



*ccTLD Security and Stability Together*

A large, light gray world map is centered in the background of the slide.

# **TLD-OPS**

## **ccTLD Security and Stability Together**

September 2019  
LACTLD Technical Workshop

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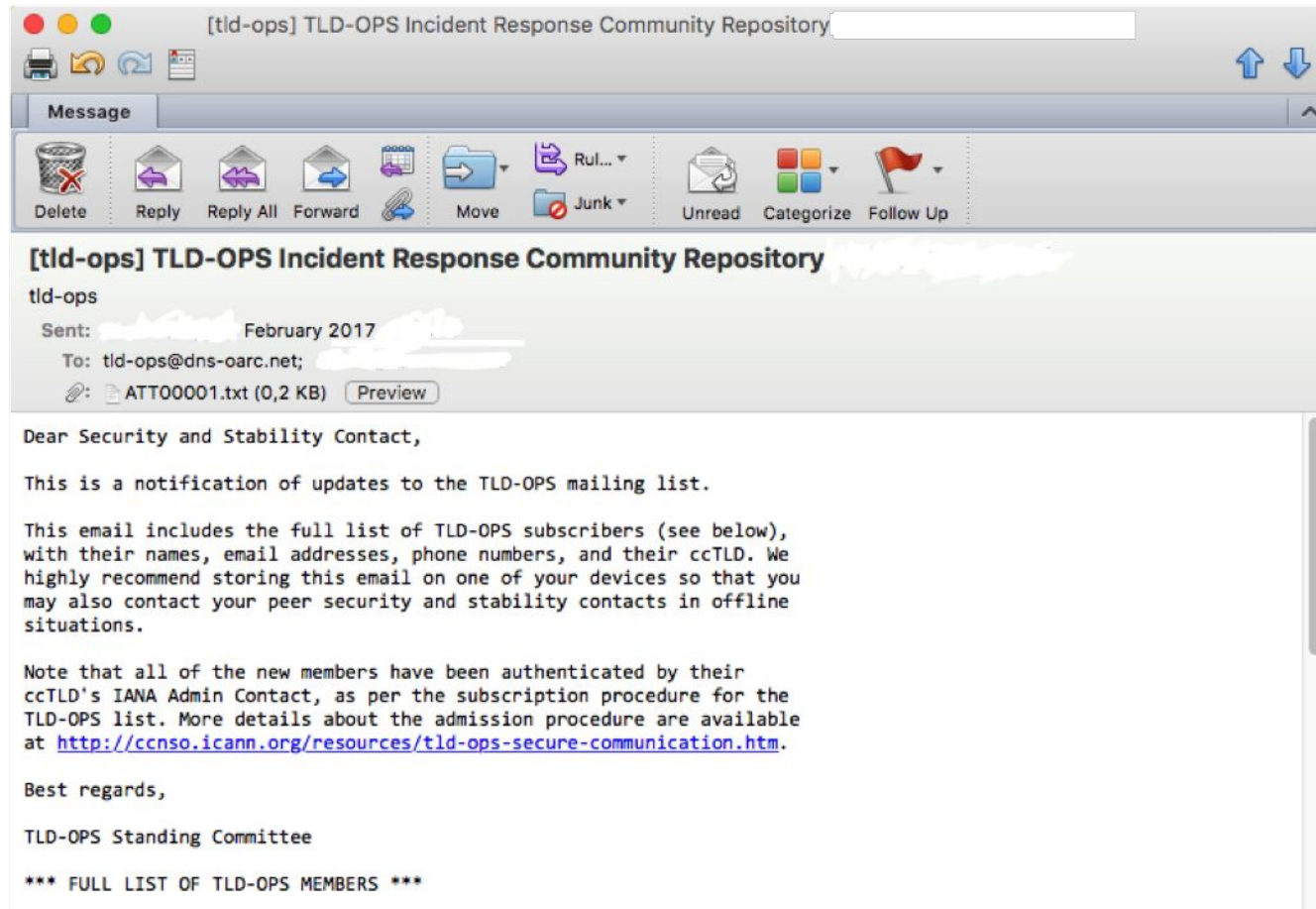
# TLD-OPS introduction

