Abstract: Among the most important influences that technology exercises on human society is the way in which technology has changed education and training during the recent years. By saying this we have in mind both the approach to education and training and the practical ways that allow an easier access to information, regardless of place or time. Regardless of location, age or profession, people need to have permanent and unlimited access to the educational process, to gain benefits in real time from the information, knowledge and experience accumulated, so that their activity, characteristic to the era of knowledge, might be as competitive as possible. This paper intends to address the way in which the ADL system can contribute significantly to the pre-deployment training of military personnel to theaters of operations.

Keywords: informational technologies, pre-deployment, theaters of operations.

I. THE GENERAL FRAMEWORK OF THE ADVANCED DISTRIBUTED LEARNING (ADL) SYSTEM

A theater of operations is a place where actions are conducted using military means in order to resolve a conflict or a conflict situation in its various stages.

In view of their participation in multinational operations, military personnel participating in such missions require thorough training. Training consists not only of the knowledge and skills necessary to any soldier in any situation or type of military action, but also of a system of abilities and competences specific to every theater of operations.

No mission is identical to another. For every type of mission, as well as for every specific mission, it is necessary for the person that executes it to receive specific training.

The initial training will not be sufficient in the theater of operations. The latter requires from the military personnel and entities that act within multinational operations the capacity to find correct, quick and efficient solutions to the situations that might appear. For this reason, a coherent and competitive continuous training system is needed. The ADL can be such a system.

The advanced distributed learning, as well as the initial INTERNET, appeared as an initiative of the military system, destined to put to good use the information and simulation advantages in carrying out education and training. At present, for various military or civilian organizations, the advanced distributed learning has various meanings and is implemented in various ways. There is one common fundamental requirement however, that it must accomplish training and support competitiveness anytime and anywhere it is necessary: classrooms, military compounds or even on the battlefield.

The idea brought forward by the ADL concept is that education is associated with the creation of a new type of learning, that attracts and motivates the subject to whom this type of learning is destined.

At the same time, the students are interested in this type of education because they can learn anytime, anywhere; they can enjoy the benefits of education right where they are and when there is the need. Traveling costs are no longer needed and the students can better manage their time between
work and study. They can study whatever they wish to know. They can jump to or select the best part, they can repeat as many times as they need or wish. This self taught way of learning is very efficient. Realistic simulations can be created. Many online students prefer to review or re-do exercises “without anyone keeping the score”. Departing from the pressing need for knowledge and access to information, more and more organizations offer training services using alternatives to traditional methods or combinations with these, thus meeting the requirements of society and facilitating at the same time the access to education.

The advanced distributed learning is destined both to the individual use of the students, course members or soldiers and those who elaborate decisions, and to the collective use of groups of individuals such as teams, crews or staffs.

The internet is preferred as a way to disseminate information, due to its reach, easy access, being also the cheapest and most flexible alternative. Due to security issues, it was preferred that all materials be non-classified, as the best solution available.

II. PRACTICAL WAYS OF USING THE ADL SYSTEM FOR THE TRAINING OF MILITARY PERSONNEL IN THE THEATERS OF OPERATIONS

2.1 At the level of other armed forces

The Armed Forces in the developed countries have developed this system to a significant extent and with notable results. The ADL Initiative, the institution that created and developed the ADL system, was founded within the United States Department of Defense with the aim to ensure training of individuals, but also of groups of individuals, everywhere on the globe where American forces are deployed. If we study the American ADL system, the offer includes over 580 online courses, grouped in functional areas, operative levels and classification categories, some of them destined to the public, while access to others is limited, for classification reasons. The military personnel take these courses according to their training needs and career continuation requirements. The characteristic feature of the American system is that all these courses can be accessed on a single portal that allows various types of access. The American ADL system stresses the training of military personnel during the pre-deployment periods in view of their participation in missions in the theaters of operations.

A system of partner ADL laboratories was created that allows the conjugation of efforts and an increased efficiency (Figure 1).
On the European continent, Norway, one of the countries with the most advanced ADL system, has components of this type at the level of every service of the Armed Forces.

On the basis of proved performances in the development of the ADL system, through a memorandum signed in January 2009, the United States Department of Defense recognized and accredited the “Carol I” National Defence University as partner laboratory in the ADL network. By signing this document Romania joins the group of seven such centers at world level, the third in Europe, assuming at the same time the strict observation of high standards of performance and quality regarding distance education and training systems. Furthermore, we were invited to join the group of NATO ADL experts that will assist and support other countries to develop this concept.

At present working groups exist both at the level of NATO and at the level of the PfP Consortium that have as main objective the management of the ADL system and the creation of online courses designed for training. The efficient cooperation already achieved allows for one course developed by one partner to also be made available to the others.

Speaking of the courses organized by the European Security and Defence College, the course members can access a resident course only after taking a preparatory module in the Internet-based Distance Learning (IDL) system and passing a test within this module. The educational platform that permits the functioning of the IDL system is provided by “Carol I” National Defence University, including the technical support and the transformation of courses into digital content.

### 2.2 At the level of the Romanian Armed Forces

For the military personnel that will execute missions in the theaters of operations in Afghanistan, “Carol I” National Defence University offers a preparatory course named “The Afghanistan pre-deployment course”. The first module is designed by the Joint Advanced Distributed Learning and Simulation Section, Allied Command Transformation. This module contains the courses ISAF basic, HQ ISAF, ISAF PRT (Provincial Reconstruction Team), ISAF RC(S) (Regional Command South), ISAF RC(N) (Regional Command North), ISAF OMLT (Operational Mentoring & Liaison Team), ISAF POMLT (Police Operational Mentoring & Liaison Team) and ISAF IJC (Figure 2). The information in this course have the aim to familiarize the personnel with the mission characteristics, the tactics used, risks that may appear during the mission, geography of the area and ways to approach the local population. The content of the course is divided in information needed by every soldier who executes missions in Afghanistan and information specific to the respective mission. Thus, one course in this module is sufficient for a soldier, according to the position he will occupy during the mission.

