



## ANALYSIS

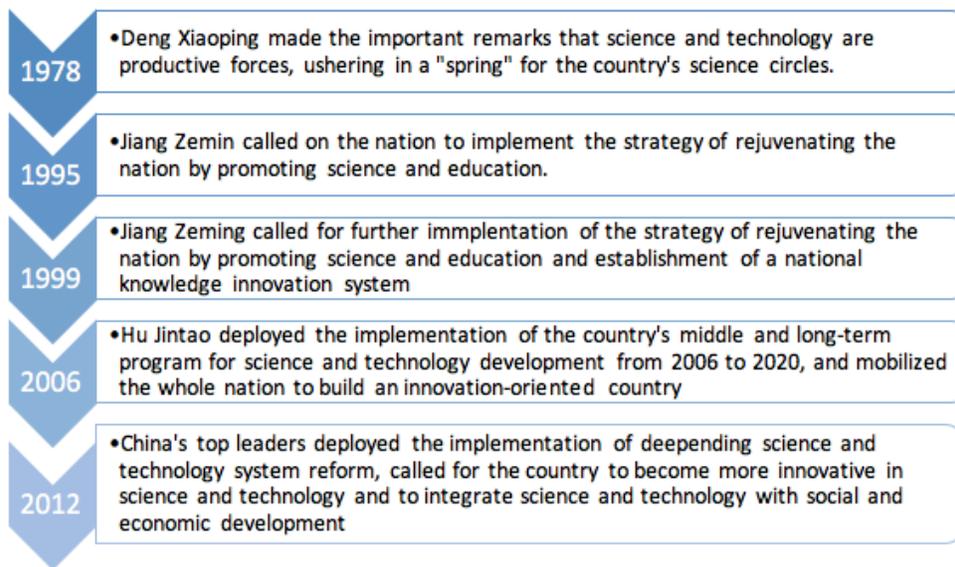
June 9, 2016

### The National Conference on Science and Technology

China held its seventh National Science and Technology (S&T) Conference in late May 2016, in combination with the biennial conference of the Chinese Academy of Sciences, the Chinese Academy of Engineering, and the national congress of the China Association for Science and Technology. Since the first National S&T Conference took place in 1978, this is an important and irregular meeting in China's S&T calendar where the central government announces key policies and strategies to meet long-term S&T development goals.

The first National S&T Conference was held in 1978 and this and, as shown in Figure 1, many of its subsequent conferences stand as pivot points in China's S&T strategy. At the first National S&T Conference, Deng Xiaoping delivered important remarks establishing S&T as a productive force and redefining S&T personnel as the working class, reversing much of the constraints and critiques on S&T during the cultural revolution. The "Outline of the National S&T Development Plan, 1978–1985 (Draft)," China's third long-term S&T development plan, was issued at this meeting.

Figure 1. Previous National Conferences on Science and Technology



The next National S&T Conference wasn't held until 1985 but also handed down important decisions on reforming China's S&T system, including introducing market forces and orienting China's largely state-led S&T system to respond more efficiently to economic needs of the country. The third national S&T conference took place a decade later in 1995, and introduced China's new development strategy with Jiang Zemin's call to "rejuvenate the nation with science, technology, and education."

The 1999 National S&T Conference targeted the promotion of technological innovation and the development and industrialization of high technology, both themes of which formed the bedrock for medium- and long-term S&T development. These themes were written deep into China's S&T thinking and implementation at the 2006 National S&T Conference, where the transformational National Medium- and Long-Term Plan for Science and Technology Development (2006–2020) (MLP) was issued. The MLP included tasks, key research areas, policies and measures for building an innovation-oriented country and famously embedded the notion of indigenous innovation in China's S&T strategy. At the most recent National S&T Conference held in 2012, China's top leaders set new targets to enhance innovation capabilities and detailed policies to promote innovation activities within enterprises.

In last month's conference, President Xi Jinping announced a new goal for China to "become one of the most innovative countries by 2020, an innovation leader by 2030, and a global S&T power by the 100th anniversary of the founding of the People's Republic of China in 2049." Xi further stressed the critical role that science, technology, and innovation play in national development and praised the many advances that China has made in building its S&T capacity. However, Xi warned that China still struggles with major bottlenecks in many S&T fields and continues to face large gaps in innovation capacity.

To reach his new goals, Xi emphasized the need for strategic support of S&T development, particularly in the selection of S&T focus areas. Four fields, including advanced materials, pharmaceuticals, high-end medical devices, and space technology, were highlighted in his speech to launch this new focus. It can be expected that new major, state-led S&T projects and programs will emerge in these areas. Xi also called for a pivot away from a factor-driven development pattern to an innovation-driven one, a need to replace major S&T decision-making based on whims of officials with institutionalized mechanisms, and a more encouraging environment for S&T personnel.

A few follow-on policies were announced immediately after the National S&T Conference, and more are expected to follow. For example, the State Council said that it would cut red tape in S&T research funding by removing administrative barriers for universities and research institutions as a way to stimulate interest. The State Administration of Science, Technology and Industry for National Defense (SASTIND) organized a Party group meeting to study the spirit of the conference and Xi's speech, with the goal of making the defense industry a pioneer in this acceleration in innovation development.

This conference was not the first time that those new goals were mentioned. The year 2020 has been a consistent future benchmark of China's progress as stated in the 2006 MLP, which set many S&T and innovation objectives to reach by 2020. Just a couple weeks prior to Xi's speech, the other goals of 2030 and 2049 were included in a document issued by the CPC Central Committee and the State Council, the "Outline for National Innovation-driven Development Strategy", which was hailed as a blueprint for China to implement its innovation-driven strategy. It is unclear, however, what the difference is between becoming "one of the most innovative countries" and becoming "a global S&T power." Neither the outline

nor Xi's speech give a clear definition of the difference between those goals, but the outline provides some targets for each period, although mostly soft measures. Xi's speech reinforced the key points of this outline and raised the goals set out in the outline to the level of a national strategy. His notion of strategic selection of S&T focus areas also indicates a new trend in China's S&T thinking. Right now, of course, it is still early to tell whether China will achieve those goals.