



# ANNUAL REPORT 2013



Bonn International Center for Conversion

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# Foreword

Our world is in transition. This transition involves challenges that we cannot tackle with our current knowledge, known strategies and tried and tested technologies—be they the consequences of climate change, the question of an environmentally friendly and affordable supply of energy, mobility, managing an increasing shortage of resources, the effects of demographic change, or other serious issues.

We must rethink—not only in order to maintain our standard of living, but also to give coming generations opportunities for development and prospects for the future. Science, acquiring and passing on new knowledge, plays a key role in the search for new solutions.

The global challenges also involve safeguarding and achieving security and peace. The conflicts in Syria, Egypt, Mali, Afghanistan and Iraq are alarming. They call upon peace and conflict research to identify causes, recognize connections, point out solutions, and provide expertise to advise both policymakers and the civil society. The State of North Rhine-Westphalia has excellent researchers in these fields and there can be no doubt that BICC in Bonn is home to some of the best.

In 2012, BICC was once again one of the world's leading think tanks in two categories of the Global "Go-To Think Tanks" Report of the University of Pennsylvania. I am proud that the only German peace and conflict research institute to be included in this international ranking is located in North Rhine-Westphalia.

The Professorship for Peace and Conflict Research at Bonn University, which BICC's Director for Research, Conrad Schetter, has held since his joint appointment by Bonn University and BICC in March 2013, stands for applied, interdisciplinary research at a high academic level. It forms the academic basis for BICC's work. I am delighted that in appointing Professor Schetter, BICC has been able to enlist a proven expert for this new position of Director for Research. The areas of research-based policy advice and capacity development are already profiting from his work.

BICC's findings in the field of arms export control are being sought both nationally and internationally. Its Global Militarization Index (GMI) shows the Middle East to be the world's most highly militarized region. The provision of research-based policy advice in this context involves seeking criteria for arms export control as well as asking questions regarding the role of the legislative—that is to say, the parliaments.



BICC is also increasingly turning its attention to interdisciplinary research topics in peace and conflict research—such as the dynamics of violence, technological changes in armed conflicts, or intervention policy. At the same time, the Center is also considering which new fields of research could arise as a result of these changes.

Shortly before its 20th anniversary, BICC plans to set a new course for its work under the leadership of its Directors for Research and Administration. I wish BICC all the best for this process!

I also wish BICC every success with its important work and hope that you will find the 2013 Annual Report interesting reading.

*Svenja Schulze*  
Minister for Innovation, Science and Research of the State of North Rhine-Westphalia

# Preface

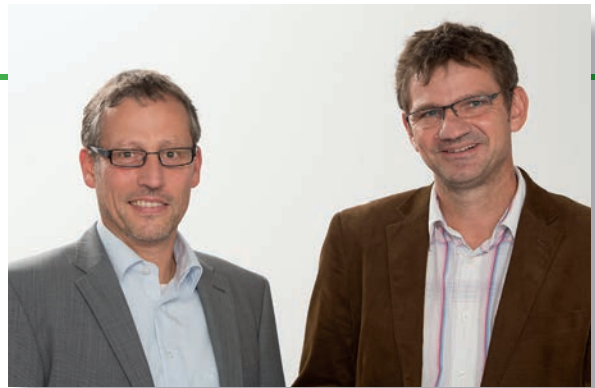
The year 2013 has marked the beginning of a new era at BICC with the introduction of a dual leadership structure. Conrad Schetter was appointed Director for Research in March and his position is combined with a newly established professorship for Peace and Conflict Research at the University of Bonn. This joint role is intended to intensify BICC's academic approach and at the same time strengthen intellectual exchanges with the University of Bonn. Michael Dedek, Director for Administration, complements the management team.

A process of reorientation has now begun that will accompany us for several years to come. The Center is aiming to combine those areas of its work that have proved successful and worth maintaining with new impulses and topic areas. This 2013 Annual Report, which gives an account of BICC's activities between July 2012 and June 2013, already bears witness to this realignment. From now on, our new concept is to focus on providing a critical and policy relevant analysis of the dynamics of organized violence. This forms the core of what we understand by "Conversion Studies" and involves three levels: *Concepts*, *Means*, and *Practices*.

At the *Concepts* level, we intend to take a closer look at how the perception of war and its concomitant processes is changing. For example, Conrad Schetter considers "Military interventions of the future" in the Editorial and analyzes interventions in the context of the trend towards technological innovations (p. 7).

The term *Means* refers to the immediate material dimension of organized violence: It comprises small arms as well as global military expenditures and arms exports. In the context of small arms control, in 2012/13 we have studied the dangers of MANPADS (Man-Portable Air Defense Systems) and the possible uses of "smart" technologies (p. 14). Our expertise on the safe storage of small arms and on the development of conventional control mechanisms is also in great demand. Our experts who live and work locally use our research when advising the governments of South Sudan (p. 16) and Sudan (p. 17) on capacity development.

BICC's 2013 Global Militarization Index (GMI) shows that the Middle East remains the world's most highly militarized region (p. 10). We analyze global arms expenditures and trends regarding global and German arms exports.




We have launched the "War and Peace" Internet portal in association with the German Federal Agency for Civic Education (p. 18). The data and facts it contains on the dynamics and means of organized violence represent a unique instrument in the field of political education.

Military sites are also included under *Means*. The conversion of former military sites is one of BICC's classic tasks. In this area too, best practices demonstrate the introduction of new ideas (p. 20).

With the term *Practices*, we refer to the entire process of discernible changes in organized violence and are currently focusing our attention on military regimes that are involved in situations of upheaval. We are conducting research on the political economy of the military in countries of the Arab Spring (p. 22). A further project is devoted to studying in how far the role of the military in Myanmar and various potentials for conflict are influencing the country's transformation and what this means for Germany's foreign cultural and educational policy (p. 21).

"Natural Resources" and "Migration" are two further key areas of our work. These highly relevant societal topics also show evidence of organized violence.

The Annual Report takes up the links between organized violence and natural resources in three project reports. In this context, we are using various methods—including remote sensing and field research—to study the interrelationships between conflict constellations and the exploration of resources such as small-scale mining in Afghanistan (p. 25) and mining for gold, diamonds and oil in South Sudan, Chad and the Democratic Republic of the Congo (p. 24). A new project is raising the question of in how far the construction of large solar power plants in North Africa is having an effect on existing conflict constellations or can provoke new conflicts (p. 23).



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The Annual Report also comprises a short Business Report (p. 26) providing information on the Center's workings and financial framework.

We would like to thank all donors and sponsors, above all the State of North Rhine-Westphalia represented by the Ministry for Innovation, Science and Research, for their valuable support. This also holds true for the members of our Boards who have shown great commitment to advising us on our work. Last but not least we would also like to give our heartfelt thanks to our colleagues at BICC for the successful year 2012/13.

BICC will be celebrating its 20th anniversary in 2014 and we would like to invite you to participate in our efforts to refocus the Center's work. With our new concept, we hope to make our applied, empirical research even more critical, policy relevant and problem-oriented in future.

We hope that you will enjoy reading this Report and look forward to receiving your suggestions and comments.

*Conrad Schetter and Michael Dedek*

# Editorial: Military interventions of the future

In retrospect, the last two decades represent a period of experimental intervention policy. Military interventions have taken place in different formations, under various mandates, and with diverse approaches—whether in the Balkans, in West, East or Central Africa, or in Iraq, Afghanistan, Timor Leste, and Haiti. There are now increasing signs that the era of broad-based interventionism involving the deployment of large military units is coming to an end and that new forms of intervention are gaining importance.

## The era of interventionism

At the beginning of the 1990s, the foreign policy concepts of the United States, many European states as well as international and supranational organizations regarded military interventions as an effective means of putting a stop to violent conflicts. This can be seen from the sudden increase in military interventions: In the first 43 years following World War II, the United Nations Security Council authorized 13 peacekeeping missions. This figure doubled between 1988 and 1995. This quantitative intensification is in stark contrast to the non-intervention in Rwanda in 1994 or in Darfur since 2003, where genocide and mass expulsion have occurred on a massive scale.



This imbalance between a moderate willingness to intervene in certain cases and a simultaneous increase in interventions in other cases has always prompted the question as to the motives of the interveners. The moral justification is cloaked in humanitarian arguments such as the responsibility to protect (r2p). Intervention takes place in the name of humanity to save human life or to uphold a certain quality of life. Critics of this appeal to humanitarian necessity argue that it is often only a pretext and that in many cases strategic, economic and security interests are the deciding factor.

## State-building, regime change, and democratization

Despite ambiguities regarding motivation, almost all the interventions of the last twenty years have in common the fact that they no longer aimed to merely contain violence, but to enforce a change in the political system. The main tasks and mandates of interventions increased rapidly: Peacekeeping operations up to the end of the Cold War were limited to monitoring ceasefires between states (e.g. on the Sinai Peninsula or in Cyprus). Complex peace-building missions developed in the course of the 1990s—often under the leadership of the United Nations. The inaction of Dutch UN Blue Helmets during the Srebrenica massacre in 1995 marked the decisive turning point from peacekeeping to peace enforcement and peace-building. Interventions now performed societal and state tasks—often in the form of integrated missions. This resulted in a dilemma: On the one hand, long-term and broad-based interventions that went beyond the scope of humanitarian tasks essentially questioned the sovereignty of the state concerned; on the other hand, the missions had to legitimate their existence through their mandate to promote democratic systems and state-building.



The results of some interventions such as those in Bosnia, Timor Leste or Sierra Leone can be seen as guardedly positive. Nevertheless, the cases of Afghanistan and Iraq have dominated the discussion in the Western world—due to the large numbers of Western soldiers involved. Both cases have demonstrated how illusory it is to attempt to achieve anything like democratization and state-building within a relatively short period of ten or twelve years respectively. Afghanistan has shown that infrastructure measures alone are not sufficient for successful state-building, but that building loyalty to the state is the

work of centuries. In Iraq, the complete replacement of the military and administrative apparatus caused the state to collapse. Clientelism and violent structures are seriously obstructing democratic processes in both countries.

### Rethinking intervention policy

The proportionality of very expensive interventions has sparked public criticism against the background of the comparatively large number of setbacks: Democratization and state-building represent tasks which cannot be accomplished by short-term interventions and where normative demands are a far cry from reality. What is more, conventional armies are hardly a match for asymmetrical warfare. The fragmentary implementation of the Counter-Insurgency Strategy (COIN) in Iraq and Afghanistan demonstrates that conventional armies are not trained for interventions in civil war situations. Ultimately, both interventions have not led to the end but to a continuation of the violent conflicts.

Since 2007, the financial and banking crisis has been encouraging a new approach to intervention policy. The interventions in Afghanistan and Iraq have cost the US tax-payer US \$4,000 to 6,000 billion<sup>1</sup>. This has had a dramatic effect on the overall budget of the United States. At the latest since President Obama's assumption of office in January 2009, Western countries have started to reconsider their intervention policy in times of limited funds.



<sup>1</sup> Linda J. Bilmes, 2013: *The Financial Legacy of Iraq and Afghanistan: How Wartime Spending Decisions Will Constrain Future National Security Budgets*. Harvard Kennedy School Faculty Research Working Paper Series, March, p. 1.

### Current trends in intervention policy

It is worth taking a closer look at the behavior of the NATO states in current crisis regions to understand the new trends in intervention policy. New forms of intervention policy are being tested which appear far cheaper, require fewer boots on the ground, and finally provoke less public criticism in the media—due to the lower numbers of troops involved. There is already mention of a light footprint approach<sup>2</sup>. One can now recognize the following three central strategies: The arguments in favor of the first two are based on the belief in technological superiority; those in favor of the third on financial superiority.

**1. Policing:** The strategy of using unmanned drones to intervene in the Afghan–Pakistani border region perhaps represents the most important innovation in warfare in recent decades. Drones are the most effective instrument for fine tuning interventionist practice in situations where an entire country is no longer occupied but state sovereignty is still suffering from partial,



local states of emergency in so-called ungoverned territories. It is no longer a matter of state-building, the spread of democracy, or the protection of human rights but solely a question of containing certain regions which are to be held in check through concrete policing actions—be it with drones, fighter bombers or the short-term deployment of special forces. Police bombing and targeted killing in limited areas of the state-of-emergency territory therefore not only help to minimize the risk to one's own soldiers, but also serve to stabilize the grey zone of state sovereignty. The construction of this new type of violent areas means that the intervening states are no longer bound by the conventions of warfare applying to land warfare.

<sup>2</sup> Cf. <http://www.cnas.org/lightfootprints>.