- Global technical incident response **community** *for and by ccTLDs*, open to *all* ccTLDs (ASCII and IDN)
- Brings together **380+ people** who are responsible for the operational security and stability of 200+ different ccTLDs
- Enable ccTLD operators to **collaboratively** detect and mitigate incidents that may affect the operational security and stability of ccTLD services and of the wider Internet
- All TLD-OPS Playbook will be **publicly available** on TLD-OPS website
- **Guidance** by TLD-OPS Standing Committee
  - ccTLD reps and Liaisons (SSAC, IANA, ICANN's security team)

# Together, we are stronger

- Open and global incident response community for and by ccTLDs
- Builds on standard mailing list
- Further *extends* members' existing incident response structures, processes, and tools and *does not* replace them.
- Increases everyone's reachability and security awareness
  - Everyone has everyone else's contact info in their inbox, even offline
  - Exchange security alerts and queries (DDoS attacks, phishing, etc.)
  - Learn from each other
- Easy to join (through IANA Admin Contact)

# Contact Repository Email



“John Doe, #1, .nl, +31 123456789” [john.doe@nic.nl](mailto:john.doe@nic.nl), john@oarc.net  
“Jane Doe, #1, .vn, +84 123456789” [jane.doe@nic.vn](mailto:jane.doe@nic.vn), jane@oarc.net

# Together, we create value for the community



# TLD-OPS all over the world

ASCII 173 (71%) & IDN: 29 (63%)

5 (100%)

65 (100%)

51 (62%)

27 (53%)

25 (60%)

Total: 202 (69%)

# TLD-OPS Membership Stats

All	Members	%	Missing	%	Total
<b>Total</b>	<b>202</b>	69%	<b>89</b>	31%	<b>291</b>
ASCII	Members	%	Missing	%	Total
<b>Total</b>	<b>173</b>	<b>71%</b>	<b>72</b>	<b>29%</b>	<b>245</b>
AF	27	53%	24	47%	51
AP	51	62%	31	38%	82
EU	65	100%	0	0%	65
LAC	25	60%	17	40%	42
NA	5	100%	0	0%	5
IDN	Members	%	Missing	%	Total
<b>Total</b>	<b>29</b>	63%	<b>17</b>	37%	<b>46</b>

## Missing LACTLD ccTLDs:

.ai	Anguilla
.bs	Bahamas
.bz	Belize
.cu	Cuba
.ec	Ecuador
.gf	French Guiana
.gs	S. Georgia & the S. Sandwich Islands
.gy	Guyana
.ht	Haiti
.jm	Jamaica
.kn	Saint Kitts and Nevis
.ky	Cayman Islands
.mq	Martinique
.ms	Montserrat
.sr	Suriname
.tc	Turks and Caicos Islands
.vc	Saint Vincent and the Grenadines

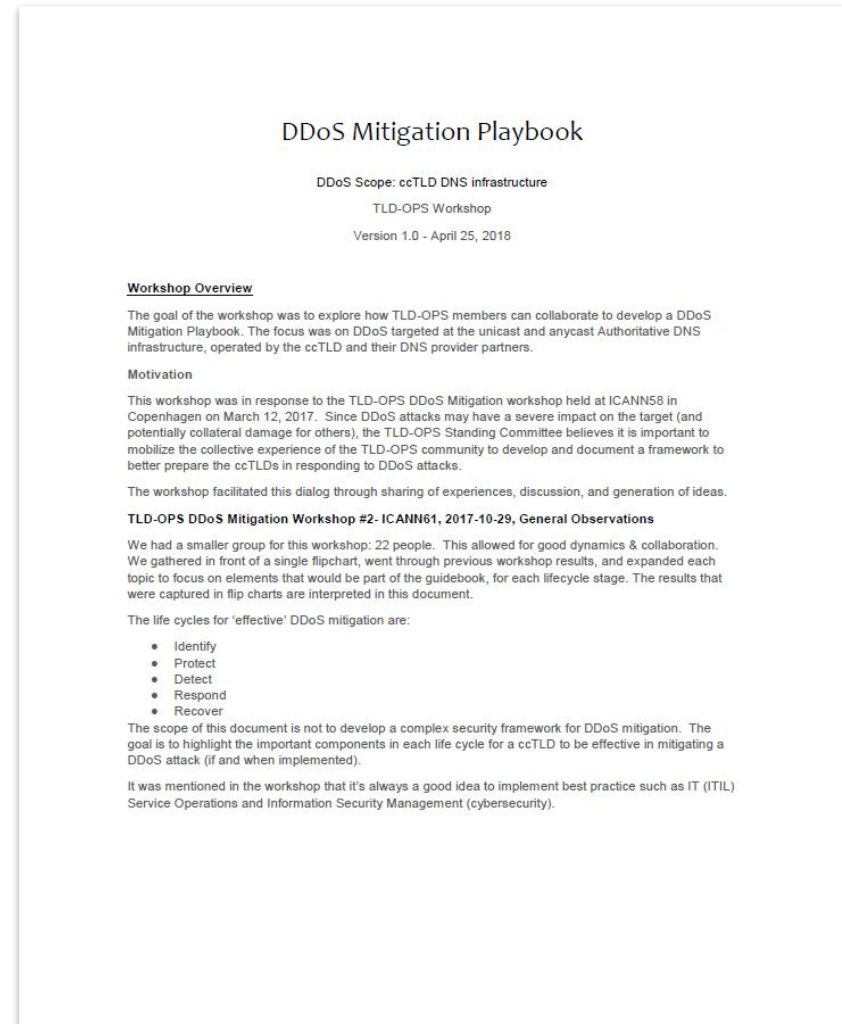
# It's time to join the TLD-OPS community





