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CISP

The Centre for International Security Policy (CISP) of the Swiss Federal Department of Foreign Affairs (DFA) is responsible for all aspects of Swiss foreign policy relating to security issues. In cooperation with the relevant sections of the DFA and in close collaboration with the Department of Defence, Civil Protection and Sports and the other departments concerned, CISP guarantees the consistency of Switzerland’s security policy within the framework of foreign policy as a whole.

Reporting directly to the State Secretary of the DFA, the Centre consists of the following three sections: the Section for International Security, the Section for Arms Control and Disarmament, and the Section for Multilateral Security Operations.

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Dear Reader,

Our strategic and human environment is developing rapidly and our globalised society increasingly presents us with new situations. The problems themselves tend to interweave and to overlap, creating complex risks whose significance and consequences are difficult to predict. They are compounded by antagonisms that operate on a worldwide scale, fuelled by logics that are often imperfectly understood and where the importance of culture and history is sometimes underestimated.

Switzerland is not a mere spectator of these often dramatic developments, which now tend to occur in sudden bursts. Whatever the response of various protagonists to contemporary risks may be, no dimension of our country can dissociate itself from the international context. The problems are so various, many-faceted and unpredictable that simple solutions based on a single standard approach are utterly inadequate. Not only do the problems demand multi-lateral and multi-dimensional responses – the solutions themselves must be capable of adapting to the evolving nature of the problems.

Building and cultivating networks is not enough. Networks also have to be developed. This is the most delicate aspect of cooperation but it is also the most indispensable, because certain risks – such as terrorism – tend to change more quickly than the measures and responses designed to counter them. Interaction between partners therefore needs to be constant, dynamic and transparent. It must be free of all pre-conceptions and open to new perspectives. It must be based on an attitude and an instinct for cooperation and adaptation, not merely on the need to respond to a requirement for action imposed by external protagonists.

Paradoxically, as the strategic environment requires levels of financing to cope with the problem of obsolescence which more than ever affect materials and structures, increasingly strict budgetary constraints now tend to limit their deployment. It is now essential to create and to exploit synergies between partners. It is indispensable that security systems should intermesh more effectively at the international level and that the resultant synergies should help to make complex solutions viable.

This brochure is not only an overview and an analysis of international cooperation in the field of risk management. It is also intended as a forum for an exchange of views on security issues and as an example of a common determination to achieve specific and positive results. It brings together compelling reflections both on substantive issues and on our determination to work together to combat contemporary threats and risks.
Risks, crises, ruptures: a whole new ball game

September 11, 2001: the global rules of the game are torn apart. This is the most dramatic, but not the only facet of the risk arena. One jet-propelled Sar contamination, and public health paradigms have to be revisited all over the world. One technical incident in a critical network – a 9-to-10 second event – and a quarter of North America is plunged into the dark; the same in Italy a few weeks later. One mad cow, and the US meat market teeters in 24 hours.

And since then Madrid: March 11, 2004. Not a week goes by without a totally unforeseeable crisis hitting the headlines. Terrible shock: we were so sure and proud of our risk analysis models and crisis management tools.

The models

The models we used to settle international crises, and to successfully avoid a nuclear holocaust in our lost XXth Century are probably outdated. As Coral Bell warned as early as in 1978:

“It has been rather misleading and unfortunate that the academic study of crisis management was initiated chiefly by the Cuban missile crisis in 1962 […] It appeared to approximate to the form of a ‘two-person game’. […] The episode really did look rather like a diplomatic chess game […]. If there is a ‘game’ model for crisis, it is certainly not chess, but poker for five or six hands in the traditional Wild West saloon, with the participants all wearing guns, and quickness on the draw rather than the fall of the diplomatic cards tending to determine who well eventually acquire the jackpot”.

The warning takes its full meaning just now. The whole scenery is under the shadow of the cut diagnosis made in 1997 by a US Presidential commission:

“Our national defence, economic prosperity, and quality of life have long depended on the essential services that underpin our society. These critical infrastructures – energy, banking and finance, transportation, vital human service, and telecommunications – must be viewed in the Information Age.

Risk management in the Swiss decision-making process

“Do you remember Kant’s famous table of categories which attempts to summarise the basic notions of classical science? It is symptomatic that the notions of interaction and of organisation were merely stop-gaps or did not even appear.”

Ludwig von Bertalanffy, General Theory of Systems

Since 1990 attempts have been made to analyse risks for the Swiss political system. The evolution of knowledge and of information science made it possible to attempt a scientific approach to the totality of risks from a security policy perspective. An inter-departmental project was initiated, only to conclude in 1998 with a brochure project that was dead in the water as a result of communication difficulties between experts and the political sphere.

In the geopolitical context of the end of the 20th century, the task was to quantify risks as a function of categories and of scenarios. Four indicators were used for these evaluations: the economic dimension, the number of victims, the extent of the phenomenon and the number of days of deprivation of democratic rights. The resultant projections gave an overview of the risks for Switzerland, the most probable ones in the long term and the most immediate in the short term.

The breakdown of many certainties, the emergence of new phenomena and the growing complexity of western society, combined with the development of technology and the acceleration of processes, underlined how difficult it was to come to terms with new risks and vulnerabilities. The reductionist approach had revealed its limitations and the era of systemic analysis had arrived.

“Electricity was not discovered by improving the quality of candle. It is symptomatic that the notions of interaction and organisation were merely stop-gaps or did not even appear.”

Louis Schondert, Swiss psycho-sociologist

The functioning of the Swiss Federal State according to the direct democracy model is very time-consuming, as the progress of a law through parliament or the procedures for dealing with a referendum initiative show. At the beginning of the 21st century, when enormous amounts of information are circulating at the speed of light, this systemic slowness tends to favour the principle of reactivity rather than of pro-activity.

Moreover, a paradoxical feature of communication is that it is essential for society but at the same time great care is needed. The moment of communication is equally crucial because it is evident that the interest of the State is not equal to the sum of all individual interests. Hence in their daily dealings and in the face of fierce media attention, the authorities are always seeking a permanent balance between over-reaction and under-reaction. In risk management, the most versatile factor is the human factor.

Patrick Lagadec

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The rapid proliferation and integration of telecommunication and computer systems have created new dimensions of vulnerability, which, when combined with an emerging constellation of threats, poses unprecedented national risk.1

Terrorists may not even try to destroy physically some elements of a network infrastructure, but rather seek ways to use the huge diffusion capacity of our own networks as a weapon.3 The 9/11 terrorists did not seek to destroy an aircraft or an airport. They used the commercial aviation network to attack civil targets outside the system (every aircraft became potentially at risk, obliging the FAA to order the shutting down of the whole commercial network).

In similar vein, the anthrax attacks were (apparently) not directed against the US Postal Service, but attackers took advantage of the trusted capacity to effectively deliver their letters. In a nutshell, we are witnessing a shift in our vulnerabilities: from massive destruction to massive disruption.

**Crisis management tools**

The tools we forged to handle managerial crises are no longer adequate to handle present day crises. Especially after the Three Mile Island incident in 1979, efficient rules, handbooks, and checklists of all kinds had been developed. Some cases are well known including the criminal contamination of Tylenol concerning Johnson and Johnson in the 80s. But that game is over: “Here lie the [conventional] crises”. We have now numerous answers to previous crisis configurations; but the questions have changed radically. The new web of challenges is now made of “unconventional” events, reflecting more than mere specific incidents, rather global turbulences; real-time risks and out-of-scale domino effects, in the new worldwide context of interdependent critical infrastructures; scientific ignorance; potential losses exceeding the capacities of insurance frameworks. And last but not least, “crisis communication” is plunging into “communication in crisis”, when instant media coverage, dramatised emotions, and the lack of substance enflame the crisis itself.

Risk management is based on three steps: situation analysis, vulnerability analysis and risk analysis. The first of these focuses on facts; the second concentrates on the flaws in the system and the third works out projections. Like the links in a chain, these three elements dovetail into each other and constitute elements of conduct at every level of responsibility. Situation analysis and risk analysis are based on a phenomenological approach, whereas vulnerability analysis adopts structuralist methods which focus on the flaws in the system.

Managing risks involves knowing how to anticipate events. It means first and foremost knowing how to cope with crises and breakdowns when there are no points of reference by which to find one’s bearings. This is a phase in which decision-makers can only be reactive. Risk management then means guaranteeing the system’s survival by a global analysis of risks, by controls and adaptations and by the prevention of specific risks. Finally, anticipatory projection is possible only if the system is coherent, which ensures that resources can be allocated optimally.

Risk management does not provide predictions, nor can it take the place of political, strategic or technological choice. However, the aim of integrating this method into behavioural processes at all levels of responsibility is to enable decision-makers to decide on the basis of all the elements that could guide their choice, whether they be expert opinions, mathematical models or any other appropriate means.

For many years, the militia principle has made it possible to develop a common basis for conducting business. Experience acquired in communal, cantonal and federal executives as well as military training courses provides know-how that is often empirically based. The administration and the universities – notably the Federal Polytechnical Universities – are constantly perfecting their methodology and producing increasingly sophisticated analyses. Communication between experts and decision-makers is now the crux of the problem. The authorities will have to make decisions, even though a margin of uncertainty remains. Their decision will often be based on the precautionary principle, but whatever happens they will not be able to shuffle off their responsibilities.

“The truth of the matter is that you always know the right thing to do. The hard part is doing it.”

General H. W. Schwarzkopf

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1 “Risikoprofil Schweiz” (Switzerland’s Risk Profile), Central Office of Defence, 1998


The importance of the network dimension can’t be overestimated. Networks have become more complex, and more vulnerable, as a result of privatisation, economies of scale and globalisation. For instance, this was the key cause of the Paris Airport Hub’s severe difficulties on January 4 and 5, 2003 (each airline having its own contracting parties for de-icing, these sub-companies being unprepared for unconventional situations; some airlines having nobody or very few people able to take charge in case of chaotic situations). Critical networks are increasingly becoming dependent on each other: some glitches in one network may cascade into large-scale breakdowns in other networks.

Rupture: a new ball game

In a nutshell, rupture becomes the name of the game. And time is running out. A dangerous dynamic tends to be reinforced after each event: disarray of people in charge (experts, managers, governments), on the one hand; distrust among the public, on the other hand, which increases the confidence and determination of the perpetrators, and offers them wide scope for action.

There is an urgent need to reconsider paradigms and strategic intelligence. Discontinuity and surprise, ambiguity and ignorance, are still outside of most managerial models.

They have to come to the center. We have to stop pretending “there is nothing new under the sun” (Ecclesiastes 1:8-10). We were used to having technical answers – technical answers will no longer do on their own. We have to switch to question searching and to a collective sharing process, systematically. Refusing questions and withholding information make problems intractable. The critical step is to have the courage to acknowledge and to address emerging challenges. Let us remember the core lesson of the official report of Enquiry after the BSE fiasco in the UK:

“A vast majority of those who were involved in the country’s response to BSE believed, subjectively, that it was not a threat to human health. In their heart of hearts they felt it was impossible.”
There is an urgent need to launch determined initiatives: senior executives’ training to global surprise, citizen empowerment are the keys for significant advancement in field work.

One illustration: after the 2001 anthrax attacks in the US and innumerable hoaxes in Europe and elsewhere, I suggested to the postal operators to launch an international debriefing process. Representatives from 30 public postal operators, among which the United States Postal Service (USPS), came to Paris in November 2002 to share their experiences, and to establish common operational capabilities in case of severe crises. It was done one month later, successfully4.

A similar initiative concerning the Sars episode, which involved much more stakeholders worldwide than the WHO and Chinese authorities, should have been launched to also include airlines, airports, insurers, municipalities around the world. I tried, I failed: no real interest. But: with a growing globalisation of social and economic activities that leads to increasing interdependencies, we’re not playing chess anymore. Collective responses have to be strong, inventive and sized to the new game.

Nevertheless, mobilisation is on its way. A European Crisis Management Academy was created in April 2000 in Stockholm. The movement was followed up last summer with a EU/US Crisis Management Conference at Minnowbrook Conference Center, thanks to the impulse of Syracuse University [NY].

