September 14, 2006 Dr. John Calabrese Testimony before the U.S.-China Economic and Security Review Commission Hearing on *China's Proliferation to North Korea and Iran*

In a general sense, Sino-Iranian relations today bear many of the hallmarks of a much larger phenomenon, namely, the progressive development of commercial and other ties binding east, south and west Asian countries together. These cross-regional linkages, in my view, are not intrinsically detrimental to US interests or for that matter detrimental to regional peace and stability in the Middle East or in East Asia.

Indeed, not all aspects of all Sino-Iranian relations are problematic for the United States or pose a threat to Middle East regional stability. But China's past record, including very recent instances of proliferation activities specifically with respect to Iran, does require of the United States constant vigilance and continual reassessment of Chinese nonproliferation commitments and performance. It also requires a deeper understanding of the context in which the Sino-Iranian relationship is evolving as well as a greater appreciation of the totality and the limits of that relationship than are commonly presented in media and other accounts.

Given the risks associated with the proliferation of dangerous technologies, including the relationship between Chinese entities and Iran in this area, it is only prudent that US officials periodically review the record, reassess their goals and expectations, and adjust their policies. A useful starting point for this undertaking is to consider how China and Iran view each other and conceive of their bilateral relationship.

1. In addition to energy, what other strategic interests does China have in Iran? Besides weapons support, what strategic interests does China have?

Sino-Iranian relations transcend cooperation in the energy sector. They comprise a multitude of activities that are rooted in broadly shared perspectives on recent developments in world affairs and on their respective roles in regional and international relations. Put simply, Sino-Iranian ties are based on overlapping national interests.

For Beijing, Iran is distinctive even insofar as China's burgeoning ties with other Middle Eastern countries is concerned. From the Chinese vantage point, Iran possesses unique geopolitical and geo-economic characteristics. Even before the Iraq war, from the Chinese perspective, Iran had emerged as an important, if not the dominant regional power. With coastlines on the Caspian and the Persian Gulf, Iran sits astride two major energy hubs. Given China's soaring energy needs, Iran occupies vital geo-economic space. The high priority Beijing attaches to a stable and productive bilateral relationship stems directly from this fact.

Iran is the largest Muslim country in west Asia as well as the most populous one. This is far from insignificant to China. Ever since the founding of the Islamic Republic of Iran, Beijing has assiduously courted Tehran, partly as insurance against potentially destabilizing Islamist activities in the form of external support of restive elements within the Chinese Muslim population. Iran's size is also a source of attraction on the business side as well. Areas of possible economic cooperation are wide-ranging. Some are already being pursued. Business activities encompass not only the energy sector but also infrastructure and industrial projects.

The Sino-Iranian relationship rests also on a geopolitical foundation – a common, if not identical, view of how US primacy in world affairs and the application of American power affect, directly and indirectly, Chinese and Iranian national interests. Both China and Iran are clearly uncomfortable with the current unipolar structure of the international system, though Beijing seems less willing to confront the United States than does Iran

For Iran, China is distinctive as well. If it is fair to say that economics is the primary driver of China's relations with Iran at the present time, geopolitical motivations – principally the aim of offsetting US/Western pressure, especially regarding the nuclear issue – is arguably the most compelling reason for Iran's gravitation toward China.

2. How much control does the Chinese government have over PRC companies that sell weapons technology to Iran? What are the mechanisms for that control if it exists? Have US sanctions on these companies been effective in curbing weapons and technology transfers?

Over the past decade, although Beijing's commitment to non-proliferation and its capacity to abide by them have improved, Chinese commercial entities have continued to proliferate to Iran. Relatively few though the instances of Chinese proliferation activities to Iran have been compared to the 1980s and 1990s, they nonetheless have occurred against the backdrop of the 9/11 terrorist attacks, the activities of the A.Q. Khan network, and revelations about the extensiveness of the Iranian nuclear program itself. Thus, as will be shown, while China has made unmistakable progress on nonproliferation, these positive steps have not kept pace with the US perception of what is required of a "responsible stakeholder" to reduce the level of risk/threat posed by the spread of weapons of mass destruction and dangerous technologies.

