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Reconstruction in Iraq: The Uncertain Way Ahead

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WORKING DRAFT

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Executive Summary

The course of the fighting on Iraq is now so uncertain that no one can predict when it will be possible to begin the systematic reconstruction of the economy and the petroleum sector. What began as an insurgency has become a sectarian and ethnic conflict that risks tearing the country apart and could lock it into a bloody civil war or divide it between Shi'ite, Sunni and Kurd.

This fighting has compounded the serious, if not critical, problems in the past allocation of aid. The US programmed some \$38 billion dollars in aid to Iraq between its invasion in 2003 and President Bush's announcement of a new strategy in January 2007. The international community pledged some \$15 billion more.

The new Bush strategy at most will buy time and support military operations for a year or so in ways that can weaken the economic incentives to support sectarian and ethnic fighting. To be successful, however, past aid plans will probably have to be totally restructured during the course of 2007 and 2008. The following issues and actions must be addressed:

- Far more realistic and fact-based plans must be developed for the overall development of Iraq based on aid, government spending, which are far more sensitive to Iraqi views of need versus those of the US and outside advisors.
- Kurdish separatism and Shi'ite regionalism in the south already are creating separate
 development efforts, even without action on the provisions of the new constitution that
 permit federalism in every province by Baghdad. These will remain major issues, even if
 the Bush-Maliki plans succeed.
- Local elections, votes on federalism, and divisions of oil revenues under the proposed act will all tend to strengthen regional and local power versus the central government even in the event of victory.
- The failure to fully complete many aid projects, make them properly transferable to the Iraqis, and provide bridging or sustaining funds until they can become self-sustaining will be a steadily growing problem in 2007, and begin to require serious action during 2008 as given projects need repair, further investment, or lack operating funds. Much of the aid effort that has been successful will being to fail relatively quickly, particularly projects depending on Western parts and maintenance practices.
- Iraqi capabilities to plan and administer effective aid efforts still need to be created at the Ministerial, governorate, and local levels. Corruption, incompetence, bureaucratic inertia, sheer lack of personnel, the risk of operating in the field, ethnic and sectarian favoritism, nepotism, and severe contractor problems are the rule and not the exception. The priority to "build" Iraqi honesty and competence to handle aid and economic development is as critical as any other aspect of "win," "hold, "build."
- US core capabilities are also critically weak. It is far from clear that the US can make a fourfold increase in some 100 civilians in the PRTs now in Iraq, many of which already lack expertise and qualifications and took two years to recruit. USAID, the Corps of Engineers, and US contractors have shown little ability to plan, administer, audit, and develop suitable effectiveness measures. The overall level of US effectiveness has been roughly equal to the Iraqi level of effectiveness with far less excuse.

- Both the Iraqi government and aid donors must develop a new approach to aid that deals with the renovation or privatization of Iraq's state industries, finds practical limits to the size of the government sector, and frees agriculture and irrigation from levels of state control and interference that sharply interfere with productivity and competitiveness.
- The de facto deterioration of Iraq's petroleum sector has reached the point where action is becoming increasingly urgent simply to maintain current production, along with efforts to limit the growth of domestic demand and reduce product imports. A coherent plan for energy sector rehabilitation and development is critical to any Iraqi ability to become self-financing, as well as to provide government funds as incentives for conciliation and coexistence. The same is true to both creating suitable refinery capacity and removing subsidies from petroleum products that create massive demand growth and act as incentive for theft and black market activities.
- The deterioration of the critical health and education sectors because of fighting, poor aid programs and sustained underinvestment, needs to be readdressed from the ground up.
- The new Bush strategy finally makes revitalizing Iraq's state industries a critical priority, but this requires new aid plans and either new sources of funds or substantial reprogramming of existing funds.
- A similar effort will be needed to readdress the deterioration of irrigation, and lack of funding and modernization in the agricultural sector.
- As the conflict recedes, new aid plans will be needed to deal with wartime damage to critical infrastructure like roads, urban facilities, etc.
- Similar changes must be made in current plans to deal with water, electricity, and sewers. A nation-wide development plan will be needed which reexamines both what kind of major facilities are needed and how to address the critical problems in power lines, water pipes, sewer connections and the delivery of actual services.
- Aid will be needed to sustain employment in the civil sector, deal with problems like disbanding militias, and downsize and restructure Iraqi security forces as the mission shifts from internal security to defense of the nation from external threats.
- The largely hollow efforts to date to create effective ministries and government offices, and end corruption and favoritism, will need to be put into meaningful practice.
- New incentives will be needed not only to attract foreign investment, but help Iraq's professional and business class recover from the war, help deal with the result of sectarian and ethnic separation and cleansing, and attract back the many Iraqi professionals that have left the country.

It is not clear that any of these issues and needs are currently being given proper attention. It is clear that even in the case of "victory," existing plans and programs can only be the prelude to a very different set of efforts that deal with a very different future than the one existing aid efforts have been based upon.

The course of the fighting on Iraq is now so uncertain that no one can predict when it will be possible to begin the systematic reconstruction of the economy and the petroleum sector. What began as an insurgency has become a sectarian and ethnic conflict that risks tearing the country apart and could lock it into a bloody civil war or divide it between Shi'ite, Sunni and Kurd.¹

The fighting has already compounded serious, if not critical, problems in the past allocation of aid. The US programmed some \$38 billion dollars in aid to Iraq between its invasion in 2003 and President Bush's announcement of a new strategy in January 2007. The international community pledged some \$15 billion more.

This aid is the largest collective effort ever made to restructure the economy of a failed state, and one that has combined massive political, military, and economic efforts. Yet, simply quoting aid figures grossly understates the true cost of the US effort. The US has spent an additional \$6 billion to \$11 billion a month on fighting the insurgent threat, dealing with hostile militias, and attempting to bring local security.

At the same time, studies by the World Bank and IMF – conducted on a preliminary basis, and without detailed surveys or consideration of the impact of the fighting – put the cost of "reconstruction" at levels around \$100 billion. In addition, Iraq must deal with the impact of debt and reparations.

During the Iran-Iraq War through the fall of Saddam Hussein in 2003, Iraq assumed a heavy debt burden of around \$100 billion – largely in debts to Gulf states and Russia. After the invasion of Kuwait in 1990, Iraq faced some \$250 billion in reparations payment claims. In November 2004, the Paris Club group of 19 creditor nations agreed to forgive, in stages, up to 80 percent on \$42 billion worth of loans. The relief is contingent upon Iraq reaching an economic stabilization program with the IMF. Iraq's oil export earnings are immune from legal proceedings such as debt collection as a result of U.N. Security Council Resolution 1483,, but only until the end of 2007.

The Failed Aid Effort to Date

The work of the U.S. Special Inspector General for Iraqi Reconstruction (SIGIR) has led the Bush Administration to admit that much of this effort has largely failed.² Iraq and the US have been unable to account for aid spending in detail, or measure the effectiveness of aid projects with any accuracy. Far too often, progress is measured in terms of the money spent, projects started, buildings completed, or gross measures of capability like the size of generating plants or volume of water purification.

The ability to bring projects to a successful, self-sustaining conclusion can only be sampled selectively, and largely in secure areas. In case after case, projects fail to result in the proper distribution of services, meet evolving demand for power or water, and turn new buildings into functioning schools or clinics. In many cases, projects have had to be

downsized or relocated to deal with security problems. Buildings are not properly completed, equipped, or staffed.

Economic and Political Problems as Well as Military Ones

Much of the problem does stem from the fighting, but this is only part of the story. The aid programmed was rushed into Iraq after the fall of Saddam Hussein without proper planning, management, and oversight. The US initially sought the rapid transformation of Iraq from a command kleptocracy into liberal capitalism with little understanding of the scale of the economic, political, and cultural problems it faced. Massive infrastructure projects were planned and started without proper surveys of need, and without proper assessment of whether suitable contract support existed, whether the Iraqi government could manage the effort, and whether the completed project would be sustainable.

The heritage of problems in state industries, and a state-driven agricultural center that planned crops and paid fixed prices regardless of quality of output, was ignored. So were the problems created by disbanding the Ba'ath, which provided the secular core of the professional and administrative class, and the collapse and looting of the ministries that had controlled the state from the center. At every level, planning and administration were made worse by constant changes in aid personnel with short tours of duty and often little practical experience and changing economic and political goals. Iraqi government personnel increasingly divided along sectarian and ethnic lines, and key ministries like health came under the control of radicals like the Moqtada Al Sadr.

The lack of regional and local administrative capability, and the impact of massive corruption and theft, were underestimated. The fact that the country had gone bankrupt early in the Iran-Iraq War (1983), and had had to rely on war loans which only paid for guns, not butter, meant much of its infrastructure and services remained sized more around a country with a population of 18-19 million, than one with 26 million. The problem was often "construction," not reconstruction.

It is clear from survey after survey that the net impact of aid has fallen far short of Iraqi expectations, that progress often has failed to even maintain the past status quo in terms of employment and services, and that the new Bush strategy calls for major shifts in the nature of US aid efforts that now focus almost exclusively on short term security efforts, and leave the future nature of Iraq's economy and outside aid efforts to be determined by the course of Iraq's struggles with its insurgents and secular and ethnic factions. The result is an open-ended process where the Iraqi government, US, and other nations can only guess at the medium and long-term future of development and aid efforts.

The Road Behind

It is very difficult to obtain anything like an accurate picture of the cumulative impact of aid or the success of individual aid efforts. Many reports confuse pledges with actual spending, and loans with actual direct aid. Massive amounts of money have been obligated, but far less has sometimes been spent. The money that has been spent has often

been reprogrammed from economic aid to areas like security, aiding the military, or aiding the government. Corruption, waste, and a lack of accounting then make much of the flow of money highly speculative.

As of October 2006, however, the Special Inspector General for Iraq Reconstruction estimated that the US had appropriated a total of \$38.3 billion in reconstruction funding. In addition, the Coalition Provisional Authority and the Iraqi governments that had followed had used some \$41.2 billion in Iraqi funds, and other international donors had pledged some \$15.0 billion more.³ In addition, Iraq has received substantial loan forgiveness and will receive much more if it can meet its agreed targets for fiscal responsibility.

The actual level of spending was far harder to determine. The US, for example, only reported regularly on spending on some \$20.9 billion in funds as part of what it called the Iraqi Reconstruction and Relief Fund (IRRF). As of January 1, 2007, it had actually obligated 16.3 billion of this money.

Out of this total, \$4.6 billion went to building Iraqi security forces. This has produced forces with over 300,000 men. Many, however, deserted or were ineffective. Much of the National Police and police have taken sides in the sectarian or ethnic fighting. The building of the regular army has had moderate success, but the police effort has largely been a failure.⁴

Nearly another \$1 billion had gone to law enforcements, courts, and other forces of security. In general, this effort has had very mixed success. The rule of law does not exist in much of the country because of insurgent, sectarian, and ethnic tensions and fighting. Iraq has not resolved the role of religion in law, or the constitutional problems involved. Many courts do not operate, are corrupt, or act out of fear. Many others are not staffed or simply do not exist.

