Berkeley Journal of International Law

Volume 31 | Issue 2 Article 2

2013

"Never Again"? German Chemical Corporation Complicity in the Kurdish Genocide

Michael J. Kelly

Recommended Citation

Michael J. Kelly, "Never Again"? German Chemical Corporation Complicity in the Kurdish Genocide, 31 Berkeley J. Int'l Law. 348 (2013).

Link to publisher version (DOI)

https://doi.org/10.15779/Z38594T

This Article is brought to you for free and open access by the Law Journals and Related Materials at Berkeley Law Scholarship Repository. It has been accepted for inclusion in Berkeley Journal of International Law by an authorized administrator of Berkeley Law Scholarship Repository. For more information, please contact jcera@law.berkeley.edu.

"Never Again"? German Chemical Corporation Complicity in the Kurdish Genocide

Michael J. Kelly*

I apologize for the German participation in the Kurdish genocide. The trade of German companies with Saddam's regime was an illegal act. They should not have done that. Germany has to tell the people of Kurdistan that it was a mistake. Gassing Halabja took place with the help of German companies.¹

—Claudia Roth, co-Chair, German Green Party, July 4, 2012

INTRODUCTION

In several domestic jurisdictions, corporations may be prosecuted for criminal wrongdoing within their home states.² This is certainly true in the United States.³ However, when multinational corporations commit crimes abroad, they often escape prosecution for a variety of reasons—lack of jurisdiction, lack of political will, or lack of well-articulated criminality under international law. The complicity of German chemical corporations in Saddam Hussein's genocide against Iraq's Kurdish population falls into all of these categories.

The chemical weapons attacks unleashed on the Kurdish people of Iraq in 1987-1988 were the largest such attacks ever directed against a civilian

^{*} Professor of Law and Associate Dean, Creighton University School of Law. B.A., J.D., Indiana University; LL.M., Georgetown University. The author is President of the U.S. National Section of *L'Association Internationale de Droit Pénal* and leads Creighton's program on International Criminal Law in Nuremberg, Germany in conjunction with Philipps-Universität Marburg, Friedrich-Alexander-Universität Erlangen-Nürnberg, and the Nuremberg Principles Academy. Many thanks to research assistant Rachel Breger.

^{1.} Sirwan Heji Berko, *Claudia Roth: Germany Must Admit Mistakes and Apologize to Kurds*, RUDAW, July 4, 2012, *available at* http://www.rudaw.net/english/kurds/4639.html.

^{2.} See, e.g., Criminal Code Act 1995 (Cth) pt 2.5 div 12 (Austl.). "A body corporate may be found guilty of any offence, including one punishable by imprisonment." Id. div 12.1.

^{3.} E.g., N.Y. Cent. & Hudson River R.R. v. United States, 212 U.S. 481 (1909).

population.⁴ Mustard gas, VX, SARIN and TABUN formed a lethal cocktail⁵ that eliminated 5,000 Kurds in the city of Halabja in a single day.⁶ Who supplied Saddam with this devastating technology? German industry⁷—the same German industry that supplied Himmler's S.S. with the poison gas to eliminate millions of Jews at Auschwitz.⁸ This Article explores how German corporations failed to learn the lessons of the Holocaust and considers the parameters of criminal liability for corporate actors who persist in flouting international norms in pursuit of profit.

Part I provides background on corporate responsibility, chemical weapons, the involvement of German industry, and a general background on transshipment to Iraq. Part II establishes the wholesale massacre of Kurdish civilians by Saddam Hussein's military forces as genocide. Part III describes German corporate complicity in the transfer of equipment and technology to Saddam's regime to carry out chemical weapons production. Part IV lays out a legal strategy to more clearly articulate the criminal culpability of corporations when they aid and abet *genocidaires*.

This Article presents a salient case study with respect to the criminal liability of German corporations for the Kurdish genocide. It derives from the author's previous work establishing a general theory of corporate criminal liability under international law, and a prior case study with respect to the criminal liability of the Chinese National Petroleum Corporation (CNPC/Petro-China) for the genocide in Darfur, Sudan.

^{4.} Chemical and Biological Weapons Threats to America: Are We Prepared?: Hearing Before the S. Judiciary Subcomm. on Tech., Terrorism and Gov't and the S. Select Comm. on Intelligence, 105th Cong. (1998) (statement of Christine M. Gosden, Professor of Med. Genetics, Univ. of Liverpool) [hereinafter Gosden Congressional Testimony], available at http://www.fas.org/irp/congress/1998 hr/s980422-cg.

^{5.} *Id.* The gassing of Halabja marked "the first time that chemical weapons had been used on a major civilian population of this size. The victims of the attack included women, children and the elderly." *Id.*

^{6.} SHIVA BALAGHI, SADDAM HUSSEIN: A BIOGRAPHY 81 (2006).

^{7.} Roni Alasor & Lorin Sarkisian, *Halabja Conference in European Parliament Discusses Kurdish Genocide*, AK NEWS, Mar. 14, 2012, http://www.aknews.com/en/aknews/4/294697/ (quoting Jurgen Klute, MEP Germany, that "the poisonous gas used in [the] Halabja massacre originated from Germany and other European countries.").

^{8.} Raymond G. Stokes, From the IG Farben Fusion to the Establishment of BASF AG (1925-1952), in GERMAN INDUSTRY AND GLOBAL ENTERPRISE 330 (Werner Abelshauser ed., 2004).

^{9.} Michael J. Kelly, *Prosecuting Corporations for Genocide Under International Law*, 6 HARV. L. & POL'Y REV. 201 (2012).

^{10.} Michael J. Kelly, Ending Corporate Impunity for Genocide: The Case Against China's State-Owned Petroleum Company in Sudan, 90 OR. L. REV. 413 (2011).

I. BACKGROUND: CORPORATE RESPONSIBILITY

Corporations are formed for profit.¹¹ It is from this central motive that corporate activity springs. Corporate governance systems in companies around the world support that motive, whether the companies exist in capitalist, socialist, or neo-communist economic systems. Indeed, members of corporate boards have fiduciary duties to shareholders to increase profits where possible.¹²

From the Latin *corpus* for body, corporations have been around since Roman times. They are artificial bodies that engage in business for the mutual benefit of people who share in the wealth they create. As Sir Edward Coke put it, they are "invisible, immortal, & resteth only in and consideration of intendment of Law." Classically, corporations were not constrained in their activities while in pursuit of profit even though their hosting governments may have loosely regulated them.

Early on, corporations became involved in the colonization and wartime activities of their home states—ostensibly in support of national aims, but never at a loss. 14 During the seventeenth and eighteenth centuries, Great Britain left most of the work of colonization and subsequent military repression of indigenous populations to the British East India Company. 15 In 1827, a contemporary noted with respect to the British East India Company: "a company which carries a sword in one hand and a ledger in the other—which maintains armies and retails tea, is a contradiction." 16 The Netherlands followed a similar paradigm via the Dutch East India Company, 17 which supplemented its Asian labor force with slaves and forced labor from local colonial populations. 18

In the United States, corporations profited wildly during the American Civil War—providing armies in the field with everything from weapons to uniforms.¹⁹ As in the case of modern corporate complicity in atrocities such as genocide, the promise of large profits with little cost and no negative

^{11.} Dodge v. Ford Motor Co., 170 N.W. 668, 684 (Mich. 1919).

^{12.} *Id*

^{13.} Case of Sutton's Hospital, (1612) 77 Eng. Rep. 960.

^{14.} See Sandy Keeney, The Foundations of Government Contracting, 5 J. CONT. MGMT. 7 (2007).

^{15.} Leo J. Blanken, Rational Empires: Institutional Incentives and Imperial Expansion 111-38 (2012).

^{16.} Id.

^{17.} See generally, Ghulam A. Nadri, Networks of Empire: Forced Migration in the Dutch East India Company (2008).

^{18.} Jan Lucassen, A Multinational and Its Labor Force: The Dutch East India Company, 1595-1795, 66 INT'L LAB. & WORKING CLASS HIST. 12, 14 (2004).

^{19.} Keeney, supra note 14, at 16.

consequences²⁰ proved too tempting for many companies to resist providing low cost, low quality merchandise:

Profiteering and fraud were the hallmarks of government business during the Civil War. Hasty mobilization, loose enforcement, large-scale emergency buys, and lack of coordination at the federal level led to a situation very attractive to people looking for a quick fortune. J.P. Morgan was one example among many. In 1861, before hostilities broke out, the government auctioned off 5,000 obsolete and dangerous guns. Morgan, through an agent, bought them for \$3.50 each. He then turned around and sold them as new to General Fremont in St. Louis for \$22 each. When soldiers tried to fire them, they exploded as often as not. ²¹

This tradition of reliance on corporate support for national defense continues today, albeit with better product results. Companies like Halliburton and Dyncorp provide both support and security to military operations, ²² and companies like Raytheon and General Dynamics provide unmatched weaponry. ²³ Yet, President Dwight D. Eisenhower eloquently warned the nation and the world of the perils of a military-industrial complex that could grow, if unchecked, to wield disproportionate influence. ²⁴ He was describing the emerging Cold War synergy between corporations, the military, and the government. That synergy cemented itself and has long outlasted the conflict it was created to counter.

Perhaps most tragically, this confluence of corporate activity, military need, and government guidance revealed its true terrible potential in Hitler's Germany during the Second World War. German corporations, like those of other countries, operated within a legal framework sanctioned by their home government—in this case the Third Reich. Consequently, the atrocities they

^{20.} See Tyler Marshall, Germany Was Hub of Iraq Arms Network in Europe, L.A. TIMES, Feb. 15, 1991, available at http://articles.latimes.com/1991-02-15/news/mn-1086_1_purchasing-network/2 ("And so it was that a country [Germany] whose government policy bans the export of weapons to areas of tension [Iraq] and whose official statistics show that it shipped only \$31 million of the \$25 billion in arms imported by Iraq during the 1980s, became the pivotal supplier to the most horrific elements of Hussein's war machine. The lure of such profits also drew numerous smaller German companies, apparently willing to ignore or deny the reality of their business, for such a onetime economic windfall.").

^{21.} Keeney, *supra* note 14, at 16 (quoting and citing James F. Nagle, A History of Government Contracting 176-77, 192-93, 198 (2nd ed. 1999); William G. Leduc, This Business of War: Recollections of a Civil War Quartermaster 68, 123 (2004); James A. Huston, the Sinews of War: Army Logistics 1775-1953 180 (1966)).

^{22.} Chalmers Johnson, *The War Business*, HARPER'S, Nov. 2003, at 53; David Hubler, *DynCorp Revenues Spurred by Continued Strong Contract Demand*, WASHINGTON TECHNOLOGY, Mar. 22, 2012, http://washingtontechnology.com/articles/2012/03/22/dyncorp-revenues.aspx.

^{23.} Raytheon Wins \$81M Contract to Develop Weapons System for Army, WASH. BUS. J. (July 25, 2012), http://www.bizjournals.com/washington/blog/fedbiz_daily/2012/07/raytheon-wins-81m-contract-to-develop.html; Dustin Walsh, General Dynamics Land Systems Wins Contract for Weapons Station, CRAIN'S DETROIT BUSINESS, June 3, 2010, available at http://www.crainsdetroit.com/article/ 20100603/FREE/100609926/general-dynamics-land-systems-wins-contract-for-weapons-station#.

^{24.} President Dwight D. Eisenhower, Farewell Address (Jan. 17, 1969), available at http://www.ourdocuments.gov/doc.php?flash=true&doc=90.

were complicit in perpetrating during the Holocaust were legal under German law at that time. However, they remained reprehensible and violated international law.

At the height of the war, one in every five workers supporting the economy of the Third Reich was a forced laborer. By the beginning of 1944, this amounted to 10 million workers—6.5 million of whom were civilian forced laborers within Germany, 2.2 million were prisoners of war, and 1.3 million were in camps outside of Germany proper. 25 German companies have paid billions of dollars in reparations to victims and survivors as a result.

Most notably, Germany began to pay reparations to Israel soon after the war for the crimes of the Holocaust.²⁶ More recently, German industry recognized, in the face of large class-action lawsuits, that it must compensate survivors and families of those subjected to forced labor in the German wartime economy.²⁷ First, in 1998, Volkswagen created a twelve million-dollar fund to compensate slave laborers used in its factories during World War II. Volkswagen's action was "the first time a German company acknowledged its 'moral and legal responsibility' to compensate Nazi-era slave laborers."²⁸

The following year, faced with similar litigation, over 3,500 German companies, including Audi, BMW, Krupp, Leica Camera, Siemens, Daimler Benz, Volkswagen, Hugo Boss, and Bayer,²⁹ together with a German foundation, paid a massive 4.4 billion-dollar settlement to compensate the victims of their own corporate abuses.³⁰

What caused such corporate abuse *within* states during wartime to jump borders and become a truly international problem? Two dominant dynamics of the twentieth century allowed the problem of corporate involvement in war crimes, crimes against humanity, and genocide to metastasize beyond the borders of their host states. The first dynamic was the emergence of new states.

^{25.} John C. Beyer & Stephen A. Schneider, *Forced Labor Under the Third Reich*, NATHAN ASSOCS. RES. 3 (1999), http://www.nathaninc.com/resources/forced-labor-under-third-reich (citing John H.E. Fried, *The Exploitation of Foreign Labor by Germany,* Int'l Labor Office Report, App. IV at 264-65 (1945)).

^{26.} Frederick Honig, *The Reparations Agreement between Israel and the Federal Republic of Germany*, 48 AM. J. INT'L L. 564 (1954).

^{27.} STUART EIZENSTAT, IMPERFECT JUSTICE: LOOTED ASSETS, SLAVE LABOR, AND THE UNFINISHED BUSINESS OF WORLD WAR II 206-09 (2003).

^{28.} BARBARA SALAZAR, CONG. RESEARCH SERV., RL30262, THE HOLOCAUST—RECOVERY OF ASSETS FROM WORLD WAR II: A CHRONOLOGY (MAY 1995 TO PRESENT) (2000).

^{29.} MARCUS MARRUS & MICHAEL SCHABAS, SOME MEASURE OF JUSTICE: THE HOLOCAUST ERA RESTITUTION CAMPAIGN OF THE 1990S 20 (2009). The current list of 3,527 German firms is accessible at the Jewish Virtual Library. *German Companies Participating in the Forces/Slave Labor Compensation Fund*, JEWISH VIRTUAL LIBRARY (July 8, 2000), http://www.jewishvirtuallibrary.org/jsource/Holocaust/germanco1.html.

^{30.} U.S. Dep't of State, Fact Sheet on the "Remembrance, Responsibility and the Future" Foundation (2002), available at http://germany.usembassy.gov/germany/img/assets/8497/factsheet.pdf.

Emancipation of peoples after World War I and decolonization after World War II led to the formation of many new states. 31 Most were resource rich but economically poor and politically weak. This created fertile ground for abuse by creatures of the second dynamic—multinational corporations (MNCs). Global economic expansion, increased capital flows, and liberalized international trade regimes allowed MNCs to dramatically increase their international operations during the Cold War and afterward. As observed, "[g]lobalization, which has displaced colonialism and then the cold war as the organizing principle of the international system, has reduced the transactional costs of doing business in multiple jurisdictions and, in turn, conferred enormous wealth on multinational corporations."32

These dynamics combined to elevate the MNCs' role as a key aider and abettor in criminal activity at the domestic level to the international arena. Ostensibly servicing the needs of struggling new states, MNCs essentially did, and continue to do, what any corporation is designed to do—seek profit. In weak states, however, such profit could come at the cost of human rights abuses and even worse.

Two models of corporate human rights abuses predominate: the direct corporate wrongdoing, and the indirect participation. In the direct corporate wrongdoing, a third world government allows a foreign first world corporation to do business in its country with little governmental oversight. This scenario is epitomized by the MNC's negligent conduct in the course of its operations.

Direct corporate wrongdoing commonly occurs in the area of environmental degradation, like the dumping of sixty tons of mercury into Lake Managua by the Philadelphia-based Pennwalt Corp.'s chlorine-processing plant which operated there until 1991.³³ As observed, "[w]hen the environmental movement began in the United States in the 1960s, companies began exporting their contaminating industries to the Third World."³⁴

This type of wrongdoing often involves human rights abuses, as in the case of foreign petroleum corporations operating in Nigeria³⁵ or, less commonly, war

^{31.} See, e.g., Obiora Chinedu Okafor, After Martyrdom: International Law, Sub-State Groups, and the Construction of Legitimate Statehood in Africa, 41 HARV. INT'L L.J. 503 (2000); LUNG-CHU CHEN, AN INTRODUCTION TO CONTEMPORARY INTERNATIONAL LAW: A POLICY-ORIENTED PERSPECTIVE 30-31 (2000).

