

SI VIS PACEM

PARA BELLUM

### CENTER FOR DOCTRINE AND COMMAND TEACHING (CDEC)

The *CDEC* was established on 1 July 2016, following the merger of the Forces Employment Doctrine Center (*CDEF*) and the College for Army Higher Education (*CESAT*). Located at the École Militaire, the *CDEC* is a decentralized Army Staff institution under the command of the Army Deputy Chief of Staff.

As the reference point for doctrine on Army employment, the *CDEC* provides advanced Army military education and acts as a vehicle for outreach. Its end goal is to fuel military thinking with a view to improving Land Forces operational effectiveness.

### The 3 missions of the CDEC

### 1\ANTICIPATING EMPLOYMENT, PROVIDING A DOCTRINAL FRAMEWORK tailored to land forces' current and future commitments

- ▶ develop and ensure the overall coherence of doctrine on Land Force employment as part of the doctrinal community network, in particular the Research and Forward Planning departments (*DEP*) of various commands and agencies of the Army;
- ▶ guarantee the Army's doctrinal interoperability with that of our allies;
- ▶ coordinate the Army Lessons Learned (LL) function;
- ▶ ensure the degree of expertise of the mission command warfighting function;
- ▶ steer and conduct prospective studies and research works to bolster doctrine and tactical anticipation;
- ▶ fulfill a monitoring and anticipation role and ensure its action is taken onboard right across all commands.

### 2 \ PROVIDING TRAINING to the army decision-makers of tomorrow

- ▶ provide advanced Army military education to prepare future active-duty and reserve military leaders to take up high-level command or executive positions that require advanced scientific or technical skills;
- ▶ teach the fundamentals of staff work as part of staff training for young captains prior to *TCUE* (combined arms qualification level one *QIA1*) and *post-TCUE* (combined arms qualification level two *QIA2*) and the Junior Staff diploma *DEM*), training in staff techniques for non-commissioned officers; and the diploma for suitability for field-grade officer positions (*EEM*);
- ▶ training active-duty officers reaching the advanced level of Army military education (*EMS2*) to take up high-level combined arms command responsibilities in operation or in organic domains (*EdG-T*);
- ▶ training reserve NCOs and officers for staff positions up to the advanced level of Army reserve military education (ESORSEM);
- ▶ prepare the officers reaching the advanced level of Army military education (*EMS1* or 2) in scientific or technical military studies (*EMSST*).

#### 3 \ PROMOTING MILITARY THINKING

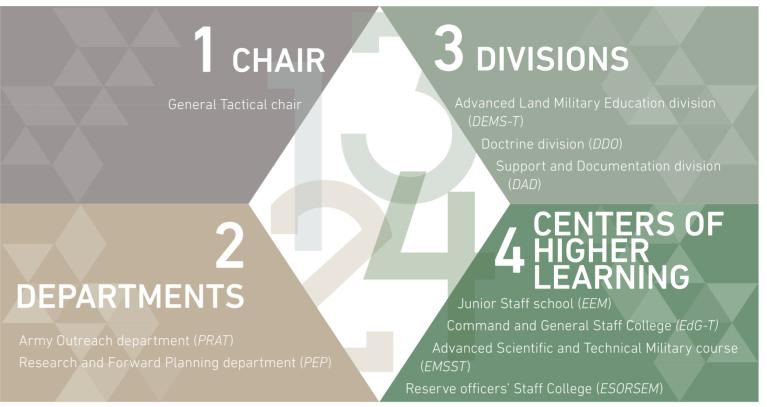
- ▶ put together, translate, publish and disseminate *CDEC* publications;
- ▶ develop, implement and support the assembly of outreach tools for an audience of decision-makers and influencers;
- ▶ produce and disseminate the master messages to the internal relay points of the Army.