A total of 0.9 billion had gone to encouraging democracy, and another \$350 million to improving governance and education. Some \$550 million went to health and \$760 million went to what was vaguely called "private sector development."

The other primary areas of spending were all for infrastructure: \$2.9 billion for electricity, \$1.4 billion for water resources and sanitation \$1.3 billion for oil, \$200 million for roads, and \$330 million for transport and communications.⁵

Such investment has not been successful in helping many Iraqis, particularly the poor and those in troubled areas. As the Department of Defense report to the US Congress issued in November, 2006 stated, reform in the financial sector and currency reform has been offset by major problems with inflation,⁶

Iraq's high rate of inflation is a serious obstacle to progress under the IMF's Stand-By Arrangement (SBA). Sustained progress under the SBA is necessary to secure donor support for the International Compact, and failure to meet the terms of the SBA would complicate

negotiations for a new IMF program in 2007. Satisfactory progress under an IMF program for three years is required for the final 20% of Paris Club debt relief.

High inflation—a result of disruptions in the supply of food and fuel, price deregulation, spending by the Government of Iraq and donors, and growth of the money supply—is threatening progress toward economic stability in Iraq. Unlike in previous years, when inflation was confined mainly to rents, fuel, and transport, prices are now increasing rapidly in all sectors.

According to Iraq's Central Organization for Statistics and Information Technology, the annual inflation rate from October 2005 to October 2006 was 53%. It is widely believed that the official inflation rate underestimates the actual inflation rate.

Runaway inflation exacerbates the government's decline in purchasing power and increases wage and pension demands, placing added pressure on the budget.

There are many other problem areas. For example, the fighting has largely offset the impact of major investments in electricity, while the end of import barriers has greatly increased demand. The level of daily electricity supplied has varied over time, but show little real increase since 2004, and availability only averaged 7.5 hours per day going into the Baghdad grid at the end of 2006, and 8.8 hours nationwide. It was roughly 55% of national demand according to US estimates, and this is supply into the grid. In much of the country, fighting and theft meant that power lines were gone or never installed, and no one could begin to measure how much power actually reached the people.⁷

The Department of Defense report summarized the situation as follows,

The Government of Iraq's goal for daily average peak generating output by the end of December 2006 is 6,000 MW, but it is unlikely that this goal will be met. During the current reporting period, the actual average daily peak generating output was 4,650 MW, an increase of 2% over the period covered in the previous quarterly report and 78% of the goal.

Almost half of Iraqis report supplementing government supplied electricity with private generators to fill the supply gap.

The shortfall between government-supplied electricity and demand is aggravated by the absence of a rational fee for-service tariff system that would encourage conservation and reduce the effects of corruption. Many experts agree that such a system is a crucial step toward solving the supply gap problem.

Government-produced electricity averaged 11 hours per day over the previous quarter and 12.2 hours per day for the month of October, the last full month for which data are available. The October data are slightly higher than the programmed end state of 12 hours per day nationwide. Baghdad, however, averaged only 6 hours of power per day in the previous quarter, rising to 6.7 hours in October, 5.3 hours short of the programmed end state.

Iraqis in some neighborhoods in other regions of the country also did not receive the national average hours of power due largely to interdiction of high-voltage transmission lines, lack of a rapid repair capability in the Ministry of Electricity, and limited local electrical generation capacity. Residents of other neighborhoods received continuous power.

These short-term problems, however, are only part of the story. To date, aid efforts have not addressed serious long-term requirements and cannot do so in the future without more aid money and enough security to actually create new facilities. The US Energy

Information Agency provides the following additional insights into the problems involved,⁸

Iraq's shortage of electric generating capacity has been caused by numerous problems, including sabotage, looting, lack of security for workers, disruptions in fuel supplies for the plants, difficulty in procuring replacement parts at the aging stations, lack of training for workers, and obsolete technology.

Also, routine natural gas flaring could potentially produce up to 10,000 MW of electricity if current infrastructure is reformed or if new infrastructure could be built, according to some analysts. In early March 2005, then-Electricity Minister al-Sammara'i said that unless \$5 billion were allocated to Iraq's electricity sector, the situation could become disastrous. Also, in late September 2005, Iraq's new electricity minister, Mohsen Shlash, said that the 2005 budget for power projects had been used up, and that \$20 billion would be needed by 2010 to boost Iraqi capacity to 18,000 MW.

The World Bank estimates that restoring and improving Iraq's electric power sector will require about \$12 billion in investment, more than double the \$6 billion that the U.S. Congress appropriated in the fall of 2003. Overall, Iraq's power ministry has cited figures as high as \$35 billion as the overall cost of rebuilding the country's power sector. In addition, Iraqi power demand is increasing as people buy new air conditioners and other electrical appliances.

The Iraq Study Group reported in early 2007 that Baghdad's electricity ministry estimated that it would still cost \$27 billion to modernize and repair Iraq's grid to meet modern power standards. The GAO reported that national demand for electricity had grown to an average of 8,210 megawatts in 2006 versus a supply of 4,317 megawatts, and that the roughly 2,000 megawatts aid had added to the Iraqi power system had been offset by looting, war, obsolescence of existing capacity, and misuses of the new capacity. (The US installed 35 modern gas turbine generators, but problems with gas distribution meant that 16 were using low quality fuel oil or crude because of a lack of gas supply, were delivering half their rated power, and having frequent down times for maintenance.)

The problems in the water and sewer sectors are even worse, although far detailed statistical data are available. The creation of new facilities has been important in some secure parts of the country, but it has been impossible to fix steadily deteriorating water and sewer distribution systems in any coherent way or install new ones, and no one can measure the actual availability of functioning water and sewer systems to the public in much of the country. For example, US government reporting summarized the true state of water distribution as follows in November 2006, "Direct measurement of water actually delivered to Iraqis is not available. Iraq must closely examine and improve its domestic water usage within the different sectors...The agricultural sector uses approximately 90% of the water consumed, but there is tremendous potential to improve the efficiency of water use in this sector." 10

The problems in the oil sector are described later in this analysis, but most of the money went to emergency repairs or was spent on projects damaged in the fighting. Military traffic far more than offset aid to roads and the transport sector. Improvements in

communications were largely confined to private sector cell phone efforts and government communications.

On paper, aid expenditures, high oil revenues, and massive flows of wartime expenditures have given Iraq a significant GDP growth and increase in per capita income. The practical problems with such expenditures, however, were far greater than the benefits. As the US government eventually came to report in detail, so much money went to security, waste, corruption, contractors outside Iraq, dealing with insurgent threats and sectarian violence, coping with crime, and paying for other factors that ordinary Iraqis rarely saw any progress over the level of services and wealth that they had had at the time Saddam fell.

In fact, Iraqis in Baghdad, Western Iraq, and in many areas outside the Kurdish security zone saw a major drop in delivered services, major problems with unemployment, and crippling personal losses because of violence or forced ethnic and sectarian cleansing. All of these problems were further compounded by the fact that paper increases in salary for those who were employed were largely offset by what SIGIR reported in January 2007 was the second highest rate of inflation in the world – reaching a rate of over 33% in calendar 2006. 11

These problems were compounded by the combined impact of growing violence and the failure to address the role of the state sector in services, industry, and agriculture. While the US and aid effort lacked any coherence, or consistency over time, the net result was to encourage private sector action and largely ignore the older state sector.

As a result, large numbers of state employees in the service sector found themselves without job or direction long before market forces could become active and shape the service sector of the economy. "Macro" reform of the financial sector also did not lead to the creation of an effective banking and credit system at the regional or local level, nor anything approaching efficient financial services that reach the ordinary Iraqi. Moreover, the welfare and state aid activities following the fall of Saddam Hussein were as corrupt, nepotistic, subject to favoritism, sectarian and ethnic faction ridden, inefficient, and lacking in personnel and capability outside the central government structure as other state activities.

This did not stop a wave of entrepreneurial activities, many profiteering off of aid and war expenditures, but it made many dysfunctional and blocked development in many high threat areas. Microcapital loans, small ventures, and similar measures could neither be put into place in most of the country or meet the scale of its needs. Bubble ventures, scams, corruption, and shadow enterprises were easy to put into place, often with the support of government officials.

The critical state industries sector was large abandoned in spite of the fact it dominated Iraq's industrial base. The massive military industries and RDT&E efforts were virtually abandoned. Many other state industries were effectively mothballed, looted, or left to rot, although many employees were given the equivalent of welfare payments that paid

them not to work. In early 2007, some 600,000 Iraqis – roughly six times the average number of jobs created by aid efforts – were still being paid not to work. ¹² It was not until President Bush announced his new strategy for Iraq on January 10, 2007 – more than three years after Saddam's fall – that the US showed a serious interest in revitalizing state industries and then in terms of vague plans to use them to rapidly create jobs.

The agricultural sector gave the impression of having private elements before Saddam's fall, and a large black market did have this effect to some degree. Water and irrigation management, however, were state controlled and subsidized. Many areas received direction as to what to plant, and seed stocks and fertilizer, from the state. Crops were bought by the state on the basis of volume or weight with little regard to quality. The irrigation system did receive aid after the fall of Saddam Hussein, but no plan existed to modernize agriculture and reduce Iraq's dependence on food imports. There were no advisors, extension agents, and no serious aid efforts. The better farmers still profited and adapted – taking advantage of more freedom and higher prices – but many did not know how to adapt or became aught up in regional violence and problems.

The SIGIR reported in October 2006, that US, Iraqi, and international aid funds were not being effective because of a steadily deteriorating security situation across Iraq. Poor capital execution by the Iraqi government, corruption within certain Iraqi ministries, and breakdowns in the transfers of assets in Iraq. It also reported that both the Iraqi government and the US lacked the security to properly monitor the completion and effectiveness of many – if not most – aid projects. ¹³

Other US reporting indicated that the total number of Iraqi jobs created by aid programs peaked at well under 140,000. This is a remarkably low figure for a country with an estimated population of 26.8 million people and a total labor force of well over 7.4 million.¹⁴ Worse, U.S. government estimates put national unemployment figures at far higher levels than the optimistic estimates of the Iraqi government and some international agencies. The figures seem to range from about 27-40% nationally and are well in excess of 60% in high conflict areas.¹⁵

The Department of Defense quarterly report, <u>Measuring Stability and Security in Iraq</u>, which was issued in November 2006, described the unemployment situation as follows, ¹⁶

There have been no new unemployment data since the August 2006 report. At that point, official unemployment estimates ranged from 13.4% to 18%. Other reporting indicates unemployment is significantly higher. Private sector-led economic growth and investment are essential for any long-term, sustained reduction in unemployment.