^{32.} Joe R. Paul, *Holding Multinational Corporations Responsible Under International Law*, 24 HASTINGS INT'L & COMP. L. REV. 285, 286 (2001).

^{33.} Edward Hegstrom, *Impoverished Nicaraguans Eat Toxic Lake's Fish*, SUN-SENTINAL, March 1, 1998, *available at* http://articles.sun-sentinel.com/1998-03-01/news/9803010003_1_fish-consumption-nicaraguans-mercury.

^{34.} *Id.* (quoting Mauricio Lacayo, a scientist at the Nicaraguan Ministry of the Environment and Natural Resources).

^{35.} INT'L COMM'N OF JURISTS, ACCESS TO JUSTICE: HUMAN RIGHTS ABUSES INVOLVING CORPORATIONS—NIGERIA (2012), available at http://icj.wpengine.netdna-cdn.com/wp-content/uploads/2012/06/Nigeria-rights-abuses-corporation-themetic-report-2012.pdf.

crimes.³⁶ It would be rare, however, for a corporation to be caught red-handed carrying out an act of genocide. Corporations, after all, are not created to wipe out entire populations. But if another entity is committing genocide and the corporation stands to gain a profit from it, the corporation is unlikely to stop it.

This leads to the second variety of corporate wrongdoing—the indirect participation. International law refers to indirect participation in a criminal act as aiding and abetting,³⁷ or complicity.³⁸ The criminal perpetrator does not carry out the final criminal act (e.g., murder or enslavement), but participates by supporting those who do. Here, far more often, we find MNCs lurking in the background when atrocities occur. Indeed, at times an atrocity itself would not have occurred without the impetus provided by corporate presence and its financial rewards. For example, the Chinese National Petroleum Corporation, bent on slaking China's thirst for oil, drove the Sudanese government to perpetrate genocide in Darfur, Sudan, so the land could be cleared for drilling.³⁹

Potentially insidious in nature, financial incentive by an MNC for a government or gang to carry out atrocities may supply the motive to commit an act. However, companies can also provide means to a perpetrator who is already predisposed with a motive to undertake genocide. The best illustrative case here is that of Saddam Hussein's massacre of the Kurdish people in northern Iraq. With chemical weapons components supplied to him by foreign MNCs, Hussein was not only empowered to release the largest chemical gas attacks since the First World War in his own war with Iran, but to turn those weapons on his own people in Iraq.

Figure 1, below, was designed in the run-up to the 2003 U.S.-led invasion of Iraq. It depicts the suppliers that Baghdad relied on in the development of its chemical weapons program in the 1980s and breaks down each country by supplier and commodity supplied.⁴¹ Germany figures most prominently in the "equipment" column. This graphic accompanied an article in the *New York Times* explaining the central dynamic involved in the transfer of chemical weapons technology from Germany to Iraq.

^{36.} JAMES G. STEWART, OPEN SOC'Y INST., CORPORATE WAR CRIMES: PROSECUTING THE PILLAGE OF NATURAL RESOURCES xx (2011), available at http://www.soros.org/sites/default/files/pillage-manual-2nd-edition-2011.pdf.

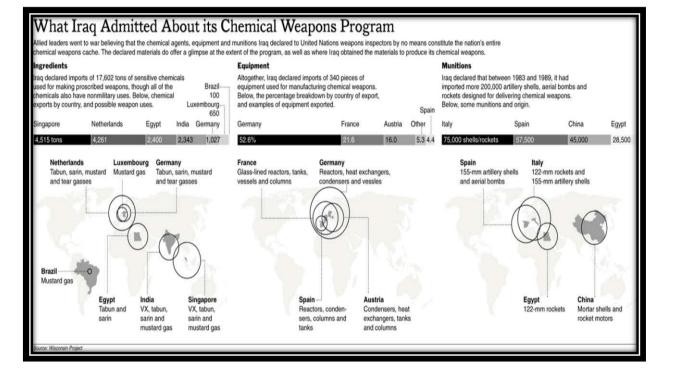
^{37.} Wim Huisman & Elies van Sliedregt, *Rogue Traders: Dutch Businessmen, International Crimes and Corporate Complicity*, 8 J. INT'L CRIM. JUST. 803, 806 (2010).

^{38.} In re Tesch (The Zyklon B Case), (1946) 13 Ann. Dig. 250 (Brit. Mil. Ct.).

^{39.} Kelly, *supra* note 10.

^{40.} Huisman & van Sliedregt, supra note 37, at 817-18.

^{41.} Gary Milhollin & Kelly Motz, *The Means to Make the Poisons Came from the West*, N.Y. TIMES, Apr. 13, 2003, at A5, *available at* http://www.nytimes.com/2003/04/13/weekinreview/the-world-the-means-to-make-the-poisons-came-from-the-west.html, *graphic available at* http://www.iraqwatch.org/ suppliers/nyt-041303.gif.



The data reveals that firms in Germany and France outstripped all others in selling the most important thing—specialized chemical-industry equipment that is particularly useful for producing poison gas. Without this equipment, none of the other imports would have been of much use.

Iraq didn't declare everything it bought, so the data is incomplete. But they can be presumed to be reliable as far as they go. In general, the pattern of Iraqi behavior with United Nations (U.N.) inspectors was to admit buying something only after learning that the inspectors already knew about it. Thus, it seems logical to assume that the admitted imports actually occurred.

Iraq sometimes lied about the quantities of ingredients or munitions to protect suppliers or to conceal stocks remaining on hand. Equipment, on the other hand, was listed in discrete units, so those quantities seem to be reliable.

The countries of origin are compiled based on the exporter, not the manufacturer, because it was the exporter who decided to sell a sensitive item to Iraq. Most of the equipment described in the report is restricted for export today, even though it also has civilian uses, but it was probably not restricted when it was sold in the 1980's.

While individual items may have had innocuous uses, the usefulness of a combination of items on an order for making poison gas could have tipped off a seller. A former U.N. inspector, citing one case, said: "anyone looking at the order could see that all the chemicals were for sarin." ⁴²

It is clear that several multinational companies across Europe, Asia, Latin America, and the Middle East participated in arming the Iraqi regime. However, this Article focuses only on the criminal liability of German corporations because of German corporate complicity in the Holocaust.

Given their central role in perpetrating the greatest crime of the twentieth century, German corporations should be held to a higher standard of care with respect to genocide. When the involvement of German corporations in advancing Saddam Hussein's chemical weapons program came to light, Wilfried Penner, a member of the Bundestag's intelligence committee noted, "[w]e have a political and a moral problem We [Germany] should be showing more restraint than other countries due to our inescapable history." ⁴³

Even though others contributed to the build-up of Saddam Hussein's chemical weapons arsenal, "[t]he moral question is especially troubling for Germany... [because] Saddam has threatened to attack Israel with chemical weapons. Poison gas was developed and used by the Germans during World War I, and was used to kill Jews in Nazi gas chambers." Indeed, during the 1991 Persian Gulf War, when Saddam attacked Israel, German officials who knew about the German corporate role in arming Iraq began to foresee the

^{42.} Id.

^{43.} Frederick Kempe, *How German Firms Built Up Iraq's Arsenal*, WALL St. J., Oct. 4, 1990, *reprinted in* THE SEATTLE TIMES, *available at* http://community.seattletimes.nwsource.com/archive/?date=19901004&slug=1096522.

^{44.} Nesha Starcevich, *Many German Firms Helped Build Iraqi Arsenal*, AP NEWS, Oct. 29, 1990, *available at* http://www.apnewsarchive.com/1990/Many-German-Firms-Helped-Build-Iraq-s-Arsenal/id-92b14b92d9adca36724138a6a8eefbc9.

specter of German gas being used to slaughter Jews all over again. "One German official says he was paralyzed with fear when he first heard Israel was hit with Scud-B missiles. 'We are so lucky they weren't carrying poison gas warheads,' he says. 'For German technology to again be responsible for Jewish deaths would have been such a tragedy.""⁴⁵

The history of chemical weapons production in Germany is not state-centered. It was driven by corporate innovation and production from the very beginning. The war ministry did not manufacture chemical weapons. Rather, German chemical companies first proved their capability to produce chemical weapons during World War I. Bayer, BASF, and Höchst worked with the German government to weaponize their large chlorine by-products from dye manufacturing into a gas capable of incapacitating soldiers in the Allied trenches. The first poison gas attack was released in April 1915 at Ypres on the Western Front against British soldiers. Other similar lethal weapons were subsequently engineered, including the dreaded mustard gas.

Though the Allied powers argued such attacks were in violation of the Hague Conventions, Germany rested its interpretation of the provision prohibiting states "to employ poison or poisoned weapons" or "to employ arms, projectiles, or material calculated to cause unnecessary suffering" as a technicality—the treaty language only applied to the use of shells, not to other types of projectiles. ⁴⁹ Forced into a stand-off, the Allies had no choice but to respond in kind. ⁵⁰ But for German intransigence, millions of soldiers would have been spared the pain and twisted death wrought by poison gas.

The use of chemical weapons between military combatants was more expressly prohibited by international law following the First World War.⁵¹ Hitler's own alleged exposure to such attacks when he was a soldier⁵² may have

^{45.} Frederick Kempe, Germany in the Gulf: A Mixed Morality, WALL St. J., Jan. 21, 1991, at A6.

^{46.} Jeffrey Allan Johnson, *The Power of Synthesis (1900-1925)*, in GERMAN INDUSTRY AND GLOBAL ENTERPRISE 165, 172-73 (Werner Abelshauser ed., 2004).

^{47.} Id. at 165.

^{48.} Id.

^{49.} JONATHAN B. TUCKER, WAR OF NERVES: CHEMICAL WARFARE FROM WORLD WAR I TO AL-QAEDA 10-11 (2006).

^{50.} *Id.* (citing Hague Convention IV: Laws and Customs of War on Land art. 23, Oct. 18, 1907, 187 Consol. T.S. 227, 1 Bevans 631).

^{51.} See, e.g., Protocol for the Prohibition of the Use in War of Asphyxiating, Poisonous or other Gases, and of Bacteriological Methods of Warfare, June 17, 1925, 94 L.N.T.S. 66.

^{52.} Interview by Neil Conan, "Talk of the Nation," National Public Radio with Jonathan Tucker, author—War of Nerves: Chemical Warfare from World War I to Al-Qaeda (2006), (May 8, 2006) (Mr. Tucker: "Hitler, during one of the final battles of World War I, had been exposed to mustard gas and temporarily blinded, which was a deeply traumatic experience. So he had a deep aversion to chemical weapons. And even though members of the Nazi inner circle, such as Goeble, Borman, and Lye(ph), advocated on many occasions for the German use of the nerve agents against the Red Army; Hitler always equivocated, could not make up his mind, I think in part, because of his deep aversion to these weapons."), available at http://m.npr.org/story/5390710; Barton J. Bernstein,

also contributed to keeping chemical weapons off the European battlefield during World War II. However, the Third Reich preferred the use of poison gas as an execution method during the Holocaust in the extermination camps of German occupied Europe. Once again, a German company led the effort. IG Farben, a conglomerate that included the same German chemical companies that had developed chemical weapons for use against Allied forces in the First World War, 53 worked hand-in-glove with Hitler's S.S. to produce the lethal Zyklon-B poison gas used to murder prisoners at Auschwitz and other camps. 54

After World War II, German companies returned to non-weaponized chemical production. Eventually, NATO allies such as the United States began storing chemical weapons in West Germany during the Cold War. ⁵⁵ Late in the Cold War, German corporations began exporting their chemical weapons expertise. It was during the 1980s that the web of relationships between the German industry and Saddam Hussein's repressive regime in Iraq began to take shape, as leading German chemical companies yet again turned back to poison gas production.

Saddam Hussein pursued the acquisition of nuclear weapons without success; yet his team had made some progress with the construction of a reactor. However, the 1981 bombing of Iraq's nuclear reactor at Osirak by the Israeli Air Force shattered that goal. This defeat drove, in part, Saddam's interest in chemical weapons production. ⁵⁶

Saddam had been counting on obtaining the bomb within a matter of months, if not years. With that hope shattered, he had to turn elsewhere for strategic "reach." He wanted weapons capable of inflicting great damage on Israel. And what could be worse to Holocaust-conscious Jews . . . than poison gas?⁵⁷

After approaching Western powers for assistance, it was the West Germans who proved most willing to help Saddam in this sinister endeavor. 58

Why We Didn't Use Poison Gas in World War II, 36 Am. Heritage (Aug.-Sept. 1985), available at http://www.americanheritage.com/content/ why-we-didn%E2%80%99t-use-poison-gas-world-war-ii?page=3; but see, Tom Kelly, British Mustard Gas Attack Didn't Blind Hitler: His Invented Trenches Myth Concealed Bout Of Mental Illness, Daily Mail, Oct. 21, 2011, available at http://www.dailymail.co.uk/news/article-2051829/Mental-illness-Hitler-blind-British-mustard-gas-attack.html#ixzz25Bf3GNsr.

- 53. Stokes, *supra* note 8, at 214. The companies that formed the new IG Farbenindustrie Aktiengesellschaft in October 1925 were Agfa, BASF, Bayer, Höchst, Chemische Fabrik Griesheim-Elektron, and Chemische Fabriken vorm. Weiler-ter Meer.
 - 54. Id. at 330.
- 55. Warren Weaver, Jr., Germ War Curb Voted in Senate, N.Y. TIMES, Aug. 12, 1969, at A1, A24.
 - 56. KENNETH R. TIMMERMAN, THE DEATH LOBBY: HOW THE WEST ARMED IRAQ 104 (1991).
 - 57. *Id*
- 58. See generally id. at 105 ("Over the next ten years, Germans worked shoulder to shoulder with Iraqi chemists, ballistics engineers, and nuclear scientists to develop one of the most diversified arsenals of unconventional weapons Senator Jesse Helms . . . called these companies and their cohorts 'Saddam's Foreign Legion.'").

It should be noted that German corporate support for the development of chemical weapons extended beyond just Iraq. German companies also provided chemical weapons capabilities to the repressive regimes of Iran and Libya. ⁵⁹ The clearest example of support for the Iranian program involved Dusseldorf-based Rheineisen Chemical Products, which attempted to arrange the transport of 257 tons of thionyl chloride (used to produce mustard gas) from India to Iran via Dubai on a German freighter in 1989. ⁶⁰ With respect to Libya, the United States identified Preussag AG of Hanover, Pilot Plant GmbH of Dreieich, Pen Tsao Materia Medica Center Ltd. of Hamburg, and Ihsan Barbouti International of Frankfurt as key corporate players assisting the Qaddaffi regime in building a poison gas factory at Rabta, south of Tripoli. ⁶¹

However, while Iranian and Libian chemical weapons were not deployed to further genocide, in Iraq, this is exactly what happened. If the oft-repeated mantra emanating from the Holocaust "never again" means anything, it means at a minimum that German corporations cannot be permitted to provide those determined to carry out genocide with the means to do so.

II. THE CRIME: GENOCIDE IN KURDISTAN

Masked by the closing salvos of the long-drawn out Iran-Iraq War, the quiet genocide of the Kurdish people in northern Iraq went unnoticed for many years. But ghosts who perished in such a way do not rest long.

On April 15, 1987, Iraqi aircraft dropped poison gas on the [Kurdistan Democratic Party] headquarters at Zewa Shkan, close to the Turkish border in Dohuk governorate, and the [Patriotic Union of Kurdistan] headquarters in the twin villages of Sergalou and Bergalou, in the governorate of Suleimaniyeh. The following afternoon, they dropped chemicals on the undefended civilian villages of Sheikh Wasan and Balisan, killing well over a hundred people, most of them women and children. Scores of other victims of the attack were abducted from their hospital beds in the city of Erbil, where they had been taken for treatment of their burns and blindness. They have never been seen again. These incidents were the first of at least forty documented chemical attacks on Kurdish targets over the succeeding eighteen months. ⁶²

^{59.} William Tuohy, Bonn to Probe Charges That Firms Helped Iran with Toxic Weapons, L.A. Times, Jan. 30, 1989: See also Conflict Records Research Ctr., General Military Intelligence Directorate Memos on Iran's Chemical Weapons Capability and Alleged Use (1987-88), available at http://www.ndu.edu/inss/docuploaded/SH-GMID-D-000-898_English.pdf (captured Iraqi military intelligence documents indicating the conviction of Iraqi intelligence that West German companies were actively building and converting chemical plants into factories with poison gas capabilities).

