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SECURITY TECHNOLOGY AT MISSIONS OF HUNGARY

Absztrakt/Abstract

Az elmúlt évtizedekben a biztonság központi kérdéssé vált a világban. A biztonságtechnikai eszközök a mindennapi életünk részei lettek. A magyar diplomáciai és konzuli szolgálat Magyarország legtávolabbi védővonala, ezért a biztonság nagyon fontos a magyar küldépviseleteknek. E cikk bemutat néhányat a vagyonsvédelmi felszerelésekből, lehetőségekből és a Külügyminisztériumban alkalmazott megoldásokból.

Security has become a central problem in the course of the past decades. The means of security technology have become a part of our everyday life. The Hungarian diplomatic and consular service is the farthest defense line of Hungary, and security is very important for the Hungarian missions. This article reviews first of all property protection equipment and possibilities of security technology, furthermore the methods applied by the Ministry of Foreign Affairs of Hungary (MFA).

Kulcsszavak/keywords: *biztonságtechnika, informatika, külügyminisztérium, küldépviselet ~ security technology, IT, information technology, Ministry of Foreign Affairs, mission, representation*

INTRODUCTION

A great number of circumstances endanger the life of people and many of them erroneously regard security as a means or a system of means although security is a status. Exactly this is the lack of being endangered and, of course, everybody would like to live in security. The status of being threatened cannot be completely eliminated but the risk of its occurrence can be minimized. For this applying the solutions of security technology can be the proper means. But what is security technology?

According to the university notes “The bases of Security Technology” [1]: the concept of security technology is the territory of technical sciences where the task is given to increase the security of different objects and systems to diminish the risk of property damages and the harmful effects hitting people by applying technical, organizational, health and economic means and measures.

This is the reason why we nowadays so often meet the expression “security technology” in a very wide circle e.g. in case of cars, working places, apartments, airports and even in the case of IT. In the course of our everyday life we also meet means and solutions of security technology when we enter a bank, are walking in the streets or when we depart from an airport for a long weekend. This article reviews first of all property protection equipment and possibilities of security technology, furthermore the methods applied by the Ministry of Foreign Affairs of Hungary (MFA).

PROPERTY PROTECTION

In life, we often meet simple and complex security problems and questions. However, the solution of complex questions consists of smaller and simpler steps. One of the best security experts of the world, Mr Bruce Schneider¹, elaborated a method consisting of five simple questions how to put the security problems of governments, companies or individuals into a coherent unit that can be more easily handled. Proper consequences and compromises can be deducted from this coherence. [2]. The questions are as follows:

- What are you trying to protect?
- What are the risks to those assets?
- How well does the security solution mitigate those risks?
- What other risks does the security solution cause?
- What costs and trade-offs does the security solution impose?

If a complex security problem is divided into smaller steps, that does not mean that a complex solution is not necessary. These property protection solutions may consist of mechanical protection, manned guarding and security, personal protection, as well as electronic protection or some kind of combination of all these. Here below we can see the details of complex property protection and its elements:

- Mechanical protection
 - Outdoor property protection solutions (trenches, embankments, fences, gates, crossing gates, etc.)
 - Construction and entering points of buildings (shell elements, walls, flooring, platform/bridging/, bars, shutters, doors, windows, locks, padlocks and iron mountings, etc.)

¹ At present Bruce Schneier is the BT (British Telecom) Security Chief and he also issues monthly a free newsletter on security.

- Security storage for valuables (fire proof lockers, strong-boxes, strong-rooms, safes etc.)
- Mechanical protection of persons (bullet-proof vests, body armors, etc.)
- Manned guarding and security
 - Key Point protection²
 - Territory protection
 - Combined protection
 - Patrolling
 - Protection of persons
 - Guarding of sport events and mass movements (demonstrations, performances, etc.)
- Electronic protection
 - Fire alarm and fire fighting techniques
 - Burglar alarm
 - Industrial video systems (formerly CCTV systems)
 - Inspection/controlling systems and equipment of persons and baggages
 - Goods protection equipment
 - Positioning systems
 - Remote control and transmission systems.
 - Access control and working-ours recording systems.
 - Buzzer and door phone systems

When checking thoroughly the above, we can see that an increasing number of integrated ICT means can be found in the solution of security technology. Formerly instruments of security technology, also used low voltage solutions, but nowadays the proportions are shifting towards ICT solutions. Electronic solutions can be found in an increasing number in devices. E.g. when passing through the rooms of a building it can be seen that practically most places require the installations of fire alarm, electronic means that can be connected to the computer network system (computer workstation, telephone, network printer, multifunctional copier, etc.) and some kind of property protection device (e.g. sensors for doors and windows and movement sensors, readers for entering systems, etc.) Therefore if an older building is going to be renovated, modernized or a new building is constructed, nowadays it is advisable to fix and to execute the endpoints and cables of property protection, fire protection and ICT systems simultaneously during the projecting and construction period. It is possible that complex projecting and execution will involve somewhat higher costs, nevertheless, this requires lower costs than a posterior solution or modification, not to mention esthetic and functional compromises.