**2. Air strikes:** Even though NATO originally justified its air strikes in Libya in 2011 as *r2p*, there was soon mention of regime change. Unlike the situations in Kosovo in 1999, Iraq in 1990/91 and 2003, or Afghanistan in 2001, the air strikes in Libya were not followed by a ground offensive, but by the provision of support for the rebels until the fall of the Gaddafi regime. The trend is to avoid the deployment of large numbers of ground troops in order to avert the risk of being perceived as an “occupying force”. The military operation in Libya was therefore kept separate from the civil rebuilding process. State-building and democratization are being tested without on-the-spot military protection.

**3. Funding rebels:** As could already be seen in Libya, the practice of not interfering in a war oneself but instead arming one’s allies is also becoming more important in Syria. During the Cold War, the Super Powers practiced providing support for their allies in Vietnam, Nicaragua, Angola and Afghanistan. This is the most destructive form of intervention since it does not even aim at establishing peace, but at a “balance of terror”. The return to this form of intervention may also be explained by the shift in the global power structure with countries such as Russia or China no longer recognizing the hegemonic claims of the United States.

All three approaches with which the United States in particular is currently experimenting involve using low stakes to implement short-term interests. Long-term, visionary projects such as democratization or state-building are taking a back seat and are separate from military interventions. France’s wide-ranging intervention activities in Mali since Winter 2012/13 represent an exception in this context. They can be explained by France’s striving for hegemony in francophone Africa.

## Future tasks for BICC

These shifts in intervention policy are of enormous importance for BICC’s research. The question of how armed conflicts can be terminated with as peaceful means as possible is becoming even more urgent: The broad-based, comparatively expensive missions of many interventions over the last twenty years, which aimed for drastic changes in normative framework conditions, have rarely produced the desired success; the recent “intervention light” approaches hardly give cause to believe that they are seriously aimed at overcoming conflicts. It is now important to gain a differentiated overview of how and under what circumstances intervention measures are necessary and promising.

BICC will closely scrutinize the new forms, technologies, and strategies of warfare as describe above. For example, the much discussed use of fighter drones will be viewed in the complex context of the future nature of wars: Conventional armies appear static and antiquated in their structure and hierarchy; it is becoming increasingly difficult to draw the boundaries between the civil and the military; the cycles of military superiority through technological leadership are becoming shorter and shorter, etc.



As far as arms export control is concerned, BICC will continue to closely scrutinize the policy of the Federal Government in the future. Exports of armaments to crisis regions—*inter alia* to the Gulf region and South East Asia—must generally be regarded as extremely critical. In particular, the recent German policy of “strengthening instead of interfering” is hardly consistent with the principles of civil crisis prevention which the Federal Government espoused in one of its own Action Plans.

Conrad Schetter



# Global militarization: Rearmament in the Middle East and Asia

The Global Militarization Index (GMI) 2013 shows that the Middle East continues to be the most highly militarized region in the world. Asia, too, is demonstrating a particularly strong trend towards regional rearmament. The GMI is funded by the German Federal Ministry for Economic Cooperation and Development (BMZ) and is being published this year for the fourth time. The GMI 2013 is based on the evaluation of various data covering 149 states.

The fact that Israel, Syria, Jordan and Kuwait, four countries in the Middle East, are among the Top 10 countries on the GMI reflects the high level of militarization in this region, which is so rich in conflicts. Furthermore, all the other states in the region, with the exception of Qatar, are listed among the GMI's Top 40. This high level of militarization together with general rearmament projects involving arms imports from all over the world (cf. below) is contributing to a further destabilization of the area and can lead to the use of violent means to resolve internal as well as external conflicts, as witnessed in Syria.

Yet, certain European countries such as Russia and Cyprus also continue to assert their positions in the TOP 10. Cyprus's regular place in the top set is due primarily to the conflict between the island's Greek and Turkish population groups, which has continued unresolved for decades. Whereas Azerbaijan already ranked high in previous years, Armenia<sup>3</sup> is a new entrant this year. The rapid build-up of military capacities in the Caucasus is accompanied by heated diplomatic rhetoric and the risk of rekindling the long-term military conflict over Nagorno-Karabakh.

## Global Militarization Index 2013 Top 10

Rank	Country	Military expenditure index score	People index score	Heavy weapons index score	GMI score
1	Israel	4.69	6.27	3.65	794
2	Singapore	4.22	6.48	3.29	752
3	Russia	4.41	5.93	3.32	729
4	Armenia	4.44	6.18	2.97	724
5	Syria	4.47	5.67	3.30	714
6	Jordan	4.28	5.66	3.22	694
7	South Korea	3.84	6.14	2.94	679
8	Azerbaijan	4.47	5.55	2.83	673
9	Cyprus	3.60	5.82	3.32	667
10	Kuwait	4.45	5.12	3.18	666

On the methodology of the GMI. Please refer to Occasional Paper VII. Grebe, Jan. 2011. The Global Militarization Index (GMI). Bonn: BICC, February

<sup>3</sup> As of 2013, the data for Armenia also includes reservists, which is why the country now ranks considerably higher than in previous years.

## The Global Militarization Index (GMI)

reflects the relative value and significance of a state's military apparatus compared with its society as a whole. The GMI uses several indicators to represent a country's level of militarization:

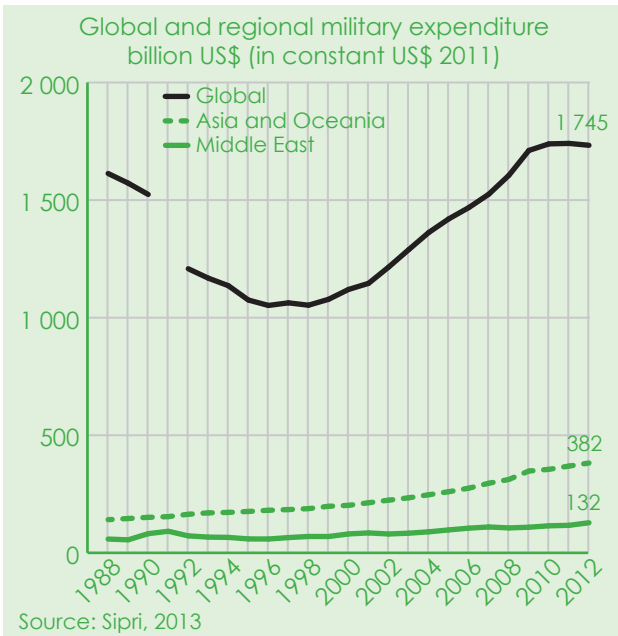
- Military expenditure in relation to the country's Gross Domestic Product (GDP) and health care sector (share of GDP);
- Ratio of (para)military personnel, reservists and doctors to the total population;
- Number of heavy weapons systems compared with the total population.

The GMI 2013 is based on data from 2012 (i.e. the latest available figures) and covers 149 states. It uses i.a. figures from the Stockholm International Peace Research Institute (SIPRI), the International Monetary Fund (IMF), the World Health Organization (WHO), the International Institute for Strategic Studies (IISS), and BICC.

It is true that the increase in military budgets worldwide has slowed down in the past few years and, in 2012, even decreased for the first time. This, however, is mostly due to severe austerity measures in the United States and Western Europe. Yet, these measures do not change the fact that with US \$668 billion in 2012 the United States still account for the lion's share of military expenditures, followed (at some distance) by China, with US \$157 billion, and Russia, with US \$90 billion. Even though its dominating share fell below 40 percent for the first time since the end of the Cold War, the United States alone is still responsible for 39 percent of military expenditure worldwide.

## Focus on regional rearmament: Middle East

The scale of rearmament in the Middle East is unparalleled. Israel (GMI: 1st place) and the Arab states of Syria (GMI: 5th place), Jordan (GMI: 6th place), Kuwait (GMI: 10th place), Oman (GMI: 11th place), and Saudi Arabia (GMI: 13th place) are among the most militarized countries in the region. This high level of militarization is demonstrated among other things by the ratio between military expenditure and Gross Domestic Product, which is well over seven percent in some states in the region and thus far in excess of the world average of approximately 2.5 percent (by comparison: the figure for Germany is approximately 1.4 percent).

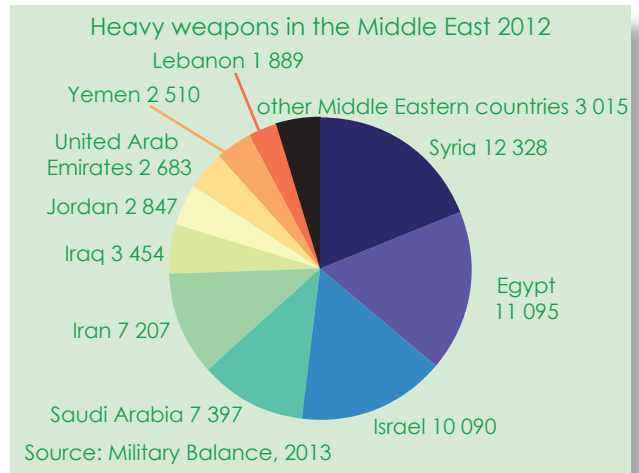


Military expenditures in the Middle East show a clear upwards trend. In 2012, they amounted to US \$128 billion, while in 2000, they came to US \$80 billion—a remarkable increase of 60 percent.

### Global Militarization Index 2013 Top 10 Middle East

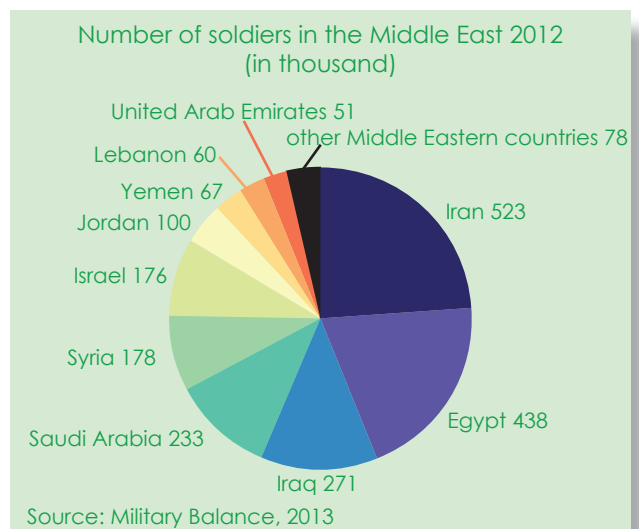
Rank	Country	GMI	Military expenditure/ GDP	Health expenditure/ GDP
1	Israel	794	6.6	7.7
5	Syria	714	4.0	3.7
6	Jordan	694	4.5	8.4
10	Kuwait	666	3.5	2.7
11	Oman	665	8.7	2.3
13	Saudi Arabia	646	7.6	3.7
15	Bahrain	645	3.5	3.8
18	Lebanon	614	4.0	6.3
26	Egypt	578	1.7	4.9
28	Iran	564	1.8	6.0

There is a comparatively high concentration of heavy weapons systems<sup>4</sup> in the region. Syria still has the largest number of such systems, followed by Egypt (GMI: 26th place) and Israel.



The Gulf monarchies, particularly Saudi Arabia, are investing billions in the procurement of new weapons, most of which they import due to the absence of an indigenous arms industry. In 2011 alone, the Saudi Arabian government ordered combat aircraft and other military goods worth US \$60 billion from US arms companies. Saudi Arabia's ambition is to expand and strengthen its role as a regional heavyweight. Its procurement schemes are focused on strategic weapons such as missiles and combat aircraft, which also enable it to attack distant targets in the region. The driving factor behind these deals is most probably the country's rivalry with Iran and the wish to adopt a threatening stance towards this rival.

Although the United States is still the largest supplier of arms to the region, Germany is becoming increasingly attractive as a supplier whereas Russia is the main exporter of arms to Syria and Iran.



<sup>4</sup> Armored vehicles, artillery, combat aircraft, large battleships

All in all, the individual states in the Middle East have a high number of soldiers compared with the total population. Iran (GMI: 28th place), Egypt and Iraq (GMI: 40th place) all have very large armed forces. The Gulf monarchies, in contrast, have small military apparatuses, which are, however, very well equipped and often well trained.

### Militarization in Asia and Oceania

The rising militarization in this region is taking place against the background of various unsolved territorial conflicts, mutual security threats and rivalries between individual states. Although the ratio of military expenditure to Gross Domestic Product is moderate in most countries, military expenditure has nevertheless risen considerably in absolute terms (cf. below).

