

PUERTO RICO STATE ELECTIONS COMMISSION

Empowering Democracy through Technology

Disaster Preparedness & Recovery

Roberto E. Benitez

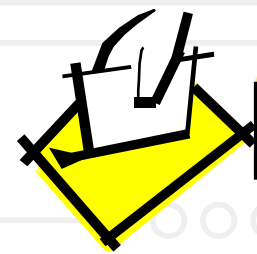
CIO



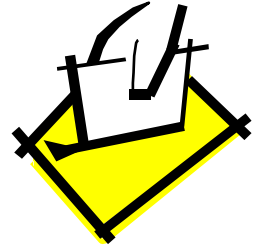
Overview

- Puerto Rico State Elections Commission
- IT Infrastructure
- Timeline
- COOP
- Hurricane Maria
- Challenges

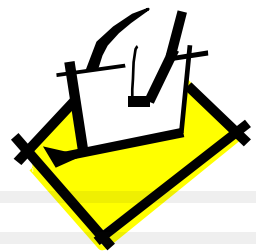
PR State Elections Commission



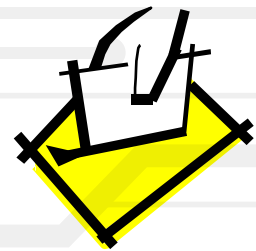
HQ Buildings (Admin-Ops)



88 Satellite Facilities



110 Precincts *(1 per precinct)*



88 Satellite Facilities

Services:

Voter Registry

Government Services

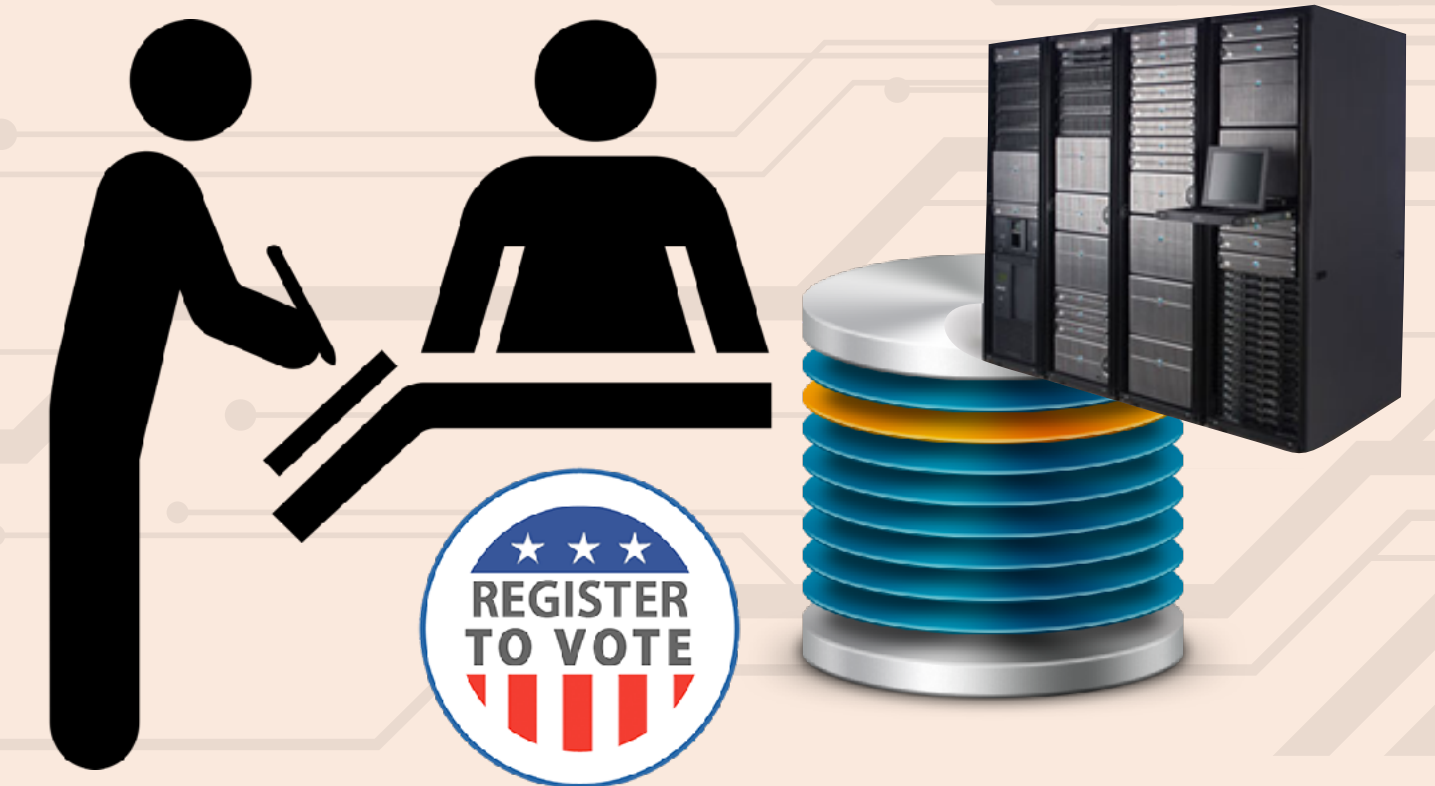
Availability - Integrity - Confidentiality

