KRIZSÁN ZOLTÁN

A TÖBBCIKLUSÚ KÉPZÉSI RENDSZER BEMUTATÁSA EGY KIVÁLASZTOTT KÉPZÉSI TERÜLETEN. A KATONAI FELSŐOKTATÁS

THE INTRODUCTION OF THE MORE-CYCLE-SYSTEM ON A SPECIAL FIELD. HIGHER EDUCATION IN THE ARMY.

A ZMNE a magyar felsőoktatás jelenlegi struktúrája szerint képes kielégíteni a megrendelő által támasztott tisztképzés igényeit és képes a Bolognai-folyamat időszerű követelményeinek eleget tenni. A Magyar Universitás Program keretében kidolgozásra kerülő új felsőoktatási törvény a ZMNE intézményének alapvető szerkezetét nem változtatja meg. A Magyar Honvédség oktatási reformjának szükségessége, a rendszerváltást követően, már a 90-es évek elején felvetődött.

The ZMNE is able on the basis of the present structure of the Hungarian higher education to satisfy the needs for educating officers of the partner and to satisfy the needs of the Bologna process. The higher education law, which is going to be worked out within the frames of the Hungarian Universitas Programme does not influence the basic structure of the institution if ZMNE. The necessity of reforming the educational programme of the Hungarian Army came into question after the system change, at the beginning of the nineties.

The introduction of the more-cycle-system on a special field - branch and on the basic level and in the specially connecting master level

Higher education in the army

The ZMNE is able on the basis of the present structure of the Hungarian higher education to satisfy the needs for educating officers of the part-

ner and to satisfy the needs of the Bologna process. The higher education law, which is going to be worked out within the frames of the Hungarian Universitas Programme does not influence the basic structure of the institution of ZMNE. The necessity of reforming the educational programme of the Hungarian Army came into question after the system change, at the beginning of the nineties.

When the Hungarian Republic joined the federal system of NATO it showed the task system of the Hungarian Army well, where a well-educated professional army was to be brought into being. With bringing the professional army into being the change of the army technology has also started, which resulted in expecting dominating changes till the end of this decade. These changes, the military career model and the expectations of the promotional system, the new demands deriving from the change to the volunteer system and interoperating demands which followed the joining of the NATO made it necessary to change the and modernise the educational system of teaching in the army. The Collage of the Ministry of Defence discussed in autumn 2001 the ideas about modernising the educational system in the army and it decided on introducing the educational reform in the army.

In the volume and structure of the officer supply of the Hungarian Army and in forecasting these in time several changes have occured. On the order of the Defence Minister a new flexible, understandable educational programme with a wide variety of programmes is determined. The changes in the education of the technical basic levels can be considered in the preparation studies of the more-cycle education on the faculty of Army and security technical engineer education. The study said the following on the basis of examining the most important challenges in the engineer-officer education:

- The education should satisfy the continuously changing demand of the Hungarian Army in the supply of the engineer-officers;
- The military-professional side of the education should be stronger, as a result of which the officers released at the end of the decade should be able after a short matching period to do the cooperation tasks in the alliance;
- Choosing the faculty and the specialisation should occur as late as possible with the aim that the human resource supply of the Hungarian Army could be optimally planned and secured;

- The education should suit the European trends in higher education, which goes towards a more-cycle linear system (BSc/MSc);
- The degree given in the first cycle and accepted officially should give a well-useable education following the interests of the Hungarian Army and it should enable its holder to enter the second cycle of the education either without a break or with some years of practice;
- In the second cycle the diploma-engineer education should enable the holders as a result of an integrated preparation to fill higher positions basing some function changes and with supporting the more economical education preparation for the special task system of the Hungarian Army on the filed of educating engineer-commanders;
- The education should serve student mobility;
- The structure of the educational system should be suitable that an officer getting a professional degree in the first cycle when taking two or three terms the students could change their faculty in order to be able to step not only higher in the pyramid but also to the sides;
- In the second cycle of the education such fields of the military technical sciences, which are not done in the Hungarian technical higher education institutions, but are needed to do higher official positions;
- The education can be sustained and operated cost-effectively ina long term and it should be solvable in a military educational institution.