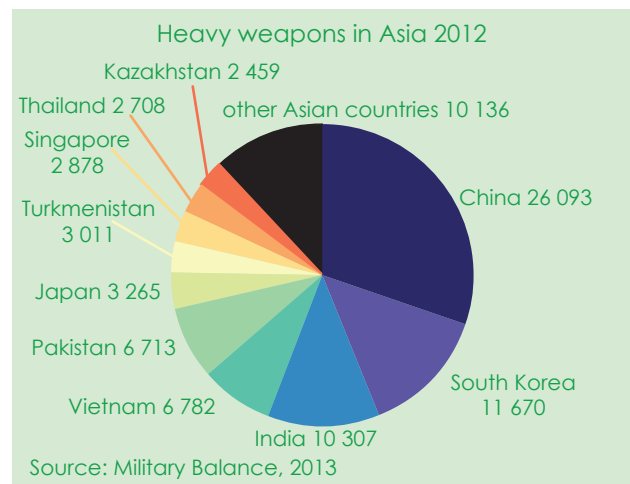
As concerns military expenditures, China (GMI: 83rd place) does not only hold a top place globally but also in Asia. China alone is responsible for 40 percent of all military expenditure in the region. All in all, expenditure on the continent amounted to US \$382 billion in 2012. This compares with US \$202 billion in 2000—an increase of 89 percent.

This trend towards rearmament is also demonstrated by the fact that India (GMI: 73rd place), China, Pakistan (GMI: 46th place), South Korea (GMI: 7th place), and Singapore (GMI: 2nd place) have joined the ranks of the world's leading arms importers in recent years.

Global Militarization Index 2013  
Top 10 Asia

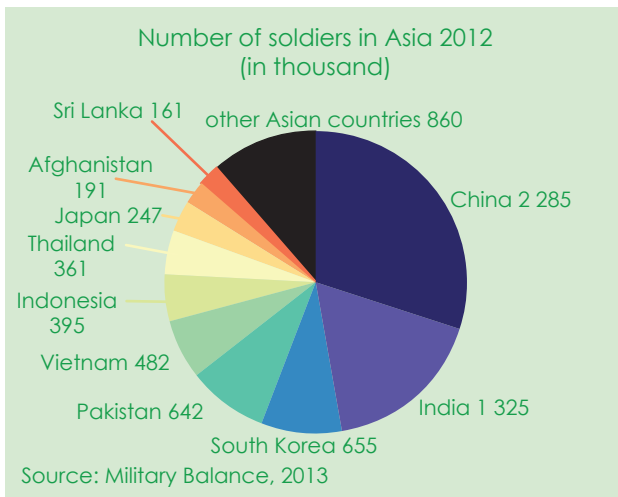
Rank	Country	GMI	Military expenditure/ GDP	Health expenditure/ GDP
2	Singapore	752	3.4	4.6
7	South Korea	679	2.8	7.2
14	Brunei	645	2.5	2.5
21	Vietnam	607	2.5	6.8
22	Mongolia	595	1.1	5.3
35	Sri Lanka	542	2.6	3.4
37	Thailand	539	1.5	4.1
46	Pakistan	515	2.9	2.5
47	Kyrgyzstan	514	3.7	6.5
49	Cambodia	513	1.5	5.7

States in Asia have increased their numbers of conventional large weapons systems by investing heavily in modernizing their arsenals. China stands out as far as the number of heavy weapons systems is concerned and towers over all other countries in the region. South Korea remains a highly militarized state against the backdrop of the continuing conflict with North Korea.



The unresolved territorial conflicts in the East and South China Sea are influencing the procurement of maritime weapons systems in particular. Many states see a potential threat in China's efforts to strengthen its armed forces and are therefore endeavoring to modernize their own naval forces. This means that China is not alone in promoting the construction and procurement of new submarines; Vietnam (GMI: 21st place), South Korea, Japan (GMI: 111th place), Australia (GMI: 72nd place) and Indonesia (GMI: 91st place) are also purchasing or planning to procure new submarines.

China has by far the largest army in the region and, based on the number of soldiers, also the largest armed forces worldwide. However, its forces have no combat experience and would only have a limited ability to conduct complex operations far from their own territory. India, too, has a very large military apparatus with 1.35 million soldiers.



For many states, modernizing their arsenals to meet changing threat scenarios is a step towards professionalizing and in some cases also to reducing the size of their armed forces.

#### Worldwide military expenditures and Germany's role as global arms exporter

Although the United States and Russia remain important arms suppliers for many countries in both Asia and the Middle East, these regions are also becoming increasingly significant markets for European arms companies. Whereas only eight percent of all European arms exports went to the Middle East in 2007, this share had already risen to over 21 percent in 2011. Apart from conventional large weapons systems, the deals included border security systems and sophisticated arms technology, which also helps the countries to establish their own production capacities. Over eleven percent of all arms exports from EU Member States went to the Asian region as a whole in 2011. For

example, Sweden supplied submarines to Singapore and fighter aircraft to Thailand; the Netherlands signed a contract for two frigates with Vietnam.

Asia is a huge growth market and will become increasingly important for German arms companies in future. This is demonstrated by deliveries of submarines to South Korea, of tanks to Singapore and patrol vessels to Brunei as well as by the license to export up to 104 battle tanks to Indonesia at the end of 2012 in a deal that also includes the sale of 50 armored personnel carriers.

The Middle East, on the other hand, has long been an important market for German arms companies. For years now, the Federal Government has been approving more and more arms exports to states in this region. German arms exports to the region amounted to euro 1.421 billion in 2012 alone. Saudi Arabia accounts for the lion's share of exports in the form of border security equipment. In addition, there was a sizeable tanks deal with Qatar involving the delivery of 62 battle tanks and 24 howitzers. It is still not known whether the deal with Saudi Arabia regarding the sale of up to 270 battle tanks will come about. Germany has indicated in the past that it is in principle interested in this transaction.

It would appear that such deals are increasingly also based on security considerations. The Federal Government is apparently willing to provide states with arms despite the dangerous dynamics in the regions concerned. The policy of "strengthening" strategic partners aims at empowering the latter to perform security tasks such as conducting their own interventions.

Jan Grebe

#### EU member states' arms transfers to specific regions (a: in millions of euro, volume of licenses issued; b: in percent of total EU member states' exports)

	2007		2008		2009		2010		2011	
	a	b	a	b	a	b	a	b	a	b
EU	10 660	39.3	10 597	31.6	9 630	23.9	9 000	28.4	14 495	38.6
Other European countries	2 133	7.9	3 094	9.2	1 641	4.1	1 746	5.5	1 837	4.9
Middle East	2 148	7.9	4 963	14.8	9 638	23.9	6 660	21.0	7 975	21.3
South Asia	2 020	7.5	1 758	5.2	2 072	5.1	1 942	6.1	2 464	6.6
South East Asia	1 963	7.2	2 642	7.9	2 106	5.2	1 940	6.1	1 779	4.7
North East Asia	446	1.6	2 726	8.1	787	2.0	831	2.6	835	2.2
North Africa	578	2.1	985	2.9	2 033	5.0	1 664	5.2	1 201	3.2
EU: Total	27 100		33 499		40 302		31 723		37 525	

Source: Council of the European Union, EU annual reports, <http://eur-lex.europa.eu/en/index.htm>

# Innovative aspects of small arms control

New technologies are currently revolutionizing the arms industry, as recent discussions on drones and robotics show. Adopting its accustomed peace policy approach, BICC is studying the role of innovative technologies in controlling small arms and light weapons (SALW)<sup>1</sup> in two projects funded by the German Federal Foreign Office (AA): One research project is analyzing the threat posed to civilian aviation by MANPADS, shoulder-launched anti-aircraft systems. The other, an international conference on "smart" technologies, raises questions regarding how they can be used to secure and oversee weapons, their storage and international transfer.

## MANPADS

The last twenty years have seen the growing importance of asymmetrical conflicts in which non-state actors fight against a state. Weapons systems that can cause a great deal of damage at low cost frequently play an important role in such conflicts and give rise to concern. These weapons include, for example, shoulder-launched anti-aircraft systems, so-called MANPADS (Man Portable Air Defense Systems), which are particularly suitable for attacks on mobile targets.

MANPADS are small, light and robust and can shoot down an aircraft or helicopter with a single shot. Approximately 50 MANPADS attacks on civilian aircraft have been documented since the 1970s, killing 920 people. The international debate on this type of weapon began following the attack on an Israeli passenger aircraft in Kenya in 2002.

The BICC project examines the significance of MANPADS from various standpoints and studies possibilities for their effective control. The BICC study "MANPADS—A terrorist threat to civilian aviation?" (BICC *brief* 47), which was published in 2013, is considered one of the most comprehensive publications on this topic.

Although MANPADS can still function after decades, their reliability declines noticeably with time. This is due primarily to the gradual deterioration of the thermal batteries and solid fuel used to drive the missiles. The fact that most of the attacks on civilian aircraft took place in war zones puts the risk scenario for the majority of air traffic into perspective.



The study reaches the conclusion that there is insufficient regulation governing MANPADS. The United States is the only country to have introduced specific legislation dealing with this type of weapon. At the international level, the Wassenaar Arrangement on Export Controls for Conventional Arms and Dual-Use Goods and Technologies provides for exemplary regulations, but these have been watered down due to lack of control and sanction mechanisms.

The publication suggests taking measures at several levels involving diplomatic, legislative, operational, and technical components to tackle the risks caused by MANPADS. The most important aim must be to prevent the weapons from falling into the hands of potential assailants. This can be achieved through international regulations, national legislation, strict stockpile controls, and the destruction of outdated weapons.

Steps must also be taken to prevent MANPADS from being positioned for attacks by terrorist groups. Measures such as improved controls in the vicinity of airports could play a role here. A further step to hamper the smuggling of MANPADS would be for the military to replace these weapons with larger, heavier and harder to operate CREWPADS, which require several people for their transport and operation. "Smart" technologies (cf. below) could provide better technical operational controls. Finally, technical measures could also be introduced to improve the protection of aircraft against MANPADS.

<sup>1</sup> Small arms are, for example, rifles, pistols, light machine guns and all weapons which can be carried and operated by a single person. The category light weapons includes, for example, heavy machine guns, manual anti-tank grenade launchers (RPG), MANPADS, mortars and other weapons which can be operated by a small unit.

## Smart technology in SALW control

It is impossible to imagine many areas of our lives without technology—whether it be to improve road safety or for high-speed data processing. “Smart” technologies appear promising in many areas of society. They could also be used to control SALW, an area which until now has been dominated by conventional, mechanical procedures.

Technical developments such as fingerprint and palm recognition, radio frequency identification (RFID) or chips can be used to limit access to light weapons. It is also possible to trace supplies of weapons using GPS transmitters or by equipping a firearm with a camera, which takes a photo as forensic proof every time the trigger is pulled.

These potential applications prompted BICC, working in association with the German Federal Foreign Office, to organize an international conference in Berlin from 17 to 18 June 2013 entitled “Smart Technology in SALW Control”. Over 80 researchers, diplomats and representatives of industry and non-governmental organizations discussed the potential and limits of these new technologies in the field of small arms control.

The starting point for the discussion was the large number of victims of firearms—be it in armed conflicts, accidents or suicides. Experts explained the technical possibilities for using smart technologies without ignoring the critical aspects involved. For example, high-tech solutions are hardly suitable for controlling small arms in post-conflict countries with low technological standards; especially as there are many more pressing problems such as the safe storage of weapons, for example. The discussion on the use of smart technologies in exporting and tracing weapons was less controversial. Here the advantages seem to outweigh the risks (e.g. malfunctioning). Furthermore, the use of smart technologies does not only have technical but also, and in particular, political and legislative implications at the national, regional and global level. The participants warned therefore that “smart” technologies are not a panacea for controlling SALW.

The findings and issues discussed at “SmartCon” provided an important stimulus for research at BICC. The Center will continue to take a critical look at developments in arms technology in future.



Project title:	Study on security relevant risks of MANPADS
Duration:	until February 2013
Funded by:	German Federal Foreign Office (AA)
Project team:	Michael Ashkenazi, Princess Amuzu, Jan Grebe, Elvan Isikozlu, Christof Kögler, Marc Kösling
Publication:	BICC <i>brief</i> 47—MANPADS: A Terrorist Threat to Civilian Aviation?
Project category:	Research-based policy advice

Project title:	Smart technology for the control of small arms (SmartCon)
Duration:	since February 2013
Funded by:	German Federal Foreign Office (AA)
Project team:	Michael Ashkenazi, Marc Kösling
Project category:	Capacity development

# Improving the management of arms and ammunition in South Sudan

BICC is advising the government of South Sudan on improving the storage of small arms and light weapons. It is supplying South Sudan's Ministry of Interior and the country's military with on-the-spot expertise on how to mark, register and store weapons and formulate corresponding sets of regulations. The project is funded by the German Federal Foreign Office (AA).

