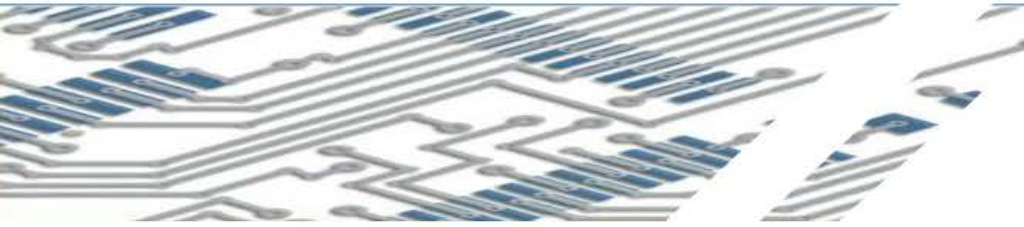


# Critical Infrastructure 101

**Mark Listes**

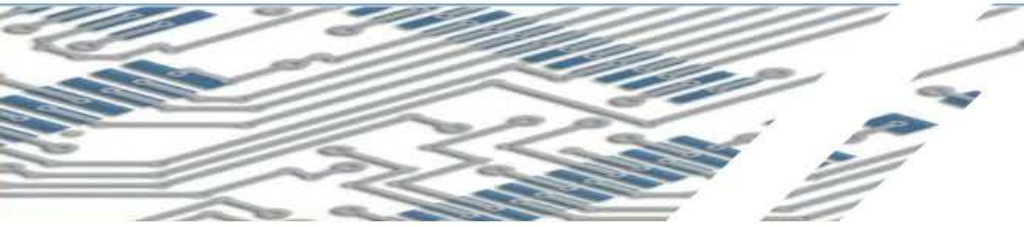
**U.S. Election Assistance Commission**



# Critical Infrastructure 101

**Brian D. Newby**

**U.S. Election Assistance Commission**



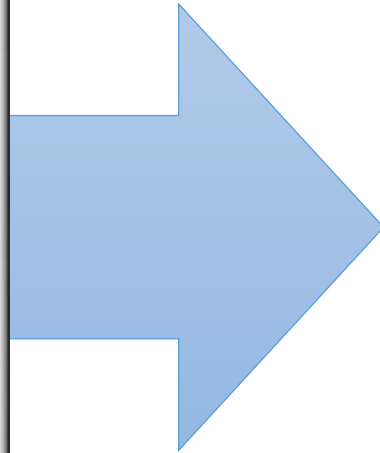
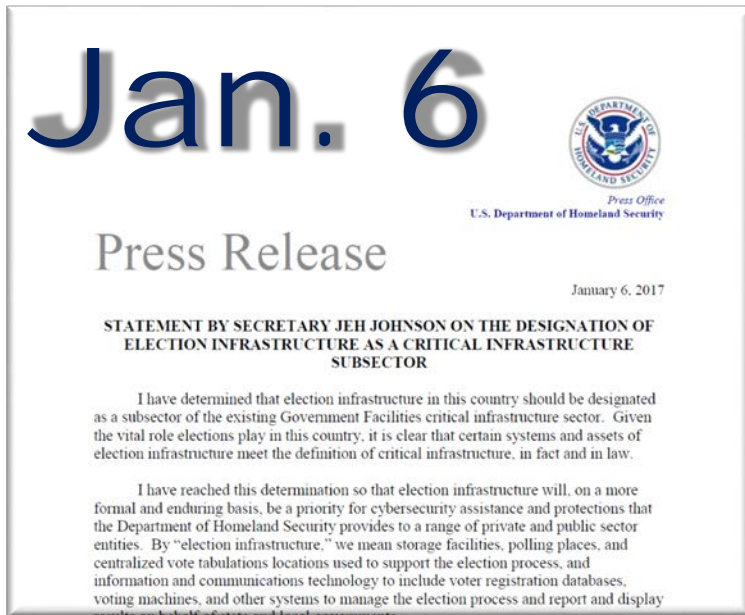
# Critical Infrastructure 101

**Brian D. Newby**

**U.S. Election Assistance Commission**

**The  
“Mini”**

# How did we get here?



1. DHS designates elections as critical infrastructure
2. DHS works to help the sector self form
3. DHS announces information about Russian hacking of states
4. The Government Coordinating Council Forms



