

Proliferation networks: between Sopranos and Supermarket

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One success in the struggle against proliferation during the last decade has been that Western countries have reinforced mechanisms for control over exports of goods and technologies intended for the perfection of weapons of mass destruction.

These new constraints have probably resulted in the appearance of a genuine proliferation economy, partly underground, organized around contacts between acquisition and sales networks, searching to exploit weaknesses in existing control systems to obtain wanted goods and technologies.

This phenomenon is particularly worrying, because the level of technical skills attained by some suppliers is sufficiently high to guarantee that their customers will have a functional product satisfying their demand. Apart from systematic exploitation of vulnerabilities in export control systems, the capacity of these networks of suppliers to conduct their operations is reinforced by access to technologies and globalization of the market and financial tools.

This article is the first of a series of two and explores the operation of these proliferation networks. The second article will be dedicated to an analysis of existing tools or other tools that can be implemented to combat them.

A genuine phenomenon

The interception of the German BBC China ship in October 2003 and the discovery of several tens of centrifuge elements on route to Libya, exposed the existence of a network of major nuclear weapon smuggling founded by Dr Abdul Kader Khan, considered to be the father of the Pakistani nuclear bomb.

Other proliferation networks are more closely related to "classical" criminal enterprises like the network that managed the transfer of Kh-65 missiles to Iran and to the Popular Republic of China, benefiting from weaknesses in national control systems.

Work done by the *Iraqi Survey Group* showed that Saddam Hussein's Iraq had set up means of circumventing the embargo and acquiring goods intended for prohibited programs from other countries. Similarly, Mafia-like activities by the North Korean regime include the supply of proliferating technologies to customers such as Iran, Pakistan and Syria.

In terminating the successful cooperation between the Pyongyang regime and the *Banco Delta Asia* established in Macao¹, American Treasury services have exposed the complexity of these supplier networks, in which some of their activities are based on legal financial or commercial operations.

Proliferation networks are the result of long and systemic maturing, and now use methods adopted by criminal organizations so as to escape to increased monitoring of worldwide material, immaterial and financial flows. However, these organizations – between Sopranos and Supermarkets – are making use of larger and sometimes legal State as well as non-state means to function.

Towards a systemic description of proliferation networks

In order to get a clearer view of how networks are intertwined, it seems essential to make an attempt to quickly differentiate between existing systems. The end purpose is to find common points and differences between the acquisition system set up by Saddam Hussein's Iraq, Khan's network of suppliers and also the North Korean system.

The first observation is that networks may be specialized in the supply or acquisition of equipment, components or know how. This "specialization" influences the organization and methods used directly to the extent that acquisition networks have the task of technically specifying their need and verifying that proposed products match their expectations, while a network of suppliers satisfies a need more or less clearly expressed by its client. This characterization appears to be theoretical because some organizations may need to carry out both types of activities – as is the case of Khan and North Korea. However, this characterization is relevant due to its organizational and structural consequences. Thus, it is important to consider that the Khan network should develop two distinct organizations, depending on whether it needs to sell or to supply nuclear technology. Following this reasoning a little further, each operation can be done be

¹ East Asia Intel, "N. Korea now channelling overseas cash via Austria after U.S sanctions on Macau bank", December 21 2005

different cells, although in practice some cells may be used for several or even all operations².

Furthermore, the size and configuration of the different proliferation networks differ considerably. Thus the Iraqi network uses several intermediaries, organizations or dummy corporations, which causes coordination difficulties, but paradoxically makes this organization more stable. Conversely, the Khan network does not seem very extensive, and only a few persons are responsible for the key functions. *A priori*, this type of structure suffers from a centralization effect that makes it vulnerable to external disturbances.

However, despite these differences, proliferation networks share common points, particularly in terms of operation. Firstly, they are all based on the use of persons responsible for making contacts with suppliers, for acquisition tasks and management of flows. Although these persons form an integral part of the network, they are assigned only organizational roles, and do not make any decisions. In the case of the Khan network, other agents were called in to assist the network, depending on the jobs being processed; either to set up dummy corporations, or to provide equipment, or even to carry out a particular operation. This is the case of Peter Griffin, firstly called upon to be responsible for SCOPE work for the Libyan client, and later replaced by Urs Tinner.

Financing proliferation networks

But most networks share common operating modes in terms of financing. All known cases include two similar methods:

- **Currency movements:** operations internal to the network usually take place in cash to escape from possible monitoring of the SWIFT network³. However, cash payments for commercial transactions are often limited to small amounts, therefore this method cannot be used by intermediaries to pay legal suppliers. Consequently, this market cannot be organized only based on currency transfers due to the size of the financial flows involved (millions of dollars⁴).
- **Money laundering:** in fact, the objective is to reintroduce currency managed by the network into the bank system to be able to pay for the legal part of transactions (payment of suppliers). The use of "accomplice" banks or even subsidiaries set up in other countries (as was the case for the Iraqi network) provides the best security for this type of operation.

² Khan himself or some of his partners at Khan Research Laboratory take part in all network operations.

³ Automation of bank transfers has led to setting up a secure international network operated by the SWIFT (*Society for Worldwide Interbank Financial Telecommunication*) society that assembles 7800 bank institutions in 202 countries.

⁴ The amount generated by the Khan network is estimated at about 100 million dollars.

In some cases, the means used also include the use of diplomatic means to transfer some or all network funds to countries in which suppliers or intermediaries are located. This was the case particularly for the Iraqi network for which security services were responsible for this task, as was also the case for repatriation of some goods or components purchased in other countries through the same channels.

A few prospects about the strength and weaknesses of proliferation networks

Evaluating the efficiency of proliferation networks is a difficult exercise, because available information is scarce. However, it is possible to define a few criteria for identifying its strength and weaknesses. In particular, the objective is to determine if the network concerned is discrete, if it is technically effective and the extent to which it is capable of continuing to operate if one of its nodes is neutralized.

As a first analysis, several factors affect these criteria, and particularly the size of the network or the concentration of functions. Thus, we can question the significance of the impact obtained when the United States terminated cooperation between the *Banco Delta Asia* and Pyongyang. Everything suggests that this bank played a sufficiently central role in the financial system of North Korean networks (the system related to proliferation, but also the system managing various illegal traffic, particularly counterfeit money) so that the American action could produce a significant global effect on their operation.

However, the possibility that such an action can have real consequences on the existence of the North Korean network should be discarded, even though it will necessarily need to reorganize itself before it can resume stable operations. Since these activities are essential for the stability of Pyongyang regime, such an event would not convince Kim Jong Il to terminate them.

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The exposure of several organized proliferation networks at the end of the 1990s illustrates the development of a trade activity for suppliers, and also the fact that this trade has become essential for countries wishing to acquire weapons of mass destruction or related technologies, despite increasingly effective control measures set up by Western countries.

However, it is important not to lose sight of the fact that these networks also exist to generate income. Consequently, privatization of state activities for the benefit of individuals, as was apparently the case of the Khan network, is one of the more worrying aspects in terms of proliferation.

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