![Image of course modules](image.png)

**Figure 2.**
The second module contains the course "Afghanistan Cultural Awareness". The materials of this course contain details and information about history, geography, customs, ethnic groups, body language, ways to behave in various situations in Afghanistan, giving examples that test the knowledge of the student through multiple choice exercises. The main aspects that are considered are the ways to solve practical situations that appear during missions of vehicle check point type, CIMIC project, meeting the local community, training and mentoring Afghans, using the available resources.

Access to this course is restricted. There is the possibility to issue a participation certificate for those who require one.

At present, after approximately one year, the course has been taken by a relatively large number of people, a statistic being sown in Figure 3.

![Figure 3.](image)

A relevant aspect that emphasizes the importance given by “Carol I” National Defence University to technology in support of the education and training system is the involvement in the Mobile Learning Environment project, a NATO-USA project, that aims to demonstrate the capabilities of mobile technologies to achieve training and ensure access to knowledge in real time, initially for medical support missions. The importance of the mobile technology based training concept is demonstrated by the fact that partners from 22 countries representing over 80 institutions are involved in this project.

III. POSSIBLE SOLUTIONS FOR THE DEVELOPMENT OF EFFICIENCY OF THE ADL SYSTEM IN THE ROMANIAN ARMED FORCES

The Romanian Armed Forces need to improve their training capabilities, in order to achieve the standards necessary for a modern army and required by the status of NATO and EU member country. In this respect, the Romanian National Security Strategy emphasizes that “the development of the informational society represents a fundamental medium and long term objective”, and among the main directions of action in the field of military transformation is to “make superior value of specific technologies”.

We consider the implementation of an ADL system at the level of the entire Romanian Army to be necessary. This represents an important and complex activity. This is necessary to be achieved step by step according to a clear and realistic vision, departing from the present situation, on the basis
of the available resources and aiming for the final established objective. The elaboration of programmatic documents at the level of the ministry of defence is needed in order to regulate this field of activity in order to ensure the unity of the ADL system and the interoperability of the educational content.

In the process of elaboration and implementation of the ADL system at the level of the Romanian Army, the following should be taken into account:

- The personnel and decision factors should be made aware of the philosophy and physiognomy of the ADL systems, their role within the military institution, their possible and achievable performances, their costs and especially their effects.
- The creation and training of teams of specialists that will ensure the implementation of the ADL system in a correct and coherent manner, with minimum costs and maximum efficiency.
- The gradual achievement, within a reasonable period of time, of ADL systems for all services and military education institutions.

The Romanian Armed Forces might choose between two easy ways to implement the ADL philosophy:

- The creation of a unique integrated ADL system that will contribute to the up-dating and optimization of the training system and especially of the continuous professional training.
- The creation in several stages of a system of training through which to achieve, following the model of other armies, especially the American model, a gradual, consistent and verifiable implementation, with possibilities to adapt to concrete conditions and budgetary restraints.

The second direction represents a viable option in our view, because the nucleus created within “Carol I” National Defence University already exists, namely the Advanced Distributed Learning Department, to which gradually all the other military education institutions can be connected.

The starting point would be to create specific domains on the ADL platform of “Carol I” National Defence University. The effective management of these domains, the management of courses and of course members would be the responsibility of the military education institutions and of the services, “Carol I” National Defence University providing the technical support for the administration of the domains, the training of the persons nominated to manage the domains and the transformation of the educational content into a digital standardized one. Later on, after accumulating a certain amount of experience, developing the system and in accordance with the financial resources available, ADL management centers can be created at the level of the other military education institutions and at the level of the services. The last stage would require the direct involvement of the General Staff and of the staffs of the services through the taking over and development of the integrated management of the ADL system and process, in the sense of finalizing the interoperability of the specific ADL systems so that every category of military personnel can access and take full advantage of the ADL courses according to training, education and career development requirements.

IV. CONCLUSIONS

Technology evolves rapidly and in order to keep up it is necessary for the education and training system to adapt rapidly.

The ADL system is far from being perfect and does not intend to replace the traditional systems, but it brings along benefits related to costs, the opportunity to disseminate the content in real time and, wherever it is necessary, the increase of the number of course members without affecting the current assignments of the structures where they come from and ensures interoperability in relation to NATO criteria and requirements. It could replace some of the training modules that are at present
conducted in a centralized way due to some obvious advantages such as accessibility, interoperability, re-usability, durability, efficiency and time and cost effectiveness.

For the military personnel that will execute missions in the theater of operations of Afghanistan, the specific knowledge that they access through the educational platform provided by “Carol I” National Defence University constitutes a solid theoretical basis, a reason for which the course has been well received and appreciated.

One of the Force Objectives – Pre-deployment stabilization and reconstruction training for deployable forces – is being implemented at present and “Carol I” National Defence University has been asked to contribute to the development of a new ADL module in support of the training of military personnel who will execute missions in the theater of operations of Afghanistan. During the current year to the two modules that already exist a new module will be added, containing aspects specific to the Romanian contingent and elements of further training in the local pashtu and dari dialects.

Due to the accumulated experience and the acquired expertise, “Carol I” National Defence University can contribute decisively to the development of the educational system within the Romanian Armed Forces through the implementation of a viable and functional ADL system.

References