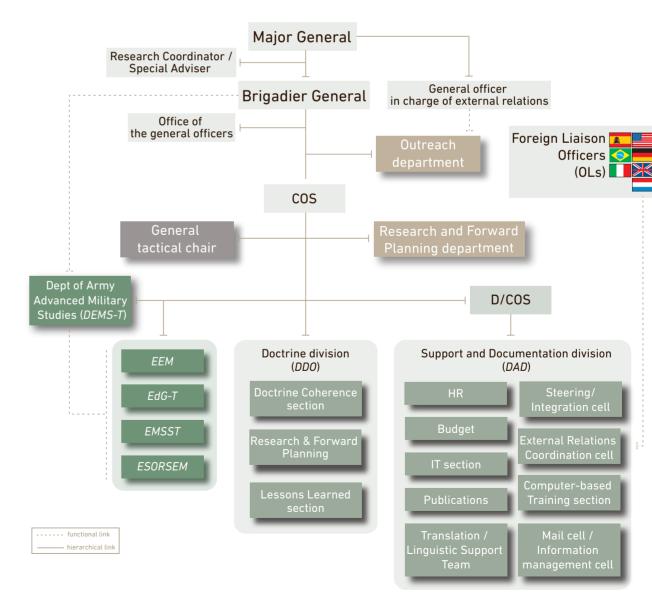




#### Organization

The *CDEC* is under the command of a major general. As *CDEC* Director, he is doctrine advisor to the Army Chief of Staff. He also oversees advanced Army military education and is the guarantor of Army outreach.





# 4 CENTERS OF HIGHER LEARNING

The CDEC implements advanced military education of both first and second level as well as command teaching within the Army, across the four schools under its command: the Command and General Staff College (*EdG-T*), the Advanced Scientific and Technical Military Course (*EMSST*), the Reserve Officers Staff College (*ESORSEM*), which are all located in Paris, as well as the Junior Staff School (*EEM*) which is located in Saumur.

Under the authority of Army HR, the CDEC plays a role in designing the general policy on advanced military education within the Army. The CDEC ensures consistency in teaching within the Officer and NCO training continuum, as well as with joint advanced military education provided at the  $2^{nd}$  and  $3^{rd}$  level.

### EEM\Junior Staff School

The Junior Staff School is a direct descendant of the "staff officer advanced warfighting course" established by the Duke of Choiseul in 1766. The course was first commanded by the Lieutenant General de Bourcet, who developed the very first military decision making process.

The EEM's mission is to train NCOs and officers in staff techniques for future postings in CPs and HQs..

Over the course of four main training phases, the *EEM* provides trainees with tactical, combined arms and organic skills and bolsters what they know and how they act:

- ▶ young captains prior to *TCUE* (combined arms qualification level one *QIA1* three weeks). The *EEM* is the "training operator" for Land Forces Command and the Combined Arms and Training School Command;
- ▶ captains post-TCUE (combined arms qualification level two QIA2 twelve weeks, in order to obtain the Junior Staff diploma - DEM);
- ▶ late-entry Officers (Officer Staff training/ FEM-0 five weeks);
- ▶ all ranks of NCOs (NCO Staff Training/ FTEM SO three weeks);

The *EEM* also maintains close contact with the equivalent schools in allied countries and with friends of France (NATO and Africa in particular).

## $EdG-T\setminus Command and General Staff College$

The Command and General Staff College is a direct descendent of the École Supérieure de Guerre, established in 1876 and the Advanced Staff Course (CSEM). An essential milestone in any commissioned officer's career, it is the reference point and hub for excellence in training and selection for ambitious military career paths.

- ▶ The EdG-T provides teaching sanctioned by the Army Higher Technical Certificate. It covers "career training", "military thinking" and "an open mindset". It is grounded in an innovative teaching approach that ties individual responsibility to dealing with confrontation in order to train future decision makers via three major features:
  - expertise in land engagements;
  - design and conduct of airland operations;
  - design and development of the components of Land combat, i.e. organic, capability-based, Land Forces preparation.
- ▶ The course of study combines general and operational teaching. This enables better understanding of current and future Army commitments, on the National Territory, in the regions identified in the Strategic Review, at battalion task force command level, under national or coalition command.
- ▶ The Trainee Officers experience teaching both in the classroom and in the field.