Two years after independence, South Sudan is a state in transformation. The rate of illiteracy is falling; new roads are being built; the capital Juba is one of the fastest growing cities in the world. At the same time, the government is having to face numerous problems. One of them is the control of small arms, which contribute to violent conflicts in many parts of the country and threaten the lives of thousands of people.

BICC has been advising the Government of South Sudan since 2011 and supporting it in improving the management and security of small arms and light weapons as well as ammunition. BICC's direct partners are the Bureau for Community Security and Small Arms Control at the Ministry of Interior and all the state organs that are equipped with weapons (army, police, wildlife, etc.). Furthermore, BICC also maintains contacts among various government institutions and international partners. These include the UN organizations UNMIS (UN Mission in South Sudan), UN Mine Action Programme und UNDP (UN Development Programme) as well as non-governmental organizations such as the Mines Advisory Group, Danish Demining Group and Saferworld. External partners are the German *Bundeswehr* and the Small Arms Survey in Geneva.

BICC's advisory work focuses on developing administrative and security systems for the storage of weapons and ammunition within the state authorities. Special staff will ensure that depots are inspected on a regular basis.

BICC is also working directly with South Sudan's Army. The key challenge here is to train individual officers in small arms control. In order to ensure sustainability, care is taken to make sure that members of staff who have participated in training activities are employed in positions where they can apply the knowledge they have acquired.

BICC has conducted several workshops for high-ranking officers in Juba, Nairobi and Johannesburg aimed at developing capacity within the military. The results have been included in processes to establish structures within the army and police force. Further-



more, training courses on the management of weapons and ammunition are to be held in four selected provincial capitals in South Sudan by the end of the year.

Improving the management of weapons and ammunition is a long, difficult and complex process—particularly in a country with low training levels and only limited experience of the diverse organizational demands facing a modern standing army. South Sudan needs sustainable support from the international community in setting up secure weapons depots, in training experts as well as active assistance in drawing up detailed sets of regulations for the control of small arms and light weapons.

Project title:	Support and capacity-building in stockpile management of SALW, ammunition and surplus weapons in South Sudan
Duration:	since May 2011
Funded by:	German Federal Foreign Office (AA)
Project partner:	Government of the Republic of South Sudan
Project team:	Conrad Schetter, Luuk van de Vondervoort
Publication:	Starter guide to strengthen arms and ammunition management practices
Project category:	Research-based policy advice

# New approaches to small arms control in Sudan

BICC is working within the framework of a training and consultancy project funded by the German Federal Foreign Office (AA) to support the Sudan Disarmament, Demobilization and Reintegration Commission (SDDRC) in planning and coordinating small arms control measures at the national level as well as at the community level in various parts of Sudan, and in intensifying initial moves to cooperate with neighboring countries.

Many regions in Sudan, particular Darfur, continue to remain insecure today. Protracted armed conflict continues to affect communities and to have a profound impact on everyday life. The easy availability and prevalence of small arms and light weapons have escalated the death toll in inter-communal conflicts that would otherwise be resolved through traditional means and are an intrinsic part of life in a region of scarce resources. Increasing competition over dwindling natural resources, an inability of the state to provide security to its citizens, and conflict between government forces and armed groups have had a deep impact on the lives of ordinary people.

In response to the expressed demand of his people, the Wali of South Darfur initiated an arms registration (not marking) program in 2011 as one of the strategies to increase the levels of security in that state.

This successful community based initiative served as a good practice for the region. This is why also communities of other regions demand to implement a similar project in their areas. As a result, an arms registering and marking strategy is being piloted in West Darfur by the SDDRC in close cooperation with traditional community leaders and with the technical support of BICC. The SDDRC worked cooperatively with the Wali of West Darfur and various *sheikhs* and *shatirs* to design and implement this program starting with a public workshop in January 2013.

As state security structures are still not adequate for guaranteeing the security of the population in large areas of the region, the current phase of the exercise is limited to registering and marking as opposed to a collection of civilian-owned weapons. Sections of the civilian population still do not trust the state authorities, which themselves were parties to the conflict. Many people are therefore not prepared to renounce the use of small arms for purposes of self-defense.

In this context, BICC experts are providing technical support to the process by helping the arms registration and marking (ARM) committees to develop concepts, design projects as well as to identify and achieve objectives. BICC is also facilitating training



exercises, study visits, simulations and workshops to network the relevant stakeholders towards designing and implementing an effective DDR and CSAC program.

Crucially, BICC, through its cooperation with the SDDRC, is also able to access and monitor progress on the ground and address problems when they arise. However, to be truly effective, an ARM process needs to be linked to community oriented development projects that tackle the structural causes of conflicts, which are positioned within regional and international frameworks on arms control. BICC is therefore working in close association with international stakeholders, through building greater synergies with their pilot projects that aim to improve the local water supply systems, establish health centers and police stations as well as ameliorate small arms control.

From an international arms control perspective, an effective ARM exercise at the community/ state level is essential to lay the foundations of evidence-based arms control and foster cross-border cooperation at the regional level. In this respect the Khartoum Declaration, which Sudan, Chad, Libya, the Central African Republic and the Democratic Republic of the Congo agreed on in 2012, intends, among other goals, to cooperate closely on cross-border small arms control. BICC regards this agreement as a potential overarching framework for coordinated regional arms control in future.

Project title:	Support and consultancy on small arms control in Sudan
Duration:	since October 2012
Funded by:	German Federal Foreign Office (AA)
Project partners:	Sudan DDR Commission (SDDRC), Ministry of Interior, Government of West Darfur
Project team:	Wolf-Christian Paes, Nikhil Acharya, Ada Hakobyan
Project category:	Research-based policy advice



# Where are the chemical weapons?

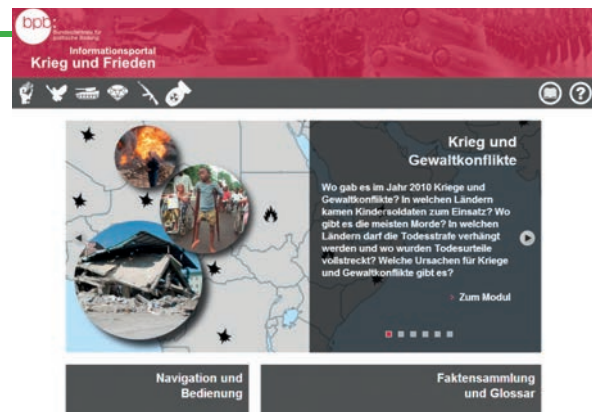
The online portal [sicherheitspolitik.bpb.de](http://sicherheitspolitik.bpb.de) provides detailed information on war and peace via interactive maps, tables, diagrams and texts. BICC developed the website in association with the German Federal Agency for Civic Education (bpb). The sixth thematic module deals with “weapons of mass destruction”.

Were chemical weapons used in Syria in August 2013? The world community was appalled by the possible attacks. UN arms experts travelled to Syria in September to investigate whether poisonous gas had actually been used near Damascus; the results of their report are expected at the end of October.

Anyone seeking more information about chemical and other weapons of mass destruction from sources other than the daily press will find what they are looking for in the BICC/bpb “War and peace” information portal. A separate module in this portal on the topic of weapons of mass destruction provides an overview of carrier systems, nuclear weapons, the production of nuclear material, and also biological and chemical weapons.

This information is provided primarily by interactive maps. For example, a user wishing to find out which states possess chemical warfare agents selects the corresponding layer in the navigation tree to the right of the maps window and is shown a map of the world indicating which countries possess these weapons, where possession is possible or unlikely, which countries are “clean” and for which no data is available. The user can also combine layers from different modules; for example, from “Military capacities and means”. With one mouse click, a map of the world is presented not only showing those countries that possess chemical warfare agents but also providing information about the level of militarization of the individual states (see figure).

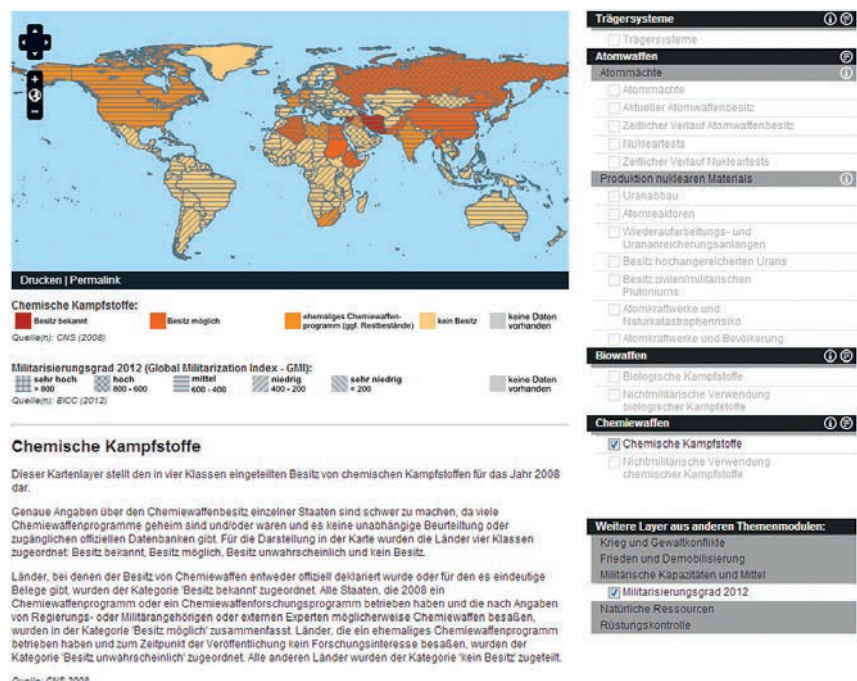
Another interesting map layer depicts the “Non-military use of chemical warfare agents”. It documents the number of non-military incidents where chemical warfare agents were used during the period 1970 to 2011 in five frequency categories. It is based on the Global Terrorism Database

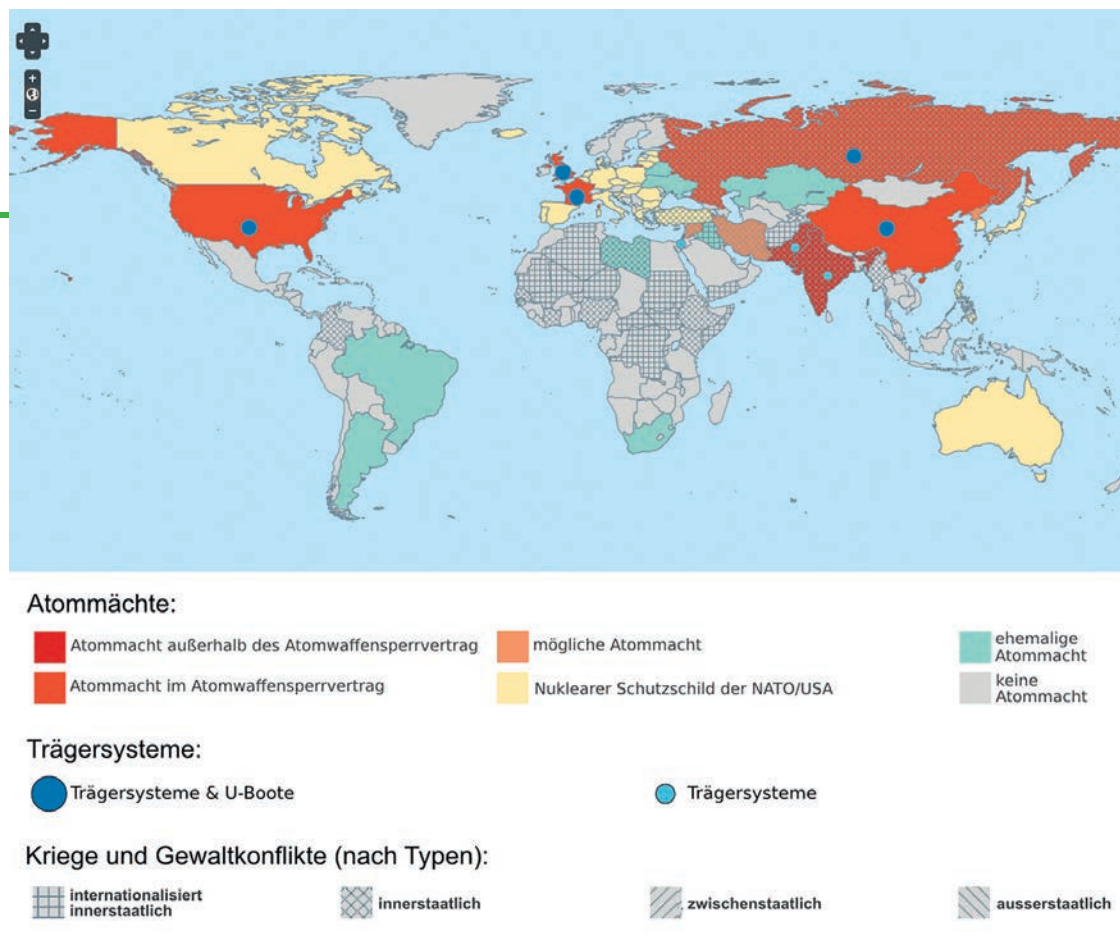


(GTD), which provides an overview of terrorist incidents involving a deliberate act of violence by a civilian actor.