^{60.} Ferdinand Protzman, *German Company Admits Role in Iran Chemical Sale*, N.Y. TIMES, June 29, 1989, *available at* http://www.nytimes.com/1989/06/29/world/german-company-admits-role-in-iran-chemical-sale.html.

^{61.} Robert J. McCartney, Bonn Names Four More Firms Linked by U.S. to Libya, WASH. POST, Jan. 10, 1989, at A16.

^{62.} Introduction to Human Rights Watch, Genocide in Iraq: The Anfal Campaign

The tragedy that befell the Kurdish people in 1987 and 1988 was a deliberate genocide, executed over a series of military campaigns known collectively as "the Anfals"—or the spoils of war. 63 This term was taken from the Eighth Sura of the Qur'an in "which followers of Mohammed pillage the lands of nonbelievers." 64 Saddam's massive movement of Sunni Arabs onto depopulated Kurdish lands ensured that he would gain control over the extensive oil reserves of northern Iraq. 65 In all, Saddam's savage attacks which sought to wipe out the Kurds in the north of his country cost up to 100,000 lives. 66

Genocide is the mass elimination of a group of people based upon a shared trait like ethnicity or religion. The paradigmatic genocide was the Holocaust. Jews were targeted for eradication *en masse* because of the fact that they were Jews. Although earlier genocides occurred, the magnitude and savageness of the Holocaust made it difficult to ignore. Indeed, the Holocaust spurred the world to rally against genocide: the newly formed U.N. passed a resolution condemning it in 1946⁶⁷ and a treaty criminalizing it in 1948.⁶⁸ The legal definition contained in the treaty and subsequent statutes creating international criminal tribunals with jurisdiction over genocide is:

[A]ny of the following acts committed with intent to destroy, in whole or in part, a national, ethnical, racial or religious group, as such:

- (a) Killing members of the group;
- (b) Causing serious bodily or mental harm to members of the group;
- (c) Deliberately inflicting on the group conditions of life calculated to bring about its physical destruction in whole or in part;
- (d) Imposing measures intended to prevent births within the group;
- (e) Forcibly transferring children of the group to another group.69

Courts in Iraq and abroad have recognized the Anfal campaign against the Kurds as genocide.⁷⁰ But what was the context? What led to the Iraqi regime's determination that it must eradicate the Kurds living in northern Iraq? To answer

AGAINST THE KURDS (1993) [hereinafter HUMAN RIGHTS WATCH REPORT], available at http://hrw.org/reports/1993/iraqanfal/.

65. Michael J. Kelly, The Tricky Nature of Proving Genocide Against Saddam Hussein Before the Iraqi Special Tribunal, 38 CORNELL INT'L L.J. 983, 988-89 (2005).

- 67. The Crime of Genocide, G.A. Res. 96 (I), U.N. Doc. A/RES/96(I) (Dec. 11, 1946).
- 68. Convention on the Prevention and Punishment of the Crime of Genocide, Dec. 9, 1948, 78 U.N.T.S. 277 [hereinafter Genocide Convention].
 - 69. Id. art. II.

70. Dana Michael Hollywood, *The Search For Post-Conflict Justice In Iraq: A Comparative Study of Transitional Justice Mechanisms and Their Applicability to Post-Saddam Iraq*, 33 BROOK. J. INT'L L. 60, 114-15 (2007); Huisman & van Sliedregt, *supra* note 37, at 805.

^{63.} David Johns, *The Crimes of Saddam Hussein: The 1988 Anfal Campaign*, FRONTLINE/WORLD (Jan. 24, 2006), http://www.pbs.org/frontlineworld/stories/iraq501/events_anfal.html.

^{64.} Id.

^{66.} Harold Hongju Koh, On American Exceptionalism, 55 STAN. L. REV. 1479, 1520, n.126 (2003).

that question, one must understand the sectarian situation in modern Iraq, which cannot be decoupled from its historic origin.

The political borders of Iraq cross many ethno-religious lines, including Shiites in the south and Kurds in the north. Modern Iraq was created from three provinces of the collapsed Ottoman Empire. This blending of Sunni Arabs, Shi'ite Arabs, and Sunni Kurds was designed by the Foreign Office in London following World War I, but it was not agreed to among the constituent groups. Further, Kurdish and Shi'ite groups generally opposed the rule of Saddam Hussein who came from the minority Sunni Arab sect. The south of the south of the section of the south of the south of the section of the south of the section of the s

Thus, after becoming president of Iraq in 1979, Saddam began strengthening his military in order to counteract hostile opposition within Iraq as well as from Iran, Israel, and Syria. Saddam sought weapons from technologically advanced Western states and the Soviet Union. Under Saddam, Iraq developed its chemical and biological weapons programs, coming to possess what some argued to be "the largest, and possibly the most sophisticated chemical weapons program in the Third World" at that time.

During the Iran-Iraq War, Saddam used these weapons of mass destruction against Iran and his own people. In order to assert and maintain his power during the war, Saddam initially used chemical weapons against Kurdish insurgents supporting Iran from within Iraq.⁷⁷ It was not until the close of the war that he turned the full force of his arsenal against the Kurdish civilian population. Figure 2 below delineates confirmed chemical weapons attacks by the Baghdad regime against Iranian and Kurdish targets over a five year period.⁷⁸

^{71.} MARGARET MACMILLAN, PARIS 1919 395-409 (2001).

^{72.} See Vera Beaudin Saeedpour, Establishing State Motives for Genocide: Iraq and the Kurds, in GENOCIDE WATCH 59, 67-68 (Helen Fien ed., 1992).

^{73.} Neil MacFarquhar, Saddam Hussein, Defiant Dictator who Ruled Iraq with Violence and Fear, Dies, N.Y. TIMES, Dec. 30, 2006.

^{74.} *Id*.

^{75.} Jochen Hippler, *Iraq's Military Power: The German Connection*, 21 MIDDLE E. REP. 168 (Jan./Feb. 1991), *available at* http://www.merip.org/mer/mer168/iraqs-military-power-german-connection.

^{76.} Id.

^{77.} Ibrahim al-Marashi, Saddam's Iraq And Weapons of Mass Destruction: Iraq as a Case Study of a Middle Eastern Proliferant, 8 MIDDLE E. REV. OF INT'L AFF. 81 (Sept. 2004), available at http://meria.idc.ac.il/journal/2004/issue3/jv8n3a6.html.

^{78.} CENT. INTELLIGENCE AGENCY, IRAQ'S WEAPONS OF MASS DESTRUCTION PROGRAMS 8 (2002), available at https://www.cia.gov/library/reports/general-reports-1/iraq_wmd/Iraq_Oct_2002.htm#02.

Figure 2

Documented Iraqi Use of Chemical Weapons				
Date	Area Used	Type of Agent	Approximate Casualties	Target Population
Aug 1983	Hajj Umran	Mustard	fewer than 100	Iranians/Kurds
Oct-Nov 1983	Panjwin	Mustard	3,000	Iranian/Kurds
Feb-Mar 1984	Majnoon Island	Mustard	2,500	Iranians
Mar 1984	al-Basrah	Tabun	50 to 100	Iranians
Mar 1985	Hawizah Marsh	Mustard/Tabun	3,000	Iranians
Feb 1986	al-Faw	Mustard/Tabun	8,000 to 10,000	Iranians
Dec 1986	Umm ar Rasas	Mustard	thousands	Iranians
Apr 1987	al-Basrah	Mustard/Tabun	5,000	Iranians
Oct 1987	Sumar/Mehran	Mustard/nerve agents	3,000	Iranians
Mar 1988	Halabjah	Mustard/nerve agents	hundreds	Iranians/Kurds

Saddam's forces, commanded by General Ali Hassan al-Majid, employed a variety of chemical weapons during the Anfal campaign, including mustard gas (blistering agent) and Sarin (a nerve agent known as GB). Gen. al-Majid's penchant for this method of extermination earned him the sobriquet "Chemical Ali" and a fearful reputation for brutality almost matching that of Saddam himself. Peter Galbraith, who secured the documentary evidence of chemical weapons use against the Kurds during the Anfal campaign for the U.S. Senate, characterized al-Majid as "almost the Josef Mengele of [the Anfal] operation," referring to the Nazi doctor who carried out experiments on Jews. "It was a deadly experiment to see which of these weapons were the most effective." 80

One survivor of al-Majid's April 1987 chemical attacks on Kurdish villages in the Balisan valley described the effect of the pink, gray, and yellow gases drifting through the towns:

"It was all dark, covered with darkness, we could not see anything It was like a fog. And then everyone became blind." Some vomited. Faces turned black; people experienced painful swellings under the arm, and women under their breasts. Later, a yellow watery discharge would ooze from the eyes and nose. Many of those who survived suffered severe vision disturbances, or total blindness for up to a month Some villagers ran into the mountains and died

^{79.} Chemical Ali: Alive and Held, CBS NEWS, Feb. 11, 2009, http://www.cbsnews.com/2100-500257 162-548099.html.

^{80.} *Id*.

there. Others, who had been closer to the place of impact of the bombs, died where they stood.⁸¹

All told, the Anfal campaign against the Kurds claimed between 50,000 and 100,000 lives by a conservative estimate.⁸² However, no single action accounts for all the casualties. There were multiple mass murders, multiple mass disappearances, forced displacement of hundreds of thousands of noncombatants, destruction of 2,000 villages that were classified in Iraqi government documents as "burned," "destroyed," "demolished," or "purified," and the razing of a dozen larger Kurdish towns and administrative centers.⁸³

The lethal combination of methods employed against the Kurds during the eight Anfals form the most complete picture of genocide. Although the successive gassings were perhaps the starkest examples of Saddam's genocidal acts, conventional killings by shooting and bombardments were also employed. For instance, the regime sent the vast majority of Kurdish "detainees" to the Iraqi army base at Kirkuk known as Topzawa. Here, soldiers registered and segregated them. They loaded the adult and teenage males onto closed trucks and took them to the execution grounds at places, where they lined them up next to large pits and shot them. So Once the trenches were full, they covered the bodies.

Exposure to the inhumane conditions of the concentration camps was an indirect method of killing, but nonetheless effective. The elderly were mostly bused to a concentration camp at Nuqrat al-Salman in the Iraqi desert, where death rates averaged four to five per day from exposure and infection. ⁸⁷ Women and children went elsewhere. They were usually taken to Dibs, a camp close to the Kirkuk-Mosul highway, where many of the children succumbed to dysentery and malnutrition. About half of the women were taken to death pits. ⁸⁸

Forced deportation, typically accompanied by the razing of villages, was also a common feature of the Anfals. By the end of the campaigns, Iraqi forces had forcibly "resettled" 1.5 million Kurds. ⁸⁹ This was part of Saddam's overall scheme to rearrange Kurdistan in northern Iraq, placing more key areas under Arab control. During this process, 60,000 Kurds fled into southeastern Turkey,

^{81.} DAVID McDowall, A Modern History of the Kurds 353 (1996) (quoting Human Rights Watch Report, *supra* note 62, at 62).

^{82.} Michael Leezenberg, *The Anfal Operations in Iraqi Kurdistan*, *in* CENTURY OF GENOCIDE: EYEWITNESS ACCOUNTS AND CRITICAL VIEWS 379 (Samuel Totten, William Parsons, Israel Charny eds., 1997).

^{83.} See HUMAN RIGHTS WATCH REPORT, supra note 62.

^{84.} Leezenberg, supra note 82, at 377-78.

^{85.} Id. at 378.

^{86.} McDowall, supra note 81, at 359.

^{87.} Leezenberg, *supra* note 82, at 378-79.

^{88.} McDowall, supra note 81, at 360.

^{89.} Id.

exacerbating the refugee problems felt by the anxious government in Ankara at that time. 90

The gassing of Halabja, however, was the single most horrific incident during this notorious campaign, accounting for about 5,000 of the approximately 100,000 Anfal deaths. Halabja has become emblematic of the Kurdish genocide, much as Srebrenica has become so for the Bosnian genocide. Rebel Iraqi Kurds captured Halabja in 1988 with support from Iranian forces; crushing the resistance there became an ultimate priority for Saddam.

According to a 2002 U.S. State Department report, al-Majid's coldly diabolical approach can be discerned from his methodology of extermination. Strowing that the gasses he intended to use were heavier than air and would sink, al-Majid opened the March 16, 1988 attack on Halabja with several hours of conventional artillery bombardment to drive the local Kurdish population down into tunnels, cellars, and basements. Those underground shelters became gas chambers as al-Majid unleashed his bombardment of poison. Aboveground, animals died and birds dropped out of trees. Belowground, humans met their end, trapped. Those who managed to scramble to the surface emerged into thick clouds of chemical gas:

Dead bodies—human and animal—littered the streets, huddled in doorways, slumped over the steering wheels of their cars. Survivors stumbled around, laughing hysterically, before collapsing.... Those who had been directly exposed to the gas found that the symptoms worsened as the night wore on. Many children died along the way and were abandoned where they fell. ⁹⁴

As photos of dead children crumpled on steps or lying contorted and bleached in the streets reached the world, the human rights community released an outcry. But the international community of states responded with muted silence. 95 None could offer much beyond platitudes, as they all had backed Saddam during the Iran–Iraq War with arms and financing. Indeed, Germany is

- 90. Id.; MICHAEL M. GUNTER, THE KURDS OF IRAQ: TRAGEDY AND HOPE 45 (1992).
- 91. Brenda K. Uekert, Rivers of Blood: A Comparative Study of Government Massacres 71 (1995).
 - 92. INT'L INFO. PROGRAMS, U.S. DEP'T OF STATE, IRAQ: FROM FEAR TO FREEDOM 4 (2002).
 - 93. Jeffrey Goldberg, *The Great Terror*, THE NEW YORKER, Mar. 25, 2002, at 52.
- 94. MCDOWALL, *supra* note 81, at 358 (quoting HUMAN RIGHTS WATCH REPORT, *supra* note 62, at 106). Agiza, who was eight years old and out in the fields when her village near Bahdinan was gassed, remembered seeing the planes come in and dropping the bombs. She recalled an experience similar to those recounted by survivors of Halabja:

It made smoke, yellowish-white smoke. It had a bad smell like DDT, the powder they kill insects with. It had a bitter taste I saw my parents fall down with my brother after the attack, and they told me they were dead. I looked at their skin and it was black and they weren't moving. And I was scared and crying and I did not know what to do. I saw their skin turn dark and blood coming out from their mouths and from their noses. I wanted to touch them but they stopped me and I started crying again.

Id. at 359 (quoting Robert Mullan Cook-Deegan et al., Physicians for Human Rights, Winds of Death 3 (1989)).

95. Id. at 362.

widely considered to have been the industrial origin of the gas used in 1988 by al-Majid during the Anfal campaign. ⁹⁶

Three years after the Anfals, in 1991, the Kurds rose up against Saddam in the wake of his defeat in the Persian Gulf War. But they were crushed by Iraqi armed forces. Ironically, perhaps motivated by guilt for its involvement in the 1988 gassings, Germany argued at the U.N. for military intervention against Saddam's repression of the 1991 Kurdish uprising: "Germany . . . warned that the treatment of the Kurdish population in northern Iraq in 1991 'harbor[ed] the danger of genocide' as a result of '[t]he persecution of this ethnic group' and argued that 'the armed repression against it must be stopped.""97 However, no concerted effort materialized beyond the United States declaring and enforcing a "no-fly zone" over Iraqi Kurdistan to protect the Kurdish people from Saddam's air power.

Although they were clearly aware of Saddam's animus toward the Kurds in 1991, were the Germans aware of his intent to destroy the Kurds in the 1980s? Saddam clearly possessed the requisite intent to destroy the Kurdish people "in whole or in part" as required to prove the crime of genocide. 98 Eyewitness

There is something else that sets Halabja apart from other known chemical weapons attacks—including the Aum Shinrikyo attack on the Tokyo subway in 1995. The Halabja attack involved multiple chemical agents—including mustard gas, and the nerve agents SARIN, TABUN and VX. Some sources report that cyanide was also used. It may be that an impure form of TABUN, which has a cyanide residue, released the cyanide compound. Most attempts directed to developing strategies against chemical or biological weapons have been directed towards a single threat. The attack on Halabja illustrates the importance of careful tactical planning directed towards more than one agent, and specific knowledge about the effects of each of the agents.

Exposed civilians are particularly at risk if a war strategy aims to produce civilian casualties on a large scale. Developing medical treatment regimes for trained military personnel, who are generally young, healthy and of approximately the same weight and size, is challenging enough. But the demands of developing effective treatment regimes for children, the elderly and infirmed (sic.) is even more daunting. And the task is ever more daunting when having to treat a chemical weapons "cocktail."

