

# bulletin

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## *Defense Firm Conversion Progress in the United States*

By Ann Markusen

Conversion success is more widespread in the United States than commonly believed. Over a decade of defense cuts, many US firms, both large and small, have increased their civilian sales and retained workers who would have otherwise been laid off. Our work at the Regional and Industrial Economics Project at Rutgers University documents the difficulties firms face in doing so and the strategies most likely to succeed.

Many large firms, depicted as 'dinosaurs' by some American critics and excused by others as too specialized, have in fact successfully parlayed their technologies into new markets. Firms like Rockwell, TRW and Hughes have been able to lower their defense dependency significantly since the end of the Cold War by applying aerospace expertise to automotive projects, such as urban traffic management and intelligent vehicle information systems. To do so, they have had to become more entrepreneurial internally, creating new groups to permit cross-over of expertise. Boeing has consistently excelled in both civilian and military markets, aided by internal mobility practices which allow personnel to move easily between civilian and military work.

Our interviews with hundreds of small- and medium-sized firms show that a majority of them have been able to increase civilian sales, while enduring deep defense cuts. As with large firms, civilian sales do not in these transitional years make up for defense losses, but they do cushion the blows. Many were able to use profits from defense contracts to explore new products and markets, and many did so explicitly to avoid layoffs. In addition, many new firms have been formed around defense technologies, hiring former defense employees.

Moving into non-defense markets is not an easy process. Successful firms generally have to undergo some form of management 'shock', bringing in new managers or deferring to a younger generation. Procuring civilian marketing expertise is essential and

often requires new hires or partnering with other firms which possess it. Defense companies have also had to learn to produce in more cost-conscious ways. A final ingredient in success is finding new sources of bridging finance, when a firm's own retained earnings are insufficient.

Government programs, especially those managed at the regional and local levels, have been quite helpful to firms in surviving the transition. Many have benefited from technical assistance programs which help firms draw up a business plan and acquire appropriate consulting assistance. Some have won technology transfer grants or gone into partnerships with government labs. Many credit regional revolving loan funds with enabling them to survive the two to five years which a conversion effort generally requires to succeed.

Conversion progress could, however, function better for workers. Surveys show that new job creation has not been closely linked to displacement, although many workers have been retained by their companies on diversification projects. In many ways, the armed forces have done a better job for soldiers than private sector firms have for workers in managing the transition from military to civilian work. Government programs are not much help, because worker adjustment efforts are not linked to job creation programs, nor do they offer income support necessary if workers are to undertake meaningful job retraining.

There are other troubling problems with the way defense downsizing has been managed in the United States. Although the federal government has devoted more than two billion dollars a year to conversion, including technology development programs, it has simultaneously offered much larger subsidies to firms for arms exports and for the costs of mergers. Each of these, our research shows, have discouraged conversion activity.

Defense firms in this period must choose whether to use their retained earnings to invest in diversification efforts or to pursue further government contracts, purchase other defense firms, and market weapon systems aggressively abroad. Given the lopsided incentives favoring these latter options, many

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firms have abandoned early attempts at diversification. The Pentagon permits firms to charge consolidation costs from mergers with other defense firms against existing contracts—dubbed ‘payoffs for layoffs’, but will not allow them to do so if they merge with a non-defense company. Buttressed by intense pressures from Wall Street to spin off commercial divisions and merge to create ‘pure play’ defense companies, most of the larger firms have capitulated.

Thus, although community assistance and dual use policies have been effective, Pentagon practices have unwittingly undermined the conversion impetus in the largest companies. The creation of giant, defense dedicated companies over the past two years has troubling implications for the future of security and economic competitiveness. These firms will lobby assiduously for high defense budgets and arms exports, and they will push for continued weapons innovation. They will absorb resources, especially skilled labor, which might better be employed in civilian initiatives to solve environmental, transportation and urban problems. Understanding conversion success where there has been a will to succeed is thus important in combating the cynicism that sees defense firms as capable only of military work.

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## Staff Spotlight:

### Michael Brzoska

Michael Brzoska, a political scientist (Ph.D. in 1995) and economist from Germany, continues his 15 years of work on economic aspects of peace and defense at BICC. Before joining BICC, he worked at the German Institute of African Studies (IAK), the Institute of Peace Research and Security Policy at the University of Hamburg (IFSH) and the Stockholm International Peace Research Institute (SIPRI). His research has focused on the economic aspects of military expenditures, the role of the military in development, arms trade and arms production. In the early 1980s, this included cooperation with trade union conversion groups in Northern Germany. He is frequently called upon by several international organizations and NGOs to act as an advisor on disarmament and conversion.