The comprehensive interactive maps are complemented by a collection of facts consisting of a glossary and numerous articles. One background article explains, for example, how chemical weapons work, when and how they have been employed for military purposes, what are the most common “poisonous gases”, and why they are a very controversial type of weapon—even among the military. Info texts provide additional information on the topics of “Chemical warfare agents—A typology”, “Chemical warfare agents in use” and “Chemical weapons ban, non-proliferation and Chemical weapons disarmament”.

BICC is conducting research on the dynamics and means of organized violence and has integrated this work into its cooperation with the bpb. The Center is





compiling data from various reliable sources for the joint online portal and processing these via interactive maps and diagrams. It is also making the information available in easily understandable articles, explaining individual issues in more detail. BICC is thus collating data and facts on the dynamics and means of orga-

nized violence to form the basis for a unique instrument in the field of political education: Interested members of the public, scholars and students can access an attractive and easy-to-use website to obtain up-to-date, reliable information and to study and identify interrelationships independently.

BICC developed the website <http://sicherheitspolitik.bpb.de> for the German Federal Agency for Civic Education (bpb) and has already produced six modules since 2010. These cover the areas of:

- War and violent conflicts,
- Peace and demobilization,
- Military capacities and means,
- Natural resources and conflicts,
- Conventional weapons,
- Weapons of mass destruction.

The next online module will deal with *Arms control*.

All the information in the various modules can be linked as an overlay in a map window.

Each module contains its own collection of facts (background and info texts), a bibliography and glossary.

Anyone who is only looking for "bare figures" on individual states can find these in the country portraits, which compile information from all the modules regarding a single selected country in tabular and printable form.

Project title:	Facts and figures on war and peace—Interactive online portal since July 2010
Duration:	since July 2010
Funded by:	German Federal Agency for Civic Education (bpb)
Project team:	Lars Wirkus, Jan Hartmann, Susanne Heinke, Alexander Strunck, Marianne Wargenau
Website:	<a href="http://sicherheitspolitik.bpb.de">sicherheitspolitik.bpb.de</a>
Project category:	Capacity development

# Barracks converted to civilian use— Best practice “made in Bonn”

The topography of military bases in Germany is undergoing lasting changes due to the *Bundeswehr's* austerity measures. This situation is also affecting North Rhine-Westphalia, where many towns and local communities are facing massive processes of structural change. The Ermekeil Barracks in Bonn were used by the Federal Office for *Bundeswehr* Infrastructure, Environmental Protection and Services until mid-2013. The city of Bonn's re-use plans have all the potential to become a “best practice” model for base conversion. Bonn's Mayor, Jürgen Nimptsch, gives details in an interview with BICC.

**T**he City of Bonn decided on a development plan for the former Ermekeil Barracks in Spring 2012. What was the background to this decision?

**Mayor Nimptsch:** Before deciding on the development plan, we conducted talks with the Ministry of Defense about how long it intended to use the site for the *Bundeswehr's* Infrastructure Office. Once we received a time frame for the move—the Office moved out officially in June this year—the city administration promptly presented the relevant political bodies with a proposal to draw up a development plan. This was the subject of intensive discussions and has now been approved.



The Ermekeil Barracks cover an overall area of 24,000 square meters in the middle of Bonn's south town area, surrounded by residential properties, shops, cafes and restaurants that were mainly built at the end of the 19th century. What does the planning procedure entail? What kind of challenges are you facing?

**Mayor Nimptsch:** We have already received lots of good and attractive proposals from many different parties and in particular from interested members of the public. The development of the site will focus on providing living accommodation. Furthermore, there are various proposals regarding other services—such as a meeting center or innovative types of residential accommodation. Work and leisure activities also play a role.



All this is being studied in various planning phases and the results will be presented to the people of Bonn in participatory steps. In the course of the planning process we will work out precisely what can be realized on the site. The challenge is to consider all the interests involved and to develop plans and corresponding alternatives.

The city of Bonn is committed to converting a former military base into an area that can be used sustainably for the benefit of the local population. Do you have a vision?

**Mayor Nimptsch:** We would like to transform the site of the Ermekeil Barracks into a lively residential area. For this purpose, we are negotiating with the owners, the Federal Agency for Real Estate, about taking over the site. This is a great opportunity for the city of Bonn to develop an attractive quarter of our city in conjunction with the residents. And who knows—perhaps one day an organization that deals with questions of base conversion will even move into the area ...

Project title:	Ongoing advisory services on matters of base conversion
Duration:	since March 2010
Funded by:	State of North Rhine-Westphalia (NRW)
Project partner:	NRW.URBAN
Project team:	Lars Wirkus, Susanne Heinke
Project category:	Research-based policy advice

# Foreign cultural and educational policy in the transformation country Myanmar

The former military dictatorship has undergone a massive transformation following Myanmar's political opening. Within the framework of the ifa's research program "Culture and Foreign Policy", a visiting researcher at BICC is developing recommendations for a conflict-sensitive German cultural policy.

Foreign cultural policy exchanges between the Federal Republic of Germany and Myanmar were extremely limited for several decades due to Myanmar's military dictatorship. However, the political framework in Myanmar has steadily altered since 2010, leading to changes in bilateral relations: The two countries signed a cultural agreement in July 2013 following the opening process in Myanmar and the introduction of political reforms.

Against this background, the ifa (Institut für Auslandsbeziehungen) and BICC are conducting a joint research project on "Foreign cultural and educational policy in transformation countries". Based on the example of Myanmar, the project is studying the role of foreign cultural and educational policy in phases of political transition and upheaval. The project is focusing in particular on existing conflict constellations and the design of a German cultural policy.

Even though a process of democratization is underway in Myanmar, during which the large majority of political prisoners have been released, control of the media relaxed and opposition parties and trade unions admitted, the country's societal structures are still characterized by long years of military rule. Although a peace process began in 2011, national reconciliation is a lengthy process for the conflict parties involved and also presents foreign cultural and educational policy with difficult challenges.

The project is studying the areas of art and culture and particularly the media and education system: What changes have there been in these sectors since 2010? Where is there an interest in an exchange with German stakeholders? What contributions can German intermediary organizations make in Myanmar?

In the past two years, decisive changes have taken place in the media sector in particular following the end of censorship and the admission of daily newspapers. There is, however, a great need for qualified journalists—which once again raises the question of education. It was not possible to study certain disciplines in the past decades and these disciplines are still lacking today. Myanmar has a centralistic education



system, which makes it difficult to provide scholarships via the DAAD (German Academic Exchange Service) or other university cooperation schemes in the field of higher education.

The project sets out to develop concrete recommendations for conflict-sensitive activities in Myanmar, taking into account the range of German intermediary organizations. Furthermore, the example of Myanmar will serve to define criteria for German foreign cultural and educational policy in transformation and post-conflict situations in general. Here BICC will contribute its expertise on post-conflict societies to the project.

The project comprises several weeks of field research in Myanmar as well as an international workshop in Bonn in November 2013. The results of the field research and the workshop discussions will be published by the ifa.

"Foreign cultural and educational policy in transformation countries" is BICC's second research cooperation project with the ifa.

Project title:	Foreign cultural and educational policy in transformation countries—The example of Myanmar
Duration:	until December 2013
Project partner:	ifa (Institut für Auslandsbeziehungen)
Project team:	Susanne Heinke, Anna Kaitinnis, Conrad Schetter
Project category:	Research

# The military and economic interests following the “Arab Spring”

Have economic factors influenced the behavior of the military during and following the “Arab Spring”? A pilot study that BICC is conducting in association with researchers in Egypt, Sudan, Syria, and Jordan has been considering this question since June 2012. The work is being funded under the Volkswagen Foundation's “Civil Societies in the Arab World” program.

**M**ilitary elites play an important role in the socio-economic development and economic systems of authoritarian political regimes in the Arab world. The protest movements during the “Arab Spring” 2011/2012 posed not only a political but also an economic challenge to long established regimes. The project is based on the assumption that economic interests have a considerable influence on the different behavior patterns of powerful state actors such as the armed forces. A further theory is that non-state armed groups also largely rely on access to economic resources.

The project focuses on the role of the military in the economic systems and development of states between 1980 and 2014. An interdisciplinary international team is conducting research on this topic in Egypt, Sudan, Syria and Jordan as countries where state actors play a strong role in the economy but behave differently towards protest movements. The project also deals with changes in institutions that secure the economic power of state actors. The researchers are taking a political-economic approach combined with sociological theory (Norbert Elias, Pierre Bourdieu, Anthony Giddens).

One aim of the research is to identify the factors that characterize the “Arab Spring” and the ensuing period. In concrete terms, the pilot study is examining the question of how the military behaved during the “Arab Spring” and afterwards in the countries under scrutiny. The theory here is that the different reactions to the mass protests were due to the military's respective position in the political and economic order.

The project is also exploring how institutional changes resulting from the “Arab Spring” are affecting the economic interests of the military and their activities and behavior and how the armed forces are legitimizing their actions.

The first year of research produced the following findings:

- The era of the privatization of public companies and the liberalization of the economy in the 1980s and 1990s established the basis for the concentration of today's powerful economic actors.



- Governments used the economic liberalization of the 1980s and 1990s to humor the military elite by granting them access to the business world.
- The armed forces operate their own firms in the civilian as well as military sector. Furthermore, their economic influence is enhanced by private companies that are interlinked in various ways with the armed forces.
- Rivaling economic interests are negotiated in networks that link the regime with key economic actors, such as the military.
- The protest movements of the “Arab Spring” are also providing new, previously excluded groups with access to economic activities.

The project, which is funded by the Volkswagen Foundation, aims to establish an intensive exchange between European and Arab research standpoints and involve early career researchers in particular.

Project title:	Economic interests and actors in Arab countries and their role during the Arab Spring and after
Duration:	since June 2012
Funded by:	Volkswagen Foundation
Project team:	Elke Grawert (BICC), Ahmed Khalifa (BICC), Atta El-Battahani, University of Khartoum (Sudan); Salam Said, Berlin (Germany); Zeinab Abul-Magd, American University Cairo (Egypt); Walid Abu-Dalbouh, University of Jordan (Jordan)
Project category:	Research

# Large solar power plants in North Africa—Opportunity or risk?

Solar thermal power plants in North Africa have the potential to satisfy the growing demand for energy. But these innovations come at a price—for example, in the form of the redistribution of resources such as land and water. BICC is studying the potential for conflict and socio-economic consequences of solar thermal power plants in Morocco and Egypt in a research project funded by the German Federal Ministry for Economic Cooperation and Development (BMZ).

**R**apid population growth in North Africa will lead to a rising demand for energy, water and food in the years to come. CSP (concentrated solar power) could play a key role in future energy scenarios as this technology, which is based on heat storage (using liquid salt tanks, for example), offers an economical solution to satisfy peak energy demand.

However, their success in the MENA-region (Middle East and North Africa) depends on taking into account the societal and economic effects of such large infrastructure projects on the local population. Solar power plants may provide “clean” electricity and create jobs, but they also involve considerable processes of change and redistribution: Solar power plants require a lot of land and water, for example.

BICC is involved in a broad-based research project on the social and socio-economic consequences of solar thermal power plants in Morocco and Egypt aimed at identifying potential conflicts in the MENA-region and preventing their possible escalation at an early stage. Partners in this project are the Wuppertal Institute for Climate, Environment, Energy, and Germanwatch as well as partner institutes in the countries under study.

BICC's perspective when looking at renewable sources of energy is based on its expertise on the conflict-proneness of natural resources. Solar thermal energy is closely linked with societal constellations and embedded in structures of organized violence. The study sets out to provide a better understanding of this web of relationships. A broad-based explorative approach has been adopted to avoid a mono-causal explanation.

The project's work so far has concentrated primarily on designing the conceptual research framework. This consists of an analysis of the concept of “social sustainability” and the identification of key aspects of sustainable livelihoods; an analysis of existing sustainability frameworks, including the fields of forestry, mining, the processing industry and biomass; and a critical study of the methodical approaches on which these sustainability frameworks are based.