Saddam Hussein clearly intended to complicate the task of treating the Halabja victims. At a minimum, he was using Halabja as part of the Iraqi CW test program. Handbooks for doctors in Iraqi military show sophisticated medical knowledge of the effects of CW. The Iraqi military used mustard gas in the "cocktail," for which there is no defense or antidote. And it is also worth noting that Saddam did NOT use the nerve agent SOMAN, but instead used TABUN, SARIN and VX, as I said above. This is noteworthy because it shows that Hussein's experts were also well aware that pyridostigmine bromide—one of the chief treatments against nerve agent—is relatively ineffective against TABUN, SARIN and VX, but highly effective against SOMAN, the only agent he DID NOT use.

^{96.} *Id.* at 363. TIMMERMAN, *supra* note 56, at 293.

^{97.} Dino Kritsiotis, *Reappraising Policy Objections to Humanitarian Intervention*, 19 MICH. J. INT'L L. 1005, 1045 (1998) (quoting U.N. SCOR, 2982 mtg. at 73, U.N. Doc S/PV.2982 (Apr. 5, 1991)).

^{98.} See Gosden Congressional Testimony, supra note 4.

testimony established that Saddam possessed specific intent to commit genocide against the Kurds:

One of the president's bodyguards brought 30 prisoners out. They were Kurds. The president himself shot them one after another with a Browning pistol. Another 30 prisoners were brought and the process was repeated. Saddam Hussein was laughing and obviously enjoying himself. There was blood everywhere—it was like an abattoir 99

More specifically, further testimony established that Saddam intended to commit genocide by employing chemical weapons:

[W]e monitored... radio communications between the political and military leadership.... Saddam Hussein briefed the assembled commanders that there would be a chemical attack on Halabja and that soldiers should wear protective clothing.... I heard a telephone conversation between Saddam Hussein and Ali Hassan al-Majid. Saddam ordered him to form a working group.... After the meeting Ali Hassan al-Majid returned to the area HQ.... Aerial pictures of Halabja after the attack were shown to Saddam Hussein and other members of the Revolutionary Command Council. 100

With Saddam's intent established, it must be shown that the Germans were cognizant of what would occur. Once the *genocidaire*'s intent is established, it can then be transferred via knowledge to those who support him; thus, proving the separate specific intent of the accomplices is not required. The extent of knowledge and complicity by German chemical corporations is discussed in next part.

III. THE ACCOMPLICES: GERMAN CORPORATE COMPLICITY

German corporations are guilty of criminal acts for their complicity in arming Saddam Hussein to carry out his genocide against Iraqi Kurds, even though their complicity did not violate two of the most important chemical weapons treaties. The trade in chemical weapons technology that these companies conducted was not a violation of international chemical weapons law. The 1925 Geneva Convention only prohibited the use of chemical weapons (CW), not their possession. ¹⁰¹ The more comprehensive Chemical Weapons Convention, ¹⁰² which outlawed CW possession entered into force in 1997—well after the technology was transferred from Germany to Iraq.

^{99.} Nicholas Watt, *Death Penalty A Possibility, PM Says*, THE GUARDIAN, Dec. 16, 2003; Paul Reynolds, *How Saddam Could Embarrass the West*, BBC NEWS, Dec. 16, 2003, *available at* http://news.bbc.co.uk/2/hi/middle_east/3324053.stm.

^{100.} MICHAEL J. KELLY, GHOSTS OF HALABJA: SADDAM HUSSEIN & THE KURDISH GENOCIDE 40 (2008) (quoting *Witness Statements: First Hand Accounts from Saddam's Brutal Regime*, INDICT (Oct. 31, 2004), http://www.indict.org.uk/witnessdetails.php?target=Saddam).

^{101.} Geneva Convention on Chemical Weapons, June 17, 1925, 26 U.S.T. 571.

^{102.} Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on their Destruction, Sept. 3, 1992, 32 I.L.M. 800. Germany signed the CWC in January 1993 and deposited their ratification in December 1994. Iraq signed the CWC in

These transfers, however, were a violation of domestic German law. But the German bureaucracy charged with enforcing the law prohibiting the export of weapons technology to areas of tension (such as Iraq) was lax. 103 Consequently, even though export laws may have been in place to restrict the kind of trade German chemical companies sought to undertake, they were easily evaded. "German export controls were... weak. The German Federal Economic Authority in Eschborn, responsible for enforcing what controls did exist, was a poor stepchild of the Economics Ministry. Hopelessly understaffed, its performance was rated in Bonn more by its ability to process license applications quickly than to catch potential offenders." 104

Chancellor Helmut Kohl initially reacted to American diplomats' numerous reports of export violations by West German companies by denying the accusations. However, overwhelming evidence to the contrary continued to pile up and forced the government in Bonn to open investigations. Eventually, German prosecutors brought cases against German companies for breaching export laws in their trade with Iraq, but these cases were largely unsuccessful.

Indeed, German companies were very careful to carry on trade with Iraq in a manner that would skirt German law. A 1991 report for the Middle East Research and Information Project describes some of the methods used to do so. Prominent firms, such as MBB, now owned by Daimler-Benz, or Degussa, are important to the process, but they work hard to never make an appearance. ¹⁰⁷

Whether with rocket projects or the superbomb for Iraq, MBB only researches and develops; the murderous hardware itself is sent by NATO allies to foreign countries. The dirty work in Iraq is mainly done by firms which are run by former MBB people; the company itself remains outwardly clean.

There are various ways of doing this. In some cases, arms are exported to another country, such as France, and then re-exported to Germany. MBB exported BK-116 and BO-105 helicopters to Iraq using US, British or Spanish intermediaries. Another technique is for MBB employees to leave and set up new firms with the contacts and technology originally developed by MBB. A third

January, 2009 and it entered into force for them the following month.

^{103.} See Marshall, supra note 20.

^{104.} *Id.* ("Senior officials at the Eschborn authority . . . believe that even *some of the country's most respected companies knowingly falsified information on export license applications*, apparently confident that it would not be followed up. The authority, for example, routinely issued export approvals to the prestigious Gildemeister machine-tool company, prime contractor for the \$1-billion Saad 16 project at Mosul, 175 miles north of Baghdad, accepting the company's description of the facility as a university research center. Saad 16 was later assessed to be the most ambitious weapons testing and research center in the Arab world. 'It's my conviction that the company knew what it was doing,' said Hans-Dieter Corvinus, director of the export-control division at Eschborn.") (emphasis added).

^{105.} TIMMERMAN, supra note 56, at 186.

^{106.} Id. at 187.

^{107.} Hippler, supra note 75 (citations omitted) (quoting Der Weg des Teufels: Geheimdienstler und Staatsanwälte sind einem Bonner Waftenmakler auf der Spur, DER SPIEGEL, Oct. 1, 1990, at 99.).

technique is to co-produce weapons with a foreign company that is not under the same restrictions as companies in Germany. Iraq has bought 5,000 HOT anti-tank missiles and 166 launchers, plus more than 4,500 Milan missiles. In addition, Iraq ordered 1050 Roland anti-aircraft missiles. This arms trade, which would be illegal in Germany, was carried out through the France-based Euromissile company, which is 50 percent owned by MBB. ¹⁰⁸

Beyond the violations of national law, an even greater implication here is the violation of international criminal law. While the sale of chemical weapons technology by German companies to Iraq was neither a breach of the 1925 Geneva Protocol nor a war crime, Saddam's use of those weapons against Iranian troops was both. Similarly, while those transactions were, in and of themselves, neither crimes against humanity nor genocide, Saddam's use of chemical weapons against the civilian population of Kurdistan was both. German corporations supplied him the means to commit all of these crimes.

What is the appropriate knowledge standard that should be used to prosecute corporations for genocide? As stated earlier, the nature of corporate involvement in genocide is such that a company is unlikely to commit overt acts such as direct killings. Instead, the company's actions would be indirect—in the form of support for the *genocidaire*. Thus, complicity or aiding and abetting would be the appropriate tool for prosecuting corporations.

While there is a general agreement about the elements involved with the theories of complicity and aiding and abetting, some interpretive disconnect still exists among international courts. Consequently, the International Court of Justice (ICJ), in deciding that states could be complicit in genocide by failing to prevent it, and the *ad hoc* criminal tribunals, ruling on the actual commission of the crime, have rendered decisions that should be read together. Both the ICTY and the ICTR view complicity of an accomplice as depending on a predicate offence. The ICJ, though, defines complicity only with aiding and abetting. ¹⁰⁹

^{108.} Id

^{109.} Amabelle C. Asuncion, *Pulling the Stops on Genocide: The State or the Individual?*, 20 EUR. J. INT'L L. 1195, 1214-15 (2009). The nuances of the reading of these decisions together can lead to higher or lower proof standards for knowledge depending upon which line of reasoning is followed:

Still, the elements are not exactly the same. Individuals can be liable for aiding and abetting genocide if they: (i) render practical assistance, encouragement, or moral support to the principal which had substantial effect on the commission of the crime; (ii) knowing that the acts assisted in the commission of the specific crime; and (iii) knowing that the crime was committed with specific intent. On the other hand, the ICJ inquires into the following elements: (i) furnishing aid or assistance with knowledge of the perpetrators' specific intent; and (ii) that the act is wrongful. Notably, the ICJ does not elaborate on the type of aid or assistance. Case law shows, however, that while the ICTY and the ICTR construe 'assistance' to include encouragement and moral support, the ICJ limits it to political, military, and financial aid.

Another significant difference is the value of the assistance to the perpetration of the act. To the ad hoc tribunals, the assistance must be substantial but need not be a condition precedent for the perpetration of the crime, and it may occur before, during, or after the crime. It may include a commander permitting the use of resources under

"[T]he *ad hoc* tribunals recognize three forms: procuring means used to commit genocide, aiding or abetting a perpetrator of genocide, and instigation. All three tribunals agree, however, that the abettor need not possess genocidal intent, but rather must only know that he is aiding genocide." ¹¹⁰

Under either the "aiding or abetting" or "complicity" rubrics, German corporations could be prosecuted for genocide. The main difference yielded by the competing interpretations of theories of liability involves the proof of knowledge required. Attempts to defeat proof of knowledge would certainly include the defense of ignorance. For example, a high official of Germany's federal customs office explained in an interview that "98 percent of arms exports are shipped in parts, making them difficult to track. Many goods also fall in the

his control. Conversely, substantiality of support was insufficient to engage the [Federal Republic of Yugoslavia's (FRY)] responsibility. Despite the ICJ's finding that the FRY's military and financial support for the Republika Srpska was so considerable that its withdrawal would have compromised the latter's operations, the FRY's responsibility turned on two questions: whether the acts of the Republika Srpska and its organs were attributable to the FRY; and whether the FRY had knowledge of the Republika Srpska's intent.

The first issue appears to require 'control' over the organs benefiting from the aid, which the ICJ interprets to mean 'complete dependence'. Assistance unaccompanied by this control will not imply responsibility. The second issue presents an alternative theory for state responsibility based on rendering assistance, and that is knowingly extending assistance for the commission of genocide. This theory relies on the factual appreciation of the element of 'knowledge', and the ICJ requires 'full awareness' that the aid supplied would be used for genocide. The ICJ thus ruled that it was not established beyond doubt that the FRY was clearly aware that genocide was about to be committed because the decision to commit the same was not brought to the FRY's attention. Yet, in a later paragraph, the ICJ admits that despite the absence of actual knowledge, the circumstances could suggest intent to commit genocide:

Nevertheless, given all the international concern about what looked likely to happen at Srebrenica, given Milosević's own observations to Mladić, which made it clear that the dangers were known and that these dangers seemed to be of an order that could suggest intent to commit genocide, unless brought under control, it must have been clear that there was a serious risk of genocide in Srebrenica.

In contrast, the ICTR inferred Blagojević's knowledge of the perpetrators' intent from the surrounding circumstances: the evacuation of the entire Bosnian Muslim population from Srebrenica; the separation of Bosnian Muslim men from the rest of the population; the forcible transfer of women and children; and the detention of Bosnian Muslim men in inhumane conditions. Although knowledge is an important element in aiding and abetting, the ICTR appreciates that it is to a certain extent a mental state like intent, so it also applied the inference theory. The ICJ, however, chose to apply a strict standard of proof such that the FRY was held free of responsibility for financing the Republika Srpska's operations.

Id. (citing Prosecutor v. Akayesu, Case No. ICTR 96-4-T, Judgment, ¶ 503, 540 (Sept. 2, 1998)); Prosecutor v. Blagojević, Case No. IT-02-60-T, Judgment, ¶ 127, 779, 782 (Int'l Crim. Trib. for the Former Yugoslavia Jan. 17, 2005); Application of the Genocide Convention (Bosn. & Herz. v. Serb. & Montenegro), 2007 I.C.J. 43, ¶ 87, 151, 158 (Feb. 26).

110. Asuncion, supra note 109.

'dual-use' category, allowing companies to claim they did not know their equipment was destined for military use "111

However, modern multinational corporations cannot deny knowledge of either their operations, destination of their products, or character of their trading partners. Pecifically, German corporations that supplied Saddam Hussein with components that could be used in a chemical weapons program knew that he was in fact doing exactly that. Iraq's use of chemical weapons against Iran during the 1980-88 Iran-Iraq War (outlined in Figure 2 above) was widely reported in the international press. 113

[T]he United Nations reported [in 1986] . . . that Iraq had used chemical weapons "on many occasions" against Iranian forces in the Persian Gulf war. Mustard gas

111. Nesha Starcevich, *Many German Firms Helped Build Iraqi Arsenal*, AP NEWS, Oct. 29, 1990, *available at* http://www.apnewsarchive.com/1990/Many-German-Firms-Helped-Build-Iraq-s-Arsenal/id-92b14b92d9adca36724138a6a8eefbc9 ("'Made in Germany' appears on much of Iraq's mighty arsenal, from missiles to poison gas, rocket fuel to helicopters. Six Iraqi poison gas plants were built with German help.").

112. See THOMAS L. FRIEDMAN, THE WORLD IS FLAT 357-58 (2005). Thomas Friedman deftly pointed out in his interview with IBM's vice president for business consulting services, Laurie Tropiano, that MNCs are aware of what business they are doing:

What Tropiano and her team at IBM do is basically X-ray your company and break down every component of your business and then put it up on a wall-size screen so you can study your corporate skeleton. Every department, every function, is broken out and put in a box and identified as to whether it is a cost for the company or a source of income, or a little of both, and whether it is a unique core competency of the company or some vanilla function that anyone else could do possibly cheaper and better.

"A typical company has forty to fifty components," Tropiano explained . . . , as she displayed a corporate skeleton up on her screen, "so what we do is identify and isolate these forty to fifty components and then sit down and ask [the company], 'How much money are you spending in each component? Where are you best in class? Where are you differentiated? What are the totally nondifferentiated components of your business? Where do you think you have capabilities but are not sure you are ever going to be great there because you'd have to put more money in than you want?""

When you are done, said Tropiano, you basically have an X-ray of the company, identifying four or five "hot spots." One or two might be core competencies; others might be skills that the company wasn't fully aware that it even had and that should be built up. Other hot spots on the X-ray, though, might be components where five different departments are duplicating the same functions or services that others outside the company could do better and more cheaply and so should be outsourced

113. See, e.g., Bernard Gwertzman, U.S. Restricts Sale of 5 Chemicals to Iraq After Poison Gas Report, N.Y. TIMES, Mar. 31, 1984, at A1 ("[T]he State Department confirmed a report in The New York Times today that quoted American intelligence officials as saying they had evidence that Iraq had used nerve gas against Iran. Earlier the United States said it was convinced that Iraq had also used mustard gas, a blistering agent."). Claude van England, Iraq's Strategies Get a Desperate Edge, CHRISTIAN SCIENCE MONITOR, Apr. 4, 1984, at 18 ("[A]ccusations that the Iraqis are using chemical weapons have multiplied. Iraq denies employing any such nerve or mustard gas, but a United Nations investigation team confirmed that chemical weapons had been used in the war. And doctors in Europe, where some Iranian casualties have been treated, confirmed that the soldiers were suffering from toxic poisoning."); Paul Keel, Victim of Gulf War Gas Burns Critical in London Hospital, The GUARDIAN, Mar. 28, 1985.

was the agent most commonly used by the Iraqis, but nerve gas was also used \dots "[T]he use of chemical weapons appears to be more extensive than in 1984."