At BICC, Michael’s main responsibility—in addition to his duties as deputy director and director of research—is to lead the team producing BICC’s annual *Conversion Survey*. The first *Conversion Survey*, published in April 1996, is an overview of progress in the six issue areas that make up BICC’s work. The 1997 issue provides an update in all areas of conversion and continues a number of data series, including the BIC3D Index of global disarmament and conversion. The central focus of the report is an in-depth analysis of the management and disposal of various types of ‘surplus weapons’. This particular consequence of disarmament is often overlooked, both in disarmament policies and academic studies. However, surplus weapons—ranging from landmines and small arms to nuclear arsenals—are a major economic, environmental and security problem. BICC has done extensive research on these issues.

Michael is already preparing for the *Conversion Survey* 1998, which will focus on the fate of the defense industry after the Cold War—industrial conversion and defense industry restructuring.

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**Bonn International Center for Conversion**  
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**As an independent, non-profit organization, the Bonn International Center for Conversion (BICC) supports and promotes the processes by which people, skills, technology, equipment, financial and economic resources are shifted from the military or defense sector towards alternative, civilian purposes.**

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## Inauguration Chemical Weapons Convention

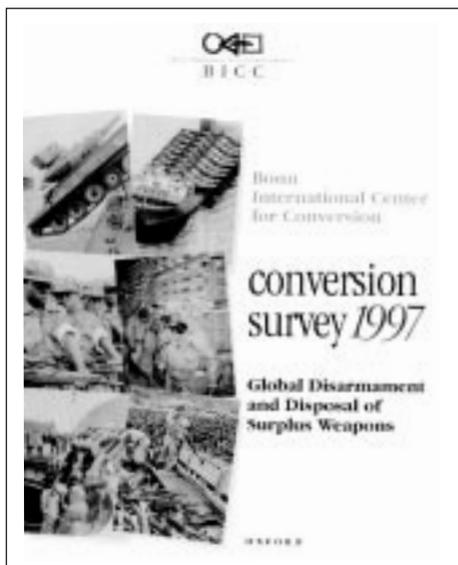
From 6–24 May 1997, the First Conference of States Parties of the Organization for the Prohibition of Chemical Weapons was held in The Hague to inaugurate the international treaty which bans an entire class of weapons of mass destruction. In accordance with the treaty—known as the Chemical Weapons Convention—countries must provide information on all past production, storage, and destruction activities related to chemical weapons, dispose of all existing chemical weapons within the next 10 years. In addition they must allow international inspectors access to their civilian chemical industry and sites of chemical weapon storage and destruction in order to verify compliance with the treaty.

BICC is one of 24 organizations which participated as official observer to the Conference. Much of the general debate stressed the importance of having more countries—including Russia, which has a 40,000 ton stockpile of chemical weapons—join the treaty. Presently, 90 of the 165 signatory countries have ratified the Convention—including the United States, which possesses some 30,000 tons of chemical weapons.

One fact often overlooked is that as many as 30 countries are plagued by old and abandoned chemical weapons which remain on their territories from the First and Second World Wars. According to the Convention, these must be destroyed. The technical complexities associated with their recovery and disposal and other important historical, legal, and environmental implications are featured in BICC's *Conversion Survey 1997*.

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## Just Published: BICC's Second Annual Survey



Jahresbericht des Internationalen Konversions-Zentrums:  
**Im Waffenhandel an der Spitze**  
Deutschland führt inzwischen mehr Alt-Waffen aus als Rußland

*Süddeutsche Zeitung*, 28 May 1997



*IHT*, 5 June 1997

Further information on the Survey can be obtained via Internet:

<http://bicc.uni-bonn.de/general/survey97>

### How to order:

The *Conversion Survey* is available either from the Bonn International Center for Conversion (BICC) at a price of 45,- DM (incl. postage and package)

or in the UK from Oxford University Press UK at a price of £17.99.

If you have a credit card, you can phone: +44 (0) 1536 454534.

In the US from Oxford University Press US at a price of \$35.00,

by phone: 1-800-451-7556, please refer to order code 'I' when placing your order.