Most companies and organizations dealing with this subject handle these methods and solutions as a complex unit. It cannot be assumed that a fire protection expert, property protection expert or ICT expert is equally familiar with all three questions. Each field of activity has its own experts.

As it can be seen from the above, the modern or up-to-date fire alarm or property protection systems contain more and more ICT novelties. Today, thanks to the above, not only the security cases (e.g. alarm in case of fire or illegal entering) can be transferred to great distances, but due to the up-to-date technical devices we can get a full picture of the happenings at the site or probably even can influence the actual local proceedings. An increasing number of solutions based on IP (Internet Protocol) can be found (e.g. wireless

² Key Point Protection is a kind of property protection and means protecting the key important place or area of the object that is essential in terms of being endangered e.g. an entrance, a place – cashier's office, telephone center) etc.

camera systems, where each camera has its own IP address and through the computer system the visible data can be recorded and/or observed at the actual time at the site).

SECURITY TECHNOLOGY AND THE HUNGARIAN MINISTRY OF FOREIGN AFFAIRS

The Hungarian diplomatic and consular service is the farthest defense line of Hungary, assists in signaling unwanted threats (terrorism, organized crime, epidemics, and illegal migration) detects the unwanted persons by checking their authorization to enter. In connection with trips it renders help³ to passengers traveling to catastrophe-hit and crisis areas as well as to citizens abroad in trouble. Therefore when we travel abroad it is important to take with us the address and phone number - and any other contact information - of the respective Hungarian consulate(s).

Since 11 September 2011 the danger of terrorism has significantly increased all over the world. The Hungarian missions are also affected by this fact, however, they have not become a direct target of terrorist attacks. Security has nevertheless become a central problem in the course of the past decade. It is the receiving country's task to guarantee the security of Hungary's diplomatic mission and representatives. Reasons:

Articles 22 and 29 of the Vienna Convention of 1961 (Vienna Convention on Diplomatic Relations) [3] defines the immunity of the premises of diplomatic missions and the personal immunity of the diplomatic representatives. This agreement includes that the receiving country is obliged to protect with proper measures the premises of the diplomatic mission against any intrusion damages, and hinder and stop the possible disturbance of the diplomatic mission and hurting its dignity. Furthermore, the receiving country is obliged to take proper measures to inhibit actions against the liberty and dignity of the diplomatic representatives. The receiving country is obliged to honor the inviolability of the buildings of the diplomatic mission even in case of an armed conflict, even in case the diplomatic connections had been severed or the diplomatic representatives had already - temporarily or finally - returned to their home country.

According to the above, in order to guarantee the security of the sending country's premises and representatives and if the international situation requires police officers shall be posted in front of the diplomatic missions in Hungary, e.g. to strengthen the police protection of the US Embassy following the death of Bin Laden [4]. There are, of course, cases when police presence in front of a diplomatic mission at the request of the diplomatic representative is required. In such cases - of course - against payment is effected by the sending country. There were cases in the past when the mission of Hungary has requested police protection for the Hungarian mission in certain states.

Every country may choose its own method how to meet its protection obligations. International law requires not only the protection and immunity of the representation and its members but identical rights are granted for the head of mission's premises, i.e. his residence, and the home of diplomatic representatives, as well. In Hungary the procedure concerning the protection of diplomatic missions is regulated by a governmental edict. According to this the national security services, the Ministry of Interior and the Protocol Department of the MFA together classify the protection level of the threats into 3 categories. During this categorization the possible request of the representation in question, respectively the non-

³ This expression is often misunderstood by many citizens. E.g. when spending our holidays abroad, our valuables are stolen or we suffer an attack we can contact our consulate for help in searching a reliable legal adviser but this will not be supplied at the expenses of the consulate. When travel documents are stolen these will be replaced by the consulates but at the travelers' expenses.

public information available through international connections will be taken into consideration. In addition to the 1961 Vienna Convention (this international treaty defines a framework of diplomatic relations between independent countries) there are independent international conventions/treaties regulating the necessary requirements for the protection and immunity of the international organizations and their members.

