP, Garrison, Units and
select Contractors

INTEGRATED TECHNOLOGIES DELIVERING INSIGHT

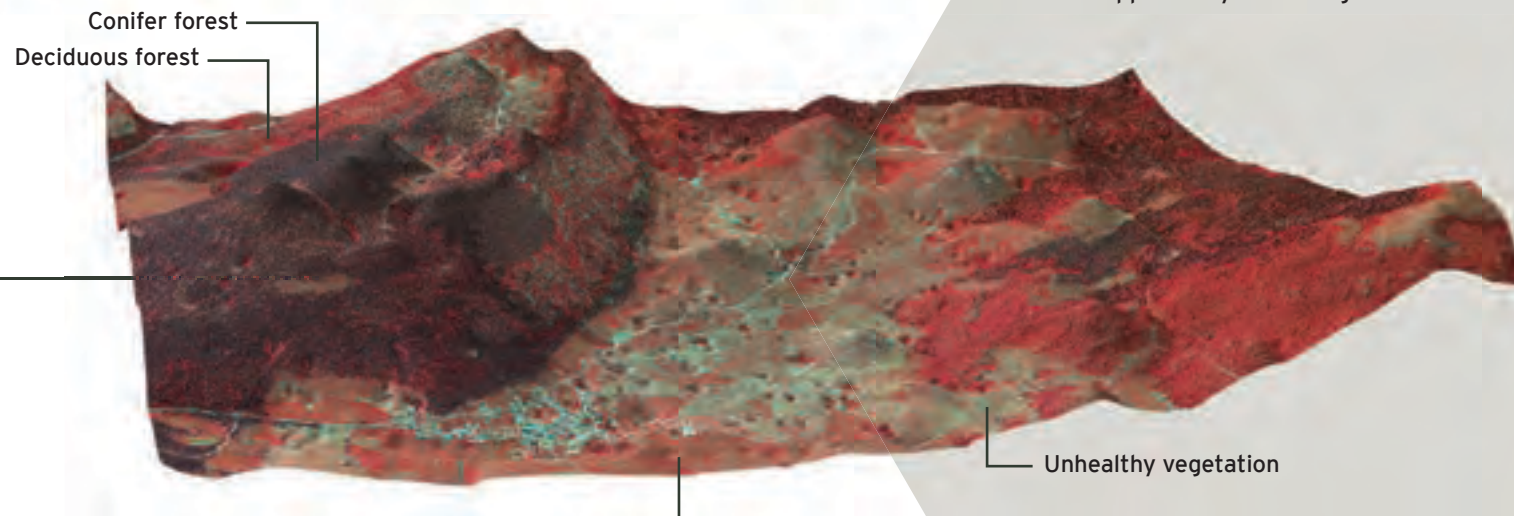
Examples of how technology delivers insight and leads to better management of training areas.



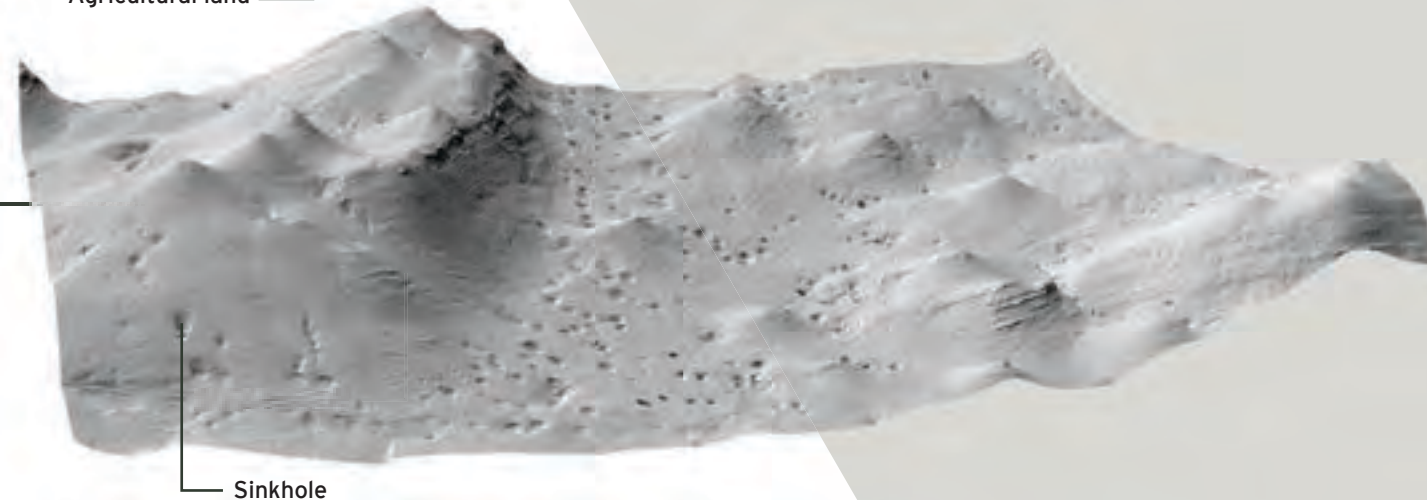
Natural Color Aerial
Aerial photography is used for trend analysis, identifying changes in land cover over time and as a basis for accurate map production.