Almost at the same time with the Bologna process there were significant changes in the military higher education. The changes in the military higher education were induced by the internal and external facts shown above. From the internal facts the most important is the change in the task system, the number of people and the proportion of people in the Hungarian Army. The above mentioned facts together resulted in the more step institutional integration and organisational changes as a result of which the Miklós Zrínyi National Defence University has come into being.

On the proposal of the National Bologna Committee the Government allowed the following faculties in the more-cycle educational structure in the military higher education:[1]

On the field of National defence and military education

In defence major

- Security- and defence political major
- Penalty-execution educator major
- Border security and defence leader major
- National security major
- Defence administration major

In military major

- Military leader major
- Military economy major

Technical major. In military and security technology engineer major

- Military and security technology engineer major.

Before releasing the Government order there was a possibility starting in 2005 to found experimental basic education faculties. The ZMNE joined this process as a result of which the Minister of Education – on the basis of the support of MAB – allowed the establishing of the following basic level majors:

- Military leader;
- Military and security technology engineer;
- Border security and defence leader;
- National security;
- Security and defence political;
- Penalty execution educator;
- Defence administration;
- Military economy.

Engineer education in the military higher education

At the ZMNE BJKMFK and its legal predecessor institutions there has been officer education since 1967 at collage level. The aim of the Engineer officer education is to train engineers for the Hungarian Army and

[1] 252/2004 (VIII.31.) Government order, MK. 2004

for other armed forces taking professional and contractual duties respectively. The institution, starting from 1997 on the basis of the 157/1996 and 28/1999. government orders educates according to the legal educational requirements in mechanical engineering-, traffic-, chemist- and electrical engineer, and technical informatics and safety technology majors in the form of redular education. The ZMNE János Bólyai Military Technical Collage and its legal predecessor respectively, makes on the basis of the labour market demands since the 1998/99 school year non-subsidized education in correspondence courses in the following faculties: security technology, mechanical-, electrical and traffic engineer.

The concept of the new structure of the more cycle engineer officer education

The ZMNE started to prepare the reform of the military education suitable for the Bologna process in 2002. In the frame of this in February 2003 on the "Military engineer major founding forum" and in June on the "The change of the military higher education structure" forum the plan of founding a military engineer faculty with linear structure was discussed. On the basis of the discussed principles and considering the suggested educational structure of the basic levels the final form of the Military- and Security Technology Engineer (Bachelor) basic level and the master faculties based on them was sketched.

In the new more-cycle system the military- and security technical engineer education on the field of the technical education in the major of military and security technology engineer will continue with the same name in the basic level in the future. The new structure education was fulfilled after long preparation work in the construction below.

The first cycle of the more-cycle engineer education is the basic level (Bachelor)

The education is definitely built on the officer education, the engineer officer supply as labour market expectation in our times. The education of the students with scholarship taking professional or contractual duties starts with military preparation. After that the first three terms are com-

mon. In the fourth term the education folds into five majors, these are: military technological-, aviation technological-, technological-, traffic and disaster defence-, military electronic and – specified from the point of view of my theses – safety technological majors. In the fourth term follows the common foundation of the major and from the fifth term the education of the specialisation starts. In some specialisations in the sixth and seventh terms it will be possible to take more special subjects on the basis of the labour market or the demands of the customer. The education finishes with the seventh term.

After getting the Bachelor degree on the basis of the demands of the labour market or the customer the students can continue their studies in the second cycle immediately or after some years of experience to get the Master degree. According to the predicted data of the customer and in the citizen sphere the majority of the number of students is in the first cycle. The topical requirements towards the human resource supply of the Hungarian Army give reason to the structural building of the education. From the speciality of the officer career model derives that after finishing the first cycle of the education the second lieutenant stays for four-six years in the same position then he can step forward the condition of which is to pass a determined course successfully.

That is the reason why the basic (Bachelor) education has the task to prepare for life long learning as well. Another specification is that the professional officer in the post of a lieutenant in the four-six years has to step horizontally to other related areas several times. Stepping horizontally follows in simple cases after a successfully passed course, when changing a professional team it can be done by changing the specialisation which is secured by the educational structure.