## EMSST\Advanced Scientific and Technical Military Course

Established in 1947, the Advanced Scientific and Technical Military Course admits officers on completion of a competitive exam and trains these military leaders of tomorrow to take on high-responsibility appointments requiring scientific, technical or linguistic skills.

The *EMSST* is central to advanced military education. It is able to adapt this advanced military education via partnerships in order to match civilian training to Army needs.

The EMSST collaborates with schools and universities in order for seasoned officers to take onboard the necessary, specific knowledge to move forward to the second stage of their career, via attractive and diverse high-profile Staff positions or those within central administration.

Every year, the *EMSST* welcomes around 100 officers for 1 to 3 year scholarship periods outside the Army. These could be abroad. There are two possible branches: Human Sciences and International Relations or Engineering Sciences

On successful completion of the competitive exam for either the *École de Guerre* or the *EMSST*, officers are admitted to different programs to obtain either a Bachelor degree, a Specialized Master Degree or an MBA.

The partnerships between the *EMSST* and fifty different institutions are what provide these officers with the training most suited to their future appointments.

Besides the scholarship periods in universities and other institutions, the *EMSST* also trains more than 200 officers on site:

- ▶ Preparation of candidates for the competitive exam;
- ▶ Coaching sessions for successful officers prior to their scholarship period;
- ▶ Specific training for Army officers later serving in the capability field (Management module of weapon program).

Nearly two hundred university lecturers, representatives of the private sector and the Ministry of the Armed Forces provide this training component for the *EMSST*.

## ESORSEM\Reserve Officers' Staff College

As one quarter of the Army Advanced Military Studies (*EMS-T*) schools, the Reserve Officers' Staff College harnesses the synergy of all four schools. *ESORSEM*'s primary mission is to design, organize and run training based on the reserve officer syllabus across four levels: predeployment training in Staff techniques (*SITEM*), Staff certificate training course (*SCEM*), reserve officers specialist Staff advanced course (*CSORSEM*), Technical certificate in general military studies (*BTEMG*). *ESORSEM* also runs conversion courses, primarily for officers and NCOs from the Joint Territorial Defense Organization chain and Deputy Reserve officers serving in units or major commands.

ESORSEM runs a training exercise specifically designed for commitment on the National Territory. It also provides pre-scholarship period preparation sessions for French personnel who are going to study in Canadian academies in Toronto and Kingston. These training programs also welcome joint and international personnel.

ESORSEM's proximity to central headquarters and decision-making institutions enables the convenient analysis of information and lessons learned emerging from the entire Ministry of Armed Forces and central administration bodies. ESORSEM is involved in studies relevant to the reserve component (governance, training, career path).

ESORSEM also fuels CDEC outreach via its newsletter, the lettre des ORSEM. The alumni committee, the Réunion des ORSEM, plays host to the ORSEM network, enabling regular and active links to be sustained with all current and former students in civil society..

### 3 DIVISIONS

### DEMS-T Advanced Army Military Education division

#### The DEMS-T handles two main missions:

- ▶ The division specializes in « force employment » and steers all studies relative to advanced military education and Command teaching. It guarantees a consistent training continuum in liaison with Army HR and the directorate of advanced military education. Alongside higher and neighboring commands, it handles all issues pertaining to traineeships, training, course content, programs and training flows etc. It is also the single point of contact for all questions regarding the schools of the CDEC.
- ► The DEMS-T also provides a support function to schools, especially regarding reports and administrative acts for training action, relations with financial and support bodies etc.

The *DEMS-T* also plays a role in drafting instructions, bulletins and notices concerning the training provided by the CDEC schools and their entrance exams, exams and qualifications. It supports the drafting of conventions and protocols with the armed forces and civilian bodies, and provides legal support to Command. It also provides the secretarial functions of the Army advanced military education development council (CP EMSAT).

## DDO The Doctrine division

Since the introduction of the *Au contact* model, the French Army has been organized into division-level or equivalent commands. This has increased the number of players involved in doctrine and in lessons learned. As a direct support to the Army Staff, the Doctrine Division implements Army doctrine policy and coordinates all of its doctrine and lessons learned works, thus guaranteeing overall consistency for the CDEC Director.