Indeed, by 1985, five years into the Iran-Iraq War, "150 German companies had opened offices in Baghdad, and scores of them would later be cited for their involvement in building Iraq's growing arsenal of unconventional weapons." 115

So by the time of Saddam's gassing of the Kurdish population in 1988, the entire international community, including German MNCs, knew of his chemical capabilities and, given his widely known disdain for the Kurds, could surmise his specific intent to eliminate them if he had the chance. At a bare minimum, the companies would have known of his intent to pursue chemical weapons production. According to Gary Milhollin, Director of the Wisconsin Project, a Washington-based research group on weapons proliferation, "[i]f you look at the scale and frequency of the exports of some of these companies, it's clear that they were deeply involved in Iraq's chemical weapons program. . . . They must have known what was going on." 116

It may thus be inferred that the German companies had at least one of two levels of knowledge. Broadly, the German companies certainly knew from the compounds used in Iraq's gas attacks against Iran that their technology would be employed for chemical warfare. But the companies also had more particularized knowledge about their own operations. The experience of Germany's Thyssen Rheinstalh Technology provides but one example. Much of the circumstantial evidence of what went on with Thyssen's main project in Iraq makes it difficult for the company to deny knowledge of what it was doing:

Contract documents showed that the "Diyala Chemical Laboratory" that Thyssen built in Salman Park . . . was fitted out with specialized manufacturing equipment capable of handling the most toxic substances. One of the chemicals manufactured at the laboratory was phosphorus pentachloride. According to . . . a West German chemical engineer . . . the production line was unusual because phosphorus pentachloride "is a starting chemical for organic phosphorus chemical agents. There is no reason for such a special layout in normal laboratories," he concluded. From the start, Salman Park was designed as a nerve gas plant. . . .

[F]rom the day ground was broken at the plant in late 1981, the site was heavily guarded by Iraqi soldiers, and Soviet-built SA-2 missile batteries were installed to protect against air attack A further warning signal should have gone off when the Thyssen employees contemplated a project specification that called for an expensive air cleaning plant for the laboratories . . . The Iraqis were not known for caring about environmental protection. The only reason for such an elaborate air cleaning system was to prevent the highly volatile compounds from poisoning workers and the local population.

If that was still not enough to arouse suspicion among Germans working at

^{114.} Elaine Sciolino, Iraq Cited on Chemical Arms, N.Y. TIMES, Mar. 15, 1986.

^{115.} TIMMERMAN, supra note 56, at 189.

^{116.} Philip Shenon, *Declaration Lists Companies That Sold Chemicals to Iraq*, N.Y. TIMES, Dec. 21, 2002, *available at* http://www.nytimes.com/2002/12/21/international /middleeast/21CHEM.html.

the site, then the "animal house," where beagles and other test animals were kept, should have been. Once production began at Salman Park, the beagles were used to test the lethality of the nerve agents. Their cadavers were thrown out on a garbage dump in plain view. 117

The companies that are implicated in supporting Saddam's chemical weapon program have come to light via self-reporting by Saddam's regime. Following the 1991 Gulf War, the U.N. passed sixteen resolutions instructing Iraq to dismantle and destroy its weapons of mass destruction. But U.N. member states, reacting to Iraq's continued thwarting of the U.N. weapons inspections regime, continuously voiced their frustration with Iraq's disregard for the U.N. resolutions. On November 8, 2002, the U.N. Security Council (UNSC) unanimously adopted Resolution 1441 providing Saddam "a final opportunity to comply with its disarmament obligations." 120

In December 2002, Iraq produced a 12,000-page weapons declaration which claimed it no longer had weapons of mass destruction. It also included a list of the companies which supplied Saddam with chemicals used to create and maintain Iraq's chemical weapons program. ¹²¹ The permanent members of the UNSC retained a copy of this document and distributed an edited version to its non-permanent members. ¹²² While the complete declaration has never been released to the public, several individuals have obtained and released information on foreign companies who supplied Saddam with materials for his chemical weapons arsenal. ¹²³

The report implicated three German companies in building, in whole or in part, Iraq's chemical warfare agent facilities: Preussag AG, Heberger Bau, and Karl Kolb. Preussag AG was identified as one of the main producers of nerve gas for Saddam's regime. ¹²⁴ It is still in business and currently focuses on steel,

^{117.} TIMMERMAN, *supra* note 56, at 106-107.

^{118.} See S.C. Res. 1441, pmbl., U.N. Doc. S/RES/1441 (Nov. 8, 2002).

^{119.} KENNETH KATZMAN, CONG. RESEARCH SERV., IB92117, IRAQ: WEAPONS THREAT, COMPLIANCE, SANCTIONS, AND U.S. POLICY (2003).

^{120.} S.C. Res. 1441, *supra* note 118.

^{121.} See Letter from Gary Pitts, Pitts & Associates, to Gulf War Veteran Clients (Apr. 25, 2003) [hereinafter Pitts Apr. 25 Letter], available at http://www.gulfwarvetlawsuit.com/april_25_2003_status-update_report.pdf; Sharon A. Squassoni, Cong. Research Serv., Iraq: U.N. Inspections for Weapons of Mass Destruction 1 (Oct. 2003).

^{122.} Letter from Naji Sabri, Minister for Foreign Affairs of the Republic of Iraq, to Alfonso Valdivieso, President of the U.N. Security Council (Dec. 7, 2002), available at http://www.gwu.edu/~nsarchiv/NSAEBB/NSAEBB80/wmd20.pdf (with cover letter from Mohammed A. Aldouri, Permanent Representative to the U.N.). See generally Iraq and Weapons of Mass Destruction, NAT'L SEC. ARCHIVE AT GEO. WASH. UNIV. (Feb. 11, 2004), http://www.gwu.edu/~nsarchiv/NSAEBB/NSAEBB80/ (documentation on Iraqi disclosure of chemical weapons capability).

^{123.} See Pitts Apr. 25 Letter, supra note 121.

^{124.} Marc Erikson, *Germany's Leading Role in Arming Iraq*, ASIA TIMES, Feb. 5, 2003, *available at* http://www.atimes.com/atimes/Middle_East/ EB05Ak02.html.

crude oil, and natural gas production. ¹²⁵ Heberger Bau is a German-based company with additional offices throughout Europe. ¹²⁶ During the Iran-Iraq War, it constructed bunkers and "a 'scrubbing' unit at the Samarra poison gas works . . . an integral part of the Tabun production lines. . . . [Although] sales of an air filtration system and four poison gas scrubbers to Iraq were forbidden by export control laws . . . Heberger Bau exported them with no inquiry." ¹²⁷ The company is still in business, specializing in civil engineering, construction, infrastructure, and renovation services. ¹²⁸

Karl Kolb is based in Germany but has offices worldwide. The company is still in business, and produces instruments and equipment for educational and industrial laboratories. Legal Kolb assisted in building much of Iraq's chemical weapons infrastructure. Specifically, the company built six chemical weapons manufacturing lines at the massive Samarra compound—one of the largest chemical weapons production facilities in the world in the mid-1980s. These plants made everything from mustard gas and prussic acid to the nerve gas compounds Sarin and Tabun. The plant was designed so that the poisons were funneled . . . to an underground packing plant, where they were put into artillery shells, rockets, and other munitions. Legal Parks with the still produced in the still plant was designed so that the poisons were funneled . . . to an underground packing plant, where they were put into artillery shells, rockets, and other munitions.

To mask its actions, Karl Kolb's management set up a subsidiary called Pilot Plant to serve as a front to execute all of the Samarra contracts with Iraq, although the same person—Helmut Maier—served as managing director for both companies. The case of Karl Kolb probably best represents the sheer determination of a modern German corporation to seek out profit, maximize its potential, and then relentlessly pursue business despite any moral or regulatory misgivings:

Despite the years of war and UN inspections, Karl Kolb GmbH, the German company that designed and built Iraq's main CW production plants in the 1980s, never really left Baghdad. Prosecuted in Germany in 1984 for having delivered CW gear to Iraq, the company won its case, then turned around and successfully sued the German government for libel. In 1999, when the German government sent its first official trade mission to Iraq since the 1991 gulf war, Karl Kolb official Michael Fraenzel went along for the ride.

That mission led to fresh business for the German chemical-equipment

^{125.} Preussag A.G. History, FUNDINGUNIVERSE COMPANY HISTORIES (1997), http://www.fundinguniverse.com/company-histories/preussag-ag-history/.

^{126.} Heberger GmbH, http://www.heberger.de/cms/en/index.html (last visited Apr. 20, 2013).

^{127.} TIMMERMAN, supra note 56, at 134.

^{128.} See Pitts Apr. 25 Letter, supra note 121; Heberger Corporation, HEBERGER (2011), http://www.heberger.de/en/heberger/corporation/index.html.

^{129.} KARL KOLB GMBH, http://www.karlkolb.com/ (last visited Apr. 20, 2013).

^{130.} See Erikson, supra note 124.

^{131.} TIMMERMAN, supra note 56, at 112.

^{132.} Id.

^{133.} Id. at 111.

broker. In 1999 and 2000, it submitted five requests to the UN Sanctions Committee to sell close to \$2 million in chemical—and possibly biological—weapons-production gear. The equipment Karl Kolb wanted to sell included a \$271,000 "incubator," which was on a list of proscribed equipment because of potential weapons use. All five requests from Karl Kolb were put on hold by the U.S. government. Undeterred, Karl Kolb went back in 2001 as a prominent participant in the Baghdad International Fair. 134

The report also implicated four additional German companies in supplying Iraq with chemical warfare agent production or related materials: Ceilcote, Klockner Industrie, Hoechst, and Schott Glass. ¹³⁵ Ceilcote supplied Saddam with chemical warfare agency production or related materials. ¹³⁶ The company was sold to a Dutch company, Akzo Notel, in 2007. ¹³⁷ Klockner Industrie, which also built a plant in Iraq, ¹³⁸ currently operates under the name Klockner and Co, and it produces and distributes steel and metal products. ¹³⁹ Hoechst Group supplied chemicals used to manufacture nerve gas. ¹⁴⁰ It is still in business working with pharmaceutical, agricultural, and chemical companies. ¹⁴¹ Schott Glass supplied Iraq with chemical warfare agent production equipment or related material. ¹⁴² It is still in business, specializing in glass and glass materials, and has subsidiaries worldwide. ¹⁴³

Additionally, two German companies, Martin Merkel and Lewa Hebert, supplied Saddam with lab equipment, pumps, Teflon pipes, etc. ¹⁴⁴ Martin Merkel is still in business and produces sealant. ¹⁴⁵ Lewa Hebert is also still in business and produces fluid pumps and metering systems. ¹⁴⁶ Several more German corporations were also implicated in contributing to Saddam's chemical weapons arsenal but they are either out of business or the extent of their contribution is unknown.

^{134.} Kenneth R. Timmerman, Eurobiz is Caught Arming Saddam, INSIGHT, Mar. 3, 2003.

^{135.} Pitts Apr. 25 Letter, supra note 121.

^{136.} Id.

^{137.} Sale of Ceilcote (Germany) to Akzo Nobel, PHIDELPHI CORPORATE FINANCE (Apr. 2007), http://www.phidelphi.com/en/transactions/cid(967)/sale of ceilcote (germany) to akzo nobel.

^{138.} TIMMERMAN, *supra* note 56, at 233.

^{139.} Pitts Apr. 25 Letter, *supra* note 121; *At a Glance: Kloeckner & Co.*, KLOECKNER (Dec. 2012), http://www.kloeckner.com/en/group/at-a-glance.php.

^{140.} Pitts Apr. 25 Letter, supra note 121.

^{141.} Hoescht A.G. History, 18 FUNDINGUNIVERSE COMPANY HISTORIES (1997), http://www.fundinguniverse.com/company-histories/hoechst-a-g-history/.

^{142.} Pitts Apr. 25 Letter, supra note 121.

^{143.} *Id.*; SCHOTT, http://www.schott.com/english/index.html?view_from_us=ww#about (last visited Apr. 20, 2013).

^{144.} Pitts Apr. 25 Letter, supra note 121.

^{145.} MERKEL FREUDENBERG, http://www.merkel-freudenberg.com/en/ueber-uns/ueber-uns/.

^{146.} LEWA—An International Group, LEWA, http://www.lewa.com/en/company/lewa-group/.

Although both the United States and the U.N. were reluctant to release the entire 12,000-page Iraqi weapons declaration, ¹⁴⁷ the American government recognized that Saddam had used chemical weapons against the Kurdish population. ¹⁴⁸ A group of attorneys representing Gulf War veterans who were exposed to Saddam's chemical weapons obtained a copy of the weapons declaration from the Iraqi Government itself. ¹⁴⁹ In a letter published on a website devoted to the lawsuit, the attorneys list the companies behind the supply of chemical agents and equipment, including thirty-three companies from Europe, the United States, India, Egypt, Singapore, and Dubai. ¹⁵⁰ Additionally, the letter lists eighteen other companies that are either out of business or whose locations are unknown.

The thirty-three companies are broken down into four categories: (1) companies that built Iraq's chemical warfare agent facilities in whole or in part; (2) companies that supplied chemical warfare agent production or related materials; (3) companies that supplied chemical warfare agent precursors; and (4) companies that supplied lab equipment, pumps, or Teflon pipes, etc. Of the thirty-three companies that were known suppliers, fourteen were from Germany. The remaining European corporations were based in the Netherlands, Switzerland, Austria, France, and the United Kingdom. Since the list was compiled and published, some of the companies have been bought or merged with other European corporations. ¹⁵¹

The tables in Figure 3 below stratify these corporations by type of contribution to Iraq's chemical weapons program and their current status. Some companies identified in Figure 3 are also identified independently in the Appendix to this Article.

^{147.} Shenon, *supra* note 116; Pitts Apr. 25 Letter, *supra* note 121.

^{148.} CENT. INTELLIGENCE AGENCY, IRAQ'S CHEMICAL WARFARE PROGRAM (2004), available at https://www.cia.gov/library/reports/general-reports-1/iraq_wmd_2004/chap5.html.

^{149.} Pitts Apr. 25 Letter, supra note 121.

^{150.} Id.

^{151.} Id.

Figure 3

A) Key Corporations that Built Chemical Warfare Agent Facilities in Whole or in Part in Iraq			
Company	Location	Status	Specialty
1. Herberger (Heberger) Bau	Based in Germany but has additional offices throughout Europe	Still in business	Specializes in civil engineering, construction, infrastructure and renovation services
2. Karl Kolb	Based in Germany but has additional offices worldwide	Still in business	Plans and equips scientific, educational, and industrial laboratories
3. Ludwig-Hammer	Based in Germany	Still in business	Specializes in installation of boilers, HVAC, plumbing, pipelaying, gas-fitting, electrical and sanitation

B) Key Corporations that Supplied Chemical Warfare Agent Production Equipment or Related Material to Iraq			
Company	Location	Status	Specialty
1. Ceilcote	Listed as a German corporation, but AkzoNobel has its headquarters in the Netherlands	Still in business— part of International Protective Coatings owned by AkzoNobel	Develops high-build chemical resistant mortars, linings and coatings, etc.
2. De Dietrich	Based in France with offices worldwide	Still in business	Provides process equipment, engineered systems, and process solutions for fine chemical, chemical, and pharmaceutical industries
3. Euromac	Listed as Netherlands corporation, but has its headquarters in Italy and a Dutch subsidiary "Tuwi"	Still in business	Supplies machines for sheet metal working— information unavailable whether the Dutch "Tuwi" has similar activities
4. Georg Fischer	Based in Switzerland with offices worldwide	Still in business	Specializes in piping systems, automotive materials/processes, and electric discharge/milling machines
5. Gig	Based in Austria, has offices in the United Kingdom and United States.	Still in business	Specializes in facades, green buildings, glass constructions, etc.
6. Horseley Bridge	Based in the United Kingdom.	Still in business— owned by Balmoral Tanks	Manufactures hot press steel water tanks
7. Karl Kolb	See above at A.2	See above at A.2	See above at A.2
8. Klockner Industrie	Based in Germany	Still in business as Klockner & Co.	Produces and distributes steel and metal products
9. Lenhardt— bought by Swiss Tegula AG	Based in Switzerland	Possibly still in business owned by Conzzeta	Owns companies that produce sheet metal and glass processing systems, foam materials, graphic coatings, etc.
10. Schott Glass	Based in Germany, with subsidiaries worldwide	Still in business	Specializes in specialty glass and glass materials
11. Sulzer	Based in Switzerland with offices worldwide	Still in business	Specializes in industrial machining and equipment, surface technology, and rotating equipment maintenance

C. Key Corporations that Supplied Chemical Warfare Agent Precursors to Iraq			
Company	Location	Status	Specialty
1. Fluka Chemie	Listed as a Swiss corporation, but owned by Sigma- Aldrich in the U.S.	Still in business owned by Sigma Aldrich	Produces and sells chemical and biochemical products
2. Hoechst (nerve gas)	Now owned by French corp Sanofi Aventis	Still in business owned by Sanofi- Aventis	Researches, develops, markets and manufactures pharmaceutical products
3. KBS-Netherlands (nerve and mustard gas)	Based in the Netherlands	Appears to still be in business, but no additional information available	
4. Melchemie (nerve gas and mustard gas)	Based in the Netherlands	Appears to still be in business, but the companies' website is unavailable	Manufactures chemicals
5. Preussag (nerve gas)	Based in Germany	Now owned by TUI AG	Used to be a mining corporation, now part of a travel company
6. Reininghaus Chemie (nerve gas and mustard gas)	Based in Germany	Still in business	Chemical company
7. Tafisa (mustard gas)	Listed as a German corporation, now based in Portugal	Now owned by Sonae Industries	Produces wood-based panel and laminate/resin
8. Weco (nerve gas)	Based in Germany with offices worldwide	Still in business	Appears to be an electronic component manufacturing corporation

D. Corporations that Supplied Lab Equipment, Pumps, or Teflon Pipes, etc.			
Company	Location	Status	Specialty
1. BDH	Listed as a U.K. corporation, now owned by VRW based in the United States	Acquired by Merck, now owned by VWR	Chemical/laboratory supply and distribution company
2. Martin Merkel	Based in Germany, operates factories in Denmark, France, Ireland, Italy, and Malaysia	Still in business	Manufactures hydraulic and specialty seals
3. Gallenkamp	Based in the United Kingdom	Still in business	Builds, designs, and maintains testing chambers and controlled environments
4. Hauke	Based in Austria	Still in business	Produces pumps and pump accessories
5. Lewa Hebert	Based in Germany	Still in business	Produces pumps and pump systems
6. Oxoid	Based in the United Kingdom	Still in business	Specializes in microbiology products
7. Pullen Pumps	Based in the United Kingdom	Now owned by Armstrong, also in the United Kingdom	Produces pumps and booster sets
8. Weir	Based in the United Kingdom	Still in business	Engineering solutions business

Most of the companies involved in arming Saddam's regime are still in business either as they were constituted at the time or in a new form through mergers, acquisitions, or reorganizations. Although some may no longer engage in the type of conduct they did in the 1980s, they remain culpable for that conduct. There is no statute of limitations on genocide.