One of the most important segments of the built and expected competences on the quoted forums is that the professional officers should be able to run and maintain the military technical equipment in their profession used in domestic, international and allied actions, furthermore to plan, organise and manage the training of the given military organisation. In the preparation to cover these tasks the strengthening of the military-professional character of the education aims that the engineer has a wider sight on the systems of the cooperating services, the military technology tools and tool systems of the professional teams.

The planning, organising and implementing the cooperation need this kind of knowledge. Taking part in allied actions and the professional military preparation and education also need this kind of structure change. On the field of military technical sciences the essence of change means the broader interdisciplinary foundation and the more concentrated professional education, which includes satisfying demand for the specialisations in the topical jobs.

The aim of the military- and security technology engineer basic level education, the needed professional competences

Matching the more cycle linear higher education structure the Minister of Education allowed and published the list of the faculties in the first cycle (Bachelor, BSc) in the school year of 2005/2006. The list contains the BSc faculties supported by the Hungarian Accrediting Committee on 2 July 2004.The list contains on educational fields the educational and outgoing requirements of BSc faculties. Part of the document is determining the aim of the education and the competences to be reached, which were determined on the basis of the ideas and expectations in the period of preparation. They have the following final form.

The aim of the education on the military- and security technology engineer faculty: training military security engineers who are suitable to run and maintain the technical tools of the military technology and defence spheres in the Hungarian Army, to introduce connecting new technologies and apply them.

Depending on the chosen major, they are able to solve tasks in the posts of subunit commander and professional officer in peaceful times in defence, peace making and maintaining activities and in war times they offer the logistic and technical support, and to plan, organise and manage the connecting practical activities, solving complex safety technology problems on civil, military or defence fields (security, person- and property protection, information protection, work- and fire protection, environment protection) and they can manage them in a system, and they also have enough theoretical knowledge to continue the education in the second cycle.

When having the BSc the military and security technology engineers considering the expectable majors are able to do:

- Planning and maintaining the working of the systemised military technology equipment;
- And its organising;
- In the technical road constructor, fighting technician, technological material technical and technological branches planning, and organising tasks;
- Working out logistical, traffic, system technical and process managing tasks;
- Complex anti-aircraft rocket-, radar technical and electronic;
- Battle equipment, signaller, military communicational and information systems;
- Putting these into operation;
- According to the domestic and international NATO rules;
- Planning, organising and developing computer systems;
- And running them;
- Organising and managing mechanical board systems of air vehicles,
- Realising and analysing the technical problems in connection with the operation on air and on earth and make correct decisions to solve them from the point of view of technique and flight safety.
- Restoring the aircraft machinery and board systems in peace and in battle,
- Choosing the correct military and civil technology.

From the point of view of the topic of my thesis considering the safety technology faculty deserves more attention, which the engineers have to know after the BSc education:

- Making risk analysis,
- Individual development of simpler safety technology plans, making complex defence plans,
- Running safety technological systems,
- Implementing, organising,
- Person- and property protection (including fire, work protection and

- Civil protection), furthermore disaster and environment protection tasks
- Running these in a system and organising and managing them.

Comparing the here listed competences with the future edition of the Ministry of Education “On a new European way to the diploma” we can see differences. The quoted edition already contains those not profession specific characteristics and competences which the students passing the levels (cycles) of the new educational system will characteristically have. These characteristics were at the time of founding the basic levels under working out and looking for an agreement. Probably, the lesson plans and education methodology of the institutions will say the possibilities, tasks and methods to develop the listed characteristics. The lesson structure of the BSc education is basically suitable to reach the set goals and competences.

Bibliography

1. 252/2004 (VIII.31.) Government order, MK. 2004
2. Karoliny Mártonné–Farkas Ferenc–Poór József–László Gyula: Human resource management handbook
3. László Zachár: Lifelong-learing
4. Udvardi-Endre Lakatos: The overview of the idea and measuring of competence
5. Udvardi-Lakatos Endre: Lifeling Learning, Module, Competence (theses and explanations)