# A first delivery : the DDoS Mitigation Playbook

- The goal of the first workshop was to explore how TLD-OPS members can collaborate to detect and mitigate DDOS attack
- Two sessions took place during ICANN Meetings 58 and 60 to share experiences, discussions and generation of ideas.
- The topic has approached from multiple perspectives, such as technical, operational, compliance and strategic.



# Work in progress

## Natural Disasters – DR/BCP Readiness

- Expand to general Disaster Recovery and Business Continuity Planning
  - Request from community following natural disasters
  - BCP is many things to many people
  - Where to start?
  - Where to focus?
  - Past Experience?
- Technical continuity plans for the DNS, Registry and corporate systems
- The Business part focuses on plans, initiation, testing, critical even, communications, simulation

# Focus for the TLD-OPS community

DNS resolution  
infrastructure

Registry system  
(SRS, RDDS,  
Data Escrow ...)

IT  
infrastructure:  
network,  
storage,  
servers,  
softwares

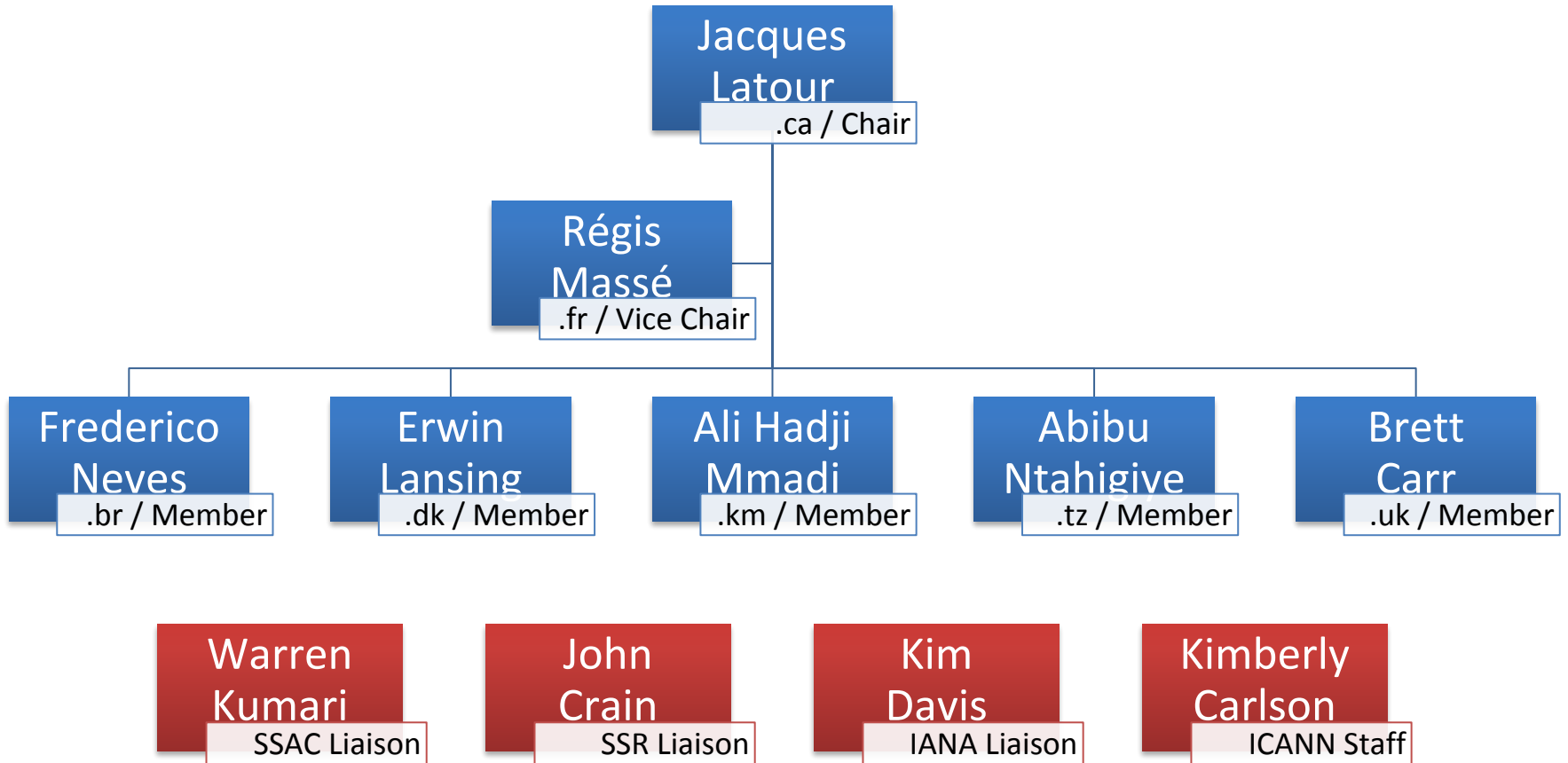
Emergency  
communication  
tools

# Next Steps: Having a DR/BCP Table Top / Simulation Workshop @ ICANN66 Montreal

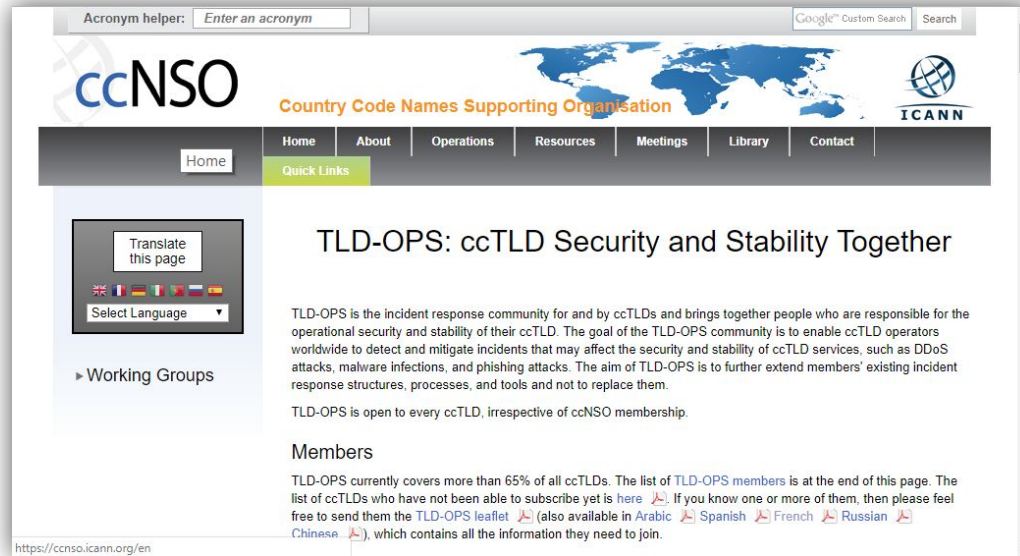
- Simulate a registry compromise
- Test the DR/BCP Playbook against the scenario
- Update the DR/BCP Playbook against the gaps, observations and lessons learned



# TLD-OPS Standing Committee



# Ressources & Contacts



<http://ccnso.icann.org/resources/tld-ops-secure-communication.htm>

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**Thank you!**

ccNSO