# What is CI and where did it come from?

## The short answers:

- **What is CI?**
  - A federal designation, made by the President (through the Secretary of DHS) stating that a type of infrastructure is critical to the function of the country
  - The designation primarily does two things:
    - Re-characterizes attacks on this infrastructure to enable the federal government to take additional steps not previously available against actors who attack this infrastructure
    - Prioritizes threat prevention information sharing to critical infrastructure entities and creates mechanisms that facilitate this information sharing



# What is CI and where did it come from?

## The short answers:

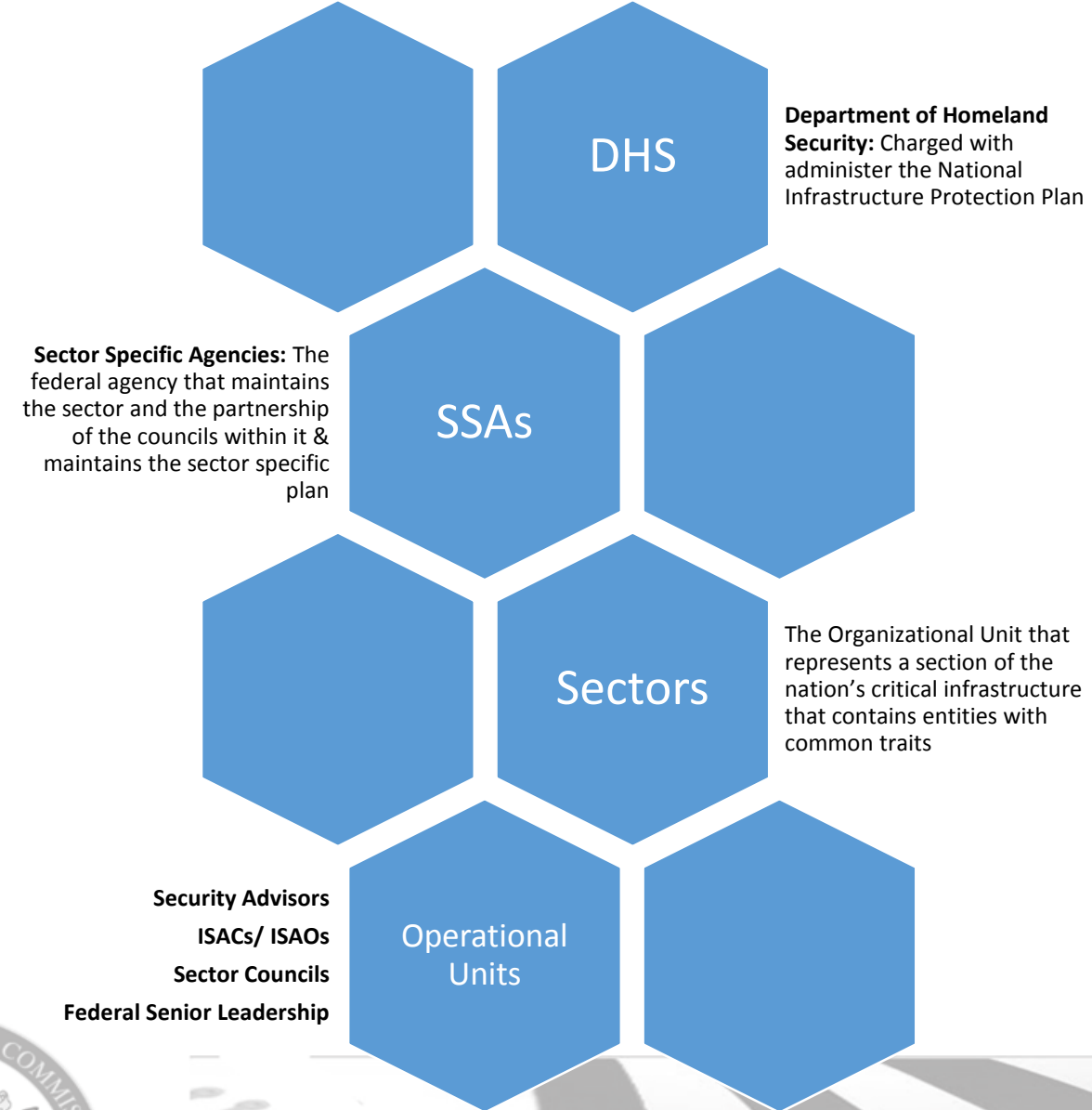
- **Where did CI come from?**

- Critical infrastructure is a term that has been around for a long time
- The Clinton administration created the first iteration of modern CI in 1996
  - Created a national commission on critical infrastructure
  - Designated the first eight CI sectors
- The current definition of comes from the Patriot act and a presidential directive (PPD-21) as:
  - “systems and assets, whether physical or virtual, so vital to the United States that the incapacity or destruction of such systems and assets would have a debilitating impact on security, national economic security, national public health or safety, or any combination of those matters.”