It is important to place the recent instances of Chinese proliferation to Iran into an historical context. Only a decade ago China and Iran had sketched out a broad agenda for nuclear cooperation. Since then, this agenda has been scaled back considerably. The principal reason for this change is that China has gradually come to accept that non-proliferation is in its own national interest, and consequently, has acceded to international norms and standards. In 1992, China signed the NPT. In 2000, China joined the Zangger Committee, and four years later joined the Nuclear Suppliers Group as well. There has been similar progress in knitting China into the international control regimes that pertain to chemical and biological weapons, ballistic missiles, and their associated technologies.

Nevertheless, there are two disturbing aspects of China's record on proliferation, especially as it relates to Iran. The first is that proliferation activities by Chinese entities prior to the mid-1990s had already helped to boost Iran's indigenous WMD and missile production capability. In other words, Chinese proliferation a decade or more ago contributed in no small measure to Iranian capabilities today. Nothing that China or the United States can do today can reverse or repair this damage. However, as will be shown, there is much that can be done to help ensure that Chinese companies do not supply components that will enable Iran to replace or upgrade weapons manufacturing systems or in the case of missiles, the weapons themselves. The second disturbing aspect of Chinese proliferation activities is that, however infrequently, they continue.

It is difficult to assess from the data available in the public domain how valuable Chinese-supplied dual-use components and other dangerous technologies are to Iran's capabilities. However, the USG does report the number of instances and describes in general terms the nature of the controlled materials that Chinese entities have transferred to Iran. This limited information alone calls into question China's commitment to nonproliferation.

One can argue reasonably that in recent years Beijing has exercised *some* restraint, in at least *partial* fulfillment of its non-proliferation commitments. On the other hand, it is conceivable that there has been more Chinese proliferation to Iran than the American intelligence community has been able to detect and confirm. In short, there are two questions that cannot be answered with a high degree of confidence: (1) How invested are Chinese authorities in adhering to their non-proliferation commitments with respect to Iran? and (2) How extensive is proliferation to Iran by Chinese entities beyond what has been detected and disclosed by the USG?

Another avenue of inquiry relates to China's mechanisms for controlling PRC companies that proliferate to Iran. Here, there have been a number of encouraging breakthroughs, though China's export control system is, in many respects, a work in progress.

Since 1997 a number of domestic laws have been promulgated that govern licensing, certification, and end-user requirements. There is also an institutional architecture in place for enforcing these regulations. Authority is lodged in five main state institutions: [1] the Ministry of Foreign Affairs, Department of Arms Control and Disarmament (DACD), [2] the Ministry of Commerce, [3] the Commission for Science and Technology (CST), [4] the China Atomic Energy Agency (CAEA), and [5] the Chemical Weapons Convention (CWC) Implementation Office.

Within this constellation of government institutions, it appears that, gradually, the Ministry of Foreign Affairs is acquiring both the authority and the capacity to exercise veto power over specific cases of licensing and transfer. It also appears that the number of PLA personnel staffing, and thus directly influencing these institutions has decreased. Thus, the processes of *centralizing* and *civilianizing* authority over export controls are well underway, though, as best can be ascertained, they are far from complete.

Also somewhat encouraging is the emergence of a growing number of increasingly powerful economic actors who arguably have vested interests in keeping US-China relations and relations with Iran's neighbors on a positive track. In a general sense, then, there is a constituency for China's upholding international norms and standards. Still, the day-to-day implementation of China's export controls rests with the state bureaucracy.

That there remain significant gaps and deficiencies in China's export control system might be partly due to the fact that jurisdiction over enforcement is dispersed. For example, *both* the Commission for Science and Technology (CST) and the China Atomic Energy Agency (CAEA) handle nuclear exports. How the responsibilities between them are delineated in practice is unclear.

The degree of state control over commercial enterprises varies, sometimes greatly, by company. There are several reasons for this. The first is the exponential growth in the number of economic actors and of interactions with foreign counterparts. The second is the differentiation of ownership and control models that prevail in China today, which range from companies that are wholly state-owned and operated to those that are roughly the equivalent of private companies in the Western sense. The third is that, by urging enterprises to harvest resources and expand overseas operations, China's state authorities have unwittingly or at least tacitly encouraged business transactions – including, perhaps, proliferation activities – that are at odds with their own avowed non-proliferation commitments. The net effect of these developments has been a proliferation of would-be proliferators.