It is necessary to mention the 1979 “New York Convention on the Prevention and Punishment of Crimes against Internationally Protected Persons including Diplomatic Agents”. This itemizes what steps must be taken and what co-operation must be carried out in case of organized or committed attacks against heads of states and governments, government members, special delegations and diplomatic representatives, respectively it regulates the prevention methods, as well.

According to the level of security endangerment, the missions can be categorized. Most representations belong into the first category. These can be found in states that can meet their obligations according to the Vienna Convention. Representations of the second category can be found in states where a legitimate police power exists but public safety is on a poor level and the receiving country is not fully capable to guarantee the security. In the third category there is a legitimate police power but as far as internal politics is concerned it is rather unstable. In case of the fourth category there is no legitimate police power available, therefore the receiving country is not in a position to meet the requirements of the Vienna Convention.

For most Hungarian diplomatic missions the receiving country can secure a proper level of security, although cases may occur where the receiving country cannot meet the requirements of the Vienna Convention. Only in cases of diplomatic missions belonging into the third and fourth category may exist the necessity that the sending state should solve the guarding and protection of the diplomatic mission. At present, Hungary has no diplomatic mission where such protective measures would be necessary, but the Hungarian diplomatic mission in Baghdad was in such a situation in 2004. Due to economic, political and diplomatic reasons or eventually obligations accepted in international treaties Hungary may have to ensure the protection of its own diplomatic mission and representatives. However, the question may arise: who will perform the protection of the Hungarian diplomatic missions, in case the receiving state cannot meet its obligations required by the Vienna Convention. Three possibilities may arise:

- Hungarian Defence Forces: On international level one can see similar actions of the United States, according to which diplomatic missions of the USA are protected by marines. E.g. Israeli embassies are protected by Israeli servicemen, however, it must be remarked that they have the right to carry fire arms but these can only be used on the territory/premises of the representation! The question may arise: why don't Hungarian soldiers protect the Hungarian representations. Hungarian law does explicitly give no authorization for that. But according to the decision of the Hungarian Parliament the Hungarian Defence Forces participated in the Iraqi International Forces. The Hungarian diplomatic service carried out the receiving and forwarding of “military mail” between Hungary and Hungarian mission in Iraq with the participation of Hungarian Defence Forces. For this purpose Hungarian soldiers were sent to the Baghdad Embassy of Hungary from the authorized military contingent. Naturally, these soldiers together with the Hungarian diplomatic representatives participated in the security protection of the Embassy. Hungarian Defence Forces have to protect establishments that are of prime strategic importance to the military protection of the Republic of Hungary. The Hungarian diplomatic missions are not such establishments therefore the protection of the diplomatic missions does not belong to the protection activities of the Hungarian Defence Forces.

Possible changes of the respective law may come into effect in the future and can make way for this possibility to come true.

- Police force: reverting to the cooperation figuring in point 1 the Hungarian Government decided in 2004 that the protection of diplomatic representation had to be secured by Hungarian policemen [5]. Furthermore, the government authorize the minister of internal affairs to establish a quick-action guard unit with 50 members that can guarantee the security of the Hungarian diplomatic missions stationed in crisis areas [6]. However, this unit had not been put in action therefore it is the Hungarian MFA that exclusively secures the protection of the Hungarian diplomatic missions at present.
- Personal and property protection firms: no such firms have been put in action in Hungary. Should the necessity arise, then it must be taken into consideration that such firms have no licenses issued by the authorities neither in Hungary nor in a foreign state therefore these cannot take forceful measures and exercise authorized power. As they are not in possession of licenses issued by the authorities in case of their employment the receiving country will not grant them any immunity and help.

As already mentioned above, most states are able to meet Vienna Convention obligations. Despite this, it is necessary to undertake steps for preventive and protective measures characteristic for the site, or respectively defined in their own security regulations, as exercised by the citizens, organizations and enterprises of the given country.

It is a well-known fact that in Hungary more and more buildings, residences and facilities are supplied with security cameras, alarm systems, different property protection installations, even with watchdogs and manned guarding. The same can be observed at MFA's buildings in Hungary and in its missions all over the world, too. However, there are differences between a residence, a shopping center and MFA buildings. E.g. high ranking representatives of different foreign states or even heads of states are often visiting the premises of MFA and diplomatic missions, where classified and electronic documents are also handled, prepared, stored and forwarded, therefore strict security instructions and measures must be applied for their security and protection.