Working on this basis, the researchers developed a pool of criteria that could be relevant in the context of solar thermal power plants and can be used as a guideline for field research in 2014.

The research also included the systematic analysis of the local, socio-economic influence of existing solar thermal power plants in other regions based on the respective assessments of social impacts and project reports. Furthermore, BICC analyzed a number of large-scale energy production projects in Egypt, Morocco and Spain, where conflicts have occurred. The local partners in Morocco and Egypt compiled socio-economic data on both regions. The legal framework conditions for the involvement of civil society stakeholders in these countries were also summarized. Finally, the planned solar thermal power plants were analyzed on the basis of an input-output framework with a view to determining their effects on the local population in the second half of the project.

All these findings will be incorporated in the method design in the latter half of 2013. The field research phase will then take place in 2014.

Project title:	Developing social requirements for future concentrated solar power (CSP) plants in the MENA-region
Duration:	since March 2013
Funded by:	German Federal Ministry for Economic Cooperation and Development (BMZ)
Project partners:	Wuppertal Institute for Climate, Environment, Energy; Germanwatch
Project leader:	Christof Kögler
Project category:	Research

# Geoinformation services for analyzing resource conflicts

Two areas that are often linked with violent conflicts in countries with weak statehood and post-conflict countries are large-scale land grabbing and mining for minerals such as gold, diamonds and oil. BICC, together with partners in Germany and Austria, is studying the contribution that geographical analyses based on remote sensing data can make to analyzing and preventing conflicts. The project is funded by the European Union.

The research project on developing geoinformation services for three potential conflict scenarios in Africa selected the following situations where conflict appears imminent: oil prospecting and production in South Sudan and Chad; the control of highly productive gold and diamond mines in the Democratic Republic of the Congo; and the current phenomenon of large-scale sales of land to international investors in South Sudan.

Satellite images are able to clearly show land use, oil infrastructures and gold and diamond mines as well as the effects of the extraction and use of natural resources on infrastructure and settlements. These patterns can be detected and evaluated semi-automatically. The geoinformation services make use of medium- to high resolution (Landsat and Spot) and very high resolution (Quick Bird and GeoEye) satellite images. BICC contributed *in situ* data via its local networks in the countries concerned to validate the data gained through remote sensing, on the one hand, and to supplement this data with context-specific information (e.g. on local and regional conflicts), on the other.

As an initial result, time series analyses and map services are available for all three scenarios. These identify changes in land use, which they document in thematic maps. As far as the South Sudan oil scenario is concerned, by studying satellite images and analyzing the differences between images taken at different points in time, researchers were able to reconstruct the spatial and temporal genesis of the oil fields in the north of the country, determine the number of oil wells, and visualize the effects on infrastructure, the layout of settlements and land use in the form of time series analyses.

In the scenario regarding the control of productive gold and diamond mines, researchers have been able to develop and calibrate the geoinformation service based on the selected mining locations so that it is now possible to semi-automatically detect mining locations which were not recognized by remote sensing methods in the past. This means that a tool is now available to enable researchers to collect



information about mines (number, location and size) in regions with a high level of insecurity or violence. By combining these findings with information regarding the yield and control of the mines, researchers will be able to form a detailed picture of the latter's role in the course of a conflict and even identify the conflict potential of individual mines or entire areas.

In a further step, researchers will integrate the local and regional effects of resource extraction and land grabbing and their significance for (violent) conflicts in the geoinformation service, whereby they will include socio-economic and political data as well as local in-situ data.

BICC's research and that of its project partners DLR (Deutsches Zentrum für Luft- und Raumfahrt) and Z\_GIS (Interfaculty Department of Geoinformatics, Salzburg University) are part of the two-year EU-funded "G-Sextant" research and development program under the EU's 7th Research Framework Programme. Working within the framework of the EU's Copernicus Initiative, this research and development project aims at developing various remote sensing products and services dealing with numerous conflict scenarios for the EU's External Action Service (EEA).

Project title:	G-SEXTANT—Geospatial intelligence in support of EU External Actions
Duration:	since January 2013
Funded by:	European Union
Project partners:	Deutsches Zentrum für Luft und Raumfahrt EV (Germany), Z_GIS/ Paris-Lodron, University of Salzburg (Austria) and 11 consortium partners in seven EU countries
Project team:	Lars Wirkus, Lena Guesnet, Marie Müller, Ruth Vollmer, Marianne Wargenau
Website:	<a href="http://externalaction.security-copernicus.eu/">externalaction.security-copernicus.eu/</a>
Project category:	Research

# Ethical challenges to remote sensing: Small-scale mining in Afghanistan

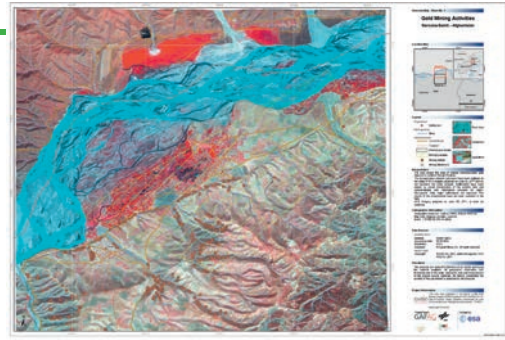
Chaos and conflicts are frequently associated with small-scale mining—but at the same time, this sector also provides a livelihood for millions of people throughout the world. Can remote sensing contribute to development and conflict prevention in this sector? BICC studied this question over the last two years as a partner in the European Space Agency's SYMIN project using the example of mining for mineral resources in Afghanistan.

An estimated 25 to 30 million people in over 80 countries work as miners in small-scale mining. Mining for minerals is not always free of conflicts, however. The damage that it causes can often seriously affect the health and safety of the miners themselves as well as that of the population in the surrounding communities. Furthermore, mining plays an important role in many violent conflicts: Resources that have been mined illegally or smuggled—such as gold and diamonds—are often used to finance the military activities of armed groups.

Mineral resources, many of which are mined primarily on a small scale, also play an important role in violent conflicts in Afghanistan, a country that has been battered by civil wars for over 30 years. The SYMIN project investigated in how far satellite-based remote sensing applications can act as an efficient instrument for mapping and controlling the small-scale mining sector. Different mineral resources such as coal, gold, gemstones as well as stone quarries and clay pits prevail in the selected five study areas in Afghanistan.

Very high definition optical satellite images, optical stereo data and radar images provided the technical basis for this project. These data were evaluated together with other geodata, specialist information—for example, from the mining register—and, if possible, data collected locally. Researchers were thus able to produce thematic maps and dossiers covering current mining activities in the various areas under study.

BICC used the project to study the remote sensing products developed as to their wider applicability and benefit for conflict prevention in small-scale mining. For this purpose it brought together experts in the fields of small-scale mining, conflict research and satellite data evaluation. Furthermore, it examined the contribution of remote sensing data to international governance initiatives that address the problem of conflicts that are funded with revenue from the trade in and smuggling of illicit minerals.



Different methods of analysis together with information gathered locally and from satellite images produced the following results, which can contribute to providing more transparency and development:

- differentiation between artisanal and industrial mines;
- identification of active and disused mines;
- identification of potential trans-border transport routes;
- determination of the number of informal mining sites within certain areas;
- findings concerning changes in land use and their impact on the environment in the vicinity of mines.

At the same time, the project demonstrated the importance of ethical considerations when conducting remote sensing surveys if this work is to contribute towards conflict prevention. For example, one must consider the risk that large mining companies could misuse the remote sensing data collected in research projects to identify and appropriate the informal mining sites instead of prospecting on their own. Attempts by state institutions to control informal mining activities could also lead to conflicts. These scenarios highlight the ethical responsibility of remote sensing projects.

Project title:	SYMIN—System for monitoring law enforcement of informal mining
Duration:	since January 2012
Funded by:	ESA—European Space Agency
Project partners:	Deutsches Zentrum für Luft und Raumfahrt e.V. – DLR (Germany), GAF AG (Germany), Institute for Environmental Security – IES (Belgium)
Project team:	Lars Wirkus, Lena Guesnet, Marie Müller
Website:	<a href="http://www3.gaf.de/symin/">www3.gaf.de/symin/</a>
Project category:	Research-based policy advice



# Business report

As an independent, non-profit organization, BICC (Internationales Konversionszentrum Bonn—Bonn International Center for Conversion) deals with a wide range of global topics in the field of peace and conflict research centering on critical, problem-oriented, and policy relevant conversion studies. With its vision of a more peaceful world, BICC analyzes the problems caused by organized violence and seeks ways to overcome these conflicts. The Center sees itself as an institution that performs research, supplies research-based policy advice, manages knowledge, and provides services in a national and international environment. Partners, donors and clients include German Federal Ministries, the European Union, foundations as well as various non-state scientific and political institutions.

**B**ICC was founded in 1994 as a non-profit private limited company (GmbH) and has two Trustees: The State of North Rhine-Westphalia (NRW) and the State of Brandenburg. The Center is also a symbol of NRW's commitment to the city of Bonn as the seat of international cooperation and development policy.

## Internationales Konversionszentrum Bonn - Bonn International Center for Conversion (BICC) GmbH

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BICC Trustees:  
State of North Rhine-Westphalia, Düsseldorf: 85%  
State of Brandenburg, Potsdam: 15%

The Trustees are advised by the Supervisory Board, which also supervises BICC's two directors. The Board consists of up to seven members who are appointed by the Board of Trustees. It is responsible *inter alia* for approving the annual work programs and financial plans.

## Members of the BICC Supervisory Board in April 2013

1. Helmut Dockter, Chair of the Supervisory Board, Secretary of State, Ministry of Innovation, Science and Research of the State of North Rhine-Westphalia, Düsseldorf
2. Dr. Lale Akgün, Premier's Department of the State of North Rhine-Westphalia, Düsseldorf
3. Prof. Dr. Armin B. Cremers, Deputy Rector, Bonn University
4. Michael Deitmer, Ministry of Economic Affairs, Energy and Industry of the State of North Rhine-Westphalia, Düsseldorf
5. Hannelore Kaukel, Ministry of Economic and European Affairs, State Brandenburg, Potsdam
6. Franz Meiers, Director, NRW.URBAN Service GmbH, Düsseldorf
7. Helmut Rubin, Ministry of Finance of the State of North Rhine-Westphalia, Düsseldorf

BICC's management was restructured with effect from March 2013. The Center is now jointly headed by the Director for Research and the Director for Administration. Professor Conrad Schetter determines the content of the Center's work as Director for Research and at the same time holds the Chair for Peace and Conflict Research at Bonn University. The Director for Administration, Michael Dedek, is responsible for the commercial and legal side of all the Center's work areas and projects. This dual leadership structure strengthens BICC's research activities as well as its organizational side, with the corresponding procedures and services aimed at acquisition, efficiency and cost effectiveness.

BICC and its management in particular are advised by an International Board on all questions regarding research, policy and acquisition. The Board will be reconstituted in 2014, the year of BICC's 20th anniversary. The International Board puts forward proposals for the work program, comments on BICC's publications, and makes suggestions regarding the content of the Center's work.

BICC relies on an international and interdisciplinary team of staff to perform its diverse tasks and provide its many services. The Center currently employs nationals from ten different countries. It had an average of 34 members of staff in 2012; 16 full-time and 18 part-time.