That said, there are only a handful of Chinese entities that have been the main culprits with respect to Iran. In June 2006, pursuant to pursuant Executive Order 13382 on Blocking Property of Weapons of Mass Destruction Proliferators and Their Supporters, the United States imposed sanctions on four Chinese entities: Beijing Alite Technologies Company, Ltd. (ALCO); LIMMT Economic and Trade Company, Ltd.; China Great Wall Industry Corporation (CGWIC); and China National Precision Machinery Import-Export Corporation (CPMIEC). In all four cases, these companies were cited for transferring missile-related controlled material to Iran. And, all four companies had been sanctioned by the United States for similar proliferation activities within the past two years.

It is impossible to tell how much or how little control Chinese state authorities can and do exert over *the full spectrum of commercial activities by Chinese economic entities*, regardless of whether the latter are nominally "state enterprises." It is also impossible to determine whether, in the case of Iran, Chinese state authorities themselves have made the strategic decision to approve or perhaps simply turn a blind eye to these proliferation activities. But as the companies listed above and a few others are *serial violators*, one thing is patently clear: Beijing either can't or won't prevent them from proliferating.

Were it not for US diplomatic pressure coupled with economic sanctions it is likely that, particularly in the case of repeat offenders, Chinese proliferation to Iran would have been even more extensive.

3. How has China influenced the development of Iran's nuclear program? Does this influence mirror US concerns for a nuclear Iran? What role has China played in the UN Security Council to limit Iran's nuclear weapons program?

China's material assistance to Iran's nuclear program pales in comparison to that of Russia. Nevertheless, China did make significant contributions to the Iranian program in specific areas within the relatively short period from the mid-1980s to the mid-1990s. For example, China helped to construct the primary nuclear research facility at Isfahan, helped to train Iranian nuclear technicians, reportedly assisted with the construction of Iranian uranium enrichment and conversion facilities, and (in 1991) supplied 1.8 tons of natural uranium (though, as disclosed by the IAEA in 2003, the amount was useful to train but too small to help produce weapons-grade material).

Throughout the 1990s, Chinese officials continued to discuss with their Iranian counterparts the proposed sale of two 300 MW reactors. (It should be emphasized that this sale would technically be permissible under the NPT.) However, this deal has been "frozen" since 1997. One interpretation of why it never materialized is that China valued nuclear cooperation with the United States over implementing the deal with Iran, i.e., access to American technology and equipment (allowable under the 1985 US-China Nuclear Cooperation Agreement) in exchange for assurances that the Iranian nuclear reactor project would not go forward.

While, in recent years, China has substantially curtailed its nuclear cooperation with Iran, Beijing continues to insist that its nuclear cooperation agreements (NCAs) with Iran are for peaceful purposes only and are consistent with the strictures of Article IV of the NPT. China's interest in furthering cooperation with Iran in the civilian nuclear field helps to explain the emphasis that Beijing has placed on respecting the *rights* of NPT signatories as the diplomatic crisis over the Iranian nuclear program has evolved.

In crafting an approach to the Iranian nuclear challenge, China has sought to balance several interests: [1] preserving access to Iranian energy resources, [2] opposing what Beijing perceives as "power politics", [3] expressing solidarity with a developing country, in a manner reminiscent of the "Bandung spirit" China sought to cultivate in the mid-1950s, [4] preventing a military showdown between the United States and Iran that could further destabilize the Middle East and compromise China's interests in the region, [5] eventually acquiring a share in the expansion of Iran's civilian nuclear infrastructure, and [6] maintaining a productive overall relationship with the United States.

Amidst the diplomatic wrangling over the Iranian nuclear program, Chinese officials have repeatedly and consistently stated [1] the matter should be resolved through *negotiation*, [2] the primary locus of authority and responsibility is the International Atomic Energy Agency (IAEA) and the latter's attendant inspection, reporting, and deliberative mechanisms, [3] Iran has the right to peaceful nuclear energy, [4] the development of nuclear weapons by any NPT signatory (including Iran) is unlawful and unacceptable, [5] coercive instruments in the form of sanctions or military force are

unhelpful and potentially counter-productive, and [6] constructive proposals by any and all parties are welcome and worthy of support.