IV. THE STRATEGY: PROSECUTION V. LITIGATION

Civil litigation has its merits. Large class action lawsuits can yield significant cash settlements or judgments, as in the case of German corporate reparations for slave and forced labor employed during the Third Reich. 152 This

type of litigation, however, often does not succeed. For example, personal injury class action lawsuits were attempted in the 1990s against German corporations on behalf of American Gulf War veterans who were exposed to chemical weapons in Iraq "in [a] joint effort of discouraging companies to sell dictators the means to have weapons of mass destruction." These efforts failed due to lack of jurisdiction in the United States and the unwillingness of foreign counsel to partner in the civil litigation. ¹⁵⁴

When pressure from class action lawsuits does succeed, settlement is the typical outcome. The reparations gained from such a settlement can be important for victims. 155 Compensation is the core commodity in civil litigation. Thus, companies can pay the cost of their negligence or complicity and move on. But when the underlying crime is genocide, should complicit multinational corporations be permitted to simply write a check and move on?

Genocide is the "crime of crimes." ¹⁵⁶ Because of the insidious nature of hatred motivating perpetrators to wipe out an entire race, thereby making the successful completion of genocide an existential question for the victims, it is the most heinous of crimes. When genocide was outlawed by treaty in the wake of the Holocaust, the idea of a perpetrator being allowed to skirt prosecution for this crime was deemed abhorrent. As the British delegate to the Genocide Convention negotiations observed in 1948: "If genocide were committed, no restitution or compensation would redress the wrong. The convention would be rendered valueless if it were couched in terms which might allow criminals who committed acts of genocide to escape punishment by paying compensation." ¹⁵⁷

Both the Genocide Convention text and the *travaux preparatoires* are ambiguous about whether corporations may be prosecuted for committing the ultimate crime of genocide. ¹⁵⁸ The term "person" is used throughout, without clarification, and could be read to include both natural and juridical persons. The current Legal Advisor to the U.S. State Department believes that corporations are included within the definition of "person" and may, therefore, be

155. John C.P. Goldberg, *The Constitutional Status of Tort Law: Due Process and the Right to a Law for the Redress of Wrongs*, 115 YALE L.J. 524, 544 (2005) ("Locke's social contract theory claims that victims of wrongs possess a natural right to reparations from wrongdoers.").

^{153.} Letter from Gary Pitts, Pitts & Associates, to Gulf War Veteran Clients (Mar. 23, 2012), available at http://www.gulfwarvetlawsuit.com/march_23_2012_status-update_report.pdf.

^{154.} Id.

^{156.} Grant Dawson & Rachel Boynton, *Reconciling Complicity in Genocide and Aiding and Abetting Genocide in the Jurisprudence of the United Nations Ad Hoc Tribunals*, 21 HARV. HUM. RTS. J. 241, 269 (2008) (citing Prosecutor v. Stakic, Case No. IT-97-24-T, Judgment, ¶ 502 (Int'l Crim. Trib. for the Former Yugoslavia July 31, 2003)).

^{157.} HIRAD ABTAHI & PHILIPPA WEBB, 2 THE GENOCIDE CONVENTION: THE TRAVAUX PREPARATOIRES 1778 (2008). Other delegates agreed. For example, the representative from the Philippines said, "An award of damages would not be an adequate substitute for the punishment of the individual criminal." *Id.*

^{158.} See Michael J. Kelly, The Status of Corporations in the Travaux Préparatoires of the Genocide Convention: The Search for Personhood, 43 CASE W. RES. J. INT'L L. 483 (2010).

prosecuted.¹⁵⁹ Later international criminal law treaties and tribunal statutes, however, specifically exclude corporations from criminal jurisdiction. ¹⁶⁰ Nevertheless, the Genocide Convention does not. Thus, the possibility of prosecuting corporations for genocide is not precluded. ¹⁶¹ Indeed, more recent efforts at codifying crimes against humanity in a single treaty have specifically recognized corporate criminal liability. ¹⁶²

This interpretation problem as it relates to the Genocide Convention may be remedied by the ICJ. Article XI of the Genocide Convention identifies the ICJ as the authoritative interpretive body with respect to ambiguities within the treaty. Consequently, it is the ICJ's job to settle the question of whether corporations can be prosecuted for committing genocide. In the wake of the ICJ's recent decision that states can be held accountable for committing genocide, ¹⁶³ a similar outcome with respect to corporations is not beyond the realm of possibility.

But in order to enable the ICJ to clarify the status of corporations under the Genocide Convention, the ICJ's jurisdiction must be triggered. This can be accomplished in three ways: by one of the ICJ State Parties requesting clarification, by two states bringing a contentious case before the Court in litigation, or by an approved U.N. body seeking an advisory opinion on the matter. Of these options, a question referred to the ICJ by the U.N. General Assembly would carry the most political and moral weight.

Once the ICJ recognized corporations as potential perpetrators of genocide, an amendment of the Rome Statute would still be necessary in order to prosecute corporations in the International Criminal Court (ICC). Currently, like other modern international criminal tribunals, the Rome Statute excludes corporations from its jurisdiction. This was not an oversight at the negotiating conference, neither was the exclusion well-considered. Rather, the conference was pressed for time and the matter was deemed too fraught to settle quickly. The drafters at the Rome Conference also famously dodged the difficult question of defining the crime of aggression by inserting a placeholder in the treaty and promising to come back in later years to address it.

^{159.} Harold Hongju Koh, Separating Myth from Reality about Corporate Responsibility Litigation, 7 J. INT'L ECON. L. 263, 266 (2004).

^{160.} See e.g., Rome Statute of the International Criminal Court art. 25, July 17, 1998, 2187 U.N.T.S. 90.

^{161.} Kelly, supra note 158.

^{162.} See Proposed International Convention on the Prevention and Punishment of Crimes Against Humanity, Annex 1(c) (Aug. 2010), available at http://law.wustl.edu/harris/cah/docs/EnglishTreatyFinal.pdf ("'Person' means a natural person or legal entity.").

^{163.} Application of the Genocide Convention (Bosn. & Herz. v. Serb. & Montenegro), 2007 I.C.J. 43, \P 140 (Feb. 26). While prior ICJ decisions have held states accountable for punishing those who commit genocide, this was the first time the ICJ had confirmed that states could themselves be liable for committing genocide.

Because the Rome Statute employs the precise definition of genocide contained in the Genocide Convention, as do all the other statutes establishing international criminal tribunals with jurisdiction over the crime of genocide, great weight would be given to an ICJ opinion placing corporations within the class of perpetrators who can commit genocide. State parties to the Rome Statute would then be under pressure to consider amending the ICC's jurisdiction to allow prosecuting corporations.

CONCLUSION

Although "social responsibility" has become a theme of corporate culture in some societies, social callousness is unfortunately a theme for German corporations that pervaded their operations throughout the twentieth century. Though the same may be said about companies in other countries, the extent and severity of examples offered by Germany's private sector are stark. Indeed, the sheer gravity of German corporate complicity to atrocities and human rights abuses places the German corporate sector in a category all by itself.

From the invention, development, production, and deployment of chemical weapons during the First World War to direct participation in the Holocaust and the deployment of poison gas capabilities to Saddam Hussein during the Iran-Iraq War, German corporations have caused widespread human suffering on a horrific scale. This disregard for life in pursuit of profit manifests itself repeatedly. Inexplicably, German companies seem unable to learn the lessons of the past as they continue to engage in egregious conduct.

Emblematic of such callousness is the reaction of the German corporation Chemie Grünenthal during the 1960s to victims of one of its biggest selling drugs—thalidomide:

[B]y early 1959, reports started to surface that the drug was toxic, with scores of adults suffering from peripheral neuritis damaging the nervous system. As profits kept rolling in, however, Chemie Grünenthal suppressed that information, bribing doctors and pressuring critics and medical journals for years. Even after an Australian doctor connected thalidomide with deformed births in 1961, it took four months for the company to withdraw the drug. By then, it is estimated to have affected 100,000 pregnant women, causing at least 90,000 miscarriages and thousands of deformities to the babies who survived. ¹⁶⁴

Within Germany and abroad, thalidomide was widely prescribed by doctors to pregnant women for morning sickness. Babies who survived thalidomide suffered often irreparable internal injuries in addition to the heart-wrenching external deformities that came to characterize the tragedy: missing appendages or other body parts such as ears, truncated limbs, two-fingered claws instead of

^{164.} Roger Williams and Jonathan Stone, *The Nazis at the Heart of the Worst Drug Scandal of All Time*, NEWSWEEK, Sept. 17, 2012 ("Despite the overwhelming evidence that thalidomide caused miscarriages and birth defects, Chemie Grünenthal for years fought to resist paying the necessary compensation required for a lifetime of care—and still does.").

hands or feet, thalidomide "flippers" instead of arms and legs. ¹⁶⁵ Chemie Grünenthal shunned full responsibility until 2012 when, after fifty years, it offered a corporate apology for the suffering it needlessly caused and covered up. ¹⁶⁶ Nevertheless, the company's reckless infliction of harm on women and unborn children for profit drew serious criticism. For example, former *Sunday Times* of London editor Sir Harold Evans publicly accused Chemie Grünenthal of committing a crime against humanity. ¹⁶⁷

The complicity of German chemical companies in the development of Saddam Hussein's chemical weapons war machine is a more recent case in point. The chemical weapons were initially created to counterbalance Iran's numerical troop advantage during the 1980-88 Iran-Iraq War. But Saddam then unleashed his chemical arsenal against the Kurdish population of northern Iraq in a premeditated genocide.

Saddam's German suppliers knew of his militarization of the materials they provided him, were aware of his use of those weapons against Iran, and were certainly cognizant of his efforts to quash Kurdish support for Iran during the war. 168 Thus, it would have been no surprise that Saddam deployed the same weapons he had used against Iran against Iran's allies within Iraq—Kurdish insurgents. Saddam's targeting of the Kurdish civilian population would have been even more predictable since he was already in the process of removing them from strategic cities in northern Iraq *en masse*—itself a genocidal act. 169 Gassing them with the weapons at his disposal was a foreseeable next step. Yet the very German corporations that enabled Saddam to carry out the worst genocide of the 1980s continued doing business with him after he committed this crime. 170

Domestic German authorities' lack of enthusiasm for prosecuting MNCs for atrocities committed abroad offers little incentive for companies to refrain from such conduct. The inability to prosecute corporations at an international level offers even less incentive. A reexamination of the 1948 Genocide Convention by the ICJ would alter this calculus since it is the authoritative interpretive body of this treaty. If the ICJ found companies capable of committing genocide, as they have recently found states, then the sense of impunity MNCs feel with respect to their international operations would be seriously blunted.

^{165.} Alcohol and Drugs: Thalidomide, MARCH OF DIMES (Aug. 2008), http://www.marchofdimes.com/pregnancy/alcohol_thalidomide.html.

^{166.} John F. Burns, German Drug Maker Apologizes to Victims of Thalidomide, N.Y. TIMES, Sept. 1, 2012.

^{167.} Sir Harold Evans, *Thalidomide's Big Lie Overshadows Corporate Apology*, REUTERS (Sept. 12, 2012), http://blogs.reuters.com/great-debate/2012/09/12/thalidomides-big-lie-overshadows-corporate-apology/.

^{168.} See supra Part III.

^{169.} Genocide Convention, *supra* note 68, art. 2(c).

^{170.} TIMMERMAN, *supra* note 56.

Such a ruling would build pressure to define juridical persons, such as corporations, as prosecutable within the purview of tribunals such as the ICC. While the ICC would not be able to try perpetrators of the Kurdish genocide due to temporal restrictions on their jurisdiction, an international criminal tribunal empowered to investigate the conduct of such companies going forward would offer a significant incentive for corporations to refrain from such conduct in the first place. Moreover, national authorities might be more prone to open cases against those companies if given the legitimizing mantle of a supportive ICJ opinion.

The rights and privileges accorded to MNCs during the age of globalization and free trade have been enormous. German companies have been at the forefront of leveraging these advantages for massive profits. The cost of doing so has, in cases like the Kurdish genocide, been high and has not been borne by the companies or Germans themselves. The time has come for corporations like those in Germany to take on the obligations that should accompany the rights they already enjoy. An obligation to refrain from participating in the commission of genocide is not a particularly heavy burden.

APPENDIX

UNCLASSIFIED LIST OF GERMAN CORPORATIONS IMPLICATED IN DEVELOPING IRAQ'S CHEMICAL WEAPONS PROGRAM

WEST EUROPE

JPRS-TAC-91-006 15 March 1991

Hans Hackkerup (Social Democratic Party) [defense policy spokesman] does not flatly reject Enggaard's wishes: "Further involvement depends on additional training, and thus on additional resources. I do not rule out the possibility, but there are obvious economic limitations."

Dividend Problems

The discussion has thus reverted to finances, and the so-called "peace dividend" that is released on account of detente and the Conventional Forces in Europe [CFE] agreements between the superpowers.

The Social Democratic Party has stipulated that once the CFE agreement has been ratified, the parties to the defense agreement will have to discuss the possible economic profit. In other words: the amount of cutbacks within the Danish Armed Forces.

The Social Democratic Party has already proposed defense cuts of 300 million kroner during the election campaign and under this year's budget. In answer to the question whether the development-in-the Baltic-states has caused the Social Democratic Party to consider the cuts once more, [Social Democratic security policy spokesman] Ritt Bjerregaard-says.—No.—There-is-no reason to hold back. On the centrary, we have to use the 'pocac dividend' to help stabilize the situation within the Soviet Union. I do not regard the developments in the Baltic-states-as-a military-threat, but as-a threat-of-instability within the Soviet Union. And if we do not help, we risk-being felt with a refugee problem which we have no possibility of tackling.—Ritt Bjerregaard predicts a confrontation between the government and the Social Democratic Party on this point. She assumes that the government will take funds-from-the-aid-to-developing countries to finance the aid-to-the-East-European] countries, whereas the Social Democratic Party-wants retrenchments within the defense budget.

Foreign Minister Uffe Ellemann-Jensen takes a much cooler view of the "peace dividend."

"Some people probably forget that a dividend is something that only comes once the actions have been concluded. And the dividend usually never becomes as large as expected."

The government and the Social Democratic Party may thus expect quite a few disputes when the future strategy for the Danish defense and security policy will have to be arranged.