Administrative



Elections Commission 3 IT Infrastructures

Voter Registry



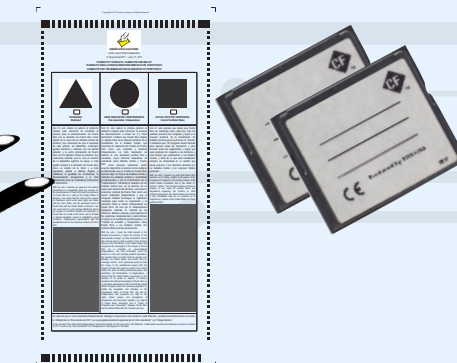
Elections Management



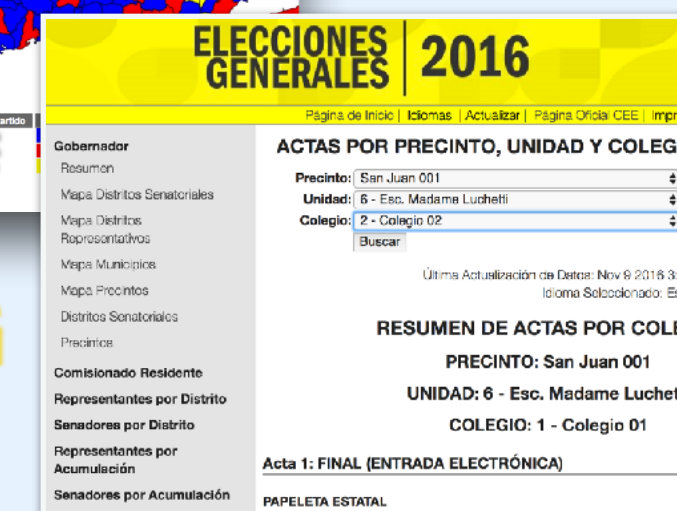
EMS



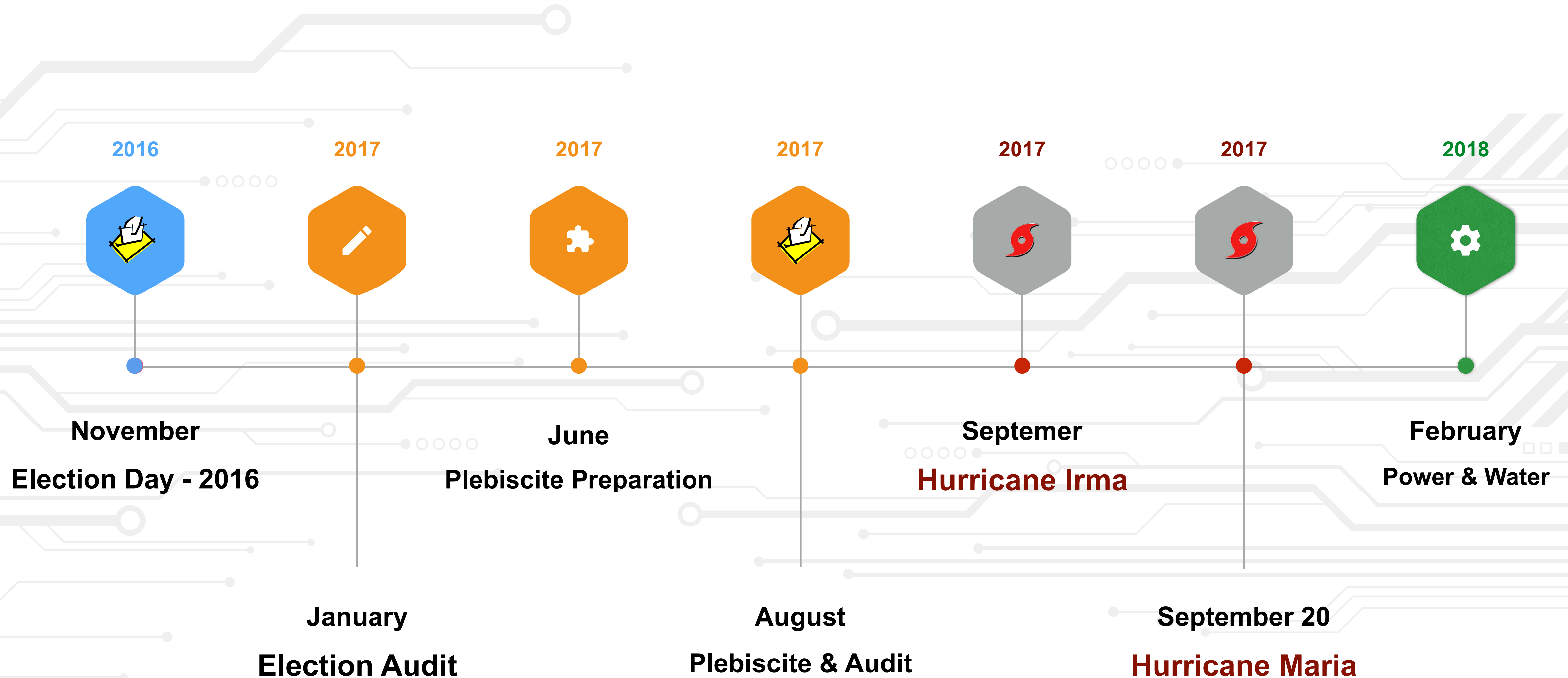
ICP



REPORTING REYDI



Timeline



COOP Phases

- **Readiness & Preparedness**
 - 1 week prior Hurricane Irma to prepare
 - Identify Assets & Procedures (C3 focus)
- **Activation & Relocation**
 - All major components backed-up
 - No relocation
 - Shelter Equipment in place
- **Continuity of Operations**
 - M+1 week : 20% Operational HQ
 - New Normal - All offices
 - M+2 weeks: 15 Satellite Facilities open for multiple services
- **Reconstitution of Operations**
 - M+4 months: Stability & Evolution
 - 75%: Devolution of Control & Direction