In more concrete terms, China has followed a defer-bend-and-defend approach. China has sought to postpone the tough questions and hard choices, working hard behind the scenes to stymie US/European attempts to impose strict deadlines and preconditions on Iran. China has also deferred in a second sense – ceding the initiative to others, especially to Russia. In this way, Beijing has been willing to allow Moscow to claim the credit for a possible breakthrough, while minimizing the risks and costs that proactive diplomacy might entail. That said, the Iran's inflammatory rhetoric and intransigence, coupled with the failure of Moscow and the EU to produce a compromise, has created a rather peculiar dilemma for Beijing. However reluctantly, China has joined the broad though fragile Western consensus to the extent that Beijing voted to refer the Iranian nuclear issue to the UN Security Council. Though vigorously opposing sanctions, China, along with Russia, nonetheless abstained in the vote on UN Security Council resolution 1696. Furthermore, opposition to sanctions can hardly be ascribed to China and Russia alone. France, Italy, and Spain have all backpedaled on sanctions, favor flexible deadlines, and (through the good offices of EU High Representative for the CFSP Javier Solana) have opened a parallel diplomatic track to secure a compromise.

4. Why does China continue to be a source of proliferation for Iran? What are the advantages and disadvantages for China of a more heavily armed or nuclear Iran? How does this proliferation affect China's interests in the Middle East? How are US regional interests affected?

In order to gauge why China continues to be a source of proliferation to Iran, one must first consider these two possibilities: [1] Chinese state authorities know and approve of these activities, [2] Chinese state authorities do not necessarily know and approve of these practices but lack the capacity to stop them. The second possibility was explored earlier in the discussion of China's export control mechanisms. But what of the possibility that Chinese state authorities have actively encouraged or have resisted these activities rather passively? What might be their motivation for doing so?

Here there are several factors to consider. The first is that the Chinese perception of threat as it relates to Iran might differ from that of the United States: the Chinese leadership might have calculated that a nuclear Iran does not pose a direct threat to China or its interests. The second is that, by Beijing's risk-reward calculation, the penalties incurred by Chinese companies engaging in proliferation (if detected) are bearable especially since the precise degree of state culpability in these activities is indeterminable, balanced against the benefits of remaining on good terms with Tehran.

The idea that a heavily armed or nuclear Iran would be a strategic asset to China is a fanciful notion. Chinese and Iranian leaders are, in equal measure, nationalists. They are also pragmatists, in the sense that there is no common ideological underpinning binding them together. It is inconceivable that Iran would willingly serve as Beijing's cat's paw.

In the event that the United States and China were to stumble into war, it is difficult to imagine a scenario in which Iranian policy-makers would opt to intervene militarily against the United States. Furthermore, there is no evidence that the Chinese leadership is seeking to forge a strategic alliance with Tehran.

To the extent that Chinese state authorities can, but have chosen *not* to clamp down on proliferation activities to Iran is a misguided and short-sighted policy that not only places US interests in the Middle East at greater risk but that renders Iran's neighbors even more strategically vulnerable than they already are. These latter consequences of continued Chinese proliferation to Iran are, in fact, injurious to China's own image and interests in the wider Middle East. It is therefore necessary to persuade China of the *mutuality of security interests in the longer term.* While difficult, this task is not impossible. But it is likely to require time and concerted action by the US and like-minded Middle Eastern states and countries with interests in the region. In the meantime, however, the United States cannot and should not rely on the power of persuasion alone.

5. What further steps can the US take to limit proliferation from China to Iran?

Limiting proliferation from China to Iran requires a multifaceted approach that employs cooperative as well as coercive measures. The basic elements of such an approach are:

Initiating a Strategic Dialogue: Given that addressing the Iranian nuclear challenge is a first order priority for the United States, this issue should be a top agenda item in *every* high-level diplomatic exchange between American officials and their Chinese counterparts. Zero in on the Ministry of Foreign Affairs, which, as previously stated, has been progressively gathering the authority and capacity to control exports. If indeed Beijing is willing and able to honor its non-proliferation commitments, the US will succeed in enlisting its full cooperation only by making it clear that a tight clampdown on proliferation to Iran is of critical importance to the overall well being of the Sino-American relationship.

Invigorating Third-Party Diplomacy: None of Iran's immediate neighbors would welcome its development of nuclear weapons capability. Nor would Europe. China has worked assiduously to build cooperative relationships with all of the countries of the Middle East and with Europe. The US should exploit these circumstances by urging Arab states, Israel, Turkey, and EU members – all of which have productive relations with China and their own concerns about the Iranian nuclear program – to lean on Beijing.

Assisting with Capacity Building: As mentioned earlier, China's export control system is relatively new. The United States has an interest in ensuring that this system operates effectively. Seminars on export controls have been conducted between the US Department of Commerce and the PRC's Ministry of Commerce. But these outreach activities should be expanded in scope, participation, and frequency. The overarching aim should be the institutionalization of these contacts – a latticework of public and public-

private sector exchanges at aimed at improving the PRC's interagency coordination and improving communication with and compliance by PRC commercial entities.