Unemployment and underemployment may make financial incentives for participating in insurgent or sectarian violence more appealing to military age males. There is a correlation between dissatisfaction over jobs and levels of violence. A decrease in unemployment may well have a significant impact on the level of sectarian violence and insurgent attacks based on analysis by the Joint Warfare Analysis Center.

Efforts to address unemployment and underemployment must be viewed as a top United States and Iraqi priority and be appropriately funded.

The same report described some of the human costs of these problems as follows:

The most recent estimates of hunger and nutrition were reported in the August 2006 report. Malnutrition was reported as varying between 14.2% and 26.5%, depending on the province.

A social safety net program, being developed by the Ministry of Labor and Social Affairs, was described in the last report. The social safety net program is an essential step in reforming national subsidies, as required by the IMF SBA. Legislation required for this initiative has not yet been introduced.

This does not mean that there have not been some successes. As recent CIA reporting indicates, "Iraq has established the institutions needed to implement economic policy, has successfully concluded a three-stage debt reduction agreement with the Paris Club, and is working toward a Standby Arrangement with the IMF. The Standby Arrangement would clear the way for continued debt relief from the Paris Club." ¹⁷

The Oil and Energy Issue

These problems with aid highlight why no strategy for Iraq can ignore the oil problem. The CIA reports that the Iraqi economy remains severely distorted by war, and is now dominated by the oil sector, which provides about 95% of foreign exchange earnings and more than 90% of government earnings aside from aid. Real per capita income is still below the level it was in 1991, after the first Gulf War. ¹⁸

Iraq has immense petroleum resources, although no one has anything approaching an accurate estimate, or one based on anything approach modern seismic surveys. The Energy Information Agency of the US Department of Energy estimates these resources as follows. ¹⁹

According to the Oil and Gas Journal, Iraq contains 115 billion barrels of proven oil reserves, the third largest in the world (behind Saudi Arabia and Canada), concentrated overwhelmingly (65 percent or more) in southern Iraq. Estimates of Iraq's oil reserves and resources vary widely, however, given that only about 10 percent of the country has been explored. Some analysts (the Baker Institute, Center for Global Energy Studies, the Federation of American Scientists, etc.) believe, for instance, that deep oil-bearing formations located mainly in the vast Western Desert region could yield large additional oil resources (possibly another 100 billion barrels or more), but have not been explored. Other analysts, such as the U.S. Geological Survey, are not as optimistic, with median estimates for additional oil reserves closer to 45 billion barrels. In August 2004, Iraqi

...Oil Minister Ghadban stated that Iraq had "unconfirmed or potential reserves" of 214 billion barrels. In early May 2005, Ibraihim Bahr al-Uloum was named to replace Ghadban, stating that his main goals were to reduce corruption in the oil sector, to improve fuel availability, to reduce attacks on oil infrastructure, and to re-establish an Iraqi National Oil Company (INOC) by the end of 2005 (this did not happen).

...According to the Oil and Gas Journal, Iraq contains 110 trillion cubic feet (Tcf) of proven natural gas reserves, along with roughly 150 Tcf in probable reserves. About 70 percent of Iraq's natural gas reserves are associated (i.e., natural gas produced in conjunction with oil), with the rest made up of non-associated gas (20 percent) and dome gas (10 percent).

....Until 1990, all of Iraq's natural gas production was from associated fields. In 2004, Iraq produced 62 billion cubic feet (Bcf) of natural gas, down sharply from 215 Bcf in 1989. Since

most of Iraq's natural gas is associated with oil, progress on increasing the country's oil output will directly affect the gas sector as well. Most associated gas is flared off due to a lack of sufficient infrastructure to utilize it; according to Iraq's oil ministry, 60 percent of all natural gas production is flared off. Significant volumes of gas also are used for power generation and reinjection for enhanced oil recovery efforts...After the 2003 war, gas gathering and treatment facilities in southern Iraq reportedly deteriorated to the point that most gas produced in the area was simply flared off. Iraq is looking at plans for increasing associated natural gas processing capability in Zubair and West Qurna and to reduce gas flaring.

The EIA also reports serious additional problems in Iraq's related infrastructure, pipeline, and export facilities which can only be dealt with properly if the country is made secure and preserves a high degree of unity, 20

One major challenge in maintaining, let alone increasing, oil production capacity, was Iraq's battle with water cut, especially in the south. In 2000, Saybolt International had reported that Iraq's Northern Oil Company (NOC) and Southern Oil Company (SOC) were able to increase their oil production through use of short-term techniques not generally considered acceptable in the oil industry (i.e., injection of refined oil products into crude reservoirs).

The Saybolt report now appears to have been largely accurate. In addition, a U.N. report in June 2001 said that Iraqi oil production capacity would fall sharply unless technical and infrastructure problems were addressed. Others have pointed to the need for water injection in order to maintain pressure and to avoid reservoir damage in the southern fields. U.N. oil experts have estimated that some reservoirs in southern Iraq have been so badly managed that their ultimate recovery rates might be only 15 percent-25 percent, well below the 35 percent-60 percent usually seen in the oil industry.

Iraq's southern oil industry was decimated in the 1990/1991 Gulf War, with production capacity falling to 75,000 bbl/d in mid-1991. That war resulted in destruction of gathering centers and compression/degassing stations at Rumaila, storage facilities, the 1.6-million bbl/d (nameplate capacity) Mina al-Bakr/Basra export terminal, and pumping stations along the 1.4-million bbl/d (pre-war capacity) Iraqi Strategic (North-South) Pipeline. Seven other sizable fields remain damaged or partially mothballed. These include Zubair, Luhais, Suba, Buzurgan, Abu Ghirab, and Fauqi. Generally speaking, oilfield development plans were put on hold following Iraq's invasion of Kuwait, with Iraqi efforts focused on maintaining production at existing fields.

In October 2005, the SOC re-issued a tender for drilling in southern oil fields. Reportedly, SOC offered improved payment and other terms. Included in the tender was the chance to drill 20 wells in the Mishrif formation of the West Qurna fields (see below). In other news, in September 2005, the US Project and Contracting Office cancelled part of a contract with Halliburton to refurbish 60 wells in southern Iraq. The contract was then awarded to SOC.

Iraq's oil exports go overwhelmingly through the southern port of Basra. Since the war, Iraq's northern route to Turkey has been largely inoperable due to war damage and frequent sabotage. Exports

Crude oil exports during May 2006 averaged 1.5 million bbl/d. Increased production impact on exports will be partially moderated by a fire that destroyed 70 percent of the Khor al-Amaya port facility at the end of May. The facility handled about 5 percent of oil exports, but with the northern export route frequently threatened by attack and the Basra terminal near capacity, this will hurt the prospect of increased oil exports from the country. Repair work will probably take up to four months, according to Iraqi oil officials.

Under optimal conditions, and including routes through both Syria and Saudi Arabia that are now closed or being utilized for other purposes, Iraq's oil export infrastructure could handle throughput

of more than 6 million bbl/d (2.8 via the Gulf, 1.65 via Saudi Arabia, 1.6 via Turkey, and perhaps 300,000 bbl/d or so via Jordan and Syria). However, Iraq's export facilities (pipelines, ports, pumping stations, etc.) were seriously disrupted by the Iran-Iraq War (1980-1988), the 1990/1991 Gulf War, the most recent war in March/April 2003, and periodic looting and sabotage since then.

Between April 2003 and June 2006, there were an estimated 315 attacks on Iraqi energy infrastructure, including the country's 4,350-mile-long pipeline system and 11,000-mile-long power grid. In response to these attacks, which have cost Iraq billions of dollars in lost oil export revenues and repair costs, the U.S. military set up Task Force Shield to guard Iraq's energy infrastructure, particularly the Kirkuk-Ceyhan oil pipeline. In August 2003, a South African security company, Erinys International, won a \$40 million contract to train 6,500 armed guard to protect Iraqi oil wells, pipelines, refineries, and power plants, mostly in southern Iraq.

Until late 2004, when the Iraqi Oil Ministry took charge of security at oil facilities, Erinys operated as part of a \$100 million joint contract with approximately 14,000 guards (mainly Iraqi nationals). In support of Erinys, Florida-based AirScan Inc. provides aerial surveillance of Iraqi pipelines. Under Saddam Hussein, Iraqi pipelines were guarded in part by local tribes, and in part by two army divisions.

The 600-mile, Kirkuk-Ceyhan (Turkey) dual pipeline is Iraq's largest crude oil export line. The 40-inch line has a fully-operational capacity of 1.1 million bbl/d, but reportedly could handle only around 900,000 bbl/d pre-war. The second, parallel, 46-inch line has an optimal capacity of 500,000 bbl/d and was designed to carry Basra Regular exports. Combined, the two parallel lines have an optimal capacity of around 1.6 million bbl/d. Unfortunately, Kirkuk-Ceyhan has been a main target for sabotage since June 2003, and is open only sporadically.

Capacity on the line is believed to be as high as 800,000 bbl/d, with significant repairs still required. Among other problems, the line was damaged by a bridge ("Al Fatha," located near Baiji) that collapsed on it after being bombed by U.S. planes during the war, requiring major repairs, including the drilling of a new tunnel under the Tigris River (reportedly, that work was complete by late 2005). In addition, the IT-1 pumping station on the Kirkuk-Ceyhan line was damaged by looters, but reportedly is operable manually.

The IT-2 pumping station on the same line reportedly was looted and destroyed. In June 2006, Iraq is expected to launch its first Kirkuk-Ceyhan (northern export route) crude oil tender since August 2005, after two weeks of on-off pumping. Flow rates have been reported between 150,000 and 550,000 bbl/d and have successfully lifted stocks at Ceyhan to just under 5 million barrels.

Oil is the one major source of national revenue aside from outside aid, it was also a key focus of sectarian and ethnic conflict. The sharing of Iraqi oil revenues and oil reserves was a critical aspect of Shi'ite, Sunni, and Kurdish power struggles.

As is the case with aid efforts, however, insurgent attacks and crime constantly threaten exports and oil development. Only high world oil prices kept Iraq from having major financial problems because of recurrent attacks on its oil facilities and pipelines. In spite of lower production and exports, steadily higher domestic consumption, and the impact of war, Iraq earned an estimated \$23.5 billion in oil export revenues during 2005, more than twice the \$9.8 billion earned in 2003. The US Energy Information Agency (EIA) estimated Iraq's oil export earnings at around \$30.7 billion in 2006, but that that the would fall below \$25 billion in 2007 because of slightly lower oil prices.²¹

The EIA warned, however, that Iraqi oil export revenue projections are complicated by high levels of uncertainty regarding future Iraqi oil exports, ongoing instability and violence that discourages contractors from making needed repairs, and continuing attacks on oil infrastructure. It also noted that Iraq's net revenues exaggerated its resources since Iraq had to spend over \$2 billion per year on importing refined oil products.²²

The fighting between 2003 and the beginning of 2007 also damaged both Iraq's production capability and its ability to plan increases in future production, much less implement them. Iraqi production had reached its historical peak of t 3.7 million bbl/d in December 1979, shortly before it invaded Iran, It dropped sharply during much of that war, but climbed back to 3.7 million bbl/d, in July 1990, just prior to its invasion of Kuwait.

