

# Significance of Realizing Independent Innovation of Key Technologies to National Security Strategy

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**Abstract:** In today's world, security does not mean the security of a country or a type of country, but the common security of all countries. Security is universal, and no country can base its security on harming the security interests of other countries. The choice of national security strategy is based on the judgment of the international strategic situation, but the international strategic situation is not a simple accumulation of situations and events, but the essence behind international phenomena. The dynamic nature of national security determines that maintaining national security requires certain innovation. This innovation requires not only theoretical innovation, but also institutional innovation, rule of law innovation, and more importantly, scientific and technological innovation plays an important role in the game of great powers. By analyzing the significance and strategies of innovation capability for national strategy, this paper aims to provide support for enhancing national comprehensive national strength and international competitiveness.

## 1. Introduction

The development of a country and the rejuvenation of the nation not only depend on historic opportunities, but also must have some necessary conditions [1]. These conditions roughly include: the growth and prosperity of the national strength, the innovation ability of the national system, and the correct choice of development strategy and security strategy [2]. This correct strategic choice also includes seizing the historic opportunities in the objective environment in time and making full use of international contradictions to create and improve the existing environment [3]. Grasping the pulse of the times, starting from the multipolarization of the world pattern, economic globalization and the actual situation of China, we put forward and actively advocate and promote the new national security concept [4]. It is of great theoretical and practical significance to correctly understand and grasp the scientific connotation and main features of the new security concept, and to seek and maintain international and national security with new ideas and ways [5]!

In today's society, countries around the world, especially developed countries, have gradually improved their system construction with patent law and intellectual property protection as the core, and the first developed countries strictly control the transfer of new and high technologies to later developing countries, which has led to increasing difficulties for later developing countries to learn and introduce advanced technologies [6]. Therefore, only by formulating and implementing independent technology innovation strategies and improving their own independent innovation capabilities can the late developing countries get rid of the "technology import trap" and break through the technology blockade of developed countries. Pei Hong LI proposed that improving innovation capability is equivalent to improving productivity, and productivity is the main factor determining a country's wealth and competitiveness [7]. At the critical historical stage when middle-income countries are marching towards high-income countries, only relying on innovation to cultivate and develop emerging industries and improve the competitiveness of traditional industries can we avoid falling into the "big country trap" due to technological dependence and ensure long-term sustainable economic growth [8]. Innovation is the soul of a nation's progress, the inexhaustible driving force for the country's prosperity and development, and an important guarantee for national security. It is extremely urgent to improve innovation capability [9]. In the choice of security strategy, we should draw lessons from history and strive to get out of the strange circle of repeating the traditional model [10]. There should be more new ideas on the allocation of

limited strategic resources, on the choice of security strategic objectives, and on the leapfrog development of security subject and means construction [11].

## 2. National Security Strategy and the Concept of Independent Innovation

### 2.1. National grand strategy and overall security concept

Under the historical tide of globalization, globalization has caused the interdependence and intersection of national interests, and at the same time aggravated the serious division of the international community. The impact of globalization on national security is twofold. In terms of security relations, we should be good at grasping the balance between international cooperation and struggle. For a country that seeks survival, development and security in a highly competitive international society, it must have a national grand strategy that includes a national development strategy and a national security strategy. In addition, it must also include a national unified strategy. National development strategy is determined by public interests, and national security strategy is determined by national interests. It is to safeguard one's own interests independently, and cooperation is to integrate into the global interests, and adhere to the dialectical unity of independence and integration into the international community. This is the connotation of the "cooperative security concept" that we are talking about, that is, our security strategy should strive to achieve a win-win situation and avoid the outcome of both losses.