As such, the DDo is the preferred first point of contact for all external players to the French Army (joint, other armed forces, directorates and services, alllied and multinational bodies...).

The DDo is also responsible for the « force employment » pilot scheme and the « command and operational headquarters » warfighting function.

Last, in liason with the Planning and Programming Directorate of the Army Staff, it coordinates exploratory doctrine works

Once the steering committee has approved the workload, the division triggers the doctrine and lessons learned cycles by reaching out to the main commands and branch commands.

There are three offices to the Doctrine division:

- DEP C2 steers the doctrine works of the "command" warfighting function and submits them to the General Director for approval. It comprises four sections: C2, ICS support to cyber command, legal operations and the force employment pillar. It also organizes how the Land component participates in doctrinal works, in line with its field, handling international and interagency interoperability, while monitoring the arguments put forward for general consistency.
- ▶ The doctrine coherence office leads doctrinal works on the documents that lay the basis of the Land corpus and on issues that cut across the Army. It is divided into a 3D section and a SCORPION section that is responsible for developing the SCORPION exploratory doctrine and, for the time being, that plays host to the SCORPION battle laboratory (*LCS*).
- ▶ The Lessons Learned office implements the annual Army Lessons Learned guidance, by moderating the Land Lessons Learned network. It ensures Army level lessons are validated and coordinates how they are processed at that level (conducting lessons learned in a long loop), as well as synthesizing and capitalizing on these same lessons via periodical publications. It also exchanges lessons learned at joint, international and interagency level.

#### Doctrine division publications

The Doctrine division publishes several types of document:

- doctrine documents incorporated into the doctrine directory;
- doctrine letters/notices, lessons learned letters and legal gazettes, which present specific issues to give rise to tactical analysis;
- Lessons learned handbooks to capitalize on the operational experience acquired and to fuel analysis. These handbooks are split into four collections: operations, exercises, reports and research:
- ▶ an immediately-accessible "doctrine pack" on the CDEC intraterre site, for detachments entering the final stage of pre-deployment training before commitment to operations.





Working in conjunction with the Paris École Militaire defense base support group (*GSBDD*), the *DAD* provides administrative, financial and IT support to the CDEC.

Within the *DAD* is an office dedicated to handling the production and dissemination process of CDEC publications. The publications office is responsible for the center's output, from its layout to dissemination. All of the center's output intended for the general public or experts in the relevant domain are made available on the website and intranet site, as well as through the doctrine directory.

 $The \textit{DAD} \ also \ counts \ a \ translation \ of fice \ which \ produces \ English \ versions \ of \ CDEC \ publications.$ 



### 2 DEPARTMENTS

### PRAT Army Outreach department

Coming directly under the General Officer in charge of External Relations (*OGRE*), the Army Outreach department is geared towards civil society. It organizes or hosts:

- > strategic thinking groups that bring together civilian and military authorities;
- training on decision-making for military and civilian executives;
- ▶ dialogue exchanges with citizen reservists;
- publishes, the "In Contact" newsletter from the Army Chief of Staff;
- partnerships between battalions and municipalities or firms;
- ▶ immersion experiences and visits;
- presentations on the Army;
- ▶ conferences, symposiums, seminars and debates, etc.

In synergy with the schools and the CDEC Doctrine division, this department develops educational initiatives geared especially towards the spheres of higher education and research.

In line with the directives from the Army Chief of Staff, the *PRAT* is also responsible for rallying the Army community by sharing common messages.





### PFP

### Research and Forward Planning department

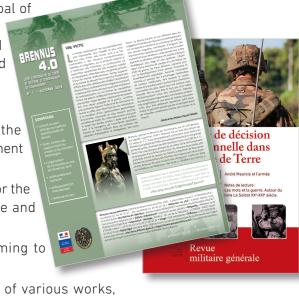
As the department handling prospective studies, with an end goal of force employment in future commitments, the *PEP* produces exploratory documents that enable readers to stay informed (monitoring), that shed light on decision making processes and that feed into anticipation, especially in terms of doctrine.