"However, I hope that there will still be good forces within the Social Democratic Party that, after all, wish well for the Armed Forces." Defense Minister Knud Enggard states with regard to the coming months.

"If the foreign minister wants to run egoistic solo races on account of opinion poll figures, he will realize that there is no majority within the Folketing. But the government may, of course, then fall on that matter," Hans Hackkerup says:

The parties, however, agree that the EC cannot, for the time being, be used as the uniting organ for a European defense and security policy. [passage-omitted]

GERMANY

Report Names Firms Involved With Iraqi Arms

Government Investigations Detailed

91GE0150A Bonn DIE WELT in German 11 Feb 91 p 6

[Article by "mik": "Saddam Husayn's German Business Partners: The Confidential Preliminary Report of Investigations on Suspicion of Illegal Arms Exports"]

[Text] German public prosecutors, customs officials, and tax examiners are investigating 44 enterprises on suspicion of illegal arms exports to Iraq. That is the result of a confidential preliminary report, compiled on the orders of the federal government, on the state of the investigations. It is at the disposal of DIE WELT. According to the report, the scrutiny of the investigating authorities has led to the initiation of at least four criminal proceedings. In 30 cases, the officials reached no conclusions on illegal business practices.

The paper is the German response to a list by U.S. Senator Jesse A. Helms. Even two years ago, the conservative politician blustered in the foreign affairs committee of the U.S. Senate: If the Bonn government had read page one of the NEW YORK TIMES of 30 March 1984, it would have known that the German firm, Karl Kolb, was building a poison-gas factory in Iraq, Helms verbatim at that time: "If the German foreign minister did not know that, he needs a blind man's cane. He did not want to know it."

Shortly after the invasion of Kuwait by Saddam Husayn's troops, Helms handed his President, George Bush, a list compiled from publicly accessible sources ("Saddam Husayn's Forciga Legion") of 132 suppliers to Iraq—62 of them from the FRG. Early in January Helms, through diplomatic channels, provided the Bonn government with an updated version.

On the basis of this list and documentation from the Simon Wiesenthal Center ("The Poison Gas Connection"), German security authorities compiled for the federal government the findings on contributions by Germans to the Iraqi armaments program. It turned out to be very difficult to prove violations of existing law against the enterprises listed as business partners of Iraq. Even worse: In at least two cases, the Iegal position lagged behind the existing situation. Export regulations

JPRS-TAC-91-006 15 March 1991

WEST EUROPE

45

were tightened when it became known that some special vehicles, for instance, up to then did not fall under the embargo.

Even in the case of the Karl Kolb connection, matters are proceeding only slowly. The prosecutors' investigation took seven years, and it will take several more weeks until it is decided whether initiation of main proceedings will be applied for.

The borderline between legal and illegal transactions is obviously unclear—the investigators are moving on very difficult ground. They are focusing on three groups: First, it is relatively easy to ascertain participants in large projects, for on the basis of the necessary know-how only a handful of first-class industries come into consideration. Those, however, frequently send medium-sized subsidiaries or companies controlled by subsidiaries into the field, or deliver supplies via foreign partners. Second, also easily ascertained is the small group of unscrupulous specialists who do not flinch from doing business involving biological and chemical weapons. Third and last, the investigators are trying to shed some light on the semidarkness surrounding the group of mercantile agents who arranged Husayn's business deals.

. No Finding

ABB Asca Brown Boveri AG, Mannheim—Electrical engineering (sales: 6.1 billion German marks [DM]; 34,100 employees). Allegation: Electrical equipment for smelting furnace in gun factory. Status of the case: "Review by Main Finance Administration in Karlsruhe showed only exports of general electrical equipment exempt from licensing. In addition, delivery of smelting furnaces exempt from licensing."

AEG AG, Berlin and Frankfurt/Main—Electrical engineering (sales: DM12.2 billion; 89.600 employees). Majority shareholder is Daimler-Benz (approximately 80 percent), the rest are scattered holdings. Allegation: Production plant for weapons and ammunition. Status of the case: "Customs Criminal Institute has no findings relevant to Iraq. On the basis of SPIEGEL data, correlation to concrete facts of the case not possible. (Probably domestic ancillary supplies to the actual exporter.)"

Avlatest, Neuss—Subsidiary of Rheinmetall. Allegation: Subcontractor for chemical weapons factory SAAD 16. Status of the case: "Domestic ancillary supplies to Gildemeister."

Blohm Maschineabau GmbH, Hamburg—Production and marketing of grinding machines. The parent company (100 percent) is Koerber AG (engineering; sales: DM1.1 billion; 6.400 employees), Hamburg, Allegation: Computer-directed grinding installation for missile research establishment. Status of the case: "Land Office of Criminal Investigation in Darmstadt found no indications of illegal exports."

CBV Blumhardt Fahrzeuge GmbH & Co. KG, Wuppertal-High-capacity cars, low-weight platforms and dumping wagons, chassis for containers and superstructures (sales: DM45 million; 220 employees). Allegation: special transporters for tanks. Status of the case: "Semitrailers were exempt from licensing; obligation to obtain a permit is being introduced."

Daimler-Benz AG, Stuttgart-Untertuerkheim—largest German industrial enterprise (sales: DM76.3 billion; 339,000 employees); owners: Deutsche Bank (28.28 percent), Mercedes-Automobil-Holding (25.23 percent), the emirate of Kuwait (14), and 300,000 individual shareholders. In correlation with the blocks of Mercedes-Benz AG, Stuttgart, AEG AG, Berlin and Frankfurt/Main, as well as Deutsche Aerospace AG, Munich, Aerospace (aeronautics and space technology, driving gears, defense technology and medical technology, 63.000 employees) are, among others, the holdings of AEG Luft- und Raumfahrt, Dornier, MTU Motoren-und Turbinen-Union aswell as MBB Messerschmitt-Beelkow-Blohm GmbH. Allegation: armored vehicles. Status of the case: "Examination by Main Finance Administration in Stutteart established only exports exempted from licensing."

Degussa AG, Frankfurt/Main—precious metals (sales: DM14.4 billion; 32,400 employees in the corporation); parent company of Leybold AG, Hanau. Major shareholder (with 37 percent) of Degussa is GfC Gesellschaft fuer Chemiewerte mbH, Duesseldorf (Henkel family, Dresdner Bank, Muenchner Rueckversicherung), 40,000 free shareholders. Allegation: Equipment for chemical weapons factory. Status of the case: "Customs Criminal Institute has no findings relevant to Iraq. Clear correlation to facts and circumstances on the basis of DER SPIEGEL data not possible. (Domestic ancillary deliveries to other exporter?)"

Deutsche BP AG, Hamburg—mineral oil (sales: DM11.9 billion; 5.500 employees). Allegation: "Military equipment." Status of the case: "Customs Criminal Institute has no findings relevant to Iraq."

W.C. Heraeus GmbH, Hanau—production of semifinished and finished goods of nonferrous metal (sales: DM4.6 billion; 9,100 employees). Allegation: tubeshaped furnace for biological weapons. Status of the case: "Domestic delivery of a tube furnace to Labsco."

Infraplan. Allegation: installations for the preparation of chemical production. Status of the case: "The Cologne Customs Investigation Office has no findings."

Iveco Magirus AG, Ulm—medium-sized and heavy trucks (sales: DM2.5 billion; 6,800 employees). Allegation: carrier vehicles for mobile toxicological laboratories. Status of the case: "Exports of eight vehicles with laboratory installations by the Rhein-Bayern firm was carried out with negative certificate."

KWU—division of Siemens AG, Munich, until business year 1986/87 Kraftwerk Union AG, Muchlheim a.d. Ruhr. Allegation: nuclear technologies. Status of the WEST EUROPE

JPRS-TAC-91-006

case: "There supposedly were negotiations with Iraqi authorities between 1978 and 1980. No contract was concluded."

Labsco Laboratory Supply Company GmbH & Co. KG, Friedberg—planning and delivery of laboratories and laboratory equipment, primarily overseas—Near East, Far East, Africa (sales 1988: DM8.7 million; 14 employees). Allegation: various biological equipment. Status of the case: "Examination under foreign trade law (AWP) did not result in indications of unauthorized exports."

Lasco Umformtechnik GmbH, Coburg—machine tools (sales 1988: DM53 million, 250 employees), subsidiary of Langenstein & Schemann GmbH, Coburg, Allegation: forging presses for artillery shells. Status of the case: "Prosecutor's office in Hof terminated investigation, because it concerned universal equipment exempt from licensing."

Leifeld & Co. (Leico), Ahlen/Westphalia—tool and machine factory (1988: 470 employees); sold by Matuschka group to Westfalenbank. Allegation: drive jets for rockets, engineering services. Status of the case: "Main Finance Administration in Muenster did not discover unauthorized exports."

MAN-Roland Druckmaschinen AG, Offenbach—97.81 percent owned by MAN AG, Munich. Allegation: transport equipment. Status of the case: "MAN-Roland produces diecasting machines. Probably mistaken for the Roland antitank missile, which was delivered to Iraq by the MBB joint enterprise, Euromissile."

MAN-Technologie AG, Munich—subsidiary of MAN AG, Munich. Allegation: nuclear technology. Status of the case: "Only domestic ancillary delivery to H + H."

Marposs GmbH, Fellbach/Krefeld—electronic measuring instruments for machine tools (190 employees). Allegation: production plant for weapons and ammunition. Status of the case: "Ancillary delivery to H + H. Customs Criminal Institute and Customs Investigation Office in Duesseldorf noted no violation of foreign-trade law regulations."

Matuschka Gruppe, Munich—financial services (staff of 400), the Leico firm was sold meanwhile, see under Leico. Allegation: Leico. Status of the case: "Mentioned only as owners of Leico."

MBB Messerschmitt-Boelkow-Blohm GmbH, Ottobrunn—development, production, and sale of products of aviation and space technology, defense technology, ofense technology, for example, helicopters, Tornado jet fighters, Ariane missiles, Airbus, the Hot and Milan antitank systems, the Roland defense system against low-flying aircraft (sales: DM6.3 billion; 37,400 employees); compare Daimler-Benz. Allegation: technology for the FAE (Fuel Air explosive); subcontract for the chemical weapons factory SAAD 16; attack helicopters; participation in

Euromissile, Fontenay-aux-Roses, France; Hot and Roland systems, electronics and test equipment for Condor 2 missiles; laboratory equipment. Status of the case: "FAE-bomb delivery of project studies to AGY was exempt from licensing according to the prosecutors of the Land Court Munich II, since they were not manufacturing records. As to SAAD 16, Condor, electronics, and tests for Condor 2, laboratory equipment—the prosecution of the Land Court Munich II has not initiated formal investigations due to lack of sufficient indications of illegal exports (domestic transactions with Consen subsidiary, PGB). Helicopters—so far, no unauthorized exports were found."

Heinrich Mueller Maschinenfabrik GmbH, Pforzheim founded in 1906, ordinary capital DM400,000; 80 employees. Allegation: technical improvement of the Scud B missile. Status of the case: "The exports carried out were exempt from licensing. Meanwhile the injection nozzle now requires an export license."

Plato-Kuehn (Josef Kuehn), Neustadt am Ruebenberge. Allegation: toxins. Status of the case: "Delivery of the small quantities of toxins (but not the fungi producing them) was exempt from licensing."

Schirmer-Plate-Siempelkamp, Krefeld. Allegation: production plant for weapons and ammunition. Status of the case: "Reviewed by Main Finance Administration in Duesseldorf: the exports were exempt from licensing."

Schmidt, Kranz & Co. GmbH, Velbert—mining equipment, load suspension devices, pumps, and compressors, suction and dust removal (200 employees). Allegation: computer-assisted device for material testing. Status of the case: "Ancillary delivery to H + H for pressure testing device, which in turn was exempt from licensing."

Siemens AG, Berlin/Munich—third-largest German industrial enterprise (sales 1989: DM61.1 billion, 365,000 employees, 538,000 shareholders), electrical products. Allegation: parent company of Interatom GmbH in Bergisch Gladbach (nuclear technology), computer guidance system for gun factory, echo-free space for missile research. Status of the case: "According to the Customs Criminal Institute, there are no findings relevant to Iraq. On the basis of DER SPIEGEL data they cannot be correlated to a concrete state of affairs. (Probably they were normal domestic ancillary deliveries to other firms, which were exporters.)"

Sigma Chemie, Oberhaching. Allegation: chemicalbiological raw materials. Status of the case: "It could never be ascertained whether delivery actually took place. Furthermore, because of the extremely small quantities of toxins (not the fungi producing them!) they would have been exempt from licensing."

TUeV—Technischer Ueberwachungsverein, Saarland. Allegation: material surveys for Saarstahl and Export-Union. Status of the case: "Only prepared material surveys." JPRS-TAC-91-006

WEST EUROPE

47

WTB Walter-Thosti-Boswau Bau-AG, Augsburg—construction industry (group sales: DM1.6 billion; 7,800 employees). Allegation: construction of four factories for nerve gas. Status of the case: "The Customs Investigation Office investigated in connection with PBG. The construction services were exempt from licensing."

Wegmann & Co. GmbH, Kassel—tank turrets, mobile launcher systems, gun mounts, retooling and improving combat effectiveness, training, logistical support, equipment and construction components (sales 1987: DM874 million; 4,800 employees in group). Allegation: traction engine for rocket ramp. Status of the case: "Main Finance Administration in Frankfurt has not found violations of foreign trade law."

Ed. Zueblin AG, Stuttgart—construction business (sales: DM1.2 billion; 6,800 employees). Allegation: construction of steel mill in gun factory. Status of the case: "The Customs Criminal Institute has no findings relevant to Iraq. But might also be included in the investigations of the Customs Investigation Office in Duessdorf and the Bochum prosecution with regard to Taji."

2. Ongoing Investigations

Anlagen Bau Contor/Beaujean Consulting Engineers, Stutensee near Karlsruhe. Allegation: purchase of highcapacity propulsions for rockets. Status of the case: "Investigations underway by Karlsruhe prosecutors."

Buderus AG, Wetzlar—foundry (sales: DM2.7 billion; 14.200 employees), major shareholder is Feldmuehle Nobel AG, Duesseldorf (98 percent); also see Dynamit Nobel. Allegation: foundry technology for gun factory. Status of the case: "Included in the investigations of the Customs Investigation Office in Duesseldorf and the Bochum prosecution concerning Taji."

Dango und Dienenthal Maschinenbau GmbH, Siegen—sales: DM40 million. Allegation: equipment to work smeltable materials. Status of the case: "Included in the investigations of the Customs Investigation Office in Duesseldorf and the Bochum prosecution concerning Taji."

Wolfgang Denzel. Allegation: radar, radio and navigation equipment for helicopters. Status of the case: "Prosecutor's office in Stuttgart is investigating."

Dynamit Nobel AG, Troisdorf—explosives (sales: DM 1.1 billion; 7,000 employees), a subsidiary of Feldmuchle Nobel AG, Duesseldorf. also see Buderus. Allegation: production plant for weapons and ammunition. Status of the case: "Bonn prosecutors are investigating."

Export-Union Duesseldorf GMbH, Duesseldorf—steel export (sales: DM70 million; 20 employees). Allegation: metal for the manufacture of components for gas centrifugal machines for uranium enrichment. Status of the case: "Customs Investigation Office in Duesseldorf is investigating."

Faun AG, Lauf, headquarters: Nuernberg—commercial vehicles, defense technology. Allegation: transport vehicles for tanks. Status of the case: "Main Finance Administration in Nuernberg is investigating."

Ferrostaal AG, Essen—international trade with iron and steel, industrial plants, equipment, forges, infrastructure projects (sales: DM4.3 billion; 745 employees); sole shareholder is MAN AG, Munich. Allegation: general contractor for the construction of a gun factory. Universal forge. Status of the case: "Customs Investigation Office in Duesseldorf and Bochum prosecutors are investigating (Project Taji)."

Graeser GmbH, Fischbachtal/Hesse—partner is Ramzi Al Khatib. Allegation: business arrangement for a plant, to construct a gun factory. Status of the case: "Arrangement of business deals, investigations still ongoing."

Havert Handelsgesellschaft GmbH, Neu-Isenburg— Consult Project Engineering. Allegation: technical improvement of Scud missiles. Status of the case: "Main Finance Administration in Frankfurt is investigating. The enterprise was searched on 15 January 1991, records confected."

Heberger Bau GmbH, Schifferstadt—construction business (sales 1988: DM104 million; 471 employees), branch office: Heberger Bau GmbH, Baghdad, Iraq. Allegation: building for chemical weapons factories. Status of the case: "Customs Criminal Institute is investigating in connection with Taji. (Probably only construction activity exempt from licensing)."