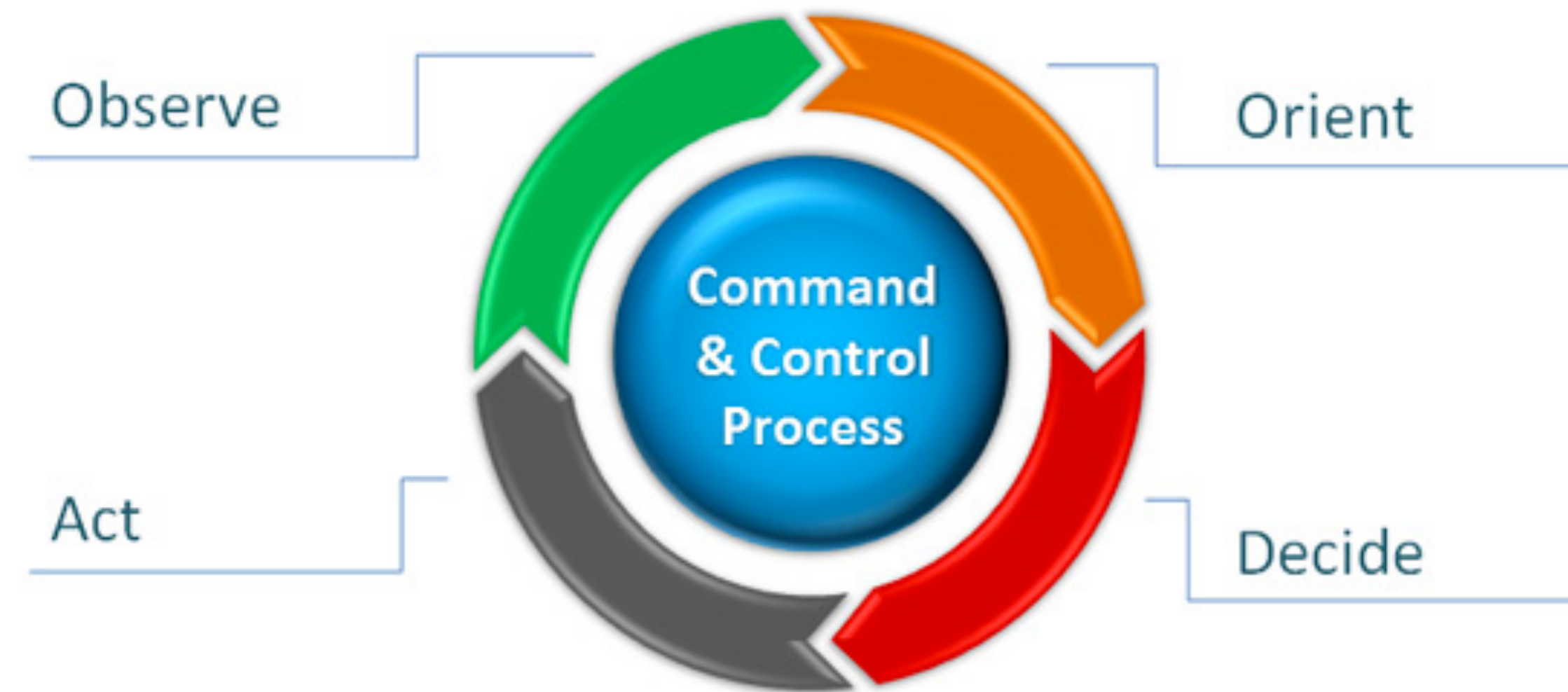
OODA LOOP



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OODA LOOP



Maria Challenges

- ***Complete Devastation***

- Infrastructure
- Electrical Infrastructure
- Communications Infrastructure
- Fuel Supply Lines

- ***Damages***

- Most damages occurred post-Maria
- Cooling and Power Issues
- Electoral Equipment (Tabulators)
- All other systems protected

- ***Mitigation measures***

- Quick Virtualization
- Backups
- Cloud Migrations
- Physical protection where available
- Longterm effect (Re-Birth)

- ***Partnerships***

- Manufacturers & Suppliers
- Emergency Management Offices
- State & Federal Offices
- Utilities/Telcos

**** No plan survives first encounter (or gust)***

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OODA LOOP





COSSIAE

**OFICINA DE
SISTEMAS DE INFORMACIÓN
Y PROCESAMIENTO ELECTRÓNICO**