Production crashed after that time due to the first Gulf War and Iraq's refusal to comply with the terms of the UN ceasefire. Iraqi oil output increased slowly, to 600,000 bbl/d in 1996. With Iraq's acceptance of the terms of U.N. Resolution 986 in late 1996. This resolution allowed limited Iraqi oil exports in exchange for food and other supplies ("oilfor-food").

Iraq's oil production then increased to 1.2 million bbl/d in 1997, 2.2 million bbl/d in 1998, and around 2.5 million bbl/d during 1999-2001. Iraqi monthly oil output increased in the last few months of 2002 and into early 2003, peaking at around 2.58 million bbl/d in January 2003, just before the US and British invasion.

Production has not met the Iraqi Oil Ministry Goal of 2.5 million bbl/d since that time, and ranged from weekly averages of 1.79 million bbl/d to 2.33 million during the last quarter of 2006. Actual exports have fluctuated significantly as well, both because of various attacks and growing problems in the overproduction of Iraqi oil fields that cannot be corrected until security and stability are established. Exports ranged from lows of 1.05 million bb/l per month during 2006 to highs of \$1.68 million.

These field management problems are becoming increasingly more severe and are increasing the need for short-term aid. In May 2006, for example, Iraqi production (net of reinjection) was averaged around 1.9 million bbl/d, with "gross" production (including reinjection, water cut, and "unaccounted for" oil due in part to problems with metering) of about 2.1 million bbl/d.

The US EIA reports that increased "water cut" (damaging intrusion of water into oil reservoirs) are probably the result of both past and current overpumping. Production from Kirkuk reached as high as 680,000 bbl/d, well above the field's estimated optimal production rate of 250,000 bbl/d, as Iraq attempted to sell as much oil as possible in the months leading up to the March/April 2003 war.²⁴

Poor reservoir management practices during the Saddam Hussein years -- including reinjection of excess fuel oil (as much as 1.5 billion barrels by one estimate), refinery residue, and gas-stripped oil -- may have seriously, even permanently, damaged the northern oil field. Among other problems, the EIA reports that fuel oil reinjection has

increased oil viscosity at Kirkuk, making it more difficult and expensive to get the oil out of the ground.

In order to better understand the state of the Kirkuk reservoir, a contract was signed in early 2005 for Exploration Consultants Ltd. and Shell to carry out an integrated study on Kirkuk. Work was scheduled to be completed during 2006 but seems to have been delayed because of the fighting. Once the study is complete, it will be the first serious study of Iraq's northern fields in three decades and the only one to use modern technology.

Similar studies are in place in Rumaila and the Maysan fields will also be conducted at the same time, and virtually all of Iraq's current producing and shut it fields need substantial technical study, renovation, and modernization. It seems clear that reinjection and water cut problems, wartime damage and reliance on outdated equipment, and "unaccounted for" oil due in part to problems with metering) will affect near term production in increasing amounts, and that major additions to Iraqi production capacity will not take place for at least 2-3 years after Iraq can establish enough security for foreign investment and full-scale field development to take place.²⁵

Substantial gains might well occur simply by modernizing existing fields, *if* the fields and export facilities can be given enough security. The EIA reports that,

Throughout most of the 1990s, Iraq did not generally have access to the latest, state-of-the-art oil industry technology (3D seismic, directional or deep drilling, gas injection, etc.), sufficient spare parts, and investment. Instead, Iraq reportedly utilized sub-standard engineering techniques (i.e., overpumping), obsolete technology, and systems in various states of decay in order to sustain production. In the long run, reversal of all these practices and utilization of the most modern techniques, combined with development of both discovered fields as well as new ones, could result in Iraq's oil output increasing by several million barrels per day.

At the same time, the Department of Defense report issued in November 2006 notes that the major problems in the oil sector are compounded by the fact Iraqi has limited refinery capability, and must import massive amounts of product at high cost into a war zone which it then is still selling well under cost, ²⁶

Over the course of Saddam Hussein's reign, Iraq's oil infrastructure deteriorated badly due to lack of replacement of critical parts and equipment from the original suppliers. The Coalition has worked to help the Government of Iraq restore oil facilities, increase production, improve refining, boost natural gas production, and maintain pipeline facilities.

However, poor operational and maintenance practices, insurgent attacks, slow repair, and flawed procurement and contracting procedures have hampered progress and have precluded the Ministry of Oil from providing sufficient funds for operations and maintenance, needed rehabilitation projects, and new field development.

The flow of crude oil has been periodically halted by corrosion, fires, maintenance, and attacks, all of which hamper production of refined products and crude oil for export.

Oil exports fell short of the Government of Iraq's revised goal (1.7 mbpd). However, due to higher market prices for crude oil, revenues improved and exceeded annual targets by US\$1.7 billion through the end of October.

During the last reporting period, Iraq briefly resumed exports from northern oilfields for the first time since the autumn of 2005, though on a very small scale. Sabotage and equipment failures continued to prevent significant northern exports.

The regulated price of regular gasoline (87 octane) in Iraq is currently about 170 dinars (~US\$0.45) per gallon, while premium gasoline (92 octane) is about 350 dinars (~US\$0.90) per gallon. Fuel subsidies and a limited supply lead to gray market activities and corruption. Gray market prices for refined products in Iraq are considerably higher than the regulated prices and are comparable to those of its neighbors, with the exception of Turkey, which heavily taxes refined oil products.

The Energy Information Agency reports similar problems, but that aid projects may help solve many of the product import problems in several years *if* the country becomes secure enough to build new refineries and *if* it remains unified enough to distribute refined product efficiently, and fairly,²⁷

According to former Oil Minister Issam Chalabi, Iraqi refineries currently are operating at only 50 percent-75 percent of capacity, forcing the country to import around 200,000 bbl/d of refined products, at a cost of \$200-\$250 million per month. This does not include the additional cost of steep government subsidies on the consumer price of gasoline, which had been priced under 10 cents per gallon prior to December 2005 (violent demonstrations broke out in that month after steep price increases were announced). It is estimated that, overall, direct and indirect oil subsidies cost Iraq \$8 billion per year. Subsidies also encourage illegal smuggling of oil out of Iraq, and exacerbate shortages within the country. In order to reduce Iraq's need for oil product imports, significant investment will be needed to perform refinery upgrades (Iraq had identified dozens of such projects prior to the war) and possibly to build new refineries.

In early December 2005, construction began on two new refineries – a 140,000-bbl/d facility in Karbala province and a 30,000-bbl/d plant at Diwaniya (south of Baghdad). The two plants are expected to cost around \$1.5 billion and \$300 million, respectively, and to be completed within three years. Iraq has also issued tenders for a 70,000-bbl/d refinery at Koya in the Kurdish region, and a 140,000-bbl/d facility at Nahrain, south of Baghdad.

The good news is that BP and Shell have been awarded contracts to conduct and examination of the reservoirs in both the north and south to determine the extent of any down hole damage resulting from inappropriate field management practices (e.g., pulling the reservoirs too hard, resulting in high water cuts, or reinjection of "topped" crude oil or heavy products under the guise of pressure maintenance). The "bad" or uncertain news is that these reports were submitted to the Ministry for review and evaluation in later 2006, but no public results are available although serious damage was reported to have taken place in both the southern fields as well as Kirkuk. Moreover, GAO studies show that the Oil Ministry spent little of its \$3.5 billion capital budget in 2006 because of poor financial controls, combat problems, crime, and corruption.²⁸

The failure to adopt a petroleum law (promised by year end 2006) remains another major stumbling block to effective Iraqi government planning, developing a well-structured aid effort, and new investment, especially by the major oil companies, although smaller firms are actively engaged in drilling in the north. Moreover, reports that Iraq has set up a federal council for all and gas (chaired by the Prime Minister) to "endorse all oil deals with foreign investors and observe their implementation" raises still more questions about both aid and Iraqi revenue plans and capabilities.

The "facts on the ground" emerging out of Iraq's political and military struggles may well result in some of those contracts beings amended to reconcile them with whatever law is eventually agreed to. Regional distribution of oil revenues and control over new projects remain contentious issues, though definitions of what constitutes "new" oil vary based on who is doing the interpreting;

As for facilities, there have been well over 300 incidents since the fall of Saddam, and president's mission accomplished announcement. These not only affect integrity of oil facilities but compound Iraq's pipeline problems, some of which cannot operate at their published rated throughput capacity for throughput serious consequences.

Finally, any effective aid and financing plan must address the black market oil movements in country, especially for refined products, remain high – and profitable. Metering of oil shipments and exports is still incomplete at best and Iraq's the production and export figures are both suspect and variable.

The New Bush Administration Strategy

Given this background, it is not surprising that the Bush Administration made a new approach to aid a critical part of the new strategy that President Bush announced on January 10, 2007. While it was the steady rise of insurgent attacks and civil fighting that drove the President to take a number overall approach to US intervention in Iraq, economics was a key dimension. It also depended on an Iraqi agreement to change much of its reconstruction planning, greatly increase spending on Iraqi forces, and allocate some \$10 billion worth of Iraqi funds in to short term aid geared to bring security and stability during 2007.

As a result, President Bush presented a new strategy that may be able to defeat the insurgency and reverse Iraq's drift towards large-scale civil war. The new Bush approach combines political, military, and economic action in ways that do offer a significant hope of success, albeit along with significant risks.

The new strategy – which President Bush negotiated at length with Iraqi Prime Minister Maliki before announcing it -- calls for major new Iraqi government efforts at political conciliation by November of 2007, and to ensure that the government's actions do not favor Shi'ites at the expense of the Sunnis. It calls for more US troops and significant expansion of Iraqi forces. It calls for a major shift in the role of US and Iraqi troops to directly defeat both the insurgents and sectarian fighters in Baghdad, stronger US and Iraqi military efforts in the West, and the eventual disbandment of the Shi'ite militias and other local security forces.

It also calls for a new approach to aid and development, although this remains somewhat undefined. As part of this approach, aid will be focused on near term security and stability objectives and on using aid and development dollars to support combat operations and bullets. Quick spending projects like urban renewal, microcapital loans, and jobs programs will create jobs and economic opportunity in high conflict and high threat areas. Military and civilian administrators will be able to spend quickly in the areas where security needs are highest. Most new mid and long-term aid projects will be

deferred, pending the creation of some new approach to security, resolving sectarian and ethnic differences, and allocating aid and oil funds between national, provincial, and local users although plans call for an immediate effort will be made to revitalize state industries as a way of creating new jobs, particularly in Sunni areas.