Near Infrared Imagery
Reflected infrared light is detected to differentiate between vegetation species and identify health condition status.



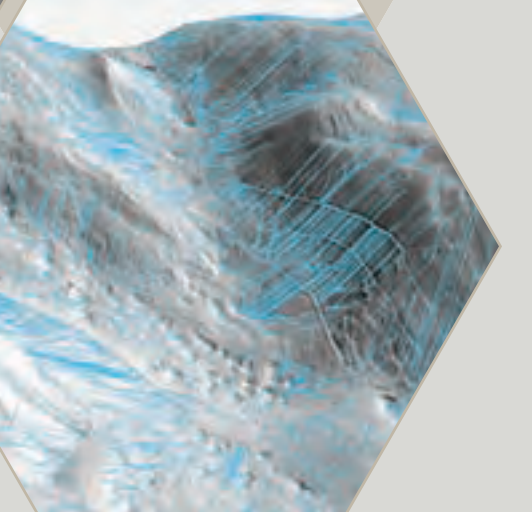
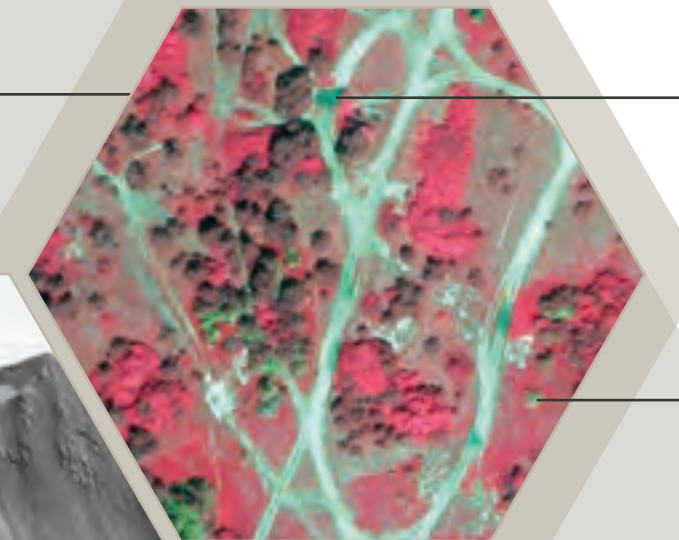
LiDAR Data
LiDAR remote sensing is utilized to create digital surface and terrain models of USAREUR training areas. LiDAR measures elevation by illuminating a target (e.g. ground, tree, building) with a laser from an airborne platform and analyzing the reflected light. In this example, LiDAR highlights numerous sinkholes and ridges (a Karst region), which would otherwise be obscured by vegetation.



LiDAR Analysis
The identification of ravines can highlight areas where roads or paths may wash away, presenting an opportunity for management measures.



Infrared Analysis
Surveys enable good habitat management and provide an early warning for the spread of disease or pests, such as bark beetle. Dead trees can be identified, highlighting areas at greater risk from fire.



Water Management
Water pathways can be identified and terrain features such as sinkholes mapped.

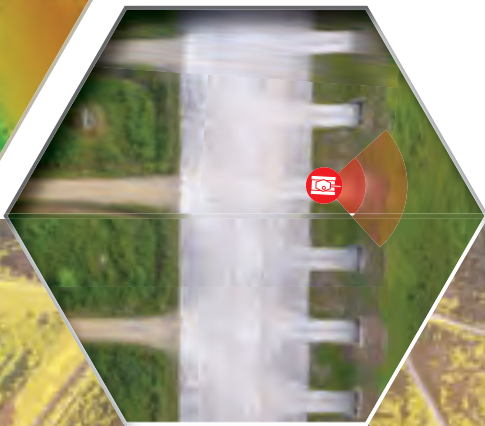
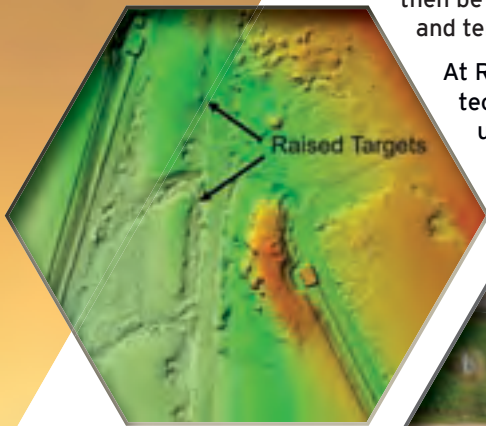
INTEGRATED TECHNOLOGIES UNMANNED AERIAL SYSTEMS



- » Rapidly deployable
- » Cost-effective
- » High-resolution aerial images
- » High-resolution elevation models
- » Line-of-sight analysis
- » Range development
- » Construction assessments

Quadcopter and fixed-wing drones capture high-quality photo and video imagery over training locations. Data can be post-processed using geospatial analysis software to generate aerial image mosaics and 3D digital elevation models. This data can then be used in GIS to enhance mapping and terrain analysis products.