In a time when a kind of death-oriented wind seems to blow throughout the world, we have to seize each and every opportunity to impulse positive dynamics, to listen, to invent with people, to suggest, to experiment, to learn from each other. And this has to be done with great perspectives, “outside of the box”. As Hegel put it: “When reality is unconceivable, then we have to forge unconceivable concepts”; I would say: “to launch unconceivable dynamics”5.

I do know how difficult it is for traditional cultures. Ralph Stacey has clearly stated the point: “At least 90% of textbooks on strategic management are devoted to that part of the management task which is relatively easy: the running of the organisational machine in as surprise-free a way as possible. On the contrary, the real management task is that of handling the exceptions, coping with and even using unpredictability, clashing counter-cultures; the task has to do with instability, irregularity, difference and disorder.”

The Guns of August, which Barbara Tuchman referred to in “The Secret of the Great War”, crushed Europe in 1914. The Planes of September, the Trains of March, and other waves of emerging ruptures are setting the scene today. I have been working for the past thirty years on the strategic management of these issues: the stakes are today of historic importance. The vision is clear: “failure is not an option” – our collective responsibility is to transform emerging global ruptures into emerging global opportunities. The roadmap is clear: unconceivable challenges call for previously unconceivable responses. The immediate imperative is clear: time to get to work.6

Useful links:
European Crisis Management Academy
www.ecm-academy.nl
Ecole polytechnique de Paris
www.polytechnique.edu

4 “Anthrax and Beyond”, (Guest Editor: Patrick Lagadec) Journal of Contingencies and Crisis Management, Volume 11 Number 3, 2003
Adaptation of security structures to contemporary threats

International security has entered into a period of profound change. This process was initiated by the end of the Cold War and its rigid, yet stable bipolar power structures. It was further accelerated by the attacks of 11 September 2001 as well as the US war against Iraq. This new security environment is bound to require a no less profound corresponding reform of the security sector and renders the principle of good governance of the security sector even more imperative.

The end of the Cold War did not bring the end of history, but its return with a vengeance. In South Eastern Europe, in the Caucasus, and elsewhere, there were attempts to redraw borders in blood. Nationalism and religious fundamentalism gained in strength. In Africa, countries faltered or virtually collapsed, while entire regions of the continent threatened to slide into endemic conflict. The horrible words of ethnic cleansing and genocide re-entered the political vocabulary. While in Europe the old dividing lines came tumbling down – and a continent that grows through enlargement of the Euro-Atlantic institutions together again promises the creation of an area of stability, peace, and the rule of law – on much of Europe’s periphery the number of refugees exploded and human security declined. “9/11” did not trigger the “clash of civilizations”, but it horribly highlighted both the inherent vulnerability of an interdependent world and the globalisation of terrorism. NATO’s decision to invoke in response, for the first time in its history, the Alliance’s Article V underlined that an important threshold had been crossed. The United States’ decision to attack Iraq and to shift towards a strategy of preventive strikes – with or without UN resolution and regardless of the impact that move was bound to have both internationally and with respect to transatlantic relations – crossed yet another Rubicon.

New security environment

It is still much too early to take full stock of what this changing security environment implies; yet some first observations can be made:

- The Westphalian world of the nation State as the unchallenged pillar of international order – and, consequently, territorial defence as the main task of the armed forces – have, in a world where not only the economy, but also security has become globalised, been superseded by a much more complex reality. The need for a military defence capability persists (for interstate war remains in parts of the world a possibility); yet it must today be coupled with a rapid reaction capability and the ability to ward off new forms of global threats (from organised international crime and Al Qaeda to hackers).

Adaptations of the ”Swiss security system”

Given Switzerland’s federal system and the complex distribution of responsibility for security matters between the cantons and the Confederation, it is not really possible to talk of a “Swiss security system.” In simplified terms, the country’s external security is a federal task, and diplomacy and the army are its main instruments. The recent reform of the army confirmed this. Cantonal military formations were disbanded, and in the Armed Forces XXI cantonal responsibility for military matters is now limited to administrative aspects. As for internal security, the cantons have sovereignty in police matters. The Confederation only intervenes if one or more cantons demands assistance in order to allocate police reinforcements (inter-cantonal police commitments) or, if necessary, to provide military elements involved in a subsidiary support role.

This mode of operation has so far proved satisfactory. However, in the case of security arrangements for the G8 summit in Evian in June 2003, the limits of this coordination were reached. Three cantons were involved in this event, which also had an international dimension (collaboration with France and Germany). All the actors in the “security system” are aware of the gaps in this coordination, where the confusion of responsibilities limits the capacity to decide and act quickly in an acute crisis. Large-scale events such as the G8 summit underline the inadequacy of this collaboration between partners who are all anxious to preserve their privileges, as well as the absence of any coherent doctrine of how to deploy the means available. As for resources, it is generally accepted that there is a police shortage in Switzerland. The use of the army in a subsidiary role – at first glance an interesting option in economic terms – can help to stop gaps but this is a solution that could necessitate profound adjustments in the long term.

The present conditions (in particular the financial and personnel resources and the limits imposed by the militia system) as well as certain recent developments (a new interpretation of the terrorist threat, the reduction of the conventional threat and the need for territorial defence, the blurring of the limits between internal and external security, etc.) show that there is a need to adapt. The Armed Forces XXI took into account several important aspects: an emphasis on quality rather than quantity (reduction of numbers, improvement of equipment); flexibility of organisation (brigades replacing army corps and divisions, modularity); increased national and international inter-operability and cooperation. This was based on the need to take account of diminishing resources, to maintain the necessary competence to face a conventional military threat that is currently hypothetical but remains possible in the future while also responding more effectively to missions that need to be accomplished here and now (subsidiary commitments and peace building).

Fundamental questions remain about the increasing need for coordination and response in exceptional situations and the need to increase further the range of security with limited resources, both for internal security and for peace building operations.

Theodor Winkler

Ambassador Theodor Winkler is the Director of the Geneva Centre for the Democratic Control of Armed Forces (DCAF) and is a representative of the Department of Defence, Civil Protection and Sports (DDPS) for the Geneva Centre, International Security Network (ISN), and the “Maison de la Paix.”

He published several books on arms control, nuclear proliferation and international security issues as well as numerous articles on international security issues.
The enemy from without is increasingly replaced by the enemy from within. Civil strife and internal conflict have indeed replaced traditional war as the most widespread form of armed conflict. Internal and external security can no longer be clearly separated. At the same time, the borders between organised crime and armed domestic factions have, in many countries, become fluid. The “warlord” has made his return – and often he is an entrepreneur, cynically dealing in human beings, drugs, blood diamonds, tropical woods, or arms. A trend towards eternalised conflicts and a growing inability to conclude peace have been the result.

The State monopoly of legitimate force is under attack. It has fully collapsed in what are euphemistically called “failed States” (the Somalias of this world). It is perverted in authoritarian States, in which parts of the security apparatus turn at night into “death squadrons”. It is under siege in post-totalitarian States where young and vulnerable democratic institutions see themselves confronted with a non-reformed security apparatus inherited from the past. It is bypassed by the rapid growth of private security agencies and private military companies (PMCs). Today, some 100,000 private security guards form the biggest single sector of the Israeli economy. Similarly, PMC form – with more than 10,000 men – after the US armed forces the second largest military contingent in occupied Iraq.

The political authorities are aware of these problems, which have been referred to in several parliamentary speeches. Apart from the implementation of reforms approved by the people (reform of the army and of civil defence), the age of sweeping reforms every 20 or 30 years (Armed Forces 61, Armed Forces 95, Armed Forces XXI) is probably over. From now on, specific adjustments at shorter intervals are more likely.

This need to think in the medium and long term while at the same time having to take the rapid decisions required by immediate confrontation with reality (in military parlance: “seeing long, commanding short”) concerns the day-to-day security of the population and the fight against terrorism as well as politics and strategy. Switzerland’s position in a developing Euro-Atlantic security architecture (including the police element: the Schengen system), evaluation of the militia system and the obligation to perform military service in a socio-economic context which is less and less stimulating for citizens; increasing professionalisation of military systems in the majority of countries that are relevant for Switzerland; structural re-organisation and re-allocation of responsibility at the federal level (creation of a federal security department?) – a whole raft of questions to be considered and resolved in an ever-shorter space of time.

The rules and principles regulating the use of force that were accepted unanimously by the founding members of the United Nations have been called into question, if not been dealt a broadside blow. Confronted with a fundamental challenge, the United States has left the world of Article 51 of the UN Charter. The golden age of multilateralism of the second half of the last century threatens consequently to come to an end – at the very moment when globalised and more complex security challenges call for more, not less, international cooperation.

At the national level, civilian and parliamentary (i.e. democratic) control of the security sector remains weak in many post-totalitarian countries. Oversight mechanisms, if they exist, tend to focus on the individual aspects of the security sector (armed forces, paramilitary forces, police, border guards, intelligence and State security agencies, other armed formations), but fail to be able to deal with the sector as a whole. PMC largely escape traditional democratic and parliamentary oversight. This is particularly worrisome in times when the fight against terrorism tends to swing the pendulum away from the protection of the rights of the individual towards the need for security of the collective.

The only sure thing in this action-packed film is that yesterday’s certainties are subject to scrutiny and will probably not be tomorrow’s certainties, whether aficionados of a certain folklore like it or not. These reflections are often a source of misunderstandings: whatever the media may say, what is being thought, questioned and planned is not always what will be implemented, especially in a political system as complex as ours. However, the fact remains that the ongoing interpretation of the situation, the identification of gaps in the system and of the measures to be taken to ensure the security of the country, is a permanent task of the political authorities and of the administration. Once decisions are taken and, if necessary, submitted to the verdict of the people, they are implemented in accordance with the will of parliament and the sovereign.

Philippe Welti
Ambassador, Head of the Directorate for Security Policy
Swiss Federal Department of Defence, Civil Protection and Sports

Afghanistan, 2003 (Photo US Army)
The reform and the civilian and parliamentary oversight of the security sector have, therefore, become a crucial precondition for peace and stability as well as development\(^1\) as good governance of the security sector has become a precondition for human security.

**Security sector reform**

Security has ceased to be the exclusive domain of the armed forces. Nor can it be defined any longer predominantly in military terms. In order to cope with the new spectrum of threats close and efficient cooperation between all components of the security sector is indispensable.

In totalitarian States the security sector is organised in rivalling “power ministries”, unwilling to cooperate with each other, forming not only a “State within the State”, but indeed “States within the State”, and easily played out against each other by the dictator according to the age-old concept of “divide et impera”.

In democracies, the security sector must be seen as a set of communicating vessels, in which each component is dependent upon the other. Each of these components – from the armed forces to traffic police – must have by law a specific, unique and clearly defined mission derived from an overarching national security strategy that has been adopted after a broad public debate by government and parliament in a transparent political process. Each component of the security sector must not only be responsible for the fulfilment of the mission assigned to it, but also accountable – to the government, parliament, civil society – for the failure to do so. This requires transparency in the execution of the job – which is in turn the precondition for effective civilian and parliamentary control as well as for a functioning civil society and hence democracy. The lessons learned in this respect in Central and Eastern Europe apply also to the problem of rebuilding a security sector from the ashes of dictatorship (Iraq, Afghanistan).

Today’s security environment requires, however, not only close cooperation at the national, but also at the international level. Interoperability cannot be defined any longer only in military terms; the ability to closely cooperate is equally required for police forces, border guards and intelligence agencies. This includes the ability to cooperate across institutional borders. This will, in turn, further increase in the need for strong parliamentary oversight.

Finally, there is the need to establish common norms and standards at the international level. International crime and terrorism can only be fought, if law enforcement agencies fuse their intelligence and are able to cooperate; borders can only become safe, if the border guards on both sides follow the same procedures.

Conflicts can only be contained, if not only their symptoms, but also their root causes are fought. Ultimately, security can only be founded on broad international cooperation anchored in international law.

