

## Technonationalism as a Driver of Armaments Production in Central Europe

Richard A. Bitzinger  
Senior Visiting Fellow  
Military Transformations Program  
S.Rajaratnam School of International Studies  
Singapore

Nearly country in Central Europe manufactures some kind of arms, but the type, quantity, and quality of weaponry produced vary widely. In many cases, armaments production is relatively inconsequential, consigned to relatively “low-tech” types of weapons systems, i.e., small arms (rifles and pistols), ammunition, armored cars, trainer aircraft, and the like.

Despite their varied backgrounds and varying defense-industrial capacities, these countries share many motives for developing and producing their own arms (self-defense, security of supply, as a driver of technological development and industrialization, etc.). One of the more interesting drivers, however, is the “technonationalist impulse.” Technonationalism – a word first coined by Robert Reich in the 1980s<sup>1</sup> -- is more than just a “security of supply” issue or a fancier word to describe protectionist economic and developmental policies. The technonationalist impulse is, of course, not limited to just armaments production or just to Central Europe. Technonationalist policies are common throughout the world and in many industrial sectors (iron and steel, automobiles, electronics, shipbuilding, and the like).

At its most fundamental level, technonationalism entails the indigenous development of technology – as much for its own sake as for any economic benefits it might incur. As David Edgerton has put it, technonationalism was about countries, through indigenous technological development, trying to determine their place in the global pecking order, even if this was just “bragging rights.”<sup>2</sup> At the heart of technonationalism is, of course, the nation-state:

[N]ations are the units that innovate, that have R&D budgets and cultures of innovation, that diffuse and use technology. The success of nations, it is believed by techno-nationalists (who rarely if ever label themselves as such), is dependent on how well they do this.<sup>3</sup>

As military technonationalism has been defined by such defense analysts and political economists as Richard Samuels and Christopher Hughes, however, it has come to mean much more, at least in a military context.<sup>4</sup> In the particular case of armaments production, technonationalism is as much about securing geopolitical and strategic autonomy as it is about achieving technological and industrial self-sufficiency when it comes to defense. In other words,

---

<sup>1</sup> Robert Reich, “The Rise of Technonationalism.” *Atlantic Monthly*, May 1987.

<sup>2</sup> David E.H. Edgerton, “The Contradictions of Techno-Nationalism and Techno-Globalism: A Historical Perspective,” *New Global Studies*, Volume 1, Issue 1 (2007), pp. 2-4.

<sup>3</sup> Edgerton, “The Contradictions of Techno-Nationalism and Techno-Globalism,” p. 1.

<sup>4</sup> Richard J. Samuels, *Rich Nation, Strong Army: National Security and the Technological Transformation of Japan* (Ithica: Cornell University Press, 1994; Christopher W. Hughes, “The Slow Death of Japanese Techno-Nationalism?” *Journal of Strategic Studies*, Vol. 34, No. 3 (June 2011).

military technonationalism serves broad, bold national strategic ambitions, particularly the emergence of a country as a modern, independent, even powerful, nation-state. Samuels argues that technonationalism is nothing less than the “struggle for independence and autonomy through the indigenization of technology.”<sup>5</sup> It is, he adds, the “embrace of technology for national security.”<sup>6</sup> Hughes describes technonationalism as “maximizing military technological autonomy in order to maximize national strategic autonomy.”<sup>7</sup> Samm Tyroler-Cooper and Alison Peet, for their part, define the technonationalist model as “characterized by a focus on the development of indigenous capabilities for self-reliance and autonomy.”<sup>8</sup> In short, technonationalism views autarky in military technology to be just as crucial to national security as is any particular weapon system.

Technonationalism is more than an objective or a set of goals, however – it is also a plan of action. The technonationalist model contains its own strategy for achieving autarky in armaments production, one that, paradoxically, involves the exploitation of *imported* technologies in order to eventually realize self-sufficiency. This process usually entails the course of moving from *learning* to *innovating*, of going from *imitating* technology to *owning* and *advancing* technology – in this particular case, for the creation and promotion of a national indigenous defense industry. As the *Economist* puts it, “The focus is laid on national goals through accessing foreign technology and the monopolization of technology.”<sup>9</sup>

In this regard, therefore, I propose to examine the defense industries of three key Central European states – Poland, the Czech Republic, and Bulgaria – and address how technonationalist impulses have driven and shaped armaments production after the collapse of communism. Questions to address include: how did the collapse of communism (which supported large investments in indigenous defense industries) affect arms production in these countries; how did technonationalism drive the efforts to protect and preserve local arms industries; how effective were these strategies?

The objective of the paper is, ultimately, to assess the efficacy and value of technonationalism as a defense-industrial development strategy. Is it worth the effort, and, if so, in what particular segments of defense production is technonationalism the most or least practical and beneficial?

---

<sup>5</sup> Samuels, *Rich Nation, Strong Army*, p. ix.

<sup>6</sup> Samuels, *Rich Nation, Strong Army*, p. 31.

<sup>7</sup> Hughes, “The Slow Death of Japanese Techno-Nationalism,” p. 453.

<sup>8</sup> Samm Tyroler-Cooper and Alison Peet, “The Chinese Aviation Industry: Techno-Hybrid Patterns of Development in the C919 Program” *Journal of Strategic Studies*, Vol. 34, No. 3 (June 2011), p. 385.

<sup>9</sup> “Techno-nationalism,” *Figuring Things Out*, December 14, 2011 (<http://dinakarr.blogspot.sg/2011/12/techno-nationalism.html>).