# The CI Landscape

- **Four categories of entities that make-up the CI landscape**
  - Department of Homeland Security (DHS) – Charged with administering and managing CI as a whole
  - Sector Specific Agencies (SSAs) – Charged with managing a sector and its sector specific plan
  - Sector: The way infrastructure is categorized
  - Operational Units: Entities that distribute information and



# What Do I Really Need to Know About CI? – Key National Players

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## 1. Department of Homeland Security

- Charged with administering CI:
  - Designates infrastructure as Critical Infrastructure
  - Creates Sectors
  - Serves as many Sector's SSA

## 2. Sector Specific Agency (SSA)

- The federal agency that maintains the sector and the partnership of the councils within it
- Maintains the sector specific plan

## 3. ISACs and ISAOs

- Non-governmental information organizations

## 4. Protective Security Advisers & Cyber Security Advisers

- DHS employee that works to help inform entities within a geographic area of threats and vulnerability mitigation information

## 5. Coordinating Council

- An organizing and information sharing entity to which entities from a critical infrastructure sector belong and interact to share security information with each other and the SSA



# Really, What is a Sector?

**Definition:** A logical collection of assets, systems, or networks that provide a common function to the economy, government or society – 2013 NIPP

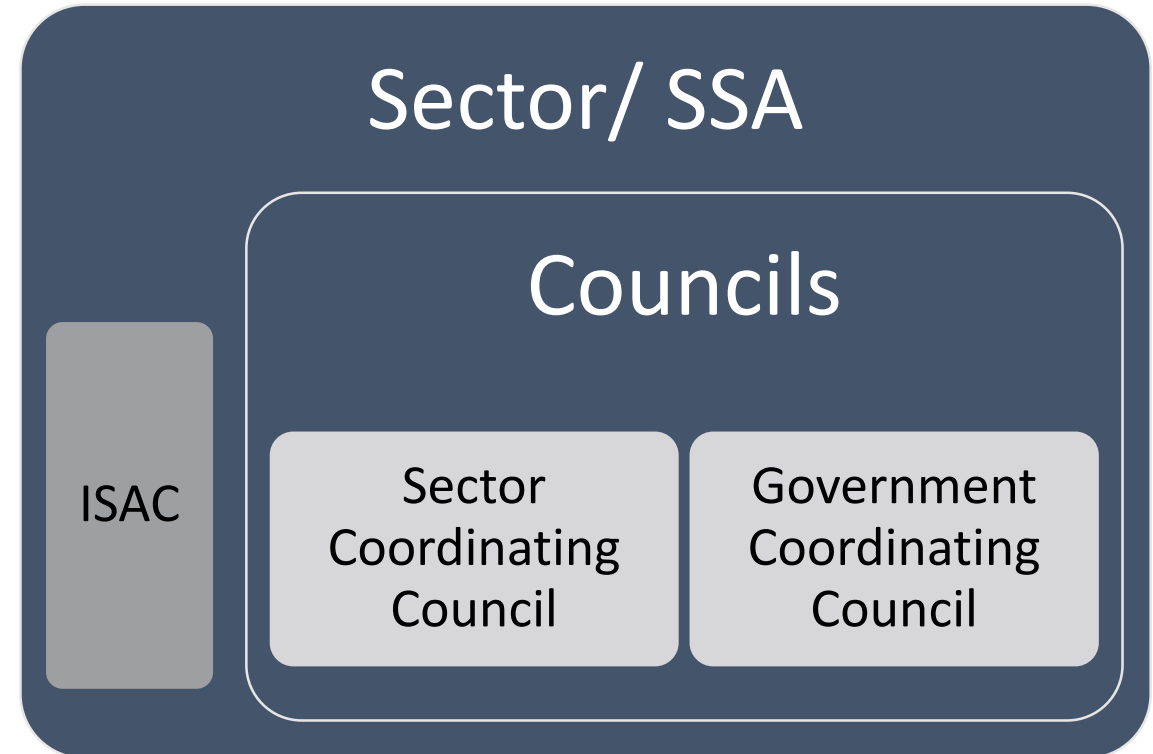
## **What this means:**

- Sectors are how DHS organizes its approach to the nation's Critical Infrastructure
- If infrastructure is critical and similar to other infrastructure, then it is in the same sector
- Sectors each have their own governance structure and operational protocols - each is unique