Switzerland has, in response to these trends, created in the fall of 2000 the “Geneva Centre for the Democratic Control of Armed Forces” (DCAF). Organised as an international foundation (with some 45 governments from the Euro-Atlantic region and from Africa as members), the Centre has as mission to systematically collect the lessons learned in the area of security sector reform and the democratic government of the security sector and to put this knowledge – through projects on the ground – at the disposal of countries in transition towards democracy. The centre of gravity of DCAF’s work is today Eastern and South Eastern Europe, but projects have also been initiated in Africa and other parts of the world. DCAF offers assistance to governments in the reform of their security sector (formulation of a national security strategy, related documents as well as legislation; ministerial reform; integration and reform of the various components of the security sector), parliaments (handbooks; seminars; strengthening of parliamentary staffs; organisation of international hearings) and civil society (empowerment, local ownership). DCAF is also actively promoting common international standards in its area of work.

Useful link: Geneva Centre for the Democratic Control of Armed Forces [www.dCAF.ch](http://www.dCAF.ch)
National resources and civil-military cooperation

Peter Foot

Even after the terrible bombing in Madrid, March 2004, few Europeans think that security and defence should have a higher priority in their nation’s peacetime spending priorities. This should cause no surprise. In all democratic States, one way or another, security and defence budgets are in competition with other aspects of State spending. Defence expenditure in peacetime, as in war, is an economic problem for open societies. What is spent on the military cannot be spent on more politically profitable investments. The same is true of the intelligence services, police, border guards and paramilitaries, the military’s obvious and expensive partners in providing for national security.

Budgetary compromise

However, there is something of a troubling disconnect at the centre of planning for the long term safety of peaceable, economically hopeful political entities at the start of the 21st century. Despite the political community’s awareness that security is something more than that which comes out of a barrel of a gun, the instinctive heart of developed societies’ responses to security problems is still largely to assume that the military and partner professions will deal with it. Moreover, democracies expect them to deliver security – even in these unpredictable times – with no damage to peacetime prosperity.

In fact, and for a period long predating the end of the Cold War, the security of the State has been an issue that goes far beyond military provision. Georges Clemenceau remains a reliable guide: “War is too important to be left to generals”. In the same way, spending on security cannot be the preserve of those wearing military uniforms or otherwise responsible for security provision.

For the highest levels of government, the issue has always been the same: evaluating risk and making spending priorities on that basis. In a very real sense, everything contributes to, or detracts from, the security of the State. The US-style “Security State” model is one way to formalise this; Scandinavian ideas about ‘total defence’ are another approach. Other ideas have involved careful, often risky, balances being struck between long-run economic advantage and shorter-term military strength. Finland became wealthy but not autonomous in foreign policy for half a century. Over the same period, Iceland invoiced another State for the privilege of using airfields, thereby getting national security at no cost to her own taxpayers. Britain probably overinsured itself militarily, thereby reducing its economic competitiveness for much of the Cold War. Greece and Turkey have historically paid too much for military reassurance against each other, measuring the matter purely as an economic issue. Most new NATO members clearly see NATO membership as providing defence on-the-cheap and value EU-led prosperity more than the burdens and responsibilities of military alliance.

So, the sense that a nation’s security is the consequence of a trade off between competing domestic budgetary priorities, coupled with a chosen international position, is not at all new. Different nations may have responded differently over time, setting their own domestic and international priorities. But there is something of a pattern – a balance variously struck between what Franklin Delano Roosevelt called “freedom from [economic] want” and “freedom from fear” – usually to the advantage of the former. The question is: are nationally-determined versions of this balance the best way to respond to contemporary challenges? Or, given the range of those challenges, is that spectrum of choice too narrow?

Oddly, perhaps, the basic issues remain those outlined by Franklin Roosevelt himself – unquestionably the greatest 20th century leader in peace and war – in his “Four Freedoms” address to Congress, 6 January 1941, 11 months before the United States was committed to war.¹

“In the future days, which we seek to make secure, we look forward to a world founded upon four essential human freedoms. The first is freedom of speech and expression – everywhere in the world. The second is freedom of every person to worship God in his own way – everywhere in the world. The third is freedom from want – which, translated into world terms, means economic understandings which will secure to every nation a healthy peaceable life for its inhabitants – everywhere in the world. The fourth is freedom from fear – which, translated into world terms, means a world-wide reduction of armaments to such a point and in such a thorough fashion that no nation will be in a position to commit an act of physical aggression against any neighbor – anywhere in the world.”

For our own times, what Roosevelt envisaged was a kind of world that “is the very antithesis of the so-called new order of tyranny” which terrorists, dictators and others “seek to create with the crash of a bomb”.

¹ All quotations taken from US Government, Congressional Record, 1941, Vol. 87, Pt. 1.
Fears and challenges

Clearly, each of the “freedoms” resonates today. Democracy may be diverse and less than perfect, and cannot be assumed to work just because it is accepted, but no better model for political legitimacy exists. Supporting regimes that do not allow freedom of speech calls into doubt our own commitment to that. Freedom of religion has no alternative in multi-ethnic European nations – leaving aside the requirements for personal salvation which a secular Europe largely ignores. Freedom from economic hardship has been a boon to West Europeans for more than a generation but it is far from an eternal freedom. So much today depends on such diverse things as continuing cheap energy, the absence of protectionism, assuring corporate integrity, or striking a better savings and spending balance: none of these can be assumed. Finally, what do we now fear most? Roosevelt’s updated worries about weapons proliferation?

Another general war in Europe? Or do accommodating to an aging population (coupled in some countries with a pension collapse), human or agricultural disease spread, environmental catastrophe and the threat of terror now represent more grounds for concern than old fashioned invasions by hostile powers? Put another way, much of what frightens us involves the responsibilities of multiple agencies, almost none of them military. Some of these are governmental but many are in the private sector or span aspects of both.

Swiss CIMIC in the Balkans

Post Cold War military operations take place within a wider political and civilian context in which new influences emerge, ranging from political to economic and social factors, which may trigger a crisis, or may occur as a result of a conflict.

An holistic approach to address these factors and to rebuild damaged civil institutions and infrastructures, will be key to achieving the stable, secure and self-sustaining environment that breaks the cycle of conflict. Such an approach also reduces the need for involvement of military forces.

In this new security environment, peacekeeping has become just one of many tasks in crisis management in areas with dysfunctional civil institutions or infrastructures. Law enforcement, election support, monitoring the human rights situation, restructuring civilian and judiciary administrations, the disarmament and demobilisation of warring parties, or helping the return of refugees are the new challenges, which military forces, international organisations (IOs) and non-governmental organisations (NGOs) face.

The purpose of Civil-Military Cooperation (CIMIC) is to increase coherence between civilian and military responses to crises or potential crises, to enhance the coordination and cooperation in support of the mission between the military commander and civil populations, including national and local authorities, as well as international, national and non-governmental organisations and agencies.

At the beginning of the SWISSCOY deployment to Kosovo in 1999, the emphasis of CIMIC activities was put on the reconstruction of school buildings. Two school buildings were repaired in cooperation with US Aid, CRS/Caritas US. Subsequently, SWISSCOY was one of the first contingents to shift from above ground construction to bridge building. A very fruitful and efficient cooperation developed between SWISSCOY and the Swiss Agency for Development and Cooperation (SDC). Their combined expertise resulted in the construction of 23 bridges and river crossings, used both by the local population and military forces.

In the initial phase, CIMIC activities were directed to support IOs, NGOs and the local population. Later, CIMIC Centres were established to coordinate and support the activities of IOs and NGOs, without humanitarian or economic activities.

Initially, most CIMIC activities were undertaken in a national framework and the linkage with other activities was not ensured. This not only reduced the effectiveness of the actions, but also resulted in a reduced exchange of vital information, which is necessary to ensure a secure environment. Close contact with the local population through CIMIC Centres helps to reduce significantly the propensity for violence.
The issue is sharply focused when attention is paid to critical infrastructure protection. Food and water, energy supplies, transportation and systems, financial institutions, public safety, and continued confidence in State structures of government – all can be seen to be vulnerable to destructive attack in open societies. In most European countries, such concerns tend to be rejected as the exaggerated ravings of a paranoid few or simply wished away without thought. Yet the issue has only to be raised for the point to stand out: what was held to be necessary for the first half, at least, of the Cold War by way of civil defence and national emergency planning has largely disintegrated.

Privatising security

Some of this will be recoverable but societies that have devolved substantial responsibilities to the private sector will be especially hard pressed to make good. Private companies do not exist to protect the national interest, especially when they are multinational corporations; rightly, whether national or international traders, they are there to enrich their shareholders. Any contribution they are expected to make will have to be paid for out of taxation or public borrowing.

Terror has also subtly undermined the role of armed forces in our societies. There was a time when the military had a unique status based on the willingness to accept unlimited personal liability – death, that is – in the defence of national interests. 9/11 showed just how important other elements of public service may be called upon to accept ultimate personal sacrifice for the greater good. The Madrid bombings made clear that the threat to the citizens of that city were the responsibility of railway authorities and staff, the police and the paramilitaries.

Civilian deaths in conflict far outweigh those of the military profession today. The post-Madrid readiness in Europe to share intelligence and other information helpful for countering terrorism or other threats to domestic tranquility is welcome, of course, but it implies considerably more than just that if this initiative is ever to be effective.

Outlook

Security, economic and social stability, as well as development depend on each other and are inseparable, making the military forces, civilian organisations and agencies partners in achieving a common goal. A successful interaction between the military forces and the civilian organisations has to be achieved, as well as a better cross-linking within the multinational military forces.

Effective CIMIC should create better understanding and closer interaction between military forces, civil organisations, and civil influences in the theatre of operations in order to reduce the host country’s dependence on military peacekeeping forces.

This is not a short sighted military policy, but the recognition that the presence of military forces aims to promote civilian development. The military component is just one element of a multifunctional and multi-organisational framework to solve a complex crisis. While the military component may initially have to undertake activities normally carried out by civilian agencies, this should be viewed as a short term emergency measure.

Usually, the military component will not have the resources or expertise to handle longer term developmental tasks, and must take guidance from those who do. Military activities should therefore aim to hand over the responsibility as soon as possible to the appropriate civilian agencies, so that military forces can focus on providing a secure environment. CIMIC should enhance the ability of both civilian and military leaders to prioritise, allocate and undertake appropriate activities, in order to withdraw military forces as soon as possible to allow a return to normal conditions.
Instinctively secretive intelligence organisations need to consider the extent to which they have to become transnational in scope and inclusive of non-governmental agencies in sharing of information, analysis and prediction. Many doubt whether their long-held information monopoly – with information distribution even within governmental agencies carefully controlled – can be so readily broken. The intelligence failures over Iraqi weapons of mass destruction have made the case for generic reform even harder to accept. Oh, and do not expect much progress in freedom of information for a while either.

Peggy Noonan, Ronald Reagan’s sometime speechwriter, made the point shortly before 9/11:

“We must take time to do some things. We must press government officials to face the big terrible thing. They know it could happen tomorrow; they haven’t focused on it because there is no Armageddon constituency. We should press for more from our foreign intelligence and defence systems, and press local, State and federal leaders to become more serious about civil defence and emergency management."

We have an “Armageddon constituency” now – the Madrid bombings created one in Europe. How it will react is unclear. The political community knows the tasks ahead but looks unable to move fast enough. Institutional change always comes more slowly than the ideas that force change in the end. National resources and civil-military cooperation are only the half of it. Redefining the meaning of security, that standby of professional strategic discourse since 1991, has finally come home. That is exactly where it ought to be.
Military cooperation as an integral part of prevention and stabilisation

Andreas Wenger

More than a year since the start of the war in Iraq, the widely diverging views concerning ways in which the uncertainties of a globalised environment can be overcome are proving to be a major obstacle to defining a sustainable political solution for post-war Iraq and stable political and social structures in the Middle East, as well as for combating terrorism and the proliferation of weapons of mass destruction. During the debate on Iraq, one of the main areas in which international opinions widely differed concerned the question of the future role of armed forces within the scope of a comprehensive prevention and stabilisation strategy.

As a result of the terrorist attacks in New York and Washington, asymmetrical challenges such as terrorist groups armed with weapons of mass destruction became a structuring factor in international relations.

Against this backdrop, the USA was no longer prepared to pursue a wait-and-see policy with respect to the Iraq problem, and began to push ever more vehemently for the use of force in order to bring down the regime in place.

While European leaders did not dispute the fact that Iraq needed to be disarmed – including by force if necessary – they warned against shifting the focus of the international strategy to combat terrorism towards military aspects. In the future, the debate concerning the limits and potentials of military cooperation in a context of asymmetrical threats will continue to be conducted in the following four main areas: principles of international law; strategic objectives; comprehensive and complementary use of resources; structuring of military transformation processes.