Political Risk

This new plan has several major risks, the most important of which are political and military The most critical risk is political. It is that the success of this strategy depends on the cooperation of a weak and divided Iraqi government that may not agree with his desire to deprive Shi'ite militias of their growing power, on Iraqi forces that so far have shown little fighting capability and key elements of which are corrupt or allied with Shiite and Kurdish militias, and on the acceptance of a major US urban warfare campaign by a divided Iraqi people, many of which are hostile to the US and the presence of US forces.

In addition, the new plan raises serious political issues of a different kind. Both Prime Minister Maliki's advisors and those of Hakim's SCIRI party have previously gone on record as opposing an increase in US troops. It may well mean a major confrontation with Sadr and the Mahdi militia, which can now draw upon up to 60,000 fighters nationwide.

More generally, much depends on the overall ability of the Iraqi government in achieving political conciliation in the entire country, and removing much of the popular support for insurgents and militias, and on the ability to coopt or disband the less extreme Shi'ite militias and Sunni security forces.

The Impact of the US Military Build-Up

The new Bush strategy focuses on Baghdad with a limited increase in US forces in Anbar, and calls for Iraqi forces to take formal control of the security mission in November. It is not clear that increasing US military strength from 132,000 to 153,000 will be enough to win even in Baghdad.

It should be noted that the Bush Administration has not talked about a sudden "surge," put rather a phased build-up that may eventually reach slightly over 20,000 *if* Iraq fully complies with its pledges and *if* the fighting goes according to plan. The overall changes in US deployments are complicated, since they involve retaining and moving forces already in theater as well as adding new forces, but involve some very high capability Army and USMC units:

- 2nd Brigade, 82nd Airborne Division, based at Fort Bragg, N.C., and currently assigned as the call forward force in Kuwait, will move into Iraq and assume a security mission there.
- 1st Brigade, 34th Infantry Division, Minnesota Army National Guard, will be extended in its current mission for up to 125 days and will redeploy not later than August 2007.
- The 4th Brigade, 1st Infantry Division, based at Ft. Riley, Kan., will deploy in February 2007.

- Three other Army combat brigades will deploy as follows:
- 3rd Brigade, 3rd Infantry Division, based at Ft. Benning, Ga., deploys in March 2007.
- 4th Stryker Brigade, 2nd Infantry Division, based at Ft. Lewis, Wash., deploys in April 2007.
- 2nd Brigade, 3rd Infantry Division, based at Ft. Stewart, Ga., deploys in May 2007.

The Marine Corps will extend two reinforced infantry battalions for approximately 60 days. Additionally, the 15th Marine Expeditionary Unit (Special Operations Capable) will remain in Iraq for approximately 45 additional days. Other combat-support and combat-service-support units may also be deployed as necessary once new requirements are assessed.

Their stated mission is to, "help Iraqis clear and secure neighborhoods while protecting the local population. These actions will build the capacity available to commanders to 20 brigade or regimental combat teams to assist in achieving stability and security and accelerate Iraqi Security Force development."

The Battle of Baghdad - US Dimension

These plans will add two brigades and some 7,000 more combat troops to the force in Baghdad relatively quickly. This will raise the 24,000 US troops now in Baghdad to a total of 31,000. There are some three additional brigade equivalents in the pipeline, with around 10,500 more troops. These may deploy to Baghdad, to Anbar, or not at all depending on the pace of events.

Even if all deploy, adding 17,500 more US troops into Baghdad might not be enough. There were close to 50,000 US troops in Baghdad during the peak of the fighting in 2004-2005, plus more than two brigades, covering an area about half the size of the one that the US now plans to clear. At most, the President's plan would provide 41,500.

The combined total of US and Iraqi strength does not seem sufficient to guarantee similar victory in the rest of Iraq, and particularly in Basra (where the British will soon start making major cuts in their forces), Kirkuk, Mosul, and Iraq's other major urban areas. Given the poor performance of Iraqi forces in Baghdad even over the last 10 days, and the failure of Iraqi forces to effectively take control of the security mission in other provinces, it seems very doubtful that the Iraqi forces can make the required progress by November.

The Battle of Baghdad – Iraqi Dimension

Everything also hinges on Iraqi forces. This raises a number of issues. One is whether the Iraqi government will appoint a military commander and two deputy commanders for their capital who will actually fight, and can or will deploy three more Iraqi Army and National Police brigades across Baghdad's nine districts.

The President's plan calls for a total of 18 Iraqi Army and National Police brigades, but many of these units can't or won't really fight, and many are at only a fraction of their authorized manning. There are currently 22,000 men in these Iraqi forces in Baghdad. Adding two brigades will add at most 8,000 men, bringing the total to 50,000.

The plan also relies heavily on the 30,000 men in the Baghdad police forces in Baghdad, These Iraqi forces are to operate from local police stations – conducting patrols, setting up checkpoints, and going door-to-door to gain the trust of Baghdad residents. The reality is that the National Police still have ties to Shi'ite militias and death squads, and the regular police are ineffective, corrupt, and not properly trained or equipped for the mission. In reality, even if all the planned US forces, and Iraqi Army, National Police, and regular police forces do show up, the total mix of forces may still be inadequate to bring lasting security to a greater urban area with 5-6 million inhabitants.

President Bush was also more politic than realistic when he announced that US troops would support or "help" Iraqi forces, rather than lead them and bear the brunt of combat. Iraqi army forces previously only deployed two of six promised battalions at the start of Operation Together Forward and took months to build up to around 7,000 troops. Putting a US battalion of 400-600 men as embeds in each of the nine Military Districts in Baghdad may help, but it is still US forces that will do almost all of the hard fighting. This is likely to sharply increase US casualties, at least initially.

Nation-wide Security Efforts

As for national efforts, the President's plan to increase the embedding of American advisers in Iraqi Army units – and partner a Coalition brigade with every Iraqi Army division, and giving US commanders and civilians greater flexibility to spend funds for economic assistance may also help. There are, however, many questions as to the real world ability to deploy enough qualified US advisors and translators, and increase the effectiveness of Iraqi forces. At the end of December, the Iraqi Army had trained and equipped 132,700 men, but many had deserted, many of the remainder were ineffective, and even effective units were often largely Shi'ite or Kurdish and had mixed loyalties.

It is far from clear that the US can rapidly succeed in raising Iraqi army division strength from 10 to 13, brigades from 36 to 41, and battalions from 112 to 132. Out of the 92 Iraqi brigades now said to be "in the lead," as few as 10 may have high effectiveness, although some experts say 20-30. The President did not discuss the problems in reforming the police, or reforming the Ministry of the Interior to increase transparency and accountability and transform the National Police. These are all "high risk" measures.

The Iraqi Army is also only part of the story. The 24,400 man National Police will present a major force development problem because of its ties to Shi'ite militias and extremists. No one knows how many of the 135,000 men trained and equipped for the police remain in service but absentee and desertion rates often ranged from 25% to 50%, and the same is true of the 28,900 men trained for other MOI forces. Further problems

exist in dealing with the 135,000 armed security personnel in the various facilities protection forces, many of which are loyal to Sunni, Shi'ite, or Kurdish factions rather than the central government.

Benchmarks

The President's use of benchmarks and the implied threat that the US will leave if Iraqi does not support it and cannot takeover security responsibility by November may backfire. It creates a strong incentive for the elements hostile to the US to keep up military pressure, and for Sadr and other Shi'ites hostile to the US to push the Maliki government to not cooperate. The Maliki government may also react by trying to use the US increase in forces in Baghdad and Anbar to focus on Sunni insurgents and defeat them, while leaving Shi'ite militias and forces intact, creating constant tension between the US and Iraqi governments.

Secretary of State Condoleezza Rice and Secretary of Defense Robert Gates explained the meaning of such political and military benchmarks at a joint press conference on September 11th, a day after the President announced his new strategy,

SEC. GATES:we're going to know pretty early on whether the Iraqis are meeting their military commitments in terms of being able to go into all neighborhoods, in terms of the Iraqis being in the lead in carrying out the leadership in the fighting, and for there not to be political interference in the military operations that are going forward. As I say, this is going to unfold over a period of time, and so I think that, as I indicated in my remarks, before very many American soldiers have been sent to Iraq, we'll have a pretty good early indications of their performance.

We'll have to see in terms of the length of time. It's really hard to say at this point. It's viewed as a temporary surge. But I think no one has a really clear idea of how long that might be.

Q Can you define what success will be then, sir? I mean, if you don't know how long it will be -- I know one of the things over the last few months, the president was saying, "We're winning in Iraq, we're winning in Iraq." Suddenly, he didn't think we were. So how do you define success, how do you know if it's not working? Certainly there will be a period where it's bloodier, more violent. But at what point do you really know it's working?

SEC. GATES: Well, let me take a crack at it and then invite Condi to comment. I think that what we will see over time is a lessening of violence in Baghdad. If the strategy is successful, over time we will see a lessening of violence in Baghdad. We're going to be, to a certain extent, the prisoners of anyone who wants to strap on a bomb and blow themselves up. But if -- but if the environment in Baghdad improves to the point where the political process can go forward, where the reconciliation process can go forward, where an oil law can be passed for the distribution of the revenues from the oil sales, where provincial elections can go forward, and where the government is actually beginning to make its writ felt outside Baghdad, and we see the government of Iraq beginning to operate more effectively, I think all of these things -- as the president said last night, and as I suggested this morning, it isn't going to be like anything we've experienced before in terms of when we'll know whether or not we're being successful, it's going to take a little time. And we will probably have a better view a couple of months from now in terms of whether we are making headway in terms of getting better control of Baghdad, with the Iraqis in the lead and with the Iraqis beginning to make better progress on the reconciliation process.

But let me ask Secretary Rice --

SEC. RICE: Well, I would underscore the point about political reconciliation. I do think the Iraqis obviously have to pass an oil law. They have to follow through on the promises that they've made to their own people about the inclusiveness of the political process.

I think as to -- I'd make one point about Baghdad and one point about the rest of the country. What has really happened in Baghdad -- and Prime Minister Maliki said this to the president -- is that the Iraqi people have lost confidence in the ability of their government to defend them in their capital, to protect them in their capital. And in fact, there are some, because of the sectarian overtones, who wonder if in fact their government is willing to protect them if they come from one sect or another. And I think what the Iraqi government is trying to do, and needs to do, is to reestablish civil order in the sense that they are, in fact, willing to and capable of protecting all Iraqis who live in Baghdad. That means the kinds of activities that take place in these neighborhoods wouldn't be tolerated, and they would, in fact, go after some of the violent people on either side who are causing the problems. And I think that will be a measure of how well they are doing.