By fax: 1-919-677-1303,

by post: Order Department, Oxford University Press, 2001 Evans Road, Cary, NC 27513, U.S., by e-mail: [orders@oup-usa.org](mailto:orders@oup-usa.org)

## BICC Publications

In addition to its annual yearbook *conversion survey* and other books, BICC publishes series such as *reports*, *briefs* and *papers* which analyze the background of the international conversion process, report on conversion projects and experiences, and offer scientific as well as practical know-how in the various fields of conversion. Recent publications include the following:

**report 9: Jörn Brömmelhörster, *KONVER II - Konversionsförderung durch die Europäische Union/ Fostering of Conversion by the European Union* (in English and German), March 1997**

**report 10: Ksenia Gonchar, *Research and Development Conversion in Russia*, May 1997**

**paper 9: Stacy Larsen, *An Overview of Defense Conversion in the Ukraine*, June 1997**

### Forthcoming:

**report 11: Keith Cunningham, *Base Closure and Redevelopment in Central and Eastern Europe*, July 1997**

**brief 9: Greg Bischak, *US Conversion after the Cold War, 1990-1996*, July 1997**

**brief 10: Yitzhak Shichor, *Peaceful Fallout: The Conversion of China's Military Nuclear Complex to Civilian Use*, August 1997**

**paper 10: Moses Kiggundu, *Retrenchment Programs in Sub-Saharan Africa: Lessons for Demobilization*, July 1997**

## Upcoming Events

The 47th **Pugwash Conference on Science and World Affairs** will take place in Lillehammer, Norway, 1-7 August 1997.

A conference on **The Globalization of European Military Industry and the Arms Trade** will be held on 19-20 September 1997 at Middlesex University, Hendon, UK.

A conference on **Human Security and Global Governance: Non-Nuclear Prerequisites for Nuclear Disarmament** will be held on 26-28 September 1997 in London, UK.

Penn State and Syracuse Universities (USA) will host two Symposia in the fall of 1997, the first at Penn State on 15-17 September on **Defense Firm Adjustment to the Post Cold War Era**, and the second at Syracuse on 27-28 October on **US Federal Government Programs for the Defense Industrial Base**.

A BICC Conference on **Transforming Defense Assets to Development: Conversion and Demobilization Prerequisites for Development?** will take place 9-12 November 1997 in Bonn.

## BICC Notes

During his keynote address at the global launch of the UNDP Human Development Report in Bonn on 12 June 1997, **Dr. Oscar Arias, former President of Costa Rica, Nobel Peace Prize Laureate and member of BICC's international board** emphasized demilitarization, reduction of military expenditures and conversion as necessary steps in reducing poverty. He said that Bonn is the home of one of the leading research centers on these issues, the Bonn International Center for Conversion. In his address he quoted the Center's director, Herbert Wulf: "Conversion, if managed well, channels resources to productive activities, leading to increased employment, social justice and decreasing social tensions."

In March and April 1997, BICC made its first appearance at two of the world's largest trade fairs: **CeBit97** and the **Hannover Messe**. As part of the stand of the Ministry of Higher Education and Research, *Forschungsland NRW*, BICC presented some of its electronic services: the WorldWideWeb Server, *ConverNet*, and the database on military base closure in North Rhine-Westphalia, *demilan*. One of the most popular on-line services at both shows was the Marketing Homepage for Military Base Closure—a new addition to *ConverNet*. This service helps communities, where military bases have closed, to find investors for commercial and housing reuse of these sites. Visitors to the stand represented a wide spectrum of trade fair visitors, including government officials, diplomats, international military personnel, representatives from non-governmental organizations, educators and computer specialists.

On 16 June 1997, an **external evaluation team** presented its final report on BICC's first three years of work, its mandate, cost effectiveness, and public standing to Minister Anke Brunn, Chair of BICC's International Board. The evaluation team was chaired by Prof. Uwe Holtz, Bonn University, a development expert and former member of the German Parliament; team members were Dr. Karlheinz Bentele, President of a banking association and Dr. Sverre Lodgaard, disarmament expert and Director of the Norwegian Foreign Policy Institute. The evaluation team praised BICC for "building up a high competence in research and its reputation among national and international organizations and institutions as well as in consultation in conversion projects" and recommended that BICC's work continue.

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