# Really, What is a Sector? – Contents

- **Sectors contain relevant critical infrastructure and its owners and operators**
- **Sectors also contain organizational mechanisms and entities that facilitate sector operation and information sharing**
  - These are usually:
    - Sector Coordinating Councils
    - Government Coordinating Councils
    - ISAC



# Really, What is a Sector? How does a sector usually managed?

- **The Sector Specific Plan is drafted and managed by the SSA with input from the councils**
  - This guides the sector as a whole
- **The councils are self-chartered and self organizing**
  - The councils write their own rules and dictate their own membership and operations
    - This includes information sharing protocols

Sector Specific Plan (SSA administered)

Councils – Each self chartered and governed

Sector Coordinating Council – self chartered

- Contains potential working groups

Government Coordinating Council – self chartered

- Contains potential working groups

# Sector Drilldown: What is a Coordinating Council?

**General Definition:** an organization to which a critical infrastructure entity, owner, or operator can belong. The coordinating councils facilitate information sharing and promote risk management efforts throughout the sector and between the sector and DHS.

## **Typical (but not required) Types:**

1. Sector Coordinating Council – Represent the involved private sector entities
2. Government Coordinating Council – Represent the involved government entities

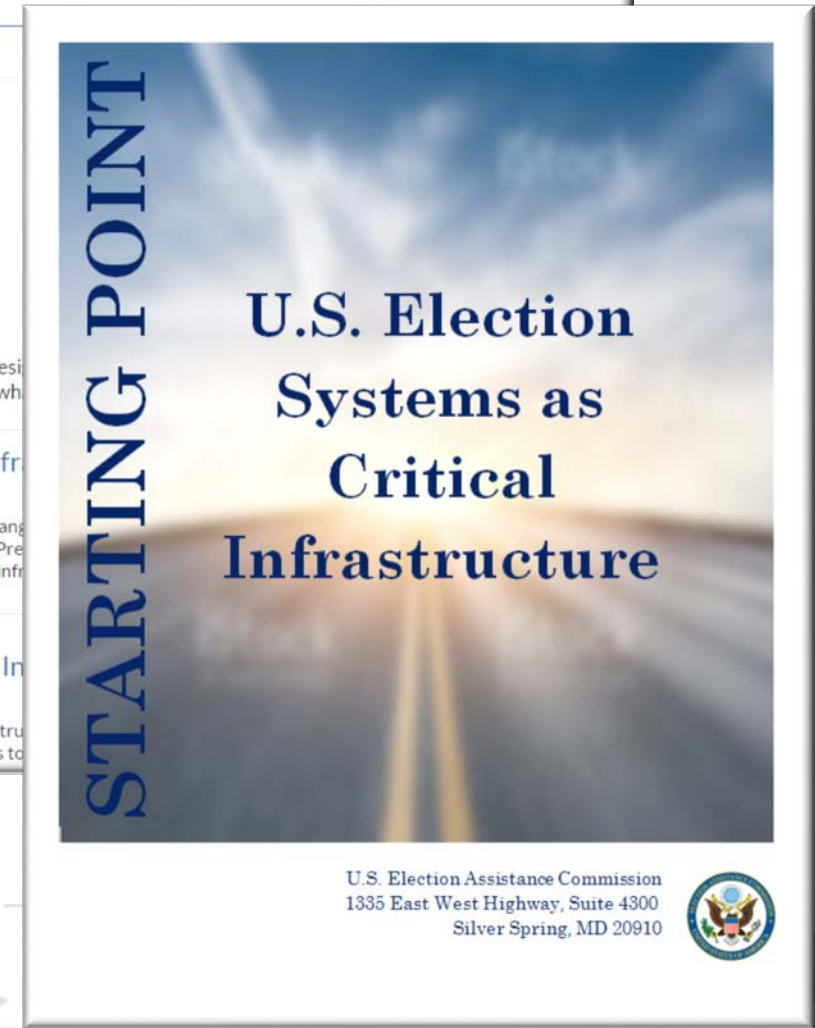


# More Resources

- **CI Scoop – Blog**
  - A new blog every few days
  - Covering all topics CI and elections as CI
  - Updates on the EAC and CI
- **Starting Point Document**
  - 6 page in-depth overview of Critical Infrastructure and Elections as Critical Infrastructure