Handling of classified data, that can be of Hungarian or foreign origin (NATO, EU, WEU etc.), must correspond to special security regulations. The legal regulations concerning the handling of classified data define personnel, physical and administrative security requirements and measures. This article deals with only physical security. Instruments and methods of security technology have to be applied for evolving physical security. Physical security has internal intermediate and external elements. The external elements are used for protection of territorial outer limits. The intermediate elements signal the unauthorized entrance to the manpower or response forces. The internal elements delay or even inhibit the obtention of classified material by unauthorized persons. In order to protect classified materials, therefore these can only be handled, prepared and stored at a properly secured area corresponding to the required classified level, therefore three different areas are required for classified material handling [7]:

- administrative zone: every area where entrance is controlled
- second class security area: every site where “Confidential” or even materials of higher classification are used, or used and stored, or just stored in a way that unauthorized access can be inhibited by internal measures. The area is physically separated and protected, furthermore the entrance and departure is controlled. In order to hinder the unauthorized access to classified data, to enter this classified area is made possible only by special authorization. Persons without a personal security certificate can only enter when accompanied by an escort.

- First class security area: every site where “Confidential” or higher classified materials are handled, or handled and stored, or stored in a way that the entrance to the area means access to the classified material, as well. The area is physically separated and protected as well as entrance and departure are controlled. Entrance and departure are possible only through an access control system and only for those who possess a special authorization and a personal security certificate.

To establish a security zone at a diplomatic mission depends on various circumstances. Local characteristics, such as the building of the mission rented or owned, situated in an individual or office building, strongly influence the cost of security zone installations. Security instructions and requirements must be observed, not only at home but everywhere in the world, independent of the fact whether the mission is operating on the territory of a friendly state (EU/NATO) or in a country threatened by international terrorism.

As it is necessary to protect the security interest of the Hungarian state execution, modification and maintenance of the system can only be carried out by technical personnel sent by Hungary. First class security areas are the most expensive ones to establish and maintain. These will be executed at larger representations being of prime importance from the viewpoint of strategical, economic, diplomatic, political relationship and concerning the foreign policy of the Hungarian government. It is a well-known fact that such security areas can be found not only at diplomatic missions of Hungary but practically at diplomatic missions of every state. The protection of security zones involves special human and technical requirements. The entrance into such a security zone is strictly limited and only permitted for few who have authorized access to these data. The entrance regulations have to be applied under strictly controlled conditions and the entrance itself (persons, duration etc.) must be continuously registered. Before beginning to handle classified data, it is necessary to elaborate the personnel, physical and administrative security conditions and the personnel must be subjected to a proper security check. They are obliged to pass an examination proving their knowledge of the regulations, and their observing of these regulations must also be checked continuously. Only full knowledge is accepted.

At certain strategically important mission so-called security expert services (KBSZCS – standing for “Külügyi Biztonsági Szakértői csoport” - a Hungarian abbreviation of Expert Group for Security of Foreign Affairs) must be formed and maintained [8]. In every case this means a 7/24 hour duty on security services continuously, i.e a continuous every day service of the week. At missions with such services the duty personnel renders the first line of manned response.

On higher level security areas, protection against technical attacks must also be established or introduced. The purpose is to aggravate access to information of great importance for us. Therefore the following details are also of great importance: wall thickness, quality of the bars, brake-through time factor of the doors, existence of security illumination and cameras (CCTV – Closed Circuit Television), their installation points and viewing angles, as well as the proper number of cameras. At this system of high level apart from the technical installations it is important to have a so-called quick response force that is a manned - human - resource. This must be secured at representations where classified material is handled and no 7/24 hour KBSZCS service is available. A quick response force is secured at these diplomatic missions by readiness or duty service activities. It is important that this force should be available at the site within a very short period of time. Furthermore, the manned service should be able to properly respond to security incidents, i.e. they should in principle and in practice be aware what measures, alarms, etc. should be taken and effected including the possible information and cooperation of the receiving countries' authorities.

Luckily, security incident of physical intrusion into the buildings of a Hungarian diplomatic mission did not often occur. The low number of physical intrusions is probably

due to the technical and manned measures are deterrent to those who want to enter unobserved the premises of the representation.

The present development of ICT means makes it possible that given information can be obtained not only by physical appropriation. Up-to-date electric instruments developed new techniques for the obtention of information, e.g. a modern electronic instrument emits electromagnetic emission that can be copied within a given distance by applying proper instruments. A few decades ago such techniques were only imagined in films but today it is reality. The seriousness of this situation is also proven by the fact that the so-called TEMPEST standard and examination were created. The TEMPEST standard and examination method deals with the regaining and/or hindering the regaining of these data in case of acoustic, electric, magnetic or even light sources, as well. More details of this important national security fact affecting all three territories of electronic information protection (INFOSEC4, COMPUSEC5, COMMSEC6) can be found on pages <http://www.tempest.hu/>.