#### To do so, it:

- ▶ implements a forward-looking monitoring system through the close study of factors pertaining to how the operational environment and the employment of land forces are evolving;
- ▶ steers and conducts prospective studies and research works for the purposes of force employment and also capabilities, doctrine and training;
- will, upon request, contribute to Army Staff-led studies aiming to develop Land Forces strategy;
- ▶ progressively helps extend and form links within a network of various works, experts and researchers;
- ▶ maintains ongoing relationships with military and non-military think-tanks (the French Institute of International Relations *IFRI*, Joint Center for Concepts, Doctrine and Experimentation *CICDE*, Institute for Strategic Research *IRSEM*, Joint Center for Advanced Military Studies *CHEM*, etc.) and universities, in particular for the purpose of recruiting students).

The PEP releases several documents, some are available on the CDEC website:

- ▶ Informing the command on prospective subjects;
- ▶ Lettre de la prospective, in order to shed light on prospective and historic thinking on specific matters;
   ▶ Cahier de la prospective, in order to reflect on some prospective subjects;
- MILINDEX database for researchers and students working on defense-related matters.



### 1 CHAIR

## General Tactical chair Airland combat tactical expertise

The CDEC tactical chair aims to develop the Army skills in general tactics with military history, tactical analysis, tactical forward planning and the tactical cultures of other countries.

#### Its goal is to:

- ▶ Provide a course on general tactics, that teaches the fundamentals of analysis and maneuver for schools (EMS 1 and 2) and even operational HQs (shared tactical grammar);
- ▶ Share and dispense, upon request, specific expertise for players external to the Army, joint, interagency and at international level. It plays a role in spreading French operational culture. This is one that is internationally renowned and that could constitute a joint approach (integrating capacity) in the art of planning and conducting an operation.









### 1 LABORATORY

### Scorpion Battle Lab



An innovative initiative putting tomorrow's technology to use today

Scorpion is the French Army's major modernization program that will enable us to maintain operational superiority against our enemies upon its implementation in 2025. Using the most cutting-edge militarized technologies, we can improve soldier protection. Scorpion envisions information-sharing collaborative operations as a way of fighting, i.e. the capability of interconnected equipment on the battlefield in a collaborative combat dataset without human intervention. Our units already operate according to a combination of specialties determined by what works best. Now, unit operating modes must evolve to become fully collaborative and interconnected to spread the practice of information-sharing between commanders, vehicles, dismounted combatants, aircraft, support and combat service support.

The work of the Center for Doctrine and Command Teaching (CDEC), actively paving the way for the future

The CDEC Doctrine Division has been running the hub of the Scorpion Battle Lab network since 2014. The Scorpion Battle Lab conducts wide-ranging exploratory work to measure what impact these innovations will have on future armed conflicts. Meanwhile, it also analyses the advantages of incorporating military-grade or militarized civilian technologies into the Army (AI, augmented reality, robotics, smart munitions, directed-energy weapons...).

The Scorpion Battle Lab initiative relies on a farreaching network of players

A campaign of tactical experimentations is underway to find credible solutions for the future employment of Scorpion units and their chain of command. The Scorpion Battle Lab experimentations use simulation tools and a trial version of the Scorpion Combat Information System (SICS) to enable service personnel, as well as representatives from the Ministry of the Armed Forces and industry, to use tomorrow's technologies today. Each contributor provides effective user feedback from these strikingly immersive sequences.

The work prioritizes forces in operational posture

The Scorpion Battle Lab is an unprecedented initiative that aims to expand the human dimension of Scorpion innovation by determining the cognitive and organizational factors necessary for future military successes. Ahead of the arrival of the new equipment, the Scorpion Battle Lab is drawing on its user feedback to draft temporary employment manuals that will aid the French Army in gradually adopting the Scorpion program.

With a resurgence of airland battle on the horizon, the Scorpion Battle Lab initiative will also evaluate and address how to adapt to this prospect.





### PARIS ÉCOLE MILITAIRE

internet : www.cdec.terre.defense.gouv.fr intranet : portail-cdec.terre.defense.gouv.fr