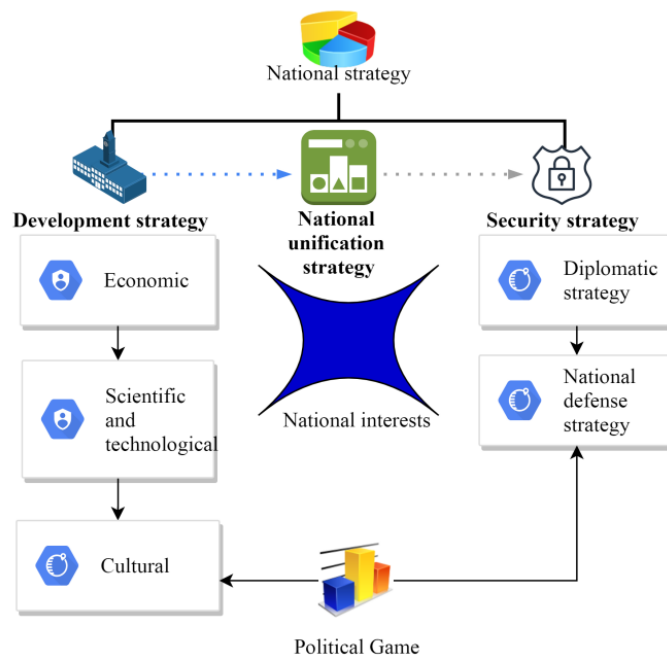


Figure 1 National grand strategic framework

Figure 1 shows that the national grand strategy should include not only the national development strategy, but also the national security strategy. The national grand strategy should be above the national security strategy, including two strategies of development and security. And comprehensively consider the internal and external situation, available resources, national public interests and national security interests. More importantly, the core of a country's strategy is its national interests. Only by clearly defining the national interests and prioritizing different interests can we make an accurate judgment on the harm degree of various threats, effectively allocate available resources and protect our national interests to the maximum extent. Therefore, when considering the national grand strategy, even the national security strategy, it is necessary to make clear what is the national interest.

The "overall national security concept" is the program of national security governance activities and the ideological basis of national security strategy. From the main purpose, the "overall national security concept" takes people's security as the purpose, and public security puts people's security

first. From this perspective, the people-oriented idea has become a bridge and link between public security and national security. From the perspective of maintenance means, the "overall national security concept" emphasizes both security and development, which is a new thinking centered on security and development. Innovation is the first driving force to lead development. To achieve national security, we need to innovate in the rule of law, system, and concept. But in the final analysis, we need to play the supporting and leading role of scientific and technological innovation in comprehensive innovation.

## 2.2. The relationship between national security and innovation

Security is a prerequisite and condition for development. Without national security as a backing, the fruits of development will be lost and social development will be unsustainable. We should adhere to the principle of ensuring development through security. Development is the guarantee and foundation of security. Without development, there will be no economic growth and scientific and technological progress. It is difficult to improve military strength and comprehensive national strength. It will be difficult to achieve people's well-being, ensure social stability and harmony, and ensure long-term stability of the country. We must adhere to development to promote security. In the face of major social contradictions, development is the basis and key to solving all national problems. We must unswervingly implement the concept of innovative, coordinated, green, open and shared development. Innovation is at the top of the five development concepts, because innovation is the first power to lead development and an important guarantee for a country's long-term stability. To sum up, the relationship between innovation, development and national security can be shown in Figure 2.

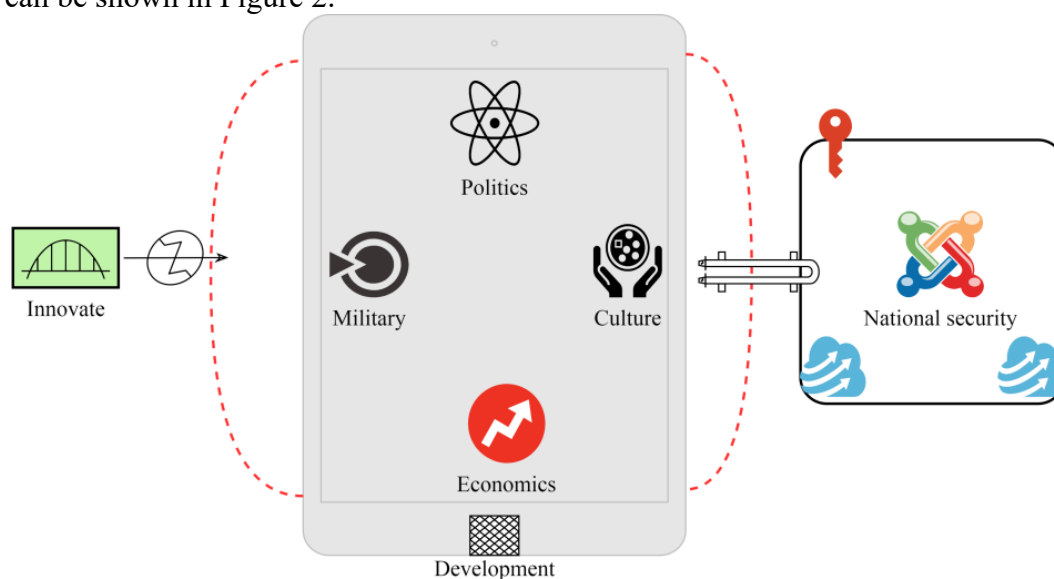


Figure 2 Relationship among innovation, development and national security

Therefore, we should solve the internal and external security problems. Stability is the guarantee, development is the condition, and the key is reform and innovation. That is, the relationship between change and invariance in the international situation, the relationship between initiative and passivity in the role change in the security environment, the relationship between cooperation and struggle in foreign exchanges, the relationship between maintaining strategic stability and paying attention to tactical attack. Both need to start from the improvement of self innovation ability.