The screenshot shows the U.S. Election Assistance Commission website. At the top, there is a navigation bar with the EAC logo, the text "U.S. ELECTION ASSISTANCE COMMISSION", a "REGISTER TO VOTE" button, and dropdown menus for "VOTERS" and "VOTING EQUIPMENT". Below the navigation bar, the page content includes a breadcrumb "Home > Blogs", a "BLOGS" section, and a featured blog post titled "CI Scoop" by "Mark Listes". The post text begins with "This blog will discuss critical infrastructure, the design surrounding the designation, the goal is to share what we know and be more informed." Below the post, there are two more blog entries: "CI Scoop: History of Critical Infrastructure" dated May 17, 2017, and "A New Home Base for Critical Infrastructure" dated May 11, 2017.



The image shows the cover of a document titled "STARTING POINT" in large, vertical, blue letters on the left side. The main title is "U.S. Election Systems as Critical Infrastructure" in a bold, blue serif font. The background is a blurred image of a road with a bright light source in the distance. At the bottom right, the text reads "U.S. Election Assistance Commission, 1335 East West Highway, Suite 4300, Silver Spring, MD 20910" next to the EAC logo.



# Questions?



## Sector Drilldown: How does a coordinating council usually operate?

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**Generally:** The coordinating council meets regularly to discuss the state of the sector, needs of the members of the council, projected future needs, and events within the sector. The council also may usually set up working groups to explore issues.

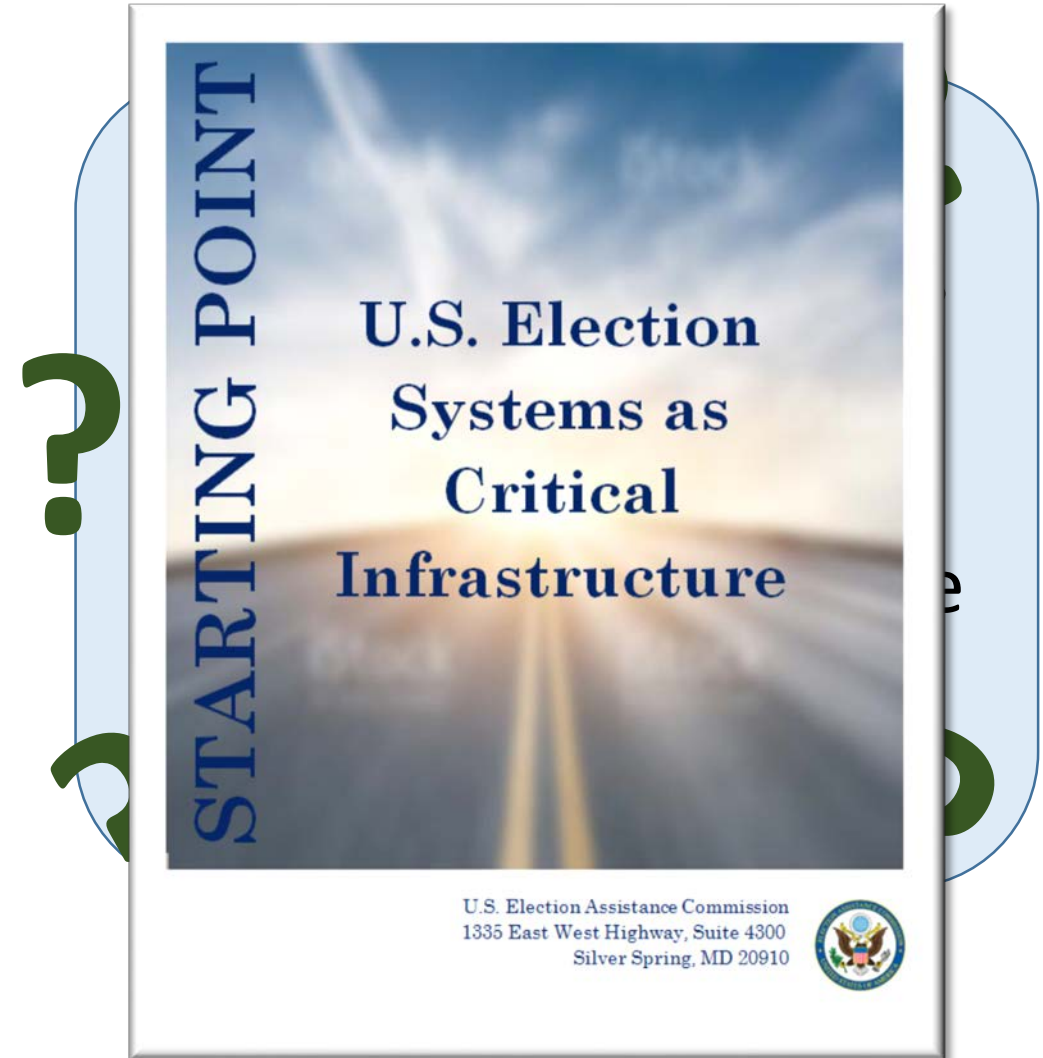
**Special Treatment:** The coordinating councils may at times take advantage of CIPAC protection that allows council communications to be treated differently under FOIA