## Financial development

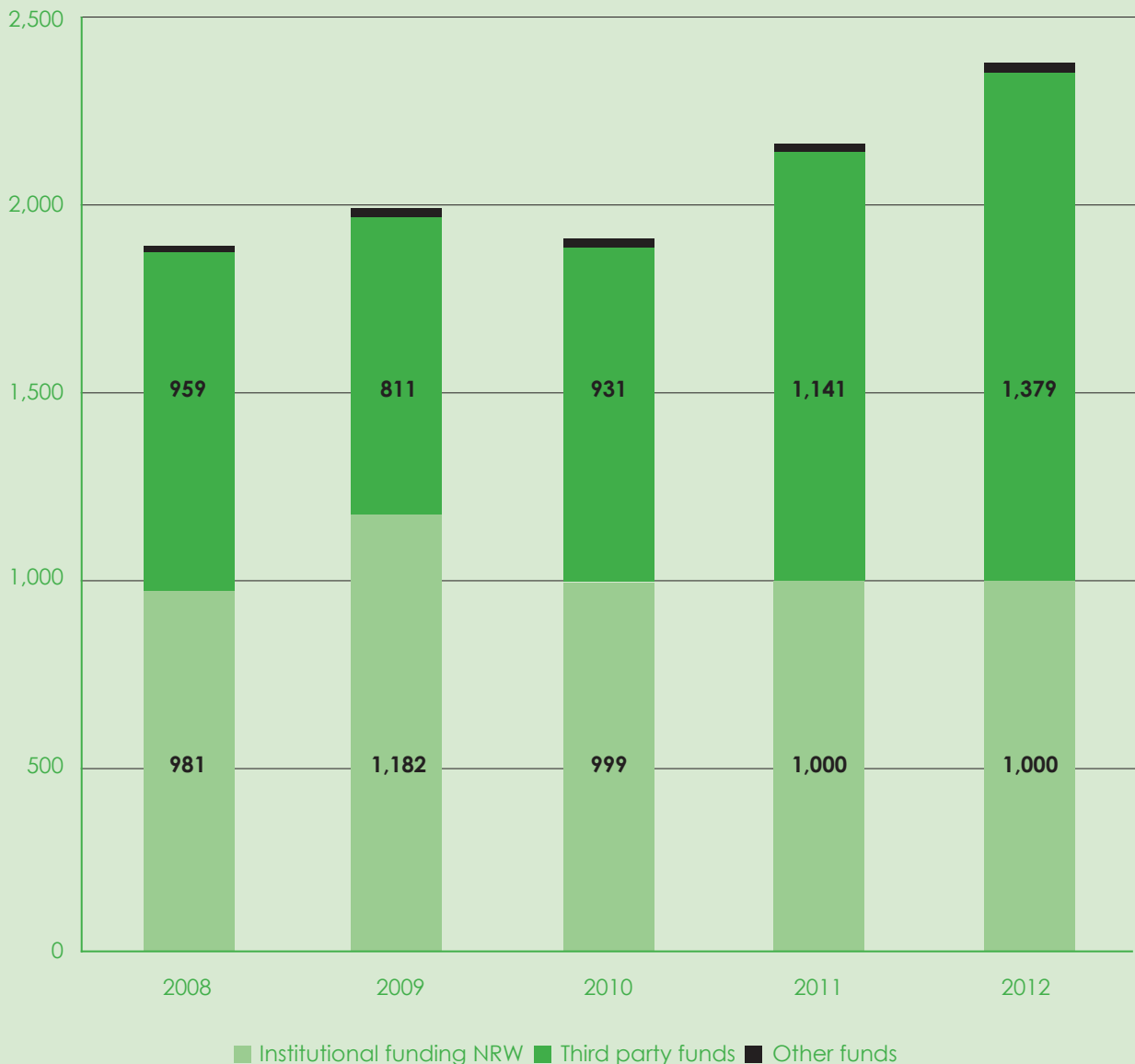
BICC's finances as a private limited company (GmbH) are based on two pillars: As Principal Trustee, the State of North Rhine-Westphalia (NRW) provides the Center with annual core funding and thus supports the Center in the context of the purpose described in the Articles of Association.

Institutional funding in 2013 amounts to euro one million and enables the Center to perform research projects and research-based policy advice with funding from other donors within the framework of third party operations. The range of donors and clients includes the German Federal Foreign Office (AA), the



Federal Ministry for Economic Cooperation and Development (BMZ), the European Union as well as foundations and institutions that fund research.

Financial development 2008–2012 (in thousands of euro)





The positive financial trend witnessed in 2010 and 2011 continued in 2012. It was important to secure the positive results of the two previous years in third party funded projects and to continue the course of consolidating costs. This has once again been successful. Compared with the previous year, the volume of third party funds rose by euro 238,000 (almost 21 percent) to euro 1.379 million, whilst funding from the State of NRW remained constant. This means that BICC has been able to acquire a sizeable 57.1 percent share of its overall funding from third party funds.

BICC worked on 37 projects in 2012 (previous year: 33). Work began on 16 projects in 2012 (previous year: 11); work on 22 projects was completed in the year under report (previous year 12).

The steep rise in externally funded project activities was also accompanied by an increased need for personnel so that staff expenditures rose by a total of 6.4 percent to euro 1.486 million. Expenditure on infrastructure and comparable items dropped slightly despite the growth in activities and at euro 311,000 only accounted for 13 percent of overall spending.

#### Excerpt from BICC's Articles of Association:

"Based on applied science and research, the association is dedicated to investigating issues and questions resulting from conversion. It will make its findings available to the broad public.

In the process of a comprehensive transformation process, it is the aim of conversion to decrease or prevent any preparation, threat or use of military or armed violence in all its shapes and forms. It also aims to optimize conversion through the practical implementation of disarmament measures.

The purpose of the association is

- to promote science and research;
- to promote the idea of creating understanding between the peoples;
- to promote development cooperation."

The BICC GmbH is a recognized non-profit association and its pursuits are completely non-profit in accordance with the German tax code's article on tax-privileged purpose.

The continuation of the overall positive trend led to a positive annual result. The balance of almost euro 41,000 forms part of BICC's own risk protection and is used for purposes in accordance with its statutes. BICC thus has the financial leeway needed to introduce the proposed process of change and perform its work in the long term.

The reorganization measures, the new leadership structure and the positive economic developments will strengthen BICC both in the context of its work and financially and will enable the Center to tackle the challenges and tasks in fulfilling its vision of "Conversion research for a more peaceful world."



#### Profit and loss account for the financial year from 1 January to 31 December 2012 (in euro)

	Actual 2012
Revenues	
a) Institutional funding from the Ministry of Innovation, Science and Research of the State of North Rhine-Westphalia	1,000,000.00
b) Revenue from completed projects	1,160,479.17
c) Reimbursements of costs and other income	10,302.33
	2,170,781.50
Changes in totals in the case of unfinished products	207,819.77
Other operating income	34,934.96
	<b>Operating performance 2,413,536.23</b>
Material costs of projects	558,870.35
Staff costs	1,486,460.35
Planned depreciation	17,010.63
Miscellaneous operating expenses (office space, etc.)	311,026.21
	<b>Operating expenses 2,373,368.09</b>
Financial result	495.88
	<b>Surplus 40,664.02</b>



## An overview of the most important projects 2012/2013

Applied research	Selection of products / further information	
Developing social requirements for future concentrated solar power (CSP) plants in the MENA-region.	since March 2013	Cooperative research project with the Wuppertal Institute for Climate, Environment and Energy and Germanwatch, funded by the German Federal Ministry for Economic Cooperation and Development (BMZ), cf. p. 23
G-SEXTANT—Geospatial intelligence in support of EU External Action	since January 2013	Project with an international consortium in the framework of the 7th Research Framework Programme of the EU; cf. <a href="http://externalaction.security-copernicus.eu">externalaction.security-copernicus.eu</a> ; cf. p. 24
Economic interests and actors in Arab countries and their role during the Arab Spring and after	since June 2012	Research cooperation with researchers from Egypt, Sudan, Syria, and Jordan, funded by the Volkswagen Foundation, cf. p. 22
Studies on arms exports policy	since May 2012	Publications: Arms exports report of the GKKE, Studies on parliamentary control and transparency of arms exports as well as the harmonization of EU-arms exports policy; <a href="http://www.ruestungsexport.info">www.ruestungsexport.info</a>
DITAC—Development of a European curriculum for international crisis management	since January 2012	Project with international consortium in the framework of the 7th Research Framework programme of the European Union; <a href="http://www.ditac.info">www.ditac.info</a>
TERAS-INDEX—Foreign- and security policy engagement of European states in the Middle East	since Dezember 2010	Sub-project within a collaborative research program coordinated by the Institute for Peace Research and Security Policy at the University of Hamburg (IFSH), funded by the German Federal Ministry of Education and Research (BMBF)
Participation of BICC in the annual <i>Friedensgutachten</i> (Peace Report)	since 1999	Book publication; <a href="http://www.friedensgutachten.de">www.friedensgutachten.de</a>



### Research-based policy advice

Support and consultancy on small arms control in Sudan	since October 2012	In cooperation with the Sudan DDR Commission (SDDRC), financed by the German Federal Foreign Office, cf. p. 17
Support and capacity-building in stockpile management of SALW, ammunition and surplus weapons in South Sudan	since May 2011	In cooperation with the South Sudan Bureau for Community Security and Small Arms Control (SSBCSSAC), financed by the German Federal Foreign Office, cf. p. 16
Ongoing advisory services on matters of base conversion	since March 2010	Advisory services provided to the government of the State of NRW in cooperation with NRW.URBAN, cf. p. 20
Security, armaments and development in countries receiving German arms exports and Global Militarization Index (GMI)	since May 2002	Data bases and country reports with basic data on armaments, military, security, human rights and governance in 170 countries, funded by the German Federal Ministry for Economic Cooperation and Development (BMZ); <a href="http://www.ruestungsexport.info">www.ruestungsexport.info</a> , cf. p. 10
Study on security-relevant risks of man-portable air defense-systems (MANPADS)	until February 2013	Study financed by the German Federal Foreign Office; BICC <i>brief</i> 47, cf. p. 14

### Capacity development

SmartCon—Smart technology in small arms control	since February 2013	International conference, financed by the German Federal Foreign Office, cf. p. 15
Support for disarmament, demobilization and reintegration (DDR) in South Sudan (capacity-building component)	since October 2009	In cooperation with the South Sudanese National DDR Commission (NDDRC) on behalf of the KfW Bankengruppe
Facts and figures on war and peace—Interactive online portal	since July 2010	Concept, development and implementation on behalf of the German Federal Agency for Civic Education (bpb); <a href="http://sicherheitspolitik.bpb.de">sicherheitspolitik.bpb.de</a> , cf. p. 18

# BICC's public relations work

BICC's portfolio also includes systematic, target group-oriented public relations work. Financed primarily from public funds, it is BICC's task to make the results of its applied research, research-based policy advice and capacity development work generally accessible. The Center primarily addresses policymakers and civil society, the media, teachers and students, but also interested members of the public. It does so through publications, events, exhibitions as well as national and international press work. The English language news portal [www.bicc.de](http://www.bicc.de) provides information about all the Center's activities.

**B**ICC has organized approximately 30 events since June 2012—on its own and in association with partners. Central topics were questions of civil–military cooperation, Germany's arms export policy, and research results in the context of "Resources and conflicts". Some of the discussions that BICC organized also dealt with developments in the Middle East.

BICC discussed its research outcomes on natural resources extraction and conflicts in Chad at the Global Media Forum (GMF) "The Future of Growth—Economic Values and the Media" (17–19 June 2013) at the workshop "Commodities and Foreign Investors—Protecting the Rights of Communities and Conflict Prevention (the Chad example)". Participants included the human rights lawyer Delphine Djiraibe and IWF expert Korinna Horta.



Together with various other organizations, BICC is active in the city of Bonn's international network. The Center has an information stand at the annual UN Day event, where it presents its research to interested members of the public. Its presentation on 20 October



2012 dealt with the question of how commodities such as cocoa, gold and oil can be produced sustainably and without violent conflicts. BICC participated in the first German Development Day, which took place in Bonn and 15 other towns on 25 May 2013. It shared a "research tent" with a focus on Africa with its partners, the UNU (United Nations University) and ZEF (Center for Development Research).

As leading editor of the 2013 *Friedensgutachten* (Peace Report), BICC was responsible for the press and public relations of this joint publication released by Germany's leading peace and conflict research institutes. Apart from its activities surrounding the presentation of the book at the Federal Press Conference in Berlin, BICC will also organize a discussion event at Bonn University at the beginning of the 2013 winter semester. The University is also an important partner in BICC's public relations work.



BICC's presence in the media has also increased considerably over the last year. Apart from publishing articles in the print media, the Center's researchers are



much sought-after interview partners for German and international radio and television channels, including the Westdeutscher Rundfunk, Deutsche Welle, Deutschlandradio, BBC Radio, Russian News TV Channel, ARD and the Austrian Servus.tv.



The photo exhibition “Resources for a Just World”, which was funded by MISEREOR, toured through Germany until July 2013, stopping at many venues on its way. BICC designed and organized this exhibition in association with “AK Rohstoffe”. It was devoted to the seven conflict resources: Cocoa, oil, gold, diamonds, uranium, tropical timber and soya.