Legitimate use of force as a response to asymmetrical threats

The events of 11 September 2001 triggered an intensive debate on the rules and organisations that legitimise the threat and use of force by way of exception to the general prohibition. Asymmetrical threats from non-State actors place governments in a difficult position, since the principles of international law focus on the regulation of the use of force by the State.

Against this background, as a directly involved country and as the global superpower the USA appeared to adopt a doctrine of unilateral pre-emption, which was widely rejected as a basis for joint military action.

Although the USA’s new security strategy discussed the option of pre-emptive action exclusively in the context of the question of how to deal with the threats from internationally organised terrorist groups and rogue nations such as Iraq and North Korea, its demand that the concept of “immediate threat” should be adapted to these new risks meant that the distinction between pre-emptive and preventive warfare had become less clearly defined.

The intervention in Afghanistan with the backing of the UN made it clear that it was not so much the right of a country to defend itself against non-State actors that was disputed, but primarily the discussion of the option of pre-emptive action against State actors. The presentation of the new security strategy in the context of the debate on Iraq gave rise to widespread concerns of a political nature and with respect to the principles of international law. The war against Iraq did not take the form of pre-emptive measures against an impending threat against the USA.

In the meantime the USA is endeavouring to qualify the importance of the option of pre-emptive action within the scope of its security strategy in favour of the central role to be played as before by the UN, NATO and other alliances. On the other hand, in view of new types of threats the necessity of interpreting the pre-emptive use of force as an integral part of a comprehensive concept of “defence” is gaining increasing international acceptance. The EU and NATO need a strategy that includes the option of taking preventive measures.

However, this means that the political will has to exist to discuss the conditions – immediacy and plausibility of the threat, appropriateness of measures – to be attached to the pre-emptive use of military force within a multilateral framework. In view of the fundamental transformation of international politics in an era of asymmetrical threats, a cautious adaptation of the international regulations governing the legitimate use of force is now unavoidable.
Strategic framework: spread of threat in terms of content and geographical distribution

The sharp differences of opinion within the international community concerning the issue of war and peace in Iraq also reflects opposing views regarding the cause and effects of asymmetrical threats and risks.

The concept of “effective multilateralism” as a European response to the American tendency towards unilaterism calls for the definition of a joint strategic framework, especially with respect to the objectives and geographical reach of multinational forces deployed in response to armed conflicts. The global military commitment of the USA and countries of Europe may be likened to a patchwork that mainly reflects national crisis decisions and which lacks a recognisable coherent security strategy, precisely in the Near and Middle East.

In the meantime the USA and countries of Europe have come closer together in terms of their threat assessments. With the onset of asymmetrical threats, the risk spectrum in the North Atlantic region has significantly broadened in terms of both content and geographical distribution. As far as content is concerned, security strategies and resources are now being focused on the threats that arise from global terrorism, the proliferation of weapons of mass destruction, and the spread of organised crime resulting from the collapse of States.

Military cross-border operations in major disasters

The provision of aid by the Swiss armed forces in the event of disasters abroad has become the rule rather than the exception. Unfortunately there has not been a lack of such occasions. The system is now well oiled, and the conditions for intervention have been clearly defined. As the highest legal instrument, the Federal Constitution stipulates that all Swiss military activities that take place outside of Swiss sovereign territory must be carried out on a voluntary basis, while the clauses of the Ordinance dated 24 October 2001 governing the provision of aid in the event of disasters abroad specify the framework for such activities. The Swiss army does not act in its own right or as an official military formation, but rather military personnel voluntarily assist the emergency and rescue services of the country concerned.

Cross-border aid

However, there is another form of provision of cross-border military aid, though it is little known since it has never actually been utilised to date: military aid in the event of a disaster in Switzerland’s border regions. The provisions governing this type of intervention differ considerably from those outlined above. The term “border regions” refers to administrative or political subdivisions in our neighbouring countries — French departments, German and Austrian provinces (Länder), Italian provinces and the Principality of Liechtenstein — that border directly on Switzerland. In other words, this takes the form of aid immediately across the border. One of the special characteristics of this form of cross-border aid is that it may concern military detachments rather than volunteers.

The main challenge for States is therefore coming from non-State networks which are benefiting from the porous borders resulting from the ongoing globalisation process, and are instrumentalising weak governments for their own purposes.

Geographically speaking the focus spreads from ethnic conflicts in the Balkans to Asia via Central Asia and the Caucasus, and culminates in the Middle East, the world’s most volatile political region.

Social and economic problems, together with fundamental weaknesses in political structures, are combining with phenomena such as failed States, proliferation of weapons of mass destruction, Islamic terrorism and authoritarian regimes to form an explosive mixture.

The extent to which it is possible to influence structural problems in the Arab world from the outside is very limited. In view of the fact that the West will have to live with extremist responses to the ongoing modernisation process in the Arab world for many years to come, it is important that it joins forces in defining and implementing its political initiatives for this region.
Joint exercises between France and Switzerland

Switzerland and France therefore decided to hold two joint military exercises (LEMAN 1 and LEMAN 2), which were by far the most important of their kind to date. LEMAN 1 was carried out in 1997 and took the form of a practical deployment of a battalion of Swiss rescue troops in the French department of Haute-Savoie, while LEMAN 2 (which was carried out in 1999) was a reciprocal exercise, i.e. it involved combined Swiss and French exercises on Swiss territory. Both exercises pursued the same objective, namely to regulate the potential deployment of military personnel and equipment to support civilian efforts in a disaster area on the other side of the border. This meant that the Swiss and French staffs and units were required to work together and examine the various methods and procedures. Operational cooperation was called for in all areas and at all levels. In both cases, the defined scenario called for the establishment of common operational structures, close coordination of the activities of the detachments concerned in searching for, and rescuing, victims, the provision of first aid, the evacuation of victims by air (and thus the necessity of also securing airspace), as well as the provision of logistical support.

LEMAN 1 and 2 were groundbreaking exercises that yielded some important findings concerning methods of intervention and cooperation on the ground in the area of disaster aid. They gave potential partners an opportunity to work closely together, to jointly find suitable solutions to problems relating to interoperability, and underscored the need to adapt the leadership structures and procedures within the Swiss army to international standards. They yielded valuable findings concerning the compatibility of intervention methods and materials. But these two exercises also yielded other significant benefits in that they promoted cooperation between the two countries at other levels. For example, the contacts that were established between the military partners persisted well beyond the bounds of the two exercises, as is admirably demonstrated by the smoothness and efficiency of the international military cooperation to support security measures for the G8 Summit in Evian in 2003.

This once again confirms that large-scale engagements are largely influenced by existing structures and preparations, their success depends entirely on the people involved and their ability to cooperate on the ground. This is especially valuable in the area of disaster aid, in circumstances in which some of the existing structures may no longer be functioning.

Switzerland’s security policy is defined as “security through cooperation”. Here the army plays a multiple role, and its potential in terms of intervention in the event of a major disaster on the other side of the border is a significant component. This should be acknowledged and continually developed.

The complexity and dynamics of the new risks require a strategy which combines civilian and military instruments both as complementary measures and for preventive purposes at an earlier stage of a crisis.

Civilian measures on their own are unable to act as a deterrent, while military measures can only contribute towards conflict regulation and the support of social and political transformation processes if they are combined with civilian instruments. It will only be possible to utilise the full strengths of NATO and the EU within the scope of a coherent overall strategy. And it is only on this basis that it will be possible to strengthen the partnership between the USA and the countries of Europe as a framework for cooperation among equals with similar values and interests. Over the past year or so, the USA has discovered that there is no sense in winning wars if it is not possible to find acceptable and sustainable political solutions after military action has been successfully concluded. The fact that global terrorism has become a real threat has to be taken just as seriously as the realisation that we cannot combat this threat first and foremost through military measures.

In the expanded Europe – and especially in the east, the Balkans and the Mediterranean region – security through integration, stabilisation and association will continue to form the basis for peace and stability. As a result of the process of enlargement, Europe is now moving into considerably less stable regions. This means that Europe and its transatlantic partners will also have to come to terms with risks that have their origin in countries further afield than their own immediate neighbours.

Both the USA and Europe will therefore have to make efforts to define a strategy that combines all aspects of prevention, crisis management, stabilisation and reconstruction.
In some cases (e.g. Afghanistan) it is undoubtedly necessary to resort to military intervention in order to combat terrorism, but this should not occur at the expense of international cooperation (as was the case in Iraq), which is a prerequisite for overcoming the political, economic and social causes of terrorism. The governments of Europe have realised that they need to review the role of military measures within the scope of a proactive and sustainable prevention and stabilisation strategy. However, before they can consider using military measures as a last resort, it is essential that they urgently push ahead with the transformation of their armed forces in favour of smaller, lighter and more mobile units.

**Structuring military transformation processes through security institutions**

In order to initiate a military transformation process, it is first necessary to acknowledge at the political level that the range of duties to be performed by modern-day armed forces has broadened in line with the expansion of the risk spectrum. Here the decisive trends concern a shift of priority from territorial defence in the direction of response to crises, and turning the armed forces into more professional organisations. Since the new threats are coming from far afield, it is becoming increasingly difficult to limit the task of defence to geographical boundaries. International stabilisation operations within the scope of conflict prevention, crisis transformation and internal anti-terrorist campaigns are increasingly becoming an integral part of structure-determining tasks for modern-day armed forces.

In view of the new risks, the capacity to take military action will be secured to an increasing extent through involvement in multinational cooperation. The transformation process encompasses technical and organisational innovation, and for both financial and armament-related reasons it will only be possible to accomplish this process within an international framework. The structuring of military transformation processes has therefore become a major task for European security institutions. Alongside a policy of force integration, the aim of which is to preserve efficiency and maintain impact potentials as well as political coherence following the recent enlargement, there is an increasing move towards a policy of resolute action against the risks of the 21st century.

More than a year after the start of the war in Iraq, it has become clear that it is not possible to combat asymmetrical threats arising from global terrorism and authoritarian governments either without international cooperation or through the unilateral use of force. It is equally clear that it will only be possible to overcome conflicts at the multilateral level effectively through a policy of resolute action against the risks of the 21st century.

There is therefore an urgent need for an intensive debate on the transformation of military cooperation within the scope of a comprehensive prevention and stabilisation strategy, focusing on the provisions of international law, strategic objectives, interaction with civilian resources and the structure of military transformation processes – at the European, transatlantic and global levels.

**Useful link:**
Centre for Security Studies
www.fsk.ethz.ch
Achieving good cyber space security: an international challenge

Richard V. Houska

Winning the international War on Terror and, especially, preventing future, large scale terrorist attacks continues to be the greatest national and international security concern in the post 9/11 world. That international cooperation is required to achieve this objective is now the accepted norm, and most nations actively share information and otherwise work together cooperatively in detecting, tracking down, and stopping terrorists.

Yet, despite the enormous investments nations are now making in the fight against terror, our highly-connected, critical infrastructures remain highly vulnerable to attack, and depend on information technology which is not secure, nor securable, using the current, reactive security model.

Enhancing cyber security

So, what can be done to effectively enhance the security of cyberspace?

There is, and has been, considerable talk about how to solve this problem, and remarkably, today’s science and technology offer good security solutions. But, unfortunately, today’s commercial, computing platforms and information security products simply don’t give good security, and business continuity considerations, together with complacency about real threats, perpetuate their continued use.

Further insight into the current state of affairs, about the abysmal lack of security in cyberspace, can be found in an abstract for a recent computer science seminar, held at Johns Hopkins Applied Physics Laboratory in January of 2002:

“The state of the science of information security is astonishingly rich with solutions and tools to incrementally and selectively solve the hard problems. In contrast, the state of the actual application of science, and the general knowledge and understanding of the existing science, is lamentably poor. Still we face a dramatically growing dependence on information technology, e.g., the Internet that attracts a steadily emerging threat of well-planned, coordinated hostile attacks. In summary, the state of the science in computer and network security is strong, but it suffers unconscionable neglect in delivered products.”

Thus, better security technology is available, that which provides so-called “verifiable security”, but, so far, neither government nor commercial consumers are requiring that it be implemented.