In the provinces -- it's also important to recognize that not everything -- as important as Baghdad is, not everything rests on Baghdad. One reason that we're diversifying and decentralizing into the provinces and the localities is that you want to strengthen the governance from the bottom up as well. And we've learned that it is somewhat more effective to be able to deliver governance and economic development and reconstruction at a more local level. And I think it's starting to have an effect. We've seen it work in Mosul, we've seen it work in Tall Afar. And as the secretary said -- Bob said, in Anbar, we're beginning to get some signs that the tribal sheikhs there want to fight the violent extremists. And we've been in Anbar for a while now working politically.

So, I think you should think of what the government needs to show in Baghdad, but also the building of governance structures outside of the country.

US Aid and Iraqi Development

It will take time before it is clear just what impact all of these political and military actions will have on US aid efforts, Iraqi development spending and the role other nations and the international community should play. Secretary Rice did, however, provide a broader picture of this aspect of US and Iraqi strategy in her testimony to Congress on September 11th:

Success in Iraq...relies on more than military efforts alone; it also requires robust political and economic progress. Our military operations must be fully integrated with our civilian and diplomatic efforts, across the entire U.S. government, to advance the strategy that I laid out before you last year: "clear, hold, and build." All of us in the State Department fully understand our role in this mission, and we are prepared to play it. We are ready to strengthen, indeed to "surge", our civilian efforts.

Our political and economic strategy mirrors our military plan: Iraqis are in the lead; we are supporting them. Improvement in the security situation, especially in Baghdad, will open a window of opportunity for the Iraqi government to accelerate the process of national reconciliation. We can and will measure whether this work is being done. We recognize that the trend of political progress in Iraq is just as important as the end result. On the hydrocarbon law, for example, Iraqis are transcending sectarian differences and achieving a national purpose. The is a positive trend, and the process is moving in the right direction.

Iraqis must also take steps that accelerate economic development and growth. The government of Iraq has taken many important steps already on key economic issues, including policies to open

Iraq's economy more fully and responsibly to foreign investment. The Iraqi government must now move urgently, especially in the most troubled areas, to deliver essential services to its people – programs that improve lives in meaningful ways, that restore confidence in national and local governance, and provide a stake in the country's future for all Iraqis who wish to see an expansion of hope rather than a continuation of violence. The Iraqi government is committing \$10 billion of its own resources to help create jobs, to break the logjams to growth in their economy, and to further national reconciliation.

To better disperse these new resources throughout the country, Iraqis are building new governmental structures. One innovation they have proposed is the creation of a new National Reconstruction Development Council, which would enable the Prime Minister to deliver resources faster and more effectively for major infrastructure projects. This Council will also help take the place of our own Relief and Reconstruction Fund. Another Iraqi innovation is the development of Project Management Units, to help Iraqis use their own resources more effectively to implement programs.

For these efforts to succeed, our support will be crucial. Since 2004, we have used money from the Iraq Relief and Reconstruction Fund and other programs to build infrastructure and help the central government move toward self-reliance. As we enter 2007, despite many problems, we have substantially and successfully completed this phase. As Iraqis take charge, we will narrow our focus in how we help their central government. Using FY 2006 Supplemental funding, we have worked with the Iraqis to improve their capacity to govern. Now, our advisory efforts will concentrate on the most vital ministries. We will advise and invest our resources where we judge that our efforts will be most effective.

As Iraqis intensify efforts to improve lives, the main focus of our support will continue to shift toward helping the Iraqi government expand its reach, its relevance, and its resources beyond the Green Zone. We will help local leaders improve their capacity to govern and deliver public services. Our economic efforts will be more targeted on specific local needs with proven records of success, like micro-credit programs. And we will engage with leading private sector enterprises and other local businesses, including the more promising state-owned firms, to break the obstacles to growth.

Secretary Rice also explained the new US approach to economic aid in more depth in that same testimony, although she did not announced the fiscal details of what the US aid effort would be. Some sources reported economic aid figures of \$1.2 billion to \$1.4 billion, with additional security assistance of \$3.5-\$5 billion. It was not clear how incremental such aid would be to the \$750 million in economic aid already appropriated for FY2007, and existing plans for Department of Defense military aid. Other sources indicated that roughly \$5 billion of new US aid money plus some \$10 billion of Iraqi funds, would be involved,

To oversee our economic support for the Iraqi people, and to ensure that it is closely integrated with our security strategy, I have appointed Tim Carney to the new position of coordinator for Iraq Transitional Assistance. He will be based in Baghdad and will work with Iraqi counterparts to facilitate a maximum degree of coordination in our economic and development efforts.

Our decentralization of effort in Iraq will require a more decentralized presence. We must continue to get civilians and diplomats out of our embassy, out of the capital, and into the field, all across the country. The mechanism to do this is the Provincial Reconstruction Team, or PRT. We currently have ten PRTs deployed across Iraq, seven American and three coalition. Building on this existing presence, we plan to expand from 10 to at least 18 teams. For example, we will have six PRTs in Baghdad, not just one. We will go from one team in Anbar province to three – in

Fallujah, Ramadi, and al Qaim. These PRTs will closely share responsibilities and reflect an unprecedented unity of civilian and military effort.

Expanding our PRT presence will also enable us to diversify our assistance across all of Iraq. Iraq has a federal government. Much of the street-level authority, and much of the opportunity for positive change in Iraq, lies outside the Green Zone, in local and provincial governments, with party leaders and tribal chiefs. By actively supporting these provincial groups and structures, we diversify our chances of success in Iraq. Our PRTs have had success working at the local level in towns like Mosul, Tikrit, and Tal Afar. Now we will invest in other parts of Iraq, like Anbar province, where local leaders are showing their desire and building their capacity to confront violent extremists and build new sources of hope for their people.

All total, we seek to deploy hundreds of additional civilians across Iraq to help Iraqis build their nation. And we will ask Congress to provide funding to support and secure our expanded civilian presence. We want to give our civilians, deployed in PRTs, the flexibility to devote extra resources where they can do the most good at the local level. Our expanded PRT presence will be a powerful tool to empower Iraq's reformers and responsible leaders in their struggle against violent extremism. We therefore plan to request, as part of our FY 2007 Supplemental, significant new operating funds for our PRTs, as well as hundreds of million of dollars to fund their programs. When we add in relevant USAID projects, we hope to approximately double our resource commitment to help local Iraqi communities through PRTs.

These commitments will not be indefinite. As I said earlier, one of our main objectives in this phase is to help the Iraqis use their own money to rebuild their country. The Iraqis have budgeted billions of dollars for this mission in 2007, and as their efforts become more effective, we have kept our FY 2008 requests limited. We want Iraqis to rely more and more on their own resources, their own people, and their own efforts. Therefore, by 2008 and 2009, the burden of local assistance should be assumed more effectively by the Iraqi government. In the meantime, though, our efforts will be vital.

A few days later in Kuwait, Secretary of State Condoleezza Rice said that success in Iraq had to be built "bottom-up as well as top-down" and that Iraq's decision to have a federal-style government made it "very, very important to build local leadership." She also claimed that it was easier "in many ways" it is easier to work at the local level through PRTs to arrange the delivery of funds, goods and services from the central government, as well as to improve the structure and effectiveness of government through training, and that the PRTs were designed to make local and provincial governments "capable of dealing with the day-to-day problems of the people where the people live...We think it's actually a pretty effective way of going about it."

The truth is a great deal more complex and uncertain. Speaking on January 17 from Baghdad through a State Department digital video conference, Joseph Gregoire, the team leader of the Baghdad PRT, said his staff of 80 civilian and military personnel focused on developing an Iraqi capacity to use aid: "By capacity building I mean engaging local Iraqi officials and representatives of nongovernmental organizations, civil society organizations ... so that we can share with them our knowledge of policies, practices, procedures that can meet, support and sustain good governance...(So that,) "in time, especially when we're no longer there,

His Lieutenant Colonel Robert Ruch, stated that the very team "provincial reconstruction team" is "a bit of a misnomer...We are not a reconstruction agency. We're reconstructing

a government." He added that even that as recently as one year ago, "we didn't have provincial governments...It's not so much about building schools. It's about getting the steps in the process so they have a bureaucracy that can do this kind of work...those midlevel people who do the work in a government...The leaders will come and go, but we've established a bureaucracy. They are the people who keep the government moving through time..."

Ruch gave the example that his PRT had recently brought together local Baghdad district leaders who wanted to build more schools together with their provincial council and Iraq's Ministry of Education to discuss how to go about school construction. None of the three levels of government previously make their own linkages, he said. As a result of this coordination, all three levels came up with a list of 10 schools to be built throughout the city, prioritized by need, to be voted on later in January. The PRT is now setting up a conference among the levels of government to establish future procedures for building schools in Baghdad.

Perhaps somewhat unrealistically, Gregoire claimed, his team had "not seen instances of sectarian criteria determining" the priority or placement of projects. "You would be hard-pressed to look at where these projects are occurring, if you were to plot them on a map of Baghdad, and find any type of sectarian divider where things are actually being built...You can't make one part of the city great and leave another part of the city alone." There is an understanding that "everyone has got to get something out of this government or they're not going to succeed....it will take a very long time to get to the point where the Iraqis will be able to meet the needs of the population independent of donor action."

These plans are not without promise, but they understate or ignore the massive problems the US has had in recruiting the existing PRTs. These delayed the operation of many PRTs until later 2006 and still left some either inactive or staffed largely with inexperienced personnel and military personnel assigned to duties that required civilian expertise. Only 13 teams existed, and only 10 teams were fully operational when 18 were needed to have even one per governorate. Auditors found in October 2006 that only four of the 13 teams could actually be effective in their satellite offices, and that massive security and transportation problems severely limited the work of the PRT effort.³⁰

The key features of the new US and Iraqi aid plan – if it can be executed with qualified personnel on a timely basis calls for moving more civilian advisers into provincial reconstruction teams (PRTs) working with local officials outside Baghdad. It would create 8 more PRTs in addition to the 10 now operating. Rice has also emphasized in her testimony to Congress that the U.S. commitment is not open-ended. "We want Iraqis to rely more ... on their own resources ... people, and ... efforts...Therefore, by 2008 and 2009, the burden of local assistance should be assumed more effectively by the Iraqi government."

The reality may well be that such plans have no chance of succeeding on a timely basis. State Department documents show this requires the State Department to suddenly recruit and deploy some 400 additional civilian advisers to supplement the roughly 100 already

in the total PRT force in parallel with the 20,000 man increase in U.S. troops – some 140 of which are to go to Baghdad and Anbar. This is projected to cost some \$414 million in 2007. In practice, many of the 100 civilians already in the PRTs have had to be recruited with few credentials or limited expertise, and took two years to develop. A 400% increase in a few months seems dubious to impossible.