H + H Metalform GmbH, Drensteinfurt/Muensterland. Allegation: computer-based installation for scrutiny of material and hardening process of gun barrels and grenade cases, rocket bodies, machines for the production of gas, and ultra-centrifuges required for uranium enrichment and rocket casings. Status of the case: "The Customs Criminal Institute and Main Finance Administration in Muenster are investigating. The Federal Office for Industry oversees reliability."

Hochtief AG, Essen—second-largest German construction enterprise (sales: DM5.5 billion; 26,400 employees). Allegation: construction of the foundation of a gun factory. Status of the case: "Included in the investigations of the customs investigating office in Duesseldorf and the Bochum prosecution regarding Taji."

I.B.I., Frankfurt/Main. Allegation: construction service for chemical weapons factory. Status of the case: "Cannot be pursued further, since the owner (Barbouti) went abroad and has meanwhile been murdered."

Integral/Sauerinformatic/ICME, Neumuenster. Allegation: computer programs. Status of the case: "Included in the investigations by the prosecution at the Land court in Bielefeld regarding Gildemeister."

Interatom GmbH, Bergisch Gladbach—planning, building and putting into operation of, among other things, breeder reactors, high-temperature reactors and WEST EUROPE

JPRS-TAC-91-006 15 March 1991

research reactors; uranium enrichment plants; superconductor magnets (sales: DM422 million; 1,570 employees), subsidiary of Siemens AG, Munich, Allegation: nuclear technology. Status of the case: "Investigations underway. Under pressure by the federal government, Interatom has terminated training program for Iraqis and will not deliver shop for building pipelines."

Inwake GmbH, Bonn—import and export. Allegation: technical improvement of Scud B missile, magnets for plant for uranium enrichment. Status of the case: "Prosecutor's office in Bonn is investigating."

Kavo. Allegation: electrical components for nuclear weapons factory. Status of the case: "Customs Criminal Institute charged with investigation."

Kloeckner Industrie-Anlagen GmbH, Duisburg—independent engineering consulting (sales 1988: DM613 million; 630 employees), subsidiaries, among other places, in Teheran, Iran, and Riyadh, Saudi Arabia; partner is the Handelshaus Kloeckner & Co. AG. Duisburg. Allegation: compressors and machine parts, steel production for gun factory, Status of the case: "Ancillary delivery to Ferrostaal (Taji): Customs Investigation Office in Duesseldorf and Bochum prosecutors are investigatine.

Loybold AG, Hanau (no longer included in latest list)—vacuum technology, coating installations (sales: DM1 billion; 5,400 employees), sole shareholder is Degussa AG, Frankfurt; compare there. Allegation: three casting installations for gun factory. Satus of the case: "according to DER SPIEGEL of 6 August 1990, delivery of factoring to DER SPIEGEL of 13 August 1990, delivery of auto-frettage installation of the firm of Schmidt, Kranz & Co. with export license."

LOI Essen Industrieofenanlagen GmbH, Essen furnaces, rapid heating and cooling installations, inert gas installations (sales: DMI (bit million; 250 employees), parent company: Ruhrgas AG, Essen. Allegation: smelting furnaces for gun production. Status of the case: "Included in the investigations of the Customs Investigation Office in Duesseldorf and Bochum prosecution regarding Taji."

Mannesmann Demag AG, Duisburg—machine and plant construction (sales: DM4.1 billion; 19,800 employees), subsidiary of Mannesmann AG, Duesseldorf, compare Mannesmann Demag Huettentechnik. Allegation: production plant for weapons and ammunition. Status of the case: "Ancillary delivery to Ferrostaal (Taji project). Customs Investigation Office in Duesseldorf and Bochum prosecutors are investigating."

Mannesmann Demag-Huettentechnik, Duisburg—blast-furnace installations, branch operation of Mannesmann Demag AG, Duisburg, a 100-percent subsidiary of Mannesmann AG (sales: DM22.3 billion; 121,000 employees), Duesseldorf. Allegation: casting equipment for gun factory. Status of the case: "Included in the

investigations of Customs Investigation Office in Duesseldorf and Bochum prosecution regarding Taji."

Maschinenfabrik Ravensburg AG, Ravensburg machine tools (sales 1988: DM36 million; 195 employees). Allegation: machine tools. Status of the case: "Ancillary delivery to Ferrostaal (Taji); Customs Investigation Office in Duesseldorf is investigating."

MBB-Transtechnica, Taufkirchen—enterprise of the Messerschmitt-Boelkow-Blohm GmbH. Ottobrunn; also see Daimler-Benz AG. Allegation: calibration instruments for rocket research. Status of the case: "Investigations by prosecutors at the Land Court Munich II still continue in connection with the criminal proceedings against the Consen substidiary, PBG."

Philips GmbH, systems and special technology division, Bremen—equipment, installations, and systems in the fields of optronics, position finding, communications, and data processing for defense technology and civilian use. Belongs to Philips corporation, Eindhoven, Netherlands, Allegation: night sight equipment. Status of the case: "Main Finance Administration in Bremen is investigatine."

Rhein-Bayern Fahrzeugbau GmbH & Co. KG, Kaufbeuren—business manager: Anton Eyerle (mentioned separately by Helms), special vehicles of all types, beverages, laboratory, workshop, ambulance and radio vehicles (sales: DM25 million; 50 employees). Allegation: mobile toxicological laboratory. Status of the case: "Main Finance Administration in Munich has not found unauthorized exports. There were ancillary domestic deliveries to lveco-Magirus Deutz. Main Finance Administration in Munich continues investigations."

Saarstahl AG, Voelklingen—iron and steel (sales: DM2.5 billion; 9,300 employees). Allegation: metal for production of gas centrifuge components for uranium enrichment. Status of the case: "See Export-Union."

SMS Hasenclever GmbH, Duesseldorf—machines and complete installations for the forging and metal extruder industry (sales: DM 164 million; 455 employees), subsidiary of SMS Schloemann-Siemag AG, Duesseldorf, which is owned with parity votes by MAN AG, Munich, and Siemag Weiss Stiftung & Co. KG. Allegation: forging press for gun factory. Status of the case: "Included in investigations by the Customs Investigation Office in Duesseldorf and Bochum prosecution regardine Tail."

TBT Tiebohrtechnik GmbH, Dettingen (no longer included in the new Helms list)—machine tools and tools (sales: DM81 million; 510 employees), shareholders are SIG Schweizerische Industrie-Gesellschaft, Neuhausen, Switzerland, and Gildemeister AG, Bielefeld (see there). Allegation: drilling equipment for gun factory. Status of the case: "Included in investigations by Bochum prosecution of the Taji complex, as well as investigations by Bonn prosecution in the Inwako proceedings."

JPRS-TAC-91-006 15 March 1991

WEST EUROPE

4

Thyssen Rheinstahl Technik GmbH, Duesseldorf planning, delivery and construction of industrial plants of all types ready for use (sales: DM440 million; 547 employees). Allegation: plant for the production of arms and ammunition in Taji. Status of the case: "Investigations underway at the Bochum prosecutor's office."

3. Deliveries via Foreign Countries

Asea Brown Boveri AG, Mannheim—90 percent of shares owned by ABB Asea Brown Boveri AG, Zurich, Switzerland, Allegation: Electrical equipment for smelting furnaces in gun factory. Status of the case: "Smelting furnaces which possibly require license were delivered by the Swiss ABB."

Dornier GmbH, Friedrichshafen—space and defense technology, business management in the hands of Daimler-Benz subsidiary, Aerospace AG. Allegation: codevelopment of the "Alphajet" ground-attack aircraft. Status of the case: "Cooperation partner in 'Alphajet'. Was exported from France."

MBB Messerschmitt-Boelkow-Blohm GmbH, Ottobrunn—aeronauties and space enterprise (sales: DM 6.3 billion) of the Daimler-Benz subsidiary Deutsche Aerospace AG. Allegation: partner in Euromissile (50 percent). Status of the case: "Euromissile, Ho! Roland—German-French cooperation. Exports came from France."

4. Criminal Proceedings Initiated

Gildenmeister Projecta GmbH, Bielefeld—industrial plants, linked enterprise (100 percent) of the Gildemeister AG (lathes, guidance systems, sounding borers; corporate sales: DM552 million; 1,910 employees), Bielefeld, see TBT Tief-bortechnik. Allegation: general contractor for chemical weapons factory SAAD 16 and missile programs; computer programs. Status of the case: "Criminal proceedings initiated by Bielefeld prosecutors."

GPA (Wiesenthal Center list). Status of the case: "Consen subsidiary, subject matter of the criminal proceedings against Consen subsidiary PBG at Land Court Munich II."

PBG Project Betreuungs GmbH-Bohlen Industrie GmbH, Essen: Managing holding company for affiliated companies for the production of chemicals, explosives, powder. Parent company of the Consen group. Allegation: rocket technology. Status of the case: "Office of the Prosecutor Munich II has initiated criminal proceedings against responsible parties."

Rotexchemie International Handels-GmbH & Co., Hamburg—pharmaceutical specialties and chemical raw materials (sales: DM100 million; 40 employees). Allegation: sodium cyanide needed for hydrogen cyanide and tabun. Status of the case: "Criminal proceedings underway by Hamburg prosecutors. The merchandise was returned to Belgium. Belgium meanwhile has introduced obligation to obtain a permit for all chemicals on the lists of the Australian Group. Incidentally, merchandise was clearly destined for Iran only."

5. The Karl Kolb Connection

Karl Kolb GmbH & Co. KG, Dreieich-Buchschlag— Scientific Technical Supplies. Export of scientific equipment, new installation of laboratories abroad, technical offices/sales branches, among other places in Baghdad, Iraq, Kuwait, and Riyadh, Saudi Arabia (sales 1988; DM33 million; 62 employees). The six limited partners want to dissolve the Kolb firm by year's end. The reason is purported to be a large drop in orders which has already led to a staff reduction to 22 employees. Allegation: chemical weapons factory, laboratory equipment for material tests, equipment for biological agents. Status of the case: "Criminal proceedings against responsible parties underway at Darmstadt Land Court."

Ludwig Hammer. Allegation: equipment for armament factory. Status of the case: "See criminal proceedings against responsible parties of the Karl Kolb enterprise et al. at Darmstadt Land Court."

Pilot Plant (in liquidation), Dreieich. Allegation: chemical weapons factory. Status of the case: "Subsidiary of Karl Kolb. Criminal proceedings against responsible parties underway at Darmstadt Land Court."

Preussag AG, Hannover—conglomerate merged with Salzgitter AG. Allegation: building for chemical weapons factory. Status of the case: "Investigations by public prosecutor/criminal proceedings underway at the office of the prosecutor in Darmstadt in connection with the Karl Kolb complex."

Quast. Allegation: corrosion-proof alloys. Status of the case: "Was subcontractor of Pilot Plant (domestic business deals)"

Rhema-Labortechnik. Allegation: inhalation chambers for chemical weapons research establishment. Status of the case: "See Karl Kolb (ancillary delivery)."

Uni-Path GmbH (formerly Oixid GmbH), Wesel—wholesaler. Allegation: bacteriological nutrient mediums. Status of the case: "Ancillary supplies to W.E.T."

W.E.T. Water Engineering Trading GmbH, Hamburg. Allegation: chemical substances for the manufacture of nerve gas. Status of the case: "Darmstadt prosecutors have initiated criminal proceedings (Karl Kolb complex)."

Carl Zeiss, Heidenheim (Brenz)—microscopy, medicaloptical equipment, measurement technology, optometrics (sales: DMI.3 billion; 8,300 employees), individual enterprise owned by the Carl-Zeiss-Stiftung. Allegation: equipment for chemical weapons factory. Status of the case: "Was ancillary supplier of Karl Kolb."

WEST EUROPE

JPRS-TAC-91-006 15 March 1991

6. Status of the Case: "?"

Eltro GmbH, Heidelberg—company for radiation technology, optronic equipment, heat image screens, missile guidance, mine sweeping system (sales 1988: DM71.5 million; 477 employees); partners are Telefunken System Technik GmbH, Ulm, and Hughes Aircraft Company, Culver City, California. Allegation: rocket guidance systems. Status of the case: "Rocket guidance systems."

Georg Fischer AG, Schaffhausen—mechanical engineering (sales: DML28 billion). Allegation: equipment for gun factory. Status of the case: "It is a Swiss enterprise in Schaffhausen; ancillary deliveries to Taji."

Industrie-Werke Karlsruhe Augsburg AG, Karlsruhe—regulating technology, welding engineering, defense technology, packaging, trade and services (sales: DM1.4 billion; 6,800 employees). Allegation: machine tools. Status of the case: "9"

Mannesmann-Rexroth—one of the more than 250 subsidiaries and associated companies of the Mannesmann corporation at home and abroad. Allegation: gun components. Status of the case: "This concerns the Belgian Mannesmann subsidiary, G.L. Rexroth NV SA. Transit of parts which the firm intended to deliver for the 'big gun' were held up in Frankfurt."

Mauserwerke Oberndorf GmbH, Oberndorf—machine tools, measurement technology, weapons systems (1,450 employees), an enterprise of the Diehl group, Nuernberg. Allegation: equipment for rocket research. Status of the case: ""

Nickel GmbH. Allegation: airconditioning technology for rocket factory. Status of the case: "?"

Promex Explorations GmbH. Allegation: rocket technology. Status of the case: "?"

Schaerer Werkzeugmaschinen. Allegation: lathes for the production of artillery shells. Status of the case: "?"

Stalco Industrieanlagen. Allegation: arranging arms deals. Status of the case: "Firm of the Iraqi secret service, arrangement of arms deals?"

Teldix GmbH. Allegation: rocket technology. Status of the case: "?"

Waldrich Siegen Werkzeugmaschinen GmbH, Burbach. Company controlled through subsidiary of Ingersoll International Incorporated, Rockford, Illinois, United States. Allegation: machine tools for rocket factory. Status of the case: "?"

Weiss Technik. Allegation: heat and cold chambers. Status of the case: "?"

Fritz Werner Industrie-Ausruestungen GmbH, Geisenheim; industrial equipment, machine tools for special purposes, testing machines (sales 1988: DM205 million).

Allegation: universal drilling equipment for chemical weapons factory. Status of the case: "The enterprise ended its involvement."

Companies Deny Charges

91GE0156A Bonn DIE WELT in German 15 Feb 91 p 12

[Article by "mik": "'We Are No Helpers of Saddam Husayn': On the Confidential Preliminary Report on the Investigation for Suspicion of Illegal Arms Exports"]

[Text] The interim report to the Federal Government on the investigations by German authorities of those suspected of illegal arms exports to Iraq, published verbatim by DIE WELT ("Saddam Husayn's German Business Partners," DIE WELT, II February) met with a lively response. Several radio and television stations aired contributions. Daily newspapers published excerpts. Managers of companies mentioned on the list of U.S. Senator Helms sent comments to DIE WELT. In the following, the replies by the companies are printed in their exact wording.

Dynamit Nobel AG, Troisdorf: "The list also mentions our company, accusing Dynamit Nobel of having delivered a production plant for arms and ammunition. The Office of the Public Prosecutor in Bonn is said to be investigating. Concerning that, it may be stated that Dynamit Nobel did not deliver any production plant for arms and ammunition to Iraq, and also did not in any other way participate in building such a plant. It also is not correct that the office of the Public Prosecutor in Bonn is conducting investigations of it."

Eltro GmbH Gesellschaft fuer Strahlungstechnik, Heidelberg: "You write that Eltro GmbH in Heidelberg is suspected of having had business dealings with Saddam Husayn. That accusation is false. Investigations by the public prosecutor into that were halted on 6 February."

On 6 February the Office of the Public Prosecutor in Heidelberg informed Eltro: "Regarding preliminary proceedings for violation of the Military Weapons Control Law and the Foreign Trade Law. Dear Ladies and Gentlemen, the investigation pending in the Office of the Public Prosecutor in Heidelberg was dropped as of Itoday in accordance with Article 70, Section 2, of the Code of Criminal Procedure."

Gildemeister Projecta GmbH, Bielefeld: "1. Gildemeister Projecta delivered and installed laboratory and workshop facilities for universal applications for the SAAD 16 project. That project does not involve an industrial plant, but rather laboratories and workshops, comparable to facilities at universities, technical educational establishments, and testing institutes, that is to say, facilities which are not specifically built for military purposes. The equipment delivered is not suitable for the development or production of NBC [Nuclear Biological Chemical] weapons. Development know-how was not included in the framework of the order. Half of the order