So, why is this?

Unfortunately, most of what we understand and perceive about computer security comes from the media, not from computer science – stories about hacking into or attacking government computer systems, defacing websites, and the appearance of malicious code such as worms and viruses spreading across the Internet, even possibly infecting and disrupting our own systems.

Such hacking activities, as well as the appearance and spread of malicious code, do represent serious compromises of computer security, and need to be dealt with effectively. This is another area where international cooperation in law enforcement has paid some dividends, and so long as such cooperation is regarded as mutually beneficial, it is worth extending.

Our continuing experiences with cyber security breaches also illustrate how vulnerable our systems truly are – namely, that they are not securable, even against attacks by amateurs, which is most of what we hear about.

Nevertheless, so long as we can recover from the last “attack”, with an appropriate “patch” from the vendor, often downloaded over the Internet, we remain confident that we will survive the next one. We do things this way because our security model is reactive – there is no problem until there is an observed breach.

Reactive and preventive security

Thus, the survival of our cyberspace infrastructure under a regime of “reactive security” assumes that all future attacks are survivable, and recoverable – an arguably naive position, but so far the accepted, and affordable, status quo.

This is part of the reason we have adopted a reactive security posture today, and why cyberspace remains unsecured, and especially vulnerable to a subversive threat, namely one from a professional versus an amateur attacker.

The reactive security model is also quite compatible with the commercial business model for providing information security products, all of which are subordinate to the operating system platforms in common use today.

Richard V. Houska

Dr. Richard Houska, a computer systems and information security specialist, is Adjunct Professor at the Georgia Institute of Technology, where he is developing a course in intelligence studies and conducting research on verifiable security, as it relates to the protection of our critical infrastructure.

He has over 25 years of experience with the US Government, including senior positions with the Navy, Air Force, and Intelligence Community.
This subordination has given rise to the so-called “layered” defence concept (also called defence-in-depth), which actually is a patchwork of layered software, ostensibly intended to enhance computer security by plugging known flaws and vulnerabilities in the operating system software. But, since all application software is subordinate to the operating system, even the best of these products does not provide protection against subversive threats from a professional attacker.

To achieve good security in cyberspace we must adopt a preventive security model, not a reactive one. This will require the use of “trusted” operating systems – those which are verifiably secure, and therefore able to counter effectively subversive threats from professional attackers. By design, such systems can be determined to be free of any unauthorised code.

It is the threat from the professional attacker that cyberspace is especially vulnerable, since there is no reliable way to determine whether a computer system has been subverted through the introduction of some software artifice such as a Trojan Horse or trap door.

Further, the introduction of such malicious code, may often be done at any point in the lifecycle, so opportunity abounds, and no computer system is secure from this type of attack, except those which are verifiably secure. Note also, that careful examination of the source code is not sufficient to detect and stop this type of attack, and there does not exist any technology today which can reliably detect the presence of malicious code.

Very few information technology professionals are aware, and some are quite skeptical, of how relatively easy this type of attack is to develop and implement; just a few lines of code among millions will do it.

**Verifiable security**

Computer security ratings introduced by the US Government use the terms A1, or EAL7, to represent a system which is verifiably secure. In the past, the US Department of Defense has developed and deployed a few of these systems for security critical applications. Such systems are designed, developed, and tested from the outset to assure no unauthorised functionality can execute.

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**Cyber Security: the Swiss approach**

The buzz surrounding the rather bendable term cyber security reaches new heights with every new virus, fraud scheme, newly discovered paedophile ring or scenario of a laptop-armed hacker brigade unplugging a nuclear power plant’s control system. Crime, natural catastrophes and human error easily get lumped together and commonly referred to as cyber threats. Such classification mix-ups, however, cannot serve as the basis for a consistent strategy to render cyber space in the least bit more secure.

The worldwide scope of the Internet obviously demands an international approach. However, every hacker, every fraudster, every not-yet-to-date system administrator and every not-yet-appeared cyber terrorist can still be physically located in a place with an Internet connection somewhere around the globe. And while almost every formal or informal international organisation pushes a cyber security, cyber threat, or cyber crime agenda, the main work takes place at the national level and includes all relevant fields. A heuristic approach however is needed to address the various facets of cyber security, including the strengthening of national information security and an effective preventive and repressive cyber crime strategy.

In Switzerland, several steps have been taken towards an integrated approach. The most important ones include the creation of the Federal Cybercrime Coordination Unit, (CYCO) and the Reporting and Analysis Centre for Information Assurance MIHAMI (Meldes- und Analy森elle Informationssicherung), both of which cooperate closely at the analytical level.

**CYCO**

The Federal Cybercrime Coordination Unit (CYCO) started work in January 2003 with the aim of establishing a slim and efficient unit to coordinate cyber crime cases between the 26 cantons which make up the Swiss Confederation. Such coordination was needed due to the lack of a federal investigative body.

The Coordination Unit provides support to the Confederation and the cantons in the following three areas:

- **Monitoring:** It conducts investigations on the Internet to identify criminal misuse and it is in charge of initiating the processing of reports from the public regarding suspicious Internet activities;
- **Clearing:** It verifies whether the reported matter constitutes a criminal offense, coordinates with ongoing proceedings, and refers the case to the relevant prosecution authorities in Switzerland or abroad;
- **Analysis:** It undertakes nation-wide analysis of cyber crime and the ongoing analysis of the situation in Switzerland, describing universal criminal techniques and methods, statistics and trends.

In one year, CYCO has established itself as a single point of contact for both the public and private sectors with regard to the reporting of suspicious and possibly illegal activities via the Internet. In 2003, around 100 cases and over 6000 suspected cases were reported by the public or discovered by the monitoring team and passed on to the prosecuting authorities of the different cantons.
Recently, new, verifiably secure computing architectures, marrying the previously developed A1-secure, US Department of Defense technology, with thin client, a server-based computing technology, have been proposed. While commercial viability is not proven, such technology can be efficiently implemented into much of the existing critical infrastructure sectors which depend on highly vulnerable, insecure technology. Several non-government entities are now investing in this technology. (For one example, see http://www.aesec.com)

Thus, good cyber space security requires a preventive security model, one which provides for verifiable security in the operating system platform. Getting there, from where we are today, with essentially no security in cyber space is a challenge for the international community, including the international business community, since a verifiably secure computing environment requires that high assurance computing platforms be available commercially – that is, verifiable security must support a commercially viable business model. Also, to get there, we need many more security professionals who are "preventive security aware", and who have significant, real experience working on cyber space security problems, beginning with those we must deal with today in a reactive security environment.

If the free market by itself will not invest in better computer security, the motivation for enhancing the security of cyberspace may have to come from regulation. If so, this will require very thoughtfully designed international agreements. Also, for nations to work this problem together effectively, they must be able to agree on the subversive threat posed by the professional attacker.

Most importantly, nations must be willing to share information about both offense and defense, itself a challenge since a nation's offensive operational (information warfare) capabilities are often regarded as quite sensitive. Some sort of "neutral" venue may be required, where all the participants can access all the information.

One possible way of getting nations to work this problem together effectively is for national sponsorship, together with participation of their best technical universities, of competitive, information war games. And, by their nature, university environments are "open", from the standpoint of information sharing.

### MELANI

With the order of October 2003, the Swiss Federal Council gave the green light to the much-needed Reporting and Analysis Centre for Information Assurance MELANI (Melde- und Analysestelle Informationssicherung) to fill a gap in Switzerland's Critical Information Infrastructure Protection (CIIP) Program. MELANI provides the following services:

- **Prevention:** The long-term observation of attack procedures and the technology used, enabling MELANI to draw up strategies aimed at reducing the probability of disruptions occurring in information and communication systems that could escalate into a crisis situation. In order to gain a broad overview, MELANI depends on the cooperation of partner organisations in Switzerland and abroad, e.g. IT manufacturers, IT operators, computer emergency response teams (CERTs).

- **Early recognition:** As an analysis centre, MELANI monitors dangerous situations, as presented for example by the vulnerability of widely used hardware and software products. However, early recognition cannot only be approached at the technical level. Potential dangers have to be constantly weighed up against risk situations identified by intelligence services. The key challenge remains to provide reasonably early recognition.

- **Limiting the adverse consequences of crisis situations:** The special task force on Information Assurance (SONIA), which takes charge in a major crisis situation can only fulfill its tasks if it draws from current and reliable information during the time of crisis. In such situations MELANI fulfills an important role as SONIA's analysis unit and centre of competence.

- **Alleviating the causes of a crisis:** Finally, technical problems must be analysed and suitable solutions proposed. As a specialised organisation, MELANI has the necessary technical know-how and draws from a network of contacts within the private and public sectors, as well as from the relevant CERTs.

As a single point of contact, MELANI offers a platform where relevant and critical information can be exchanged between the above-mentioned organisations. Findings and general prevention measures can also be distributed to the public through MELANI.

With CYCO and MELANI Switzerland offers clearly defined partners at the international level, successfully addressing the full range of issues from criminal or information security to cyber security. However, this can only be accomplished through efficient national coordination, leaving the task of combating misdemeanours and fixing fouls-ups to services where they originate – at the local level.

Urs von Dattenen, Chief
Marc Herren, Analyst
Service for Analysis and Prevention
Swiss Federal Office of Police
Further information: http://www.cyberrana.admin.ch/e/index.html
Let us not forget that, in the real physical battle-space, international war gaming has been a staple of NATO for years. And, competitive war gaming in cyberspace, with participation of universities, is not without precedent in the United States. There, the nation’s military academies, with support from the National Security Agency (NSA) and other US Department of Defense components, have been doing this for several years. Moreover, because of the program’s success, consideration is being given to include other public and private universities.

But, whatever means are used, achieving good cyberspace security that is based on a preventive security model will require a major shift in our thinking about computer system security. This can happen only with international community participation, to include both government and business sectors, and only if the participants have the will to actually implement an effective strategy for doing so. So far, there is only talk about change, not action. No one seems willing to go first, and therefore government regulation may be required, to get the process started.

Further, history has shown that such major changes in the status quo usually take place only “post facto” — that is, as a result of some catastrophic world event. Counterexamples are rare, but a necessary condition for such change is always strong leadership, with wide international participation, and the will to act, before being acted upon.

Useful link:

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The media are full of articles on proliferation concerns around the world and the risk of terrorists “going nuclear”. They point to the inevitable truth: nuclear energy today cannot exist without credible safeguards and robust security. It has to address a triple challenge.

A triple challenge

Proliferation

The first challenge confronting the use of nuclear energy at the international level concerns the risk of nuclear proliferation. The idea of international control was first proposed by President Eisenhower in his 1953 “Atoms for Peace” speech. It was recognised that the extraordinary destructive power of the atomic bomb could not be addressed solely at the level of individual States.

The International Atomic Energy Agency in Vienna (IAEA), in the framework of the Nuclear Non-Proliferation Treaty (NPT), developed a set of safeguard agreements with States to assure the international community that nuclear energy was developed and used for peaceful purposes. Since then, numerous organisations for the development of safeguards have been created. Europe, for example, created the European Safeguards Research and Development Association (ESARDA) in 1969. Its main objective is to assist the safeguards community to improve and to increase the efficiency of systems and measures, as well as investigating how new techniques can be developed and implemented. It also aims to fulfill an educational role and to involve the general public.

It is the forum in Europe where all concerned specialists meet and exchange notes on their experience, techniques, or difficulties in implementing safeguards. Since 1996 it has linked with its sister organisation across the Atlantic (the Institute for Nuclear Material Management) and has organised regular workshops on “Science and Modern Technology for Safeguards”, producing thorough reviews on this subject. These reports are essential for the credibility, effectiveness and efficiency of safeguards around the globe.

Physical Protection

Parallel to the concerns of proliferation by States, the risk of nuclear material falling into the wrong hands presents a further challenge. The main thrust of nuclear security was designed to prevent non-State actors from obtaining enough nuclear material to build a crude nuclear explosive device.

The issue of the security of nuclear material came to the fore again in the early 90s, with the end of the Soviet Union. Stories about weak security at nuclear facilities made the headlines, particularly in 1994, when several cases of illicit trafficking of nuclear material were discovered. They led to cooperation programs around the word, aimed at providing expertise, cash and hardware wherever weak points were identified.