It is also far from clear how quickly the US can act in getting aid into the field; how it can cope with Iraqi corruption, inefficiency, and factionalism; and whether it can time serious aid efforts to provide immediate support to its security efforts. Every single major US and Iraqi effort of this kind to date has failed dismally to live up to its promises, and every claim to the contrary has misstated the facts, puffed up minor or temporary successes, or been a lie. Moreover, the US must now suddenly make sudden reversals in its past efforts that focused on long-term projects and major construction and find ways of aiding Iraq's state industries, effectively dispensing microcapital loans, and dealing with other aid projects that require effective US personnel, and honest and effective Iraqi government personnel, in the field. This must be done in the areas which are now most violent and which are certain to have serious lingering problems no matter how effective US and Iraqi forces are during the course of 2007.³²

The New Strategy and Continuing Needs for International Aid

Both President Bush and Secretary Rice made it clear that the US would look for broad international support as part of the new plan, although they rejected proposals to seek cooperation from Iran and Syria. President Bush made this a key part of his speech when he introduced the new strategy on January 10, 2007,

We will use America's full diplomatic resources to rally support for Iraq from nations throughout the Middle East. Countries like Saudi Arabia, Egypt, Jordan, and the Gulf States need to understand that an American defeat in Iraq would create a new sanctuary for extremists – and a strategic threat to their survival. These nations have a stake in a successful Iraq that is at peace with its neighbors – and they must step up their support for Iraq's unity government. We endorse the Iraqi government's call to finalize an International Compact that will bring new economic assistance in exchange for greater economic reform.

Going on with the International Compact

Secretary Rice testified to the Congress on January 11th that the Bush administration had a "regional approach" to dealing with the challenges in Iraq -- "to work with those governments that share our view of where the Middle East should be going." She included in that group what she called the "reformers and responsible leaders" of the region.

The final piece of our effort is the development of a regional diplomatic strategy, which was a key recommendation of the Iraq Study Group. Iraq is central to the future of the Middle East. The security of this region is an enduring vital interest for the United States. America's presence in this part of the world contributes significantly to its stability and success. So as we recommit ourselves in Iraq, we are also enhancing our efforts to support reformers and responsible leaders in the region – and to deter and counter aggression to our friends and allies.

Our regional diplomacy is based on the substantially changed realities of the Middle East. Historic change is now unfolding in the region, and it is unleashing a great deal of tension, anxiety, and violence. But it is also revealing a new strategic alignment in the Middle East. This is the same alignment we see in Iraq. On one side are the many reformers and responsible leaders, who seek to advance their interests peacefully, politically, and diplomatically. On the other side are extremists, of every sect and ethnicity, who use violence to spread chaos, to undermine democratic governments, and to impose agendas of hate and intolerance.

This is why the proper partners in our regional diplomacy are those who share our goals. In this group, I would count, of course, our democratic allies, Turkey and Israel. I would also count the governments of the Gulf states plus Egypt and Jordan, or the "GCC + 2." We have established unprecedented consultation with this group of countries. In fact, I will be returning to the region, and to this process, later this week. I would also count among our key partners the democratic reformers and leaders in places like Lebanon, the Palestinian territories, and of course, Iraq. Our most important goal now is to use our diplomacy to empower democratic and other responsible leaders across the region. We must help them show their fellow citizens that it is they, not violent extremists, who can best protect their lives, promote their interests, and advance a future of hope.

On Iraq, in particular, our regional diplomacy has several components. One concerns Iraq's neighbor to the north: Turkey. President Bush and I have engaged retired General Joe Ralston to work with Iraq and Turkey on concerns about terrorism from the Kurdish Worker's Party. Those efforts have helped to ease tensions, but we will do more to protect our ally, Turkey, from terrorist attacks.

Over the last six months, we have also supported significant progress in crafting an International Compact between the Iraqi government and the international community. Working with more than forty countries, Iraq has developed a set of written commitments to action on political, security, and economic targets. The creation of the Compact has been guided by a diplomatic process that has already met at the level of foreign ministers. This group involves all of Iraq's neighbors – including Iran – and other states that have invested significantly in Iraq's future. Iraq has led the Compact process. The United Nations has served as co-chair. And the World Bank has assisted. This diplomatic process also provides a structure that can easily accommodate flexible, informal meetings of smaller groups of countries about other topics of common concern.

Secretary Rice provided further details in a press conference that same day,

Well, as for the future shape in coalition, there continue to be coalition forces operating in Iraq. The South Koreans, the Japanese, others have re-upped their forces again to continue operating in Iraq. And there is a NATO training mission for officers in Iraq. And so I think you'll continue to see that kind of international support.

Now, the International Compact for Iraq is a framework in which there can be real support for Iraq that is, in fact, a kind of conditional support. The Iraqis undertake to do certain obligations. We undertake, as an international community, to match those obligations with resources. Many of the states that, for instance, the Iraqis owed debt to have agreed to very favorable terms: 80 percent of debt reduction. We've agreed to 100 percent of debt reduction, and I think you'll see more of that.

... I'm going to the Middle East with the GCC because I feel very strongly that those states that are part of an alignment that understands that there are extremist forces that need to be resisted, need to be mobilized and rallied in support of this Iraqi government. The states, like Saudi Arabia and Jordan and others, have been helping with Sunni outreach. I'd hope that they will help with more.

But I think the International Compact is the right framework for now, because it is an international effort that is actually led by the Iraqis and the United Nations, which is really the proper way for Iraq to engage its neighbor.

It is clear from these remarks that the new US and Iraqi focus on short-term, security oriented aid did not necessarily mean changing the existing international focus on longer term development, debt forgiveness, and dealing with the reparations problem. Existing international commitments and plans remained valid, both to ensure ongoing efforts to meet Iraq's longer term needs and to ensure that military success during 2007 and 2008 would not create a future gap in aid flows and development activity.

It also makes the pleases from other nations are key element in providing continuity during the period in which the US and Iraq shift to what may well be a last chance effort to use force to bring stability and security to a united Iraq. According to SIGIR, such countries had pledged \$15.02 billion as of August 2006, of a total of \$94.47 billion in reconstruction funds, including \$38.28 billion in US funds and \$41.17 billion in Iraq funds. Out of the \$15.02 billion total, Japan was the largest donor with \$4.96 billion (33.1%). Other donors included:³³

- Australia: \$130 million (0.8%),
- Canada: \$190 million (1.3%),
- EU: \$91 million (0.5%),
- IDB: \$500 million (3.3%),
- IMF: \$2.55 billion (17%),
- Italy: \$240 million (1.6%),
- Others: \$1.87 billion (0.8%),
- Spain: \$220 million (12.4%),
- UK: \$450 million (3.0%),
- World Bank: \$3 billion (20%)

Looking at the Near and Mid-Term

The very real risks in the President's new strategy do not mean it cannot succeed over time. Most experts do feel, however, that the odds of success are probably less than even. They also mean a near term focus on combat and steps that will make it more difficult to conduct aid efforts in combat and troubled areas. President Bush made it clear during the speech that announced his new strategy that he expected much more intense urban fighting during the course of 2007, and that a more powerful and proactive US military effort to "win, hold, build" in Baghdad could significantly increase US casualties.

Everything Now Depends on the Near-Term Course of the Fighting and Political Conciliation

What is not clear is how well the course of the fighting will actually go, what will happen if the Iraqi people turn against US forces, or the insurgents simply lie low and outwait the US and government forces in what is fundamentally a long war of attrition. In all of these cases, the outcome of the November 2006 election, US public opinion polls, and the initial reaction of both parties to President Bush's announcement on the new strategy on January 10, 2007 strongly indicate that the US would be forced to begin

major troop withdrawals, and both the short-term aid emphasis on combat and current longer-term aid plans for Iraqi development would become largely irrelevant.

This raises an issue that is ignored all too often even in peacetime aid and development efforts: What happens if things go wrong? What happens if Iraq does split or federate? If it sees the civil war escalate sharply, and/or experiences massive sectarian and ethnic cleansing? What happens if the oil sector is damaged enough to prevent exports for some period or time, if the nations oil facilities and infrastructure are further devastated or divided, or if Coalition troops must suddenly withdraw? Contingency plans need to cover failure, and not just success.

Iraq faces a future in which it could separate, create federal structures that would divide along ethnic and sectarian lines, become locked in a long civil conflict and war of attrition, or reject the present US role in the country. The central government is weak, sectarian and ethnic tensions and cleansing are a problem throughout the country and not just in Baghdad, and it is far from clear that central government ministries can be made effective as long as the fighting continues. Crime, corruption, and incompetence may create problems as great as the insurgents and civil fighting.

Restructuring Aid and Development Efforts

The new Bush strategy at most will buy time and support military operations for a year or so in ways that can weaken the economic incentives to support sectarian and ethnic fighting. To be successful, however, past aid plans will probably have to be totally restructured during the course of 2007 and 2008. The following issues and actions must be addressed:

- Far more realistic and fact-based plans must be developed for the overall development of Iraq based on aid, government spending, which are far more sensitive to Iraqi views of need versus those of the US and outside advisors.
- Kurdish separatism and Shi'ite regionalism in the south already are creating separate development efforts, even without action on the provisions of the new constitution that permit federalism in every province by Baghdad. These will remain major issues, even if the Bush-Maliki plans succeed.
- Local elections, votes on federalism, and divisions of oil revenues under the proposed act will all
 tend to strengthen regional and local power versus the central government even in the event of
 victory.
- The failure to fully complete many aid projects, make them properly transferable to the Iraqis, and provide bridging or sustaining funds until they can become self-sustaining will be a steadily growing problem in 2007, and begin to require serious action during 2008 as given projects need repair, further investment, or lack operating funds. Much of the aid effort that has been successful will being to fail relatively quickly, particularly projects depending on Western parts and maintenance practices.
- Iraqi capabilities to plan and administer effective aid efforts still need to be created at the Ministerial, governorate, and local levels. Corruption, incompetence, bureaucratic inertia, sheer lack of personnel, the risk of operating in the field, ethnic and sectarian favoritism, nepotism, and

severe contractor problems are the rule and not the exception. The priority to "build" Iraqi honesty and competence to handle aid and economic development is as critical as any other aspect of "win," "hold, "build."

