Policy Dimensions of Strengthening Election Cybersecurity

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Overview of remarks

- Extent of the policy failures in connection with the cybersecurity of election systems
- Need for a comprehensive, high-level political strategy to strengthen election cybersecurity
- Possible components of a comprehensive political strategy
- Examples of some specific policy options
- Challenges of designing and implementing a comprehensive strategy

Policy failures on election cybersecurity

- Comprehensive failure to accord sufficient policy attention and political commitment to election cybersecurity
- Policy failure happened in three contexts in which cyber threats to election systems should be priorities
 - <u>Administration of election systems</u> \rightarrow Cybersecurity risks
 - <u>Cybersecurity</u> \rightarrow Election system vulnerabilities
 - Internet freedom \rightarrow Cyber interference with core act of democracy and a fundamental right
- Why such comprehensive failure?
 - <u>Functional</u>: Capacity deficits to understand cyber threats to election systems and address them effectively \rightarrow Local/State
 - <u>Political</u>: Calculation that other cyber threats were more urgent and serious (e.g., critical infrastructure protection; economic cyber espionage; cyber terrorism) \rightarrow National
 - Philosophical: Complacency about the machinery of democracy in an increasingly dangerous digital world → International

Comprehensive, high-level policy strategy (1): Objectives and levels of policy action

Strategic Objectives	Levels of Policy Action		
	Local/State	National	International
Protect (technological)			
Deter (political)			
Reassure (psychological)			

Comprehensive, high-level policy strategy (1): Examples

Strategic Objectives	Levels of Policy Action		
	Local/State	National	International
Protect (technological)	 Secure voting machines and procedures Protected voter- registration systems 	 Guidelines/standards for election cybersecurity Financial resources for local/State systems 	Information sharingCapacity buildingJoint R&D
Deter (political)	 Deterrence by denial (strong, resilient defenses) 	 National security priority Sanctions (criminal, economic, political) 	 Collective action priority Common policies and solidarity on sanctions
Reassure (psychological)	 Pre-election testing Communication during election cycles Post-election verification 	 Visible support Assessment Leadership on improving resilience 	Election monitoring

Comprehensive, high-level policy strategy (2): Tools of policy action

Levels of Policy Action	Tools of Policy Action		
	Actors	Processes	Norms
Local/State			
National			
International			

Comprehensive, high-level policy strategy (2): Examples

Levels of Policy Action	Tools of Policy Action		
	Actors	Processes	Norms
Local/State	 Governors Secretaries of State County/city officials Election administrators 	 Associations of governors, secretaries of state, and county/city officials Specific cybersecurity initiatives 	 Constitutional allocation of primary responsibility
National	 White House DHS, State, NIST Congress Voting rights and other civil society groups 	 Election Assistance Commission Inter-agency processes Federal-state cooperation mechanisms 	 Constitutional allocation of support responsibility Criminalization of cyber interference
International	 Democratic states International organizations Civil society groups (e.g., election monitoring) 	 Cyber crime cooperation Cyber threat information sharing mechanisms Democracy promotion efforts 	Non-interventionHuman right to voteDemocracy promotion

Challenges for a comprehensive strategy on election cybersecurity

• Protect

- Sustainable \rightarrow technologies and approaches (no HAVA 2.0)
- Proportionate \rightarrow calibrate security with other goals (e.g., expand access to voting)
- Structural barriers \rightarrow imperatives for significant federal government roles
 - Federalism → cooperation model as in disaster response, pandemic preparedness and response & counter-extremism
 - "Anarchical society" \rightarrow US leadership among democracies
- <u>Deter</u>: "deterrence by denial" requires long-term commitment, without which protection can weaken and reassurance can fail

• <u>Reassure</u>

- Very bad political climate → allegations of "rigged" elections; investigation of campaign collusion with Russia; "fake news;" foreign information operations; divisive partisan politics; internet freedom in global trouble
- Raises the bar for what election cybersecurity has to achieve

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