In contrast to the issue of international safeguards, the question of whether physical protection was to be addressed directly by the international community or by States themselves invariably prompted a clear answer: the responsibility for establishing and operating a physical protection system in a State rests entirely with the government of that State.

In the case of physical protection, the potential consequences for a State of not fulfilling its responsibilities would probably first affect its own territory and would lead to destruction and casualties, but would possibly also result in similar consequences across its borders. Therefore the State has the prime responsibility and the prime interest in establishing an effective physical protection regime. However, other States also have a legitimate interest in knowing that this responsibility has been fully assumed.

In the international arena, these concerns have been addressed through recommendations under the auspices of the IAEA, starting in 1972 with the Information Circular 225 (INFCIRC/225) on the “Physical Protection of Nuclear Material”, regularly updated since that time.

In addition, the views and advice of international experts in physical protection were made available to willing States through the International Physical Protection Advisory Service, set up by the IAEA following the illicit trafficking concerns of the 90s.
Sabotage

Then came 9/11.
Although the terrorist attacks in September 2001 did not involve the use of nuclear material, they shook the nuclear security community around the world. The traditional emphasis on protection against theft of nuclear material now took second place to protection against sabotage, and doubts were expressed about the security of radioactive materials. However, 9/11 did not represent a complete change: the potential threat of sabotage of nuclear facilities had been recognised long before this date. In 1998, experts reviewing the recommendations on the physical protection of nuclear material had increased the focus on the protection of nuclear facilities against sabotage in the 4th revision of INFCIRC/225.

In 1999, an expert meeting to discuss the need for revision of the existing Convention on the Physical Protection of Nuclear Material (CPPNM, adopted March 1980), produced a set of recommendations in 2001, specifying that an amendment to this Convention should cover the protection of nuclear facilities against sabotage.

In March 2003, these recommendations were translated into a proposal in the report of the Expert Group responsible for drafting an amendment to the CPPNM.

What has now changed is the new focus of governments and the public on the potential threat of a deliberate release of radioactivity, either through the theft of radioactive material followed by its dispersal by means of explosives or through the sabotage of a nuclear facility.

New answers are needed

From assistance...

Unlike the safeguards system, there is no such cornerstone and binding instrument for nuclear security such as the NPT. The closest approximation to this is the CPPNM.

In October 1999, evaluating the need to revise the CPPNM, a “group of five” (UK, France, Germany, Belgium and Sweden) wrote:

[…] before the necessity of revising the Convention can be properly discussed, there needs to be:

» a review of the Agency’s [IAEA] various support and assistance activities in the field of physical protection. These activities complement the legal provisions of the Convention and play a key role in supporting its aims. They are very important in stimulating practical improvements in physical protection. […]

Nuclear material control and protection of nuclear plants

International obligations

At the end of the seventies, Switzerland ratified the Non-Proliferation Treaty (NPT) and the Safeguards Agreement. It thereby allowed the International Atomic Energy Agency (IAEA) to control all stocks of nuclear material in this country. The Additional Protocol to the Safeguards Agreement with the Agency was signed in 2000. After the legal bases for the implementation of this agreement have been established, it is expected that this protocol will be ratified by Switzerland in the autumn of 2004. The Convention on the Physical Protection of Nuclear Materials (CPPNM) was ratified by Switzerland at the beginning of 1987. In recent years, Swiss representatives have participated actively in the preparation of a revision of this convention and of a revision of the IAEA Guideline INFCIRC/225 (Physical Protection of Nuclear Materials and Nuclear Plants).

Tasks and measures in the framework of the nuclear control regime

According to the convention that Switzerland has signed with the IAEA, it must, as a State subject to the IAEA controls, have a bookkeeping and control system for all Swiss plants with nuclear materials. The IAEA verifies this system by means of inspections in which the bookkeeping is controlled, the nuclear material stock is checked and the plant declarations are compared with the actual status. The frequency of inspections depends on the type and the amount of nuclear materials in the plant or on the assessment of the potential risk in the event of nuclear material being illicitly removed for the production of nuclear weapons.

In recent years, the IAEA has carried out some 80 to 100 inspections per year in Switzerland.

The Swiss Federal Office of Energy (SFOE) represents Switzerland as contracting party and carries out the preparation and coordination of inspections and also the control of information and reports to the IAEA. As the Swiss bookkeeping and control organ, the SFOE is responsible for “national bookkeeping” and for ensuring that the nuclear plant operators comply with their obligations to the IAEA. It sees to it that inspectors are given access to plants and that contractually guaranteed inspections can be carried out without difficulties.

The ratification of the Additional Protocol will increase the volume of work for nuclear material controls. The IAEA will have to be provided with additional information, and inspections can be carried out anywhere in Switzerland (dosage measurements, environmental samples). Industrial companies that produce sensitive substances as defined by the NPT will from now on be subject to IAEA supervision, and the import and export of nuclear-related products must be registered with the IAEA. Once the new elements in the Additional Protocol have been fully implemented and the IAEA has checked the data provided by Switzerland and confirmed its correctness and completeness, the level of inspection activity is likely to decline. However, the verification is not likely to be completed for some years.

In the last few years, the SFOE has actively contributed to the safeguarding of nuclear materials in Switzerland. It is now due to the ratification of the Additional Protocol and the CPPNM that Switzerland will gain access to IAEA support and assistance activities in the field of physical protection.
Three and a half years later, the draft amendment to the CPPNM mentions many new ideas, but also points out that:

- [5. A State Party may consult and cooperate, as appropriate, with other States Parties directly or through the International Atomic Energy Agency and other relevant international organisations, with a view to obtaining their guidance on the design, maintenance and improvement of its national system of physical protection of nuclear material in domestic use storage and transport and of nuclear facilities.]

This has been a long and slow process and it is still not complete. The realisation that there is a need for a homogeneous security, when local weaknesses pose global threats, has led to a balanced proposed amendment to the CPPNM, which the State Parties now have to consider. The approach adopted relies heavily on a set of twelve fundamental principles, which will need more input from specialists in order to become fully effective.

In the meantime, the most advanced countries in the field of nuclear security have made available their expertise to the international community, either directly through bilateral contacts, or through the IAEA, particularly in building a whole set of specific workshops (design basis threat, vital area identification, internal threat methodology, …). Such approaches respect the cultural differences in different States, as well as the necessary confidentiality of specific security measures at nuclear facilities.

Protecting nuclear plants against sabotage

Great importance is attached to the protection of Swiss nuclear plants against sabotage. All plants are subject to protective measures that apply to the areas of construction, technology, organisation, personnel and administration. Potential saboteurs are confronted with a range of security checks that become progressively more stringent as they approach the centre of the plant. Regulations on access authorisation, as well as controls of personnel and material round-off the protective measures. Large nuclear plants also have their own armed security personnel which is supported and advised by the cantonal police and would cooperate closely with them in the event of an attack.

The standards of security are determined by the authorities in response to the global terrorism and violent extremism situation, to specific threats in Switzerland and to the potential danger posed by the objects to be protected. The assessment of the level of danger and of the potential effects on the security of nuclear plants is the responsibility of a working group chaired by the SFOE. The Swiss Federal Nuclear Safety Inspectorate (SFNSI), the Federal Police Office and the Strategic Intelligence Service are also represented on this body.

Following the terror attacks of 11 September 2001, protective measures, especially at the organisational level, were stepped up for a short period. By and large, existing security measures in the areas of construction and technology were found to be appropriate. By international standards, the level of security for Swiss nuclear plants was and is high. At the request of the SFNSI, nuclear power operators carried out an in-depth analysis of security measures to counter a targeted aircraft crash on a Swiss nuclear power plant. The study looked at all current commercial airliners in use throughout the world, their weight, fuel volume, attack speed and further approach conditions and at the possible effects of such an attack on the structural integrity and stability of the relevant security structures in nuclear power plants. The results of the analysis showed that for more recent plants the level of protection was comprehensive. In the case of older plants, the study concluded that, thanks to upgraded emergency systems designed to counter an airline crash, the level of protection was high.

Since the end of 2001, the SFOE has been part of a group of European countries that regularly exchanges information on security questions. The group’s discussions focus mainly on general assessments of the situation and the protective measures to counter sabotage of nuclear plants in the various countries concerned. Within the framework of the International Physical Protection Advisory Service, Swiss experts have taken part in IAEA advisory missions to nuclear plants in East Europe and the Near East, thus contributing to efforts to ensure a high level of anti-sabotage protection for nuclear power plants throughout the world.

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Nuclear security regulators have to cope daily with practical problems that are constantly arising. They may be intelligence-related, or they may be of a technical nature. Obvious examples are the capacity of nuclear power plants to resist aircraft impact or the availability of modern weapons and their effect on facilities and on transport systems.

The safety field is full of examples where the feedback from one country about a specific weakness has been made available to the entire nuclear industry through international conferences. To translate this situation to the security field without facilitating malevolent acts, the key word is confidence. This can only develop from common concerns and from a shared vision.

One unexpected outcome of the long and continuing process of CPPNM revision was that it brought together a core of European security regulators, starting from the “group of five” mentioned above. Initially the objective was solely to coordinate and to focus negotiations on a revised CPPNM. But today, with the inclusion of three further regulators from Switzerland, Spain and Finland, the agendas cover the whole spectrum of current and future security activities.

These future security activities will break new ground in the security of radioactive sources. Already three major international conferences have been devoted to this subject, but regulatory work is a protracted business. The experience gathered in setting up physical protection systems for nuclear material is a sound initial basis. However, it is also important to bear in mind the difference in risks and the need to strike a balance between intrusiveness, practicability, and benefit to society.

In the last ten years, concerns about the physical protection of nuclear materials and nuclear facilities have been increasingly shared among experts and regulators around the world. This is probably one of the main reasons why responses in the nuclear field to the 9/11 attacks have stood up well to public scrutiny. Public confidence can be further improved by developing regional and international coordination anchored in a common security culture.

Useful links:
Radiation Protection and Nuclear Safety Institute
www.irsn.org

Comprehensive Nuclear-Test-Ban Treaty Organization
www.ctbto.org

International Atomic Energy Organisation
www.iaeo.org
Landmines and unexploded ordnance have a major humanitarian impact on the civilian population during and after armed conflict. Since the mid-1990s an unprecedented, cooperative effort among States, international and non-governmental organisations has taken place to address and solve those problems. The major achievements are the 1997 Anti-Personnel Mine Ban Convention, the strengthening of previously existing instruments of international law, but even more importantly, the practical response to clear land and to assist victims. This unique effort is seen by many as a model for other areas of humanitarian action.

Landmines were introduced in the arsenals of most armed forces in the 20th century, and until recently they played a significant role in warfare and military planning. However, they were a particular humanitarian problem as they remained active long after the end of hostilities, and continued to kill and maim civilians.

While the horror of landmines was known for a long time, broader public attention was given to it only in the 1990s. The driving force was the experience of aid workers during and after the armed conflicts in Afghanistan and Cambodia. There was general assent that measures had to be taken regarding the use of anti-personnel mines but also to clear affected land and to take care of victims.

The attempt to strengthen the then existing instruments of international law produced more restrictive regulations, but failed to achieve a total ban of anti-personnel mines. As a consequence, a process outside the established multilateral framework was launched, commonly known as the Ottawa process.

In an innovative way a group of committed States, the ICRC and a coalition of non-governmental organisations were able to achieve the ambitious objective of a ban. The Anti-Personnel Mine Ban Convention was negotiated in the record time of less than a year, and opened for signature in Ottawa in late 1997. The Ottawa process benefited from favourable circumstances like the fading role of aerial defense in military doctrine after the end of the Cold War.

At that time many of the most committed States contributed to stability by sending troops in peace support operations, or were committed to humanitarian relief operations. In both cases, the existence of anti-personnel mines was a major threat for their own troops.

Focus on international cooperation

The success of the Convention was not guaranteed from the beginning. Today more than 140 States are parties to it. While it is true that important States like the US, Russia or China are still missing, it is obvious as well that the use of anti-personnel mines is now strongly stigmatised, and that the ban has changed the behaviour even of those not legally bound by it.