- US core capabilities are also critically weak. It is far from clear that the US can make a fourfold increase in some 100 civilians in the PRTs now in Iraq, many of which already lack expertise and qualifications and took two years to recruit. USAID, the Corps of Engineers, and US contractors have shown little ability to plan, administer, audit, and develop suitable effectiveness measures. The overall level of US effectiveness has been roughly equal to the Iraqi level of effectiveness with far less excuse.
- Both the Iraqi government and aid donors must develop a new approach to aid that deals with the renovation or privatization of Iraq's state industries, finds practical limits to the size of the government sector, and frees agriculture and irrigation from levels of state control and interference that sharply interfere with productivity and competitiveness.
- The de facto deterioration of Iraq's petroleum sector has reached the point where action is becoming increasingly urgent simply to maintain current production, along with efforts to limit the growth of domestic demand and reduce product imports. A coherent plan for energy sector rehabilitation and development is critical to any Iraqi ability to become self-financing, as well as to provide government funds as incentives for conciliation and coexistence. The same is true to both creating suitable refinery capacity and removing subsidies from petroleum products that create massive demand growth and act as incentive for theft and black market activities.
- The deterioration of the critical health and education sectors because of fighting, poor aid programs and sustained underinvestment, needs to be readdressed from the ground up.
- The new Bush strategy finally makes revitalizing Iraq's state industries a critical priority, but this
 requires new aid plans and either new sources of funds or substantial reprogramming of existing
 funds.
- A similar effort will be needed to readdress the deterioration of irrigation, and lack of funding and modernization in the agricultural sector.
- As the conflict recedes, new aid plans will be needed to deal with wartime damage to critical infrastructure like roads, urban facilities, etc.
- Similar changes must be made in current plans to deal with water, electricity, and sewers. A
 nation-wide development plan will be needed which reexamines both what kind of major facilities
 are needed and how to address the critical problems in power lines, water pipes, sewer
 connections and the delivery of actual services.
- Aid will be needed to sustain employment in the civil sector, deal with problems like disbanding militias, and downsize and restructure Iraqi security forces as the mission shifts from internal security to defense of the nation from external threats.
- The largely hollow efforts to date to create effective ministries and government offices, and end corruption and favoritism, will need to be put into meaningful practice.
- New incentives will be needed not only to attract foreign investment, but help Iraq's professional and business class recover from the war, help deal with the result of sectarian and ethnic separation and cleansing, and attract back the many Iraqi professionals that have left the country.

It is not clear that any of these issues and needs are currently being given proper attention. It is clear that even in the case of "victory," existing plans and programs can only be the prelude to a very different set of efforts that deal with a very different future than the one existing aid efforts have been based upon.

Two Futures: Success or Failure

This same need for change will be even greater in the case of "defeat," and the uncertain outcome of the present strategy and fighting also may mean massive changes in the political context of the current US debates over the war, and in Iraq politics. Much has been made of the Baker-Hamilton Iraq Study Group and current US domestic politics. The former never developed clear operational plans or options. Its recommendations were vague, overlapping, and sometimes contradictory and President Bush's actions in paying them little more than lip service has made them largely obsolete.

As for US and Iraqi politics, today's Congressional and U.S. public reactions will clearly change sharply by 2008. The new Bush strategy will either succeed or fail by that time, as will the efforts of the present Iraqi government. Military and political victory of any kind will greatly strengthen the now weak position of those who favor continued US intervention, including such important voices as Senator John McCain. It also will strengthen the Maliki government, and those in Iraq who favor national unity and cooperation with the US.

As for military and political defeat, such an outcome will sharply strengthen the now strong position of those who oppose continued US intervention, including leading figures in both the Democratic and Republican parties. It also will probably destroy the Maliki government, and greatly strengthen those in Iraq – like Sadr -- who oppose cooperation with the US. It will also make some form of separatism and/or federalism virtually inevitable,/

More broadly, a US and Iraqi government failures seems almost certain to trigger a struggle for influence (or for the military support of given Iraq factions) by key neighbors like Egypt, Iran, Jordan, Saudi Arabia, Syria, and Turkey. This is a combination that will make it far more difficult for outside states to provide any form of successful aid, and create strong new pressures to provide aid to sectarian and ethnic regions, particularly Shi'ite and Kurdish areas. It may not be a recipe for long-term stability, but it also may delay any coherent development of Iraq's oil resources on either a national or "federal" basis by three to five years.

¹ Estimates differ sharply as to the sectarian and ethnic divisions in Iraq. A recent US government study puts Iraq's religious composition at Muslim 97% (Shi'a 60%-65%, Sunni 32%-37%), Christian or other 3%. It estimates ethnic Group(s) as Arab 75%-80%, Kurdish 15%-20%, Turkoman, Assyrian or other 5%.

² For the full range of reports see the Special Inspector General for Iraqi Reconstruction (SIGIR) website at www.sigir.mil/. Additional reports explaining the problems involved at available on the web sites of the General Accountability Office (www.gao.gov) and the Congressional Budget Office (www.cbo.gov/). Other analyses by the Congressional Research Service are not on public web sites.

Special Inspector General for Iraq Reconstruction. Figure 2-32. 2006. file:///Main%20Drive%20-%20400GB/Users/acordesman/Desktop/SIGIRFigures10-06.html

⁴ For more detail, although it requires careful reading between the lines of a political and propagandaoriented document, see Department of the Defense, Measuring Stability and Security in Iraq, Office of the Secretary of Defense, Washington, November 2006, pp 10-17 and 31-41.

Department, Weekly **Process** December 2006, http://www.state.gov/p/nea/rls/rpt/iraqstatus/2006/c18335.htm.

⁶ Department of Defense, Measuring Stability and Security in Iraq, Office of the Secretary of Defense, Washington, November 2006, http://www.defendamerica.mil/.

Department, Weekly US State **Process** Report, December 27, 2006, http://www.state.gov/p/nea/rls/rpt/iraqstatus/2006/c18335.htm, p. 13.

⁸ EIA, "Country Analysis Briefs, Iraq," Department of Energy, Washington, June 2006, http://www.eia.doe.gov/emeu/cabs/Iraq/Full.html.

⁹ Charles J. Hanley, "\$1.2 billion Aid Boost Will Not Light Up Iraq, Washington Times, January 17, 2007,

p. 13.

Department of Defense, <u>Measuring Stability and Security in Iraq</u>, Office of the Secretary of Defense, Washington, November 2006, http://www.defendamerica.mil/.

¹¹ See Special Inspector General for Iraq Reconstruction, "Key Iraq Transition Indicators, SIGIR, October 2006 Quarterly Report.

¹² James Glanz, "Iraqi Factories, Aging and Shut, Now Give Hope," New York Times, January 18, 2007, p.

¹³ See SIGIR, October 2006 Quarterly Report, pp. 3-12. For further details, see Curt Tarnoff, Iraq: Recent Developments in Reconstruction Assistance, Congressional Research Service, Washington, RL37188, June 15, 2006.

¹⁴ CIA, World Fact Book, 2006, "Iraq," https://www.cia.gov/cia/publications/factbook/geos/iz.html.

15 Based on discussions with US experts. For public reporting, see EIA, "Country Analysis Briefs, Iraq," Department of Energy, Washington, June 2006, "Profile, http://www.eia.doe.gov/emeu/cabs/Iraq/Full.html ¹⁶ Department of Defense, Measuring Stability and Security in Iraq, Office of the Secretary of Defense, Washington, November 2006, http://www.defendamerica.mil/

¹⁷ CIA, World Fact Book, 2006, "Iraq," https://www.cia.gov/cia/publications/factbook/geos/iz.html.

¹⁸ CIA, World Fact Book, 2006, "Iraq," https://www.cia.gov/cia/publications/factbook/geos/iz.html.

¹⁹ Iraq Country analysis by the EIA, "Country Analysis Briefs, Iraq," Department of Energy, Washington, June 2006, http://www.eia.doe.gov/emeu/cabs/Iraq/Full.html.

²⁰ Iraq Country analysis by the EIA, "Country Analysis Briefs, Iraq," Department of Energy, Washington, June 2006, http://www.eia.doe.gov/emeu/cabs/Iraq/Full.html.

²¹ Based largely on Energy Information Agency (EIA), OPEC Net Oil Revenues, 1972-2007, Department DC. Energy, Washington, accessed January Sthttp://www.eia.doe.gov/emeu/cabs/OPEC Revenues/OPEC.html, but updated after discussions with US government experts.

Energy Information Agency (EIA), OPEC Net Oil Revenues, 1972-2007, Department of Energy, Washington, DC, accessed January 12, 2007. http://www.eia.doe.gov/emeu/cabs/OPEC_Revenues/OPEC.html.

State Department, Weekly **Process** Report, December 27, 2006, http://www.state.gov/p/nea/rls/rpt/iraqstatus/2006/c18335.htm, pp. 19-20.

²⁴ This analysis is based largely on the Iraq Country analysis by the EIA, "Country Analysis Briefs, Iraq," Department of Energy, Washington, June 2006, http://www.eia.doe.gov/emeu/cabs/Iraq/Full.html, and updates from US government experts.

25 Experts differ sharply over the cost of such improvements and Ironi sources tend to heally under

²⁶ Department of Defense, <u>Measuring Stability and Security in Iraq</u>, Office of the Secretary of Defense, Washington, November 2006, http://www.defendamerica.mil/.

EIA, "Country Analysis Briefs, Iraq," Department of Energy, Washington, June 2006, http://www.eia.doe.gov/emeu/cabs/Iraq/Full.html,

²⁸ Charles J. Hanley, "\$1.2 billion Aid Boost Will Not Light Up Iraq, <u>Washington Times</u>, January 17, 2007, p. 13.

²⁹ See Stephen Kaufman, "Provincial Reconstruction Teams Building Local Iraqi Leadership," US State Department Press Release, January 18, 2007, 3:38PM; and (http://usinfo.state.gov/xarchives/display.html?p=washfile-english&y

=2007&m=January&x=20070111134242ndyblehs0.9469416).

Charles J. Hanley, "\$1.2 billion Aid Boost Will Not Light Up Iraq, Washington Times, January 17, 2007, p. 13.
 James Glanz, "Rebuilding Teams Would Swell Under Bush's New Iraq Plan, New York Times, January

³¹ James Glanz, "Rebuilding Teams Would Swell Under Bush's New Iraq Plan, New York Times, January 15, 2007.

³² For a good summary discussion of these issues, see Karen DeYoung, "Reconstruction Effort to Emphasize Iraqi Jobs, <u>Washington Pos</u>t, January 11, 2007.

³³ SIGIR, October 2006 Quarterly Report, Figures 2-32 and 2-33.

²⁵ Experts differ sharply over the cost of such improvements and Iraqi sources tend to badly understate them. An EIA analysis notes that Tariq Shafiq, a founding Vice President of the Iraq National Oil Company (INOC), claims Iraq's oil development and production costs range from as low as \$750 million for each additional million bbl/d day in Kirkuk, to \$1.6 billion per million bbl/d near Rumaila, and to as high as \$3 billion per million bbl/d for smaller fields in the northwestern part of the country. In contrast, Cambridge Energy Research Associates (CERA) estimates an average cost for Iraqi oil development of \$3.5 billion per million bbl/d for the country as a whole., which is higher than Tariq Shafiq's estimates, but still relatively low by world standards. Either way, Iraq remains a highly attractive oil prospect, with only 17 of 80 discovered fields developed, and few deep wells compared to its neighbors. Overall, only about 2,300 wells reportedly have been drilled in Iraq (of which about 1,600 are actually producing oil).