

William Jackson

Estonia's president today called for greater international cooperation as well as better cooperation between government and industry to counter the economic threat of intellectual property theft.

Cyber threats are changing the face of war as significantly today as aerial threats did a century ago, said President Toomas Hendrik Ilves. But the greatest threats now are not to military targets or critical infrastructure.

"We focus too much on the military side of things," Ilves said at an April 12 talk at the Center for Strategic and International Studies in Washington. "It's the economy, stupid. It is intellectual property that is the real worry."

Intellectual property is the economic engine of Western nations, and it is being siphoned off by public/private partnerships between criminal organizations and national governments, Ilves said. To counter this state-sponsored piracy, nations need to abandon their proprietary intelligence-based approach to cybersecurity and be more collaborative, he said.

Governments and international organizations have been slow to recognize the magnitude of the cyber threat and to take action against it, although some progress is being made. "NATO is finally recognizing that cyber is a significant issue," he said.

Cyber defense was one of 11 priorities agreed to at NATO's Lisbon Summit in 2010, and last year the treaty organization formally launched a procurement process for a cyber defense capability that is supposed to be up and running by the end of this year. But cybersecurity is not a high priority on the agenda for the treaty organization's next summit, to be held in May in Chicago.

"Most of the world hasn't gotten it yet," Ilves said of the cyber threat. "We have a lot of educating to do."

Estonia speaks with some authority in this area, being one of the world's most tech-savvy nations, where more than 90 percent of banking transactions are done online, and home to NATO's cyber defense center. It also was the target of one of the first politically motivated cyberattacks when, in May 2007, distributed denial-of-service attacks apparently originating in neighboring Russia disrupted commercial and government websites in the country for 24 hours.

"We were frankly shocked when this happened," Ilves said. But he called DOS attacks primitive and insignificant today. "This is so yesterday," he said. Sophisticated theft of intellectual property is a much greater threat today.

A report released April 11 by the Commerce Department's Economics and Statistics Administration and the Patent and Trademark Office seems to bear this out. The report identified 75 industries that rely most heavily on intellectual property and that account directly for more than 27 million American jobs, as well as supporting another 13 million jobs indirectly. These industries account directly for about 19 percent of American employment but produced nearly 35 percent of the nation's gross domestic product in 2010. Intellectual property-based jobs also tend to pay better, averaging 42 percent more than other jobs in 2010.

"When companies are more confident that their ideas will be protected, they have the incentive to pursue advances that push efficiency forward, costs down, and employment up," the report states.

But efforts to protect intellectual property from theft are hampered by a lack of cooperation, Ilves said. Western democracies usually maintain strict separations between public- and private-sector activities, which limits the ability and willingness to share information and cooperate on defenses.

Nations also are reluctant to share threat information with each other, preferring to hold onto sensitive cyber intelligence rather than share it. The result is that developed nations that produce intellectual property often are at a disadvantage in defending themselves against nations and organizations cooperating to steal it.

Although he said there is a need to lower barriers to international cooperation and collaboration, Ilves stopped short of prescribing a remedy.

"I'm not offering any solution," he said. "I don't know what it is."

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