The worldwide production of anti-personnel mines has dropped dramatically; global trade has dwindled to a very low level of illicit trafficking and unacknowledged trade. Millions of stockpiled mines from States parties, and from non-States parties as well, have been destroyed. The number of new landmine accidents has reduced significantly. International efforts to mark and clear mined areas are under way. Even the difficult problem of the use of anti-personnel mines by armed factions, or non-State actors, is addressed, in particular by an initiative of the Swiss non-governmental organisation Geneva Call. However, the landmine problem remains enormous. Some seventy countries are affected and up to 20’000 landmine casualties are estimated to occur each year. The ban of anti-personnel landmines was only the beginning.

To achieve the objective of a world free from the impact of landmines, it has been important to keep the momentum alive after the entry into force of the Convention. For this reason States Parties meet annually, and a so called intersessional process provides for a framework to address issues on the implementation of the Convention. In this process, States, international and non-governmental organisations work closely together in a cooperative way.

Mine awareness: prime element of security (Photo GICHD)
In 2001, the States Parties gave the Geneva International Centre for Humanitarian Demining (GICHD) a mandate to create a structure to organise and support the work between the meetings of States Parties.

**Mine Action – practical cooperation**

Mine Action, which is defined as mine risk education (teaching people to live safely in a mine affected environment), demining for humanitarian purposes, assistance to victims, destruction of stockpiles and advocacy against the use of anti-personnel mines, has significantly changed the last ten years. Most outstanding was the strong shift towards professionalism.

In the early days of mine action simplistic adaptation of military knowledge from areas like battlefield breaching or safety education were common. The focus was very much on technical issues and much less on the human factor. The inclusion of knowledge from other areas and from persons with different experience was paramount to improve effectiveness of mine action. This was strongly supported through the close interaction among the persons involved in the movement against anti-personnel mines.

In operational mine action activities, different actors are working together: multinational forces, national authorities, and international organisations like the UN or the ICRC, non-governmental organisations, and commercial companies. Given the different mandates and corporate cultures of these organisations, smooth cooperation cannot be taken for granted, although it is essential for success. Two sets of instruments which have been particularly important for smooth cooperation, are information management and international mine action standards.

Information is crucial for any human activity. People are taking decisions and act on the basis of what they know or think to know. In all areas of mine action, accurate and timely information is critical. During emergency operations like in the aftermath of the Kosovo crisis, information was needed to warn refugees from the threat and to allocate resources in the best way to save lives and money. It is decisive that information available can be shared and combined with information from other institutions.

Information management remains essential after the emergency phase when long term and sustainable work becomes predominant.

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**Swiss Mine Action Strategy 2004 - 2007**

**A vision of a world without landmines**

Switzerland strives for a world free of the threat of landmines. This vision is based on its objective to improve human security. In order to attain this, Switzerland aims to achieve the universal validity of the Ottawa Convention and to enable mine-affected countries to help themselves. Switzerland endeavours to make its contribution in a sustainable, transparent and coherent way.

**Fulfilling political and operational objectives**

Switzerland wants to strengthen Geneva’s role as the international centre for mine action and therefore hosts events such as the Ottawa Convention States Parties’ conferences, and the meetings within the framework of the Certain Conventional Weapons Convention (CCW). It also supports the Geneva International Centre for Humanitarian Demining (GICHD), which has developed into an internationally renowned and indispensable player in the campaign to eradicate the landmine problem in the world.

Switzerland’s main priority is to reach universality of the treaty by attracting as many countries as possible to ratify it. As signatory States alone cannot ensure fully effective and universal implementation, Switzerland also aims to include non-State armed actors in the treaty. At the same time, Switzerland supports initiatives which work to achieve this objective, such as Geneva Call.

Furthermore, Switzerland aims to ensure that mine action is taken into account and integrated into all UN activities. For this reason, it has taken on the chair of the Mine Action Support Group (MASG) for a period of two years.

Last but not least, Switzerland is an active member of the Human Security Network, which works to establish mine action as a key factor to improve human security.

Switzerland prioritises its operational objectives as follows:

- to provide human and financial resources to eliminate anti-personnel mines in the coming years;
- employ anti-mine activities as a peace promoting element to contribute to a safer environment for humanity;
- to create national capacities in mine-affected countries so as to ensure long-term sustainability and autonomy.

**The statistics don’t give the full picture**

Switzerland contributes around USD 12 million per year to mine action programmes, a figure which is expected to remain constant over the next few years. Victim assistance however is not included in this figure, because Switzerland pursues an integral approach with regard to victims assistance. Its support of medical facilities or social programmes for mine victims does not specify the kind of victim it intends to help, thus enabling all patients of the medical facilities and all beneficiaries of the social programmes to benefit.
Like in development cooperation, planners and operators need to know how to best use scarce resources. Today socio-economic knowledge is available and a computer based software tool (IMSMA) supports information management in data collection, data analysis and data distribution. Both are provided by the GICHD.

Ten years ago humanitarian demining operations looked quite different from today. Much work carried out then proved to be unsatisfactory, and much of the methodology was dangerous and lacked efficiency. In the meantime International Mine Action Standards have been issued by the UN in cooperation with the GICHD. The standards are now the basis for training, contracting and for the planning of operations. Needless to say, that the capability for working together and interoperability among organisations has improved due to the standards.

Although mine action technology has improved, it is still not satisfactory. There is general agreement that progress will come rather from the better use of existing methods, than from new cutting-edge technology. Modest application oriented research has the potential to improve humanitarian demining.

Switzerland presently ranks among the ten biggest donors to mine action programs. However, it does not keep specific figures on the funds it channels to international organisations where the purpose for which they are to be used is not explicitly stated. This is the case, for example, with its support for the International Committee of the Red Cross and the World Food Programme, which are strongly committed to mine-victim assistance and mine-risk education.

Swiss actors in mine action

Several units of the Swiss Federal Department of Foreign Affairs (DFA) and the Federal Department of Defence, Civil Protection and Sports (DDPS) are operationally and politically involved in mine action. These units closely coordinate their activities, seek to generate synergies, and contribute to mine action in various other ways.

The DFA finances mine clearance projects, national and regional mine risk education strategies and their implementation, projects to support mine victims, as well as advocacy projects such as the Landmine Monitor, universalisation conferences and the sponsorship programme. In addition, Switzerland covers 46% of the GICHD’s costs.

The DDPS runs a pool of experts, which seconds up to 10 persons per year to work as logistics specialists, coordinators, IT specialists or trainers for periods of up to one year to UN programmes and NGOs. In addition, it makes available equipment to help mine clearance work such as the Swiss-developed explosive ordnance disposal device, known as the SM-EOD-System. This device allows neutralisation of explosive ordnance or mines without physical contact.

The way ahead

By the end of 2004 – five years after its entry into force – the First Review Conference of the Convention banning Anti-personnel Mines will be held in Nairobi. The purpose of the Review Conference is to take stock of the achievements and to decide on the way ahead. Despite the important progress achieved to date, the challenge remains enormous; in many countries more than one future generation will suffer from the effects of landmines.

It will be important that the States Parties and other stake holders renew the commitment they have taken when the Convention was born. The vision of a world free of the threat of landmines can only become reality with a continued and cooperative effort. For the forthcoming years it is important that the issue of mine action is better integrated in the broader development context.

For some time discussion is going on to that effect and if the outcome is successful it will make mine action more predictable in the long term. Mine affected countries are not sufficiently in charge of the operations in their own land. Given the complex post-war situation in many mine affected countries this is not an easy task. But it is unavoidable for long term success. Donor countries and other foreign operators, including NGOs, are well advised to put more emphasis on local ownership and local capacity building. However, support including the transfer of knowledge and resources, will remain important.

Funding principles

Switzerland works on a long-term basis with all types of organisations carrying out projects which pursue the same objectives and meet the same criteria. Switzerland attaches importance to the quality of the organisation, to its strict orientation towards local needs, and to a high degree of integration. Coordination both with national and local authorities is of fundamental importance. The overarching credo is to “help people to help themselves”.

Switzerland supports demining projects in countries where it is also pursues humanitarian aid programmes and where it is involved in civilian conflict transformation. Currently, it is present in over twelve countries. Through this approach it exploits synergies and pursues an integral approach to human security. Ratification of the Ottawa Convention is a fundamental condition for Switzerland’s commitment to help a particular country with a demining project.

The exceptions to this rule are activities to support mine victims, which Switzerland offers regardless of the political position of the country in question. Due to limited resources, Switzerland focuses its contributions on countries most affected by mines and unexploded ordnance (UXO). Switzerland selects projects which promise to be the most efficient and effective without ignoring local ownership. Finally, one important selection criterion for projects is compatibility with Switzerland’s multilateral commitment.

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Professionalism in mine action is still at the beginning. With limited and perhaps even decreasing resources available for mine action it is particularly important to do demining in a more efficient way. In the future the expensive field of mine clearance will improve by the use of machines, by better methods of manual demining or the use of mine detecting dogs.

Such innovations will keep the need for training and operational research high. During the past decade the landmine issue enjoyed strong public attention, which was instrumental to keep mine action on the political agenda and to mobilise resources. In the coming years it will be a challenge to keep public attention alive against the background of a media environment where the new story attracts more attention than the important one.

Many survivors of landmine accidents live under distressing conditions. Access to medical treatment is not granted, and very often survivors are excluded from professional life and society. It is important that victims raise their voice stronger in the years ahead. Only through a cooperative effort by a wide range of players – donors, mine affected States, international organisations and others – will the struggle against anti-personnel mines achieve its objective. But this victory is achievable.

Useful link:
Geneva International Centre for Humanitarian Demining
www.gichd.ch
The title to this article should have included the word “cooperation,” which has been purposefully omitted for, the present author believes, good reasons. The idea of “cooperation” in the context of the combating of terrorism by Western powers on both shores of the Atlantic is simultaneously both overrated and undervalued – although this problematic trend is more acutely felt in Europe than in the U.S. A paradox proposition, you may think, as you read this.

Differing approaches to combating terrorism

Conversely, a perceptible divergence in how Continental Europe, Great Britain and the United States pursue anti- and counter-terrorism policy – to the extent that comprehensive policies can be found on the Continental end of the spectrum – is suggestive of how States have historically found themselves at loggerheads with a number of different and often contradictory imperatives in the fight against terrorism. National interests at times conflict with requirements of supranational entities committed to this struggle; the policy of State A concerning group X might not agree with the regional agenda of State B; or a political violence movement evidently engaged in terrorist acts may actually be on the payroll of a State. The list of potential bones of contention is interminable. Yet the need to pool the resources to actively fight the scourge of terrorism with dispatch is not only self-evident: it is first and foremost paramount. With this long-standing quandary adumbrated, let us return to the original contention of this writer: that national interests at times conflict with requirements of supranational entities committed to this struggle; the policy of State A concerning group X might not agree with the regional agenda of State B; or a political violence movement evidently engaged in terrorist acts may actually be on the payroll of a State. The list of potential bones of contention is interminable. Yet the need to pool the resources to actively fight the scourge of terrorism with dispatch is not only self-evident: it is first and foremost paramount. With this long-standing quandary adumbrated, let us return to the original contention of this writer: that international cooperation in the fight against terrorism is both overrated and undervalued, albeit, for the wrong reasons.

The problem of attaching too high a value to international cooperation is intricately linked to two propositions advanced with conspicuous frequency on the European side of the Atlantic: first, that there should be an ordered framework for Europe within which collaboration against terrorism between States occurs; second, that the conduct of States in this cooperative process and during the phase of implementing the fruits of such cooperation should consequently be governed by norms and regimes, legal or otherwise.

The manifestation of this normative approach is institutionalism, the principles of which are arguably steeped in the intellectual tenets of its hapless Wilsonian Idealist progenitor, the penultimate expression of this brand of institutionalism in Europe is a bureaucratic juggernaut: the European Union.

Limits to institutionalism

Pursuant to the maxim of augmenting force by concentration and optimising it by way of the integration of its constituent capabilities, the proponents of the institutional approach implicitly contend that while the process leading to the integration of resources to fight terrorism may indeed be long, it will culminate in the desirable end-state of bringing together a comprehensive arsenal of counter-terrorism instruments. At first sight, there is no problem with this formula per se. When scrutinised, however, we quickly find that in the wake of the Maastricht Treaty, the emphasis of the institutionalist approach as practiced by Brussels after the treaty’s ratification (1 November 1993) is on process rather than on verifiable outcome. This prioritisation, whether by design or entirely inadvertent, is deeply problematic as it engenders – downright encourages – the growth of the bureaucracy and its attendant formalisms required to ensconce processes. Concerning counter-terrorism, both represent supreme impediments: the yardstick of recent history is without remorse.