**Disclaimer:** The councils are self-organizing and self-governing. So, none of this is set in stone and the council charters can affect the councils' structure and operations significantly



# Where Do We Go From Here?

- 1) Research all that you can, and learn as much as you can so that you can engage in conversations that will affect your work in a real and meaningful way
- 2) Leverage your years of expertise and your excellent skills
- 3) Use your resources like the EAC





# Contact Us:

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**U.S. Election Assistance Commission**

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# Topics – Questions That I'll Answer

## **I. Cybersecurity, Elections**

- I. How did we get here?
- II. What do we do now that we are here?

## **II. What is the EAC doing with all of this?**

## **III. What is Critical Infrastructure and where did it come from?**

## **IV. What do I need to know about Critical Infrastructure?**

## **V. Really, what is a sector?**





# How did we get here?

**Clinton Says She's Unsure What Sanders Means by 'Wall Street'**



**17 GOP CANDIDATES**

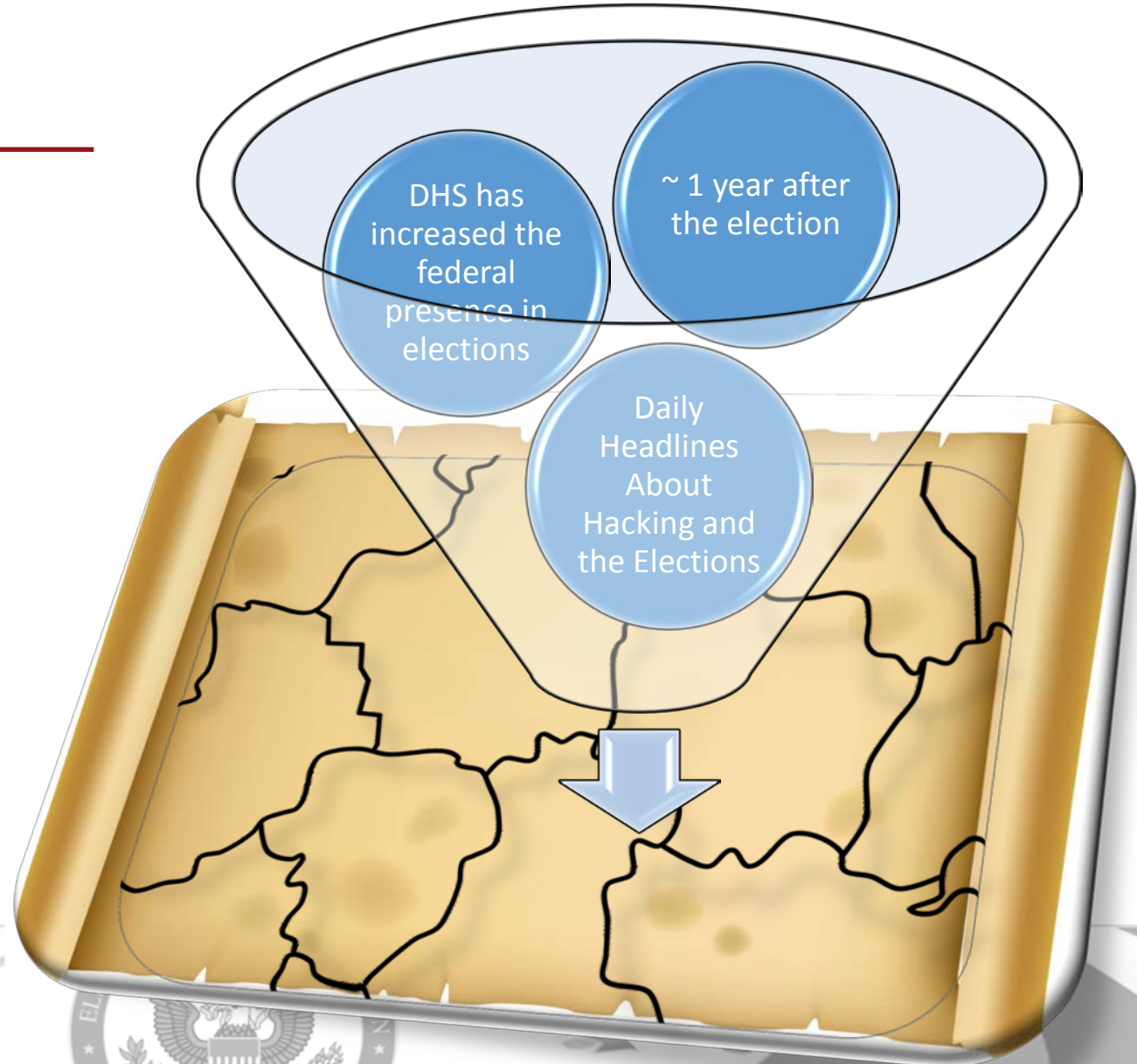


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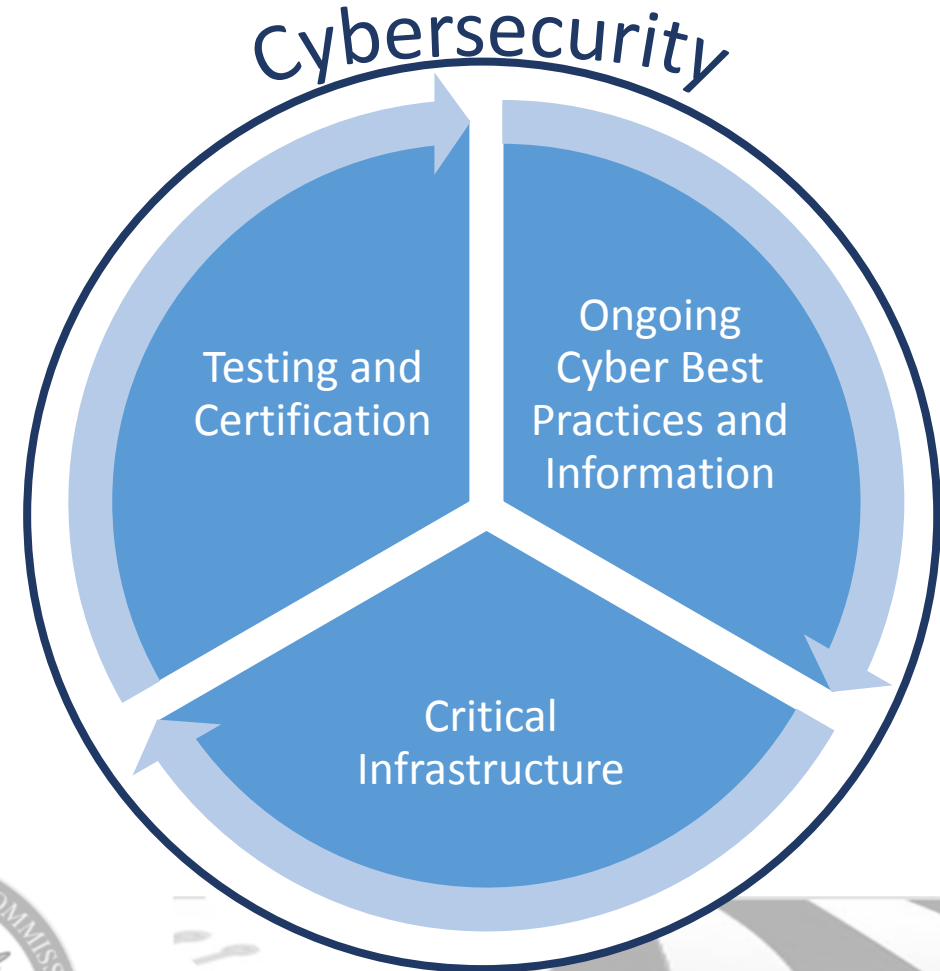
# So Where Are We?