Security also means that the adequacy to the regulations must regularly be checked. In the MFA the regular checking of the proper application of these regulations is performed by the Department of Controls, Security and ICT Department as well as by National Security Authority as the competent authority.

Apart from the property protection and handling of classified documents other territories that significantly influence the security level of missions has also to be mentioned. One of these decisive territories was our joining of the Schengen zone. As part of our preparations we had to effect developments at home (at international airports, border crossings etc.) and abroad at our missions in order to meet the Schengen requirements. These developments had to be performed at each mission issuing Schengen visas according to the “Common Consular Instructions” for Schengen countries and the security requirements of the EU Schengen Catalogue. These developments promote as well as maintain the security of visa issuing. In the course of preparation of our Schengen joining at the missions at home and at the MFA the following examples of the development procedure are worth mentioning [9]:

- construction of separate door to the consular section
- introduction of metal detection security control of consular clients
- exchange of traditional glass paneling of consular customer service and certain places for bulletproof windows
- applying up-to-date transfer trays
- installing security cameras
- hiring security guards
- supplying interview rooms with panic buttons
- construction of sluicing-system doors for entering the consulate
- etc.

The security of a consulate can be significantly influenced by the operation of the consular customer service. As a connection a proper informative and queuing system has to be established in order to avoid superfluous queues, lack of information (e.g. necessary documents and data for the administration) and to eliminate possible unpleasant issues. Imagine the situation when a long queue of several ten meters is formed in front of the consulate: unpleasant debates may arise between consular clients concerning who is next, Not to mention that there may be customers with great probability who will not be able to be attended to on the given day due to physical limitations. In case of a properly organized

4 Electronic information protection

5 Computer security

6 Communication security

customer service system this also has to be taken into consideration, because such cases may considerably influence not only the security of the consulate but its vicinity, as well.

Further examples of security technology: there are cases that may occur in Hungary and at our missions, too. It may happen that a peaceful demonstration turns into chaos and if there are no bulletproof windows or windows with special foils, then the building may suffer serious damages or even the people inside, as well. Similar situation can be observed if the fence is not high enough or it can be easily climbed because of its construction. If a panic room⁷ is available that may keep and increase the feeling of security for a limited time. The level of security can be increased by an automatic alarm system that can call the response force when a burglar or an unauthorized person appears in the court or in the building or a safe box supplied with a time lock that can only be open at a certain time or after a certain period. At certain missions, especially those located at receiving countries fighting against international terrorism, due to public safety requirements it is advisable to procure armored cars or even jeeps and land rovers because of poor road conditions.[8].

At the diplomatic missions, as well at home, a great number of electronic devices are in operation. Due to special conditions in certain countries the power supply is not continuous at some of our missions. Power outage may last long hours or even days, endangering the continuous power supply necessary for everyday work or even the continuous power supply of security instruments. For missions with similar conditions it is advisable to procure a standby power generator. Therefore the procurement of power generators for several missions should centrally be organized by the MFA (e.g. Abuja, Nigeria).

SUMMARY

As it can be stated from the above, although not explained in detail, security technology instruments have become part of everybody's life. In our every day life hardly any situation occurs where we don't meet with some elements of security technology even if we think of the entrance door of our own residence. We should not forget that the hundred percent security does not exist but we can approach this level. Hundred percent well operating security systems do not exist because neither security systems are not completely perfect . Superfluous excitement may be caused by an infra red based motion detector not satisfactorily mounted: e.g. the sensor was turned to watch the window and after sunset or sunset, or when the sun hides behind a cloud the quick drop of temperature may cause an alarm erroneously. This can be eliminated by proper design work. Similar avoidable security event may be caused by the advection of a not properly closed window moving a curtain. The movement sensor may sound off the alarm system after working hours or when nobody is at home because of a movement. Such and similar security incidents/cases/ may be avoided by proper foresight.

For complex security problems our correct answer is: the development, installation and operation of complex security systems. For the installation and operation proper proficiency skills and careful design work is necessary. In order to grant a proper security level of our security systems continuous development and research of security technology, as well as training, retraining and ensuring a second line of experts operating these is also necessary.

⁷ This is a fortified room, that can protect persons, for hiding in case of break-in, home invasion or even in case of emergency or disaster

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