At the heart of this problem lies the circumstance that the undue importance conceded to processes, and the bureaucratic infrastructure they require, in many different fields of EU activity up to and including counter-terrorism is neither intended nor unintended, but inherent. In the final analysis, the result is that eleven years after Union, the desired objective of achieving a force multiplier in the area of counter-terrorism because of European integration remains remote. The not so self-evident answer to the question of why the EU is struggling to get its bearings in the fight against terrorism even after the catalytic impact of 9/11 is best explained by taking recourse to two examples: the demise of TREVI (Terrorisme, Radicalisme, Extremisme, Violence Internationale) and the emergence of the EU common arrest warrant. The problem of attaching too high a value to international cooperation is intricately linked to two propositions advanced with conspicuous frequency on the European side of the Atlantic: first, that there should be an ordered framework for Europe within which collaboration against terrorism between States occurs; second, that the conduct of States in this cooperative process and during the phase of implementing the fruits of such cooperation should consequently be governed by norms and regimes, legal or otherwise.
European institutions

TREVI was formed 1975/76 with the purpose of harnessing resources, mostly from the intelligence agencies, on an intergovernmental level in the fight against a nascent, yet burgeoning international terrorism. Its purview originally did not extend beyond terrorism and internal security; but its success led to an expansion of the TREVI remit into the fields of organised crime and illegal immigration. Against the backdrop of a steep rise in politically motivated aerial piracy and hijackings in the later 1970s and after, ministers of various European States met in order to deliberate and coordinate steps to be taken against the threat of terrorism, to facilitate the exchange of intelligence, pass on experiences and promote training.

But the TREVI working groups’ ad hoc modus operandi may have left much to be desired in terms of procedural transparency and, by extension, accountability. TREVI was criticised on many accounts: for being a ramshackle ministerial forum without a clear mandate, out of fear of its potential for developing into an unguided missile and, not least, for its propensity toward secrecy enshrined in its operational code of “need to know,” which its members were careful to maintain at all times. Indubitably, its functional constitution and pragmatic methods did not dovetail with the highflying ideals of a supranationalist lobby in Britain and the Continent bent on accelerating the economic and political integration of Europe and its institutions.

And what is more, its track record spoke for itself: TREVI was in the forefront of fighting cross-border terrorism at a time when, in the face of a threat that rendered such a perspective inadmissible, the majority of national security policy establishments in Europe upheld the Manichean conception of internal and external security.

On an operational level, TREVI’s intergovernmental activity set a precedent for effectiveness, if not a politically acceptable benchmark, for what the EU is attempting to accomplish with Europol today. The difference between the two, and the fate of the former, largely illustrate the argument about institutional inertia. TREVI’s remit was both an expression of its members’ political will to cooperate on a case by case basis; and an indication of the security context that rendered such collaboration necessary. TREVI ceased to operate in 1992, when its cooption into the EU Third Pillar (Justice and Home Affairs) put an end to its principal quality of being a flexible, ad hoc ministerial counter-terrorism forum: institutionalisation spelled the end of TREVI’s potential.

Combating terrorism: Switzerland and transatlantic cooperation

The attacks of 11 September 2001 have underlined not only the need to strengthen national cooperation but also the need for greater international police cooperation. Switzerland is aware of the crucial importance of international cooperation in the fight against terrorism and is actively involved in this process within the framework of its legal possibilities. The Interpol channel is used to disseminate police information, to request support and also to ask for legal assistance. Liaison officers from the Federal Office of Police are stationed in several European countries and in the USA in order to facilitate the work of the prosecution authorities. Cooperation with the USA in particular has been intensified thanks to a special agreement.

Preventing money flows for terrorist activities

Switzerland has supported American efforts to combat terrorism from the outset. It adopted for example the so-called Bush lists that were published shortly after 11 September 2001 based on a presidential executive order of September 24, 2001. It ordered the immediate freezing and also banned any transactions with all financial assets of listed persons or organisations with connections to international terrorism. The supervisory authorities responsible for the activities of financial intermediaries (FIs) (Federal Banking Commission, Money Laundering Control Authority) provided the FIs with the Bush lists and reminded them of their due diligence obligations. Shortly afterwards, a good hundred reports of suspicious transactions were sent to the Money Laundering Control Authority (MROS). The MROS passed all these reports on to the Federal Prosecutor, which then instigated several criminal proceedings and blocked accounts containing CHF 24 million. This efficient reporting system is a testament to Switzerland’s money laundering legislation, which is progressive by international standards. Reports from banks in particular are of high quality.

Operative Working Arrangement

In view of the complexity of investigative procedures in the area of terrorism, a new level of international cooperation was needed from the outset, particularly with the USA. On 4 September 2002, Switzerland and the USA signed an Operative Working Arrangement. This agreement defines arrangements for the unbureaucratic exchange of operative staff and for information exchange, while fully respecting the rules of international legal aid. The Swiss Federal Prosecutor’s Office also held an informal conference of leading State prosecutors and police specialists from ten European countries and from the USA in which international investigative methods and problems of legal assistance were discussed. One of the aims of the conference was to identify networking possibilities between separate national investigative procedures.

Legal assistance procedures

On the whole, the existing instruments of international legal aid have proved their worth in the combating of terrorism. The first request for legal assistance in this area by the USA was granted within two days of receipt. After ten months of legal proceedings, bank documents connected with proceedings against the head of the Benevolence International Foundation (BIF) in the USA were also handed over to the USA after an appeal to the federal court. Difficulties that sometimes arise for procedural reasons in legal assistance proceedings are of a general nature and are not specifically related to the fight against terrorism.
there have not yet been any specific cases of application. Of course, the legal tools to combat terrorism were not in place at the time of the attacks of 11 September 2001. The persons or organisations included on the UN-lists have no right to a legal hearing for the listing or for the de-listing process. They are subject to sanctions at the discretion of the state of origin. The list of persons that international sanctions against alleged terrorists and their backers should be based on more transparent and more solid legal foundations. The list of persons subject to sanctions was massively extended on the initiative of the USA following the attacks of 11 September 2001. The persons or organisations included on the UN-lists have no right to a legal hearing for the listing or for the de-listing process.

The official rendition of how the warrant finally received majority assent despite having been shelved as what one commentator called “another in-basket item for water cooler discussion,” was that senior level government officials pledged their support for this measure as a consequence of the catastrophic events of 11 September 2001. In the case of the present author, this complacently held view was rudely disturbed at a conference recently held at the Paul H. Nitze School of Advanced International Studies in Washington D.C. There, the audience was confronted with an entirely different version: that the passage of the common arrest warrant was the result of intense U.S. diplomatic pressure following 9/11. Had anybody but Richard Falkenrath, President George W. Bush’s Special Assistant, made this point, the comment could have been written off with relative ease as just so much political spin. Furthermore, after careful reflection concerning this case, the plausible conclusion offers itself that the institutionalist emphasis on process, as opposed to outcome, had again reared its ugly head and, in the years before 9/11, had resulted in the hallmark self-absorption of the responsible EU organisations.

In view of the serious personal and financial consequences involved, this is unacceptable. Switzerland is also fully implementing UN sanctions. Apart from the USA, Switzerland has blocked the largest amounts, a total of CHF 34 million, in connection with UN sanctions. Switzerland has also ratified all twelve UN anti-terrorism conventions.

The practice of cooperation has proven that close and efficient cooperation is perfectly possible within the framework of the current provisions and that pragmatic approaches can bring constructive solutions for certain areas, as the Entrepreneurial Working Agreement shows. When there are differences of opinion, multilateral fora such as the UN or bilateral discussions serve as useful means of working out viable compromises.
Only the shock of 9/11 and persistent U.S. demands that the EU clamp down on terrorism with whatever means at its disposal broke the EU internal deadlock. If this analysis applies to the case of the common arrest warrant, the moral would be that one of the only few tangible innovations of the EU Third Pillar is in fact not its own achievement, but instead the direct result of the events of 9/11, severe external diplomatic pressure and the EU reaction to both. Whatever this episode suggests about the EU’s willingness and ability to effectively combat terrorism (as opposed to that of her member States), it appears to corroborate a contention made earlier about inherent institutional inertia.

Wedded to the observation that the terminus a quo of the terrorist threat, the political violence movements, is highly dynamic and operates in an informal environment, and unfettered by any rules, the EU’s doctrinaire insistence on using closely regulated, interlocking institutions at the frontline in the fight against terrorism bodies ill for the future. In closing, a few parting thoughts on why the present author believes international cooperation to be undervalued; the observations pertain to pragmatic, “functional” instances of bilateral and multilateral collaboration that generated positive “spillover” effects impacting on related policy areas.

Franco-Spanish cooperation against the Basque separatist group did not arise out of a meta-discussion on how best to combat terrorism in Europe and elsewhere: it was the direct result of the reality of adjoining, porous borders used by ETA to evade capture by Spanish law enforcement officers. Spain’s repeated calls for security assistance and France’s gradual realisation that she could not permit ETA to use her territory as a stepping-stone for the Basque group’s operations in Spain because of the general strain imposed on bilateral relations, and due to the potential reciprocating precedent inaction would create, provided the crucial impetus for cross-border cooperation. Franco-Spanish operations against ETA are among the most successful accomplishments in the history of European counter-terrorism. Many other examples, not least the Anglo-Irish Accord of 1985 and other bilateral and multilateral agreements about how to best rise to the challenge of political violence and terrorism, illustrate the value of working toward a common goal on a case by case basis, if such holds the promise for concrete and mutual benefit.

The point is simply this: the success of international cooperation in the fight against terrorism does not depend on creating a specialised organisation within a multilateral, formalised institution of the supranational kind.

The institutional approach is, indeed, overrated and, has, hitherto barely paid any tangible dividend, and also does not appear to offer a brighter perspective in the near future. The effective combating of terrorism, however, is predicated upon viably operable international partnerships, such as TREVI. Notably, in this context “operable” in the past has been synonymous with “informal”.

Meanwhile the need to confront terrorism is immediate; we have all witnessed the attacks of 11 March in Madrid this year. It is sensible to commit resources to what can be done now and for reasons immediately apparent to the relevant parties, and no longer hold out the promise of that which presently and for reasons integral to the nature of the EU seems a remote possibility at best.

Maybe the time has come to reappraise our estimation of proven avenues to international cooperation with all their blemishes and fragility arising from the functionalist yet pragmatic circumstances which gave rise to them; and to stop investing direly needed resources in pursuit of a tantalising fantasy of the ideal, centrally directed, pan-European counter-terrorism agency. The quintessence of this argument is that many little steps may lead us to greener pastures after a grueling foot march, while the discussion on how to leapfrog ahead remains only of potential value.

Useful link:
International Relations and Security Network
www.isn.ethz.ch
Useful links

Swiss Federal Department of Foreign Affairs (DFA)
www.eda.admin.ch/eda/e

Centre for International Security Policy (CISP) of the DFA
www.eda.admin.ch/international_security

Swiss Federal Department of Defence, Civil Protection and Sports

Geneva Centre for Security Policy
www.gcsp.ch

Geneva International Centre for Humanitarian Demining
www.gichd.ch

Geneva Centre for the Democratic Control of Armed Forces
www.dcaf.ch

International Relations and Security Network (ISN)
www.isn.ethz.ch

Partnership for Peace (PfP)
www.nato.int/pfp/pfp.htm

Euro-Atlantic Partnership Council
www.nato.int/pfp/eapc.htm

Partnership for Peace (PfP)
Swiss Homepage (German) www.pfp.ethz.ch

PfP-Consortium of Defence Academies and Security Study Institutes
www.pfpconsortium.org

European Crisis Management Academy
www.ecm-academy.nl

Radiation Protection and Nuclear Safety Institute
www.irsn.org

Comprehensive Nuclear-Test-Ban Treaty Organisation
www.ctbto.org

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www.iaeo.org

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