## 3. Significance and Strategy of Independent Innovation of Key Technologies

Independent innovation is an important support to improve international competitiveness and anti risk ability, and also a sword to ensure the implementation of national security strategy! The essence of improving national competitiveness is to emphasize the unity of learning and innovation, the coordination between individuals and the whole, the coordination between openness and

internal cohesion, and the transformation from passive introduction to independent, conditional and selective introduction. Among them, the national independent innovation ability is the ability to correctly choose and timely adjust the path of innovation and development, and the comprehensive ability to engage in scientific discovery, technological invention and create value "based on me". It is the ability to gather and integrate innovation resources, promote the upgrading of innovation elements and transform them into wealth, and it is mainly carried in the innovation subject, talent team, infrastructure and system culture. Adding "autonomy" before "innovation" emphasizes that the innovation subject belongs to an independent country and fully relies on its own strength to achieve the innovation goal. That is, we have our own core technology and obtain independent intellectual property rights. To build an innovative country, we should correctly grasp the relationship between imported technology and independent innovation, make full use of the existing foundation, and vigorously promote original innovation, integrated innovation, digestion, absorption and re-innovation. Master the core technologies and key technologies with independent intellectual property rights, and accelerate the transformation of scientific and technological achievements into real productive forces.

Owning the core technology of independent intellectual property rights is the way to make China strong. Turning to the modern history of the world, we can clearly see that whoever took the lead in the independent development of revolutionary technologies at that time will become a world power. The core technology with independent intellectual property rights is an inevitable strategic choice to break through the major bottlenecks of the national economy such as unreasonable structure and extensive growth mode. It can be seen that we must take enhancing the self-confidence of independent innovation and establishing a sound independent innovation mechanism as the primary breakthrough point to improve the ability of independent innovation. To this end, we should strengthen the core technology innovation ability from the following aspects:

(1) Through the mobilization and allocation of resources by the government, the national capacity for independent technological innovation will be formed and enhanced. In order to promote the improvement of the environment for China's participation in international cooperation and innovation, and thus enhance its own technological innovation capacity. Quickly shorten the gap with the technologically advanced countries, carry out technological innovation with the technologically advanced countries, and realize the national technological leapfrog and the great development of strategic industries.

(2) Adhere to the combination of advanced technology introduction, digestion, absorption and independent innovation. Strengthen international scientific and technological cooperation and exchange, introduce advanced foreign technology from a high starting point, and focus on the introduction of patented technology, software and necessary key equipment. At the same time, we should strengthen the digestion and absorption of imported technologies to achieve simultaneous innovation and improvement.

(3) As an enterprise, it should increase the construction of technology development center and the investment in research and development activities. We will vigorously develop key technologies with independent intellectual property rights, form our own core technologies and proprietary technologies, create well-known brands, and enhance our core competitiveness. Because the technological innovation ability of enterprises is the basis of the national technological innovation ability, the optimization of resource allocation and industrial upgrading also depend on the technological progress and improvement of market competitiveness of enterprises.

In short, to achieve sustainable economic and social development and steady progress of national security strategy, it is necessary to realize the transformation from resource dependent to innovative. Let independent innovation become the basic way to improve the utilization rate of energy resources, enhance the economic and ecological benefits and the national grand strategic development.

#### **4. Conclusions**

The goal of the national security strategy must be clear, that is, the strategy to ensure national

security. Under a certain geopolitical, geo economic and socio-cultural background, according to its own definition of national interests, judgment of existing and potential threats, and available resources, it decides what way or how to allocate and use resources to deal with threats and most effectively safeguard its own security. A national security strategy should combine attack with defense and attack. Only in this way can we form an effective support for the overall strategic defense situation and truly achieve the political purpose of defense. It is emphasized that independent innovation of key core technologies is an important measure to safeguard national security and determine the quality of future economic growth of the country. It is a strong backing that supports the country's strong bones and muscles and concerns the country's strategic interests. Global economic competition and comprehensive national strength competition are essentially the competition between science and technology and national quality. Today, with the deepening of economic globalization, independent technological innovation should constantly improve the ability to acquire key technologies and independent intellectual property rights under the open conditions. Only with a global vision, we can learn and learn from the best international innovation models and experiences. And make full use of global innovation resources, and be good at making use of international platforms. Only by combining our national conditions and giving full play to our advantages can we enhance our ability to create independent intellectual property rights and our core competitiveness.

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