- **Things are a little bit different**
- **We have a few more eyes watching us**
- **We have some new terms, skills, and information that we need to know and use**

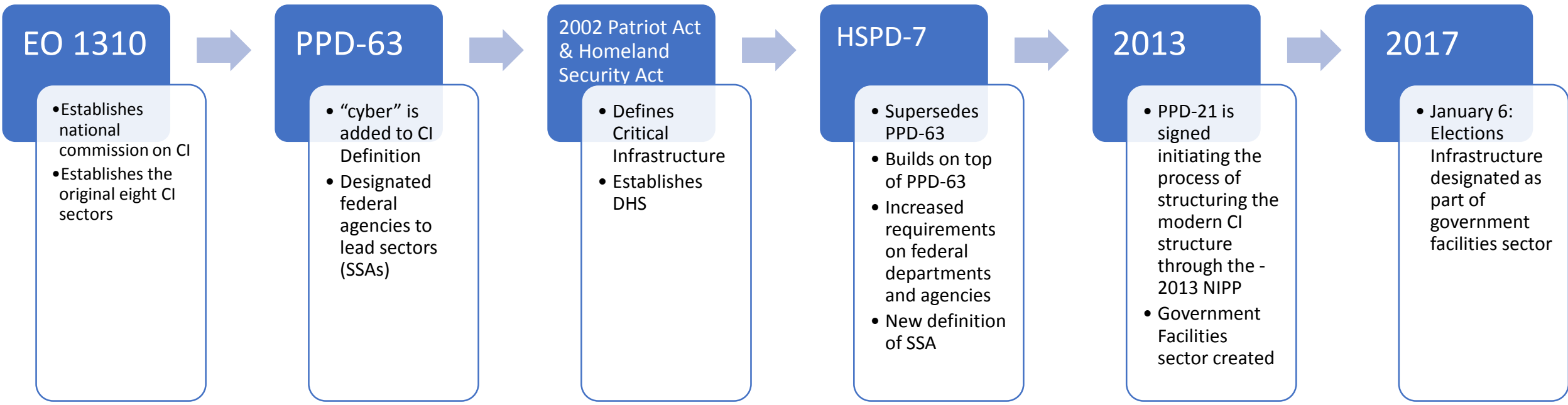


# What is the EAC doing with all of this?

- The EAC is dedicated to helping election officials be ready to protect their systems against modern cyber threats
- We see Critical Infrastructure and the resources that come with it as one component of the larger Cybersecurity picture
- We are crafting resources to address all fronts



# What is CI and where did it come from? – The timeline

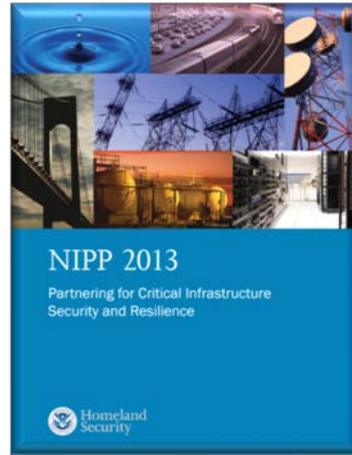




# What Do I Really Need to Know About CI? – Documents to Know

**Homeland Security Act**

Created DHS and empowered DHS to designate CI as well as create sectors



- Sets the vision and goals for overall critical infrastructure and security and resilience efforts

**Your Sector/  
Subsector's Plan**

This document governs how your sector is managed, maintained and shares information. There is no current elections infrastructure subsector plan





# Really, What is a Sector?

## Questions I'll Answer:

- What is a sector?
- How is a sector usually structured?
- What is a Coordinating Council?
- How does a sector usually operate?