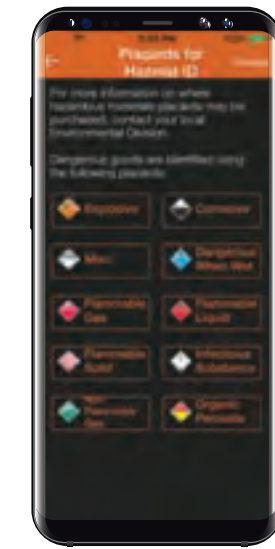
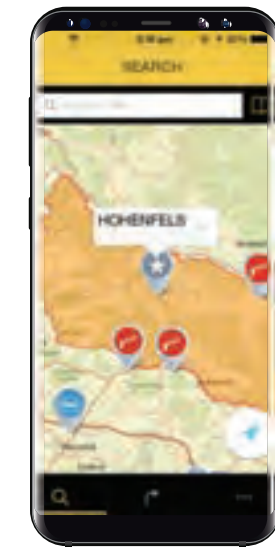
At Range 301 (Grafenwoehr), these techniques have been deployed to undertake line-of-sight analysis and enable effective decisions with regard to target siting.



At Yavoriv Training Area, Ukraine, an unmanned aerial system (drone) was deployed to assess design and construction activities at a new hand-grenade range.

INTEGRATED TECHNOLOGIES MOBILE APPS

Search by Keyword: "USAREUR"



	Army Range Mapper Mobile	USAREUR Environmental Officer Guide	Soldier's Field Card
USAREUR Coverage	✓	✓	✓
Maps	✓	✓	✓
Products & Services Catalog	✓	✓	✓
Multilingual			✓
Price	FREE	FREE	FREE
Highlights	<ul style="list-style-type: none"> » Route planner » 80+ USAREUR training areas » Access gate locations » Esso gas stations (Germany) 	<ul style="list-style-type: none"> » Authoritative environmental reference » 'Must have' for Environmental Officers » Fire and spill response POCs » HAZMAT management 	<ul style="list-style-type: none"> » Training area best practice reference » MEDEVAC and safety information » Maps » POCs

INTEGRATED TECHNOLOGIES BY THE NUMBERS

2017 Tap In Statistics



Mobile App Download Statistics



2017 GIS Support Statistics

- 60,650** Soldier's Field Cards printed for distribution throughout USAREUR
- 34,450** Military Training Area Maps printed to support training in USAREUR
- 1,450** ITAM Viewer DVD sets distributed throughout USAREUR
- 814** GIS / map data requests submitted, processed and completed
- 220** Custom maps authored in response to customer requests
- 180** Technical GIS support requests completed
- 54** New aerial, satellite and topographic imagery datasets acquired
- 37** Installation, industry and training events attended or hosted
- 26** Site visits to USAREUR and host-nation training areas for GIS data collection, coordination and validation
- 22** New or updated Soldier's Field Cards created
- 18** GIS briefings or training sessions provided at Army workshops and other events in Europe and the U.S.
- 15** SOPs, Reports, Plans and Best Management Practice (BMP) documents created
- 12** RTLP Range Modernization projects supported

51

Countries in the USAREUR area of responsibility

60,000+

Soldiers (U.S. and allied) train at the Joint Multinational Readiness Center at Hohenfels annually

30,000+

U.S. Soldiers in USAREUR by 2017, concentrated in 7 communities

20,000+

Partner-nation personnel participated in multinational exercises

OUTLOOK 2018 INITIATIVES

U.S. Army Europe Sustainable Range Program Workshop

The theme of the 2018 USAREUR Sustainable Range Program Workshop is 'Enabling Training Readiness'.

The briefings, exercises and discussions promote the sustainable use and development of the training areas under the responsibility of USAREUR and partner nations.

Over 125 participants from 12 nations are expected for the 2018 workshop.



Multinational Engagement

ITAM will continue to support theater security cooperation events with partner nations throughout Europe and Africa.

Innovation

We will continue to develop Tap In outreach to units and training forums and enhance drone-mounted remote-sensing platforms for post-exercise training land assessments.

Key Exercises and the Training Land Platform

ITAM will provide support to USAREUR's key 2018 exercises while, through integrated management, enhancing the realistic training land platform throughout the USAREUR area of responsibility.



2018



For further information or copies of this Stewardship Report, please contact the ITAM office: +49 (0)9641-83-ITAM or e-mail: usarmy.bavaria.7atc.list.usareur-srp@mail.mil

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