However, it would be imprudent to rely exclusively on dialogue and cooperation. It cannot be assumed that China possesses the political will and the capacity to stop proliferating to Iran. Thus, United States must also be prepared to continue to employ coercive measures. The sanctions tool admittedly a blunt instrument. To maximize its effectiveness, use it more effectively and more judiciously.

Closing the Accountability Gap: Adopt a punish-and-deter approach that targets serial offenders, and that holds both Chinese state authorities and commercial entities responsible for upholding non-proliferation commitments. The first component of this approach would be to hold the parent company responsible for proliferation transactions conducted by its subsidiaries. The second component would be to institute a graduated scale of penalties with a high threshold cost for repeat offenders. The third component would be to reduce, withhold, suspend or deny specific US technology transfers to China.

Narrowing the Focus: The list of proscribed items is long and continues to grow. It might be both prudent and feasible to zero in on certain specific "high value-high risk" dual-use technologies. In other words, identify among all of the many controlled items those whose transfer would boost Iran's capability the most – scaling sanctions accordingly.

Integrating US Sanctions Law: Proliferation to Iran is covered in at least seven pieces of US domestic legislation plus two executive agreements. This dizzying array of US domestic law ill serves US non-proliferation objectives. Synthesizing this legislation into a single clear and coherent text would have at least two possible benefits. First, they would facilitate Congressional monitoring and oversight. Second, they would leave the US less exposed to charges and excuses by Chinese state authorities and commercial entities that these proscriptions are excessively complex and ever changing.

Strengthening the NPT Regime: As previously stated, China – echoing the Iranian position but also in defense of its own interests – emphasizes that the *rights* of NPT signatories to pursue, conduct, and exchange peaceful civilian nuclear activities must be respected. The United States, while affirming these rights (including in the Iranian case), emphasizes the *obligations* to which all NPT member states are bound. How, then, to reconcile these positions – to strike a balance between rights and obligations – such that both American and Chinese interests are served? Here the United States can do two things. First, American officials can reassure Beijing that the aim of US policy is to hold Iran to the highest possible level of transparency and accountability under the NPT, not to coerce Tehran to abandon its stated goal of acquiring nuclear capability for *peaceful* purposes and thus foreclose the opportunity for Chinese companies to compete for business in the civilian nuclear sector. Second, the United States can lead and vigorously seek to enlist China in multilateral efforts to strengthen the IAEA's authority and capacity to inspect, monitor, and verify compliance.

Conclusion:

The news about Chinese proliferation to Iran is not all bad. There is some encouraging evidence that Beijing has begun to accept responsibility for and develop the capacity to adhere to its non-proliferation commitments. But cases of Chinese entities proliferating to Iran continue to surface.

Even were China's state authorities more willing and better able to restrain Chinese companies, it is important to point out that the Sino-Iranian proliferation linkage is a supply *and* demand challenge. Even the best efforts to curb Chinese proliferation activities to Iran are likely to be inadequate in the face of a determined proliferator – if indeed this is an accurate characterization of Tehran's ambitions. Therefore, cooperative and coercive measures to stanch the flow of dangerous materials from China to Iran must go hand-in-hand with efforts to dissuade Iran from acquiring them. Much, then, rests on whether the current and future rounds of nuclear diplomacy succeed in producing an outcome that is acceptable to both Tehran and Washington. Even were such a breakthrough to occur, however, there would be no reason to be complacent. Protecting US interests would still require constant vigilance and robust efforts to prevent Chinese proliferation to Iran.

Two recent events stand as stark reminders of the consequences of Chinese proliferation activities: the North Korean missile tests on July 4, 2006 and Hezbollah's launching of Chinese-designed C-802 cruise missiles to strike an Israeli naval vessel on July 15, 2006. One would hope that these events would convey the lesson to Beijing that *mutual security interests* are best served by the strictest possible monitoring and compliance with its non-proliferation commitments.

For the United States, these events hold lessons as well. The first is that Chinese proliferation activities can inflict damage long after they might have been curbed or stopped. The second is that while it may be too late to mitigate the adverse consequences of some of China's past transgressions, it is nonetheless essential to spare no effort to shape Beijing's outlook and help strengthen its capacity to adhere strictly to its nonproliferation commitments.