#### Panel discussions and presentations (selection)

**“Two years after the Arab Spring—An attempt at taking stock.”** Panel discussion with Marc von Boemcken, Elke Grawert, Ahmed Khalifa, Salam Said, and Jerry Sommer. The panel discussion was followed by a private viewing of a photo exhibition by Ahmed Khalifa (Bonn, 21 February 2013)

**“The future of civilian conflict management after Afghanistan.”** Panel discussion with Isabella Bauer, Cornelia Brinkmann, Andreas Heinemann-Grüder, Winfried Nachtwei, and Conrad Schetter (Bonn, 16 April 2013)

**“Military interventions and a new humanitarianism. On the dissolution of civil–military borders.”** Presentation by Conrad Schetter together with EuroConsult Research & Education, University of Bonn and EADI (Bonn, 10 June 2013)

**“Confronted with a choice—What are the priorities in respect of peace and development?”** Panel discussion with Dr. Stephan Eisel, former Member of Parliament, CDU; Achim Kansy, FDP; Paul Schäfer, Member of Parliament, Die Linke; Frithjof Schmidt, Member of Parliament, Bündnis 90/Die Grünen; and Heidemarie Wiczorek-Zeul, Member of Parliament, SPD. In cooperation with Platform for Peaceful Conflict Management (Bonn, 16 September 2013)

#### Conferences and workshops (selection)

**“9th International South Sudan and Sudan Studies Conference.”** In cooperation with Sudan Studies Association USA and the Sudan Studies Society UK (Bonn, 23–25 July 2012)

**“Preventing diversion of arms and ammunition: Approaches in Sudan and South Sudan.”** Side event on the occasion of the “UN Programme of Action Review Conference 2012.” In cooperation with the German Federal Foreign Office (New York, 28 August 2012)

**“Smart Technology in SALW Control.”** International conference in cooperation with the German Federal Foreign Office (Berlin, 17–18 June 2013); cf. p. 15.

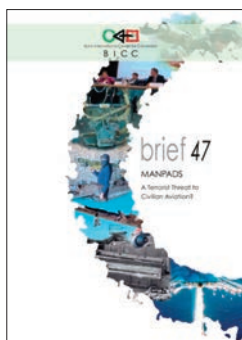


# List of publications

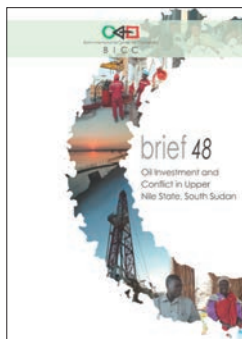
## Briefs



**brief 46. Müller, Marie** and Friedel Hütz-Adams (eds.). 2012. *Kleinbergbau von Gold in Peru und der DR Kongo*. Bonn: BICC, September.



**brief 47. Ashkenazi, Michael** et al. 2013. *MANPADS—A terrorist threat to civilian aviation?* Bonn: BICC, February.



**brief 48. Grawert, Elke** and Christine Andrä. 2013. *Oil Investment and Conflict in Upper Nile State, South Sudan*. Bonn: BICC, May.

## Occasional Papers



**Occasional Paper VIII. Grebe, Jan** and Christoph Schwarz. 2013. *Sicherheitspolitische Implikationen maritimer Aufrüstung im asiatisch-pazifischen Raum. Australien, Japan, Südkorea und Vietnam im Fokus*. Bonn: BICC, February.

## Bulletins

### BICC Bulletin, No. 61, July-September 2012

Feature: *Moving on and forward in the ATT process*. Katherine Prizeman.

### BICC Bulletin, No. 62, January-March 2013

Feature: *German Arms Exports—“Strengthening instead of interference”*. **Jan Grebe** and **Marc von Boemcken**.

### BICC Bulletin No. 63, July 2013

Feature. *Combat drones are not planes*. **Marc von Boemcken**, Ines-Jacqueline Werkner, Margret Johannsen and Bruno Schoch.

## Focus

### BICC Focus 11

**Boemcken, Marc von**. 2012. *“Dealing with Private Security Companies. Options for Development Cooperation in Timor-Leste, Liberia and Peru.”* Bonn: BICC, October.

### BICC Focus 12

Ebertz, Utz and **Marie Müller**. 2013. *“Legacy of a resource-fueled war: The role of generals in Angola’s mining sector.”* Bonn: BICC, June.

## Features

### BICC Feature 3

**Sommer, Jerry**. 2012. *“Iran-Verhandlungen – und wie weiter?”* Bonn: BICC, July.

## Other BICC publications



**Grebe, Jan.** 2013. *Harmonized EU Arms Exports Policies in Times of Austerity? Adherence to the Criteria of the EU Common Position on Arms Exports.* Bonn: BICC, June.



**Grebe, Jan** and Sebastian Roßner. 2013. *Parlamentarische Kontrolle und Transparenz von Rüstungsexporten.* Bonn: BICC, July.



**Kahl, Marius.** 2013. *Starter Guide towards strong Arms and Ammunition Management Practices.* Bonn: BICC, January.

## Further publications

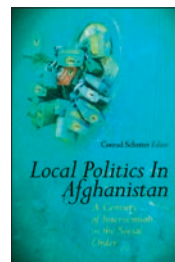
### Books



**Boemcken, Marc von.** 2013. *Between Security Markets and Protection Rackets. Formations of Political Order.* Leverkusen & Opladen: BudrichUniPress.



**Boemcken, Marc von.** Ines-Jacqueline Werkner, Margret Johannsen and Bruno Schoch (Hg.). 2013. *Friedensgutachten 2013.* Berlin: LIT.



**Schetter, Conrad.** (ed.). 2013. *Local Politics In Afghanistan. A Century of Intervention in Social Order.* London/ New York: Hurst and Columbia University Press.

### Journal articles and book chapters (peer-reviewed)

**Ashkenazi, Michael.** 2012. "Development is Destruction, and Other Things You Weren't Told at School." In Volker Franke and R. Dorff (eds.). *Conflict Management and "Whole of Government": Useful Tools for U.S. National Security Strategy?* Carlisle, PA: Strategic Studies Institute, pp. 91–125.

**Ashkenazi, Michael.** 2013. "Forces Of Order And Disorder: Security Providers And The Illusion Of Conflict Management." In Volker Franke und R. Dorff (eds.). *Conflict Management and Peacebuilding: Pillars of a New American Grand Strategy.* Carlisle, PA: Strategic Studies

**Ashkenazi, Michael** and **Jan Grebe.** 2013. "Traditionelle Konfliktbearbeitung." In Andreas Heinemann-Grueder and Isabella Bauer (eds.). *Zivile Konfliktbearbeitung: Vom Anspruch zur Wirklichkeit.* Opladen & Toronto: Verlag Barbara Budrich, pp. 122–33.

**Boemcken, Marc von.** 2013. "Rüstungsmärkte ohne Grenzen. Neue Komplexe globalen Unfriedens." In Marc von Boemcken, Ines-Jacqueline Werkner, Margret Johannsen and Bruno Schoch (eds.). *Friedensgutachten 2013*. Berlin: LIT, pp. 32–45.

Doevenspeck, Martin, **Lena Guesnet**, and **Marie Müller.** 2013. "Ostkongo: der ewige Krieg?" In Marc von Boemcken, Ines-Jacqueline Werkner, Margret Johannsen and Bruno Schoch (eds.). *Friedensgutachten 2013*. Münster: Lit Verlag, pp. 278–91.

**Grebe, Jan** and Peter Kreuzer. 2013. "Lässt sich der Drache zähmen? Eskalation und Aufrüstung im Südchinesischen Meer." In Marc von Boemcken et al. (eds.). *Friedensgutachten 2013*. LIT: Münster, pp. 69–83.

**Grebe, Jan** and Nils Schaede. 2012. "Aufstrebende Staaten. Rüstungsindustrie in Brasilien, Indien und Südafrika." *Wissenschaft und Frieden*, Vol. 30, No. 4, pp. 25–27.

**Schetter, Conrad** and Katja Mielke. 2013. "Erzwungene Staatlichkeit – Die internationale Intervention in Afghanistan." In Günter Meyer et al. (eds.). *Staatlichkeit in der Dritten Welt – Fragile und gescheiterte Staaten als Entwicklungsproblem*. Mainz: Johannes Gutenberg Universität Mainz (Veröffentlichungen des interdisziplinären Arbeitskreises Dritte Welt Bd. 22), pp. 127–42.

Schinke, Boris, Jens Klawitter and **Christof Kögler.** 2012. "Desertec: Zwischen Heilsanspruch und neokolonialen Befürchtungen." *Wissenschaft und Frieden*, Vol. 30, No. 3, pp. 39–42.

Renaud, Fabrice and **Lars Wirkus.** 2012. "Water, Climate Change and Human Security: Conflict and Migration." In H. Bigas et al. (eds.). *The global water crisis: addressing an urgent security issue. Papers for the Interaction Council*. UNU-INWEH, Hamilton, pp. 34–45.

#### Other articles and reports

**Kösling, Marc, Michael Ashkenazi** and **Christof Kögler.** forthcoming. "Controlling Small Arms and Light Weapons. Contemporary Africa." *Entwicklung + Zusammenarbeit / Development + Cooperation*.

**Schetter, Conrad.** 2013. "Book Review: Policing Afghanistan by Antonio Giustozzi." *International Affairs*, Vol. 89, No. 4, pp. 1074–75.

**Van de Vondervoort, Luuk,** David Deng and Paul Mertenskoetter. 2013. "Establishing a Mining Sector in Postwar South Sudan." *Special Report*. Washington, DC: United States Institute of Peace, April.

**Wirkus, Lars.** 2012. "Liegenschaftskonversion im Wandel – Ausmaß, Auswirkungen, Akteure." *Städte- und Gemeinderat*, Ausgabe 7/8.

Kramm, Johanna and **Lars Wirkus.** 2010. "Local Water Governance: Negotiating Water Access and Resolving Resource Conflicts in Tanzanian Irrigation Schemes." *MICROCON Research Working Paper 33*, Brighton: MICROCON.

#### Media

**Khalifa, Ahmed.** 2013. "Stein auf Stein." *Zenith Zeitschrift für den Orient*. 28. January.

**Khalifa, Ahmed** and Kristin Jankowski. 2012. "Wir drehen uns im Kreis." *Zenith Zeitschrift für den Orient*. 25 June.

**Khalifa, Ahmed.** "2013 Egypt 2013 – Street Clashes instead of Anniversary." *Arab Spring Collective*. 28 January. Available at <<http://arabspringcollective.wordpress.com/2013/01/28/ahmed-khalifa-the-2nd-anniversary-of-the-egyptian-revolution-in-pictures/>>.

**Khalifa, Ahmed.** 2012. "Photos from the Inside." *Arab Spring Collective*. 25 August. Available at <<http://arabspringcollective.wordpress.com/2012/08/25/ahmed-khalifa-photos-from-the-inside/>>.

**Khalifa, Ahmed** and Günther Birkenstock. 2013. "Quiet before the storm." *Deutsche Welle*. 7 July.

# Conversion research for a more peaceful world

As an independent, non-profit organization, BICC (Internationales Konversionszentrum Bonn—Bonn International Center for Conversion) deals with a wide range of global topics in the field of peace and conflict research centering on conversion studies. With its vision of a more peaceful world, BICC analyzes the problems caused by organized violence and seeks ways to overcome these conflicts.

## The main foci of BICC's work

BICC examines the dynamics of organized violence at three levels:

- *Concepts* (changes in the perception of war and its concomitant processes).
- *Means* (research on the material dimension of organized violence: i.a. conversion of military sites, global arms expenditures and exports, small arms control, new arms technologies).
- *Practices* (all processes of visible changes in organized violence: i.a. military regimes in transition, privatization of security).

Natural resources as well as migration constitute further key areas of BICC's work. Organized violence also manifests itself in these highly relevant societal topics.

BICC's empirical and applied research is critical, problem-oriented, and policy relevant. Its interdisciplinary topic areas generate diverse synergies regarding content and methods and also influence the fields of advisory services and capacity development.

## BICC's work

BICC's portfolio includes:

- *Applied research* (research reports, background and evaluation studies, impact evaluations, development of indicators, data collection and analysis, as well as feasibility studies to support program implementation).
- *Research-based policy advice* (background analyses, feasibility and evaluation studies, training and expert workshops as well as the allocation of long- and short-term experts).
- *Capacity development* (preparation of concepts and modules for the further education and training of stakeholders in peace processes).
- *Public relations work* (publications, conferences and events, exhibitions).

## Organization and mission

BICC was founded as a non-profit limited company in 1994 with the support of the State of North Rhine-Westphalia (NRW). The Center is headed by a Director for Research and a Director for Administration. Shareholders are the States of NRW and Brandenburg. BICC's governing bodies are the Supervisory Board, the Board of Trustees, and the International Board.

BICC's mission is to conduct critical, problem-oriented, policy relevant conversion research in response to the problems that occur as a result of organized violence. To do so, BICC engages in active exchanges with scholars, politicians and stakeholders in everyday practice and civil society. As a think tank, it seeks to engage in a dialogue with NGOs, governments, private organizations, research institutes and universities well as with interested individuals. BICC's public relations work sets out to raise public awareness of its central topics.

## Partners, donors and clients

BICC receives institutional funding from the State of North Rhine-Westphalia (NRW). The position of Director for Research is combined with a professorship for Peace and Conflict Research at Bonn University.

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