

# Root Server System Governance Working Group

Teleconference #2

19 March 2020 | 22:00 UTC



# Agenda

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1. Call to Order and Attendance
2. Administration
  - a. Approval of Minutes from Teleconference #1
  - b. Review of RSS GWG Chair Selection Process
3. Review of RSSAC037 and RSSAC038
4. Any Other Business
  - a. Review of Action Items
  - b. Next Teleconference
5. Adjournment

# 1. Call to Order and Attendance

Luis Diego Espinoza Sanchez	ccTLD registries (via Country Code Names Supporting Organization)	Representative
Peter Janssen	ccTLD registries (via Country Code Names Supporting Organization)	Representative
Kurt Pritz	gTLD registries (via Registries Stakeholder Group)	Representative
Hanyu Yang	gTLD registries (via Registries Stakeholder Group)	Representative
Ted Hardie	Internet Architecture Board	Representative
Geoff Huston	Internet Architecture Board	Representative
Hiro Hotta	Root Server Operators	Representative
Lars-Johan Liman	Root Server Operators	Representative
Brad Verd	Root Server Operators	Representative
Joe Abley	Security and Stability Advisory Committee	Representative
Tripti Sinha	ICANN Board	Liaison
Lito Ibarra	ICANN Board	Liaison (Alternate)
Naela Sarras	IANA	Liaison
Duane Wessels	Root Zone Maintainer	Liaison

## 2. Administration

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a. Approval of Minutes from Teleconference #1

b. Review of RSS GWG Chair Selection Process

**Two-week Nomination Period Opened:** Tuesday, 3 March 2020

- Nomination via the mailing list. Candidates may provide statements via the mailing list during this timeframe. Self-nomination is possible.

**Two-week Nomination Period Closed:** Tuesday, 17 March 2020

- Support staff confirm final slate of candidates on the mailing list
  - Ted Hardie and Brad Verd

**Election:** Tuesday, 23 March 2020

- Support staff distribute secret electronic ballot to RSS GWG representatives for a vote.



### 3. Review of RSSAC037 and RSSAC038

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# **A Proposed Governance Model for the DNS Root Server System**

# A Few Acronyms

## **RSS**

- Root Server System

## **RS**

- Root Server

## **RSO**

- Root Server Operator

## **SF**

- Secretariat Function

## **SAPF**

- Strategy, Architecture, and Policy Function

## **DRF**

- Designation and Removal Function

## **PMMF**

- Performance Monitoring and Measurement Function

## **FF**

- Financial Function

# Setting the Context and Expectations

3-year Effort

- New work with RSSAC focus only

An initial draft  
model

- RSSAC is providing a starting point

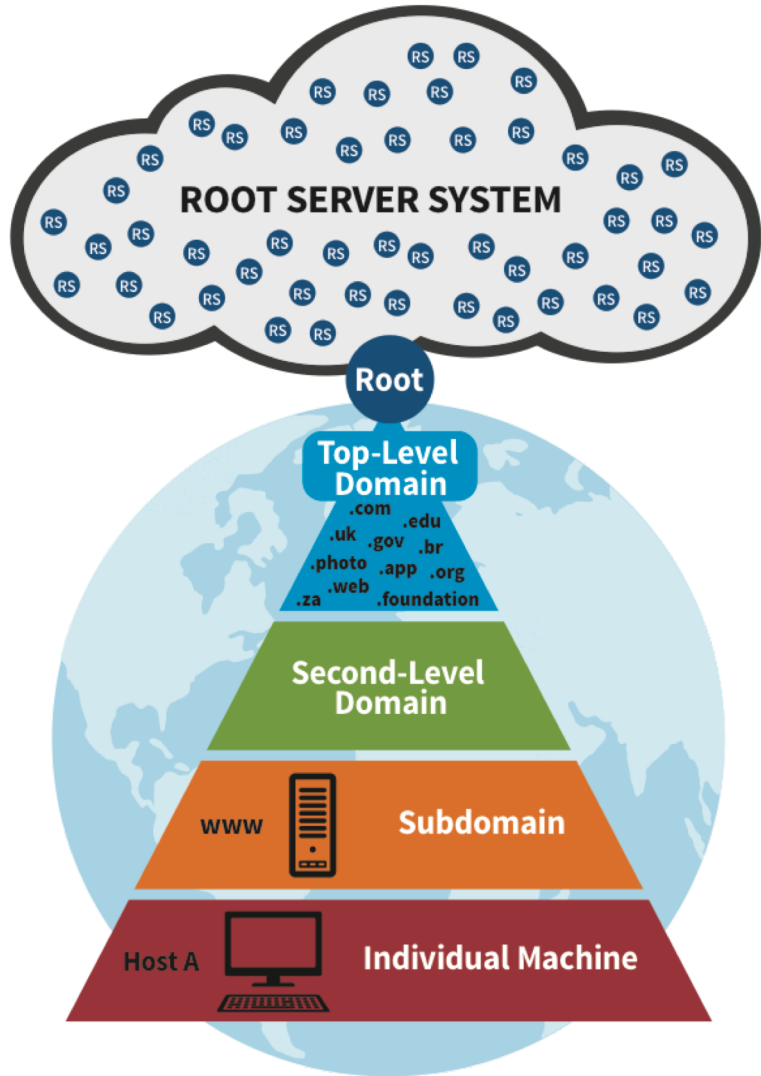
# Our Initial Impetus



# Workshop Timeline and What Happened



# Global DNS Root Service



## 1000+ DNS root server instances in the global DNS root cloud

1. Cogent Communications
2. ICANN
3. Internet Systems Consortium
4. NASA Ames Research Center
5. Netnod
6. Réseaux IP Européens Network Coordination Centre
7. University of Maryland
8. University of Southern California, Information Sciences Institute
9. U.S. Department of Defense Network Information Center
10. U.S. Army Research Laboratory
11. Verisign, Inc.
12. WIDE Project and Japan Registry Services

# Root Server System Principles

•To remain a global network, the Internet requires a globally unique public namespace.

## Principle 1

•IANA is the source of DNS root data.

## Principle 2

•The RSS must be a stable, reliable, and resilient platform for the DNS service to all users.

## Principle 3

•Diversity of the root server operations is a strength of the overall system.

## Principle 4

•Architectural changes should result from technical evolution and demonstrated technical need.

## Principle 5

•The IETF defines technical operation of the DNS protocol.

## Principle 6

•RSOs must operate with integrity and an ethos demonstrating a commitment to the common good of the Internet.

## Principle 7

•RSOs must be transparent.

## Principle 8

•RSOs must collaborate and engage with the stakeholder community.

## Principle 9

•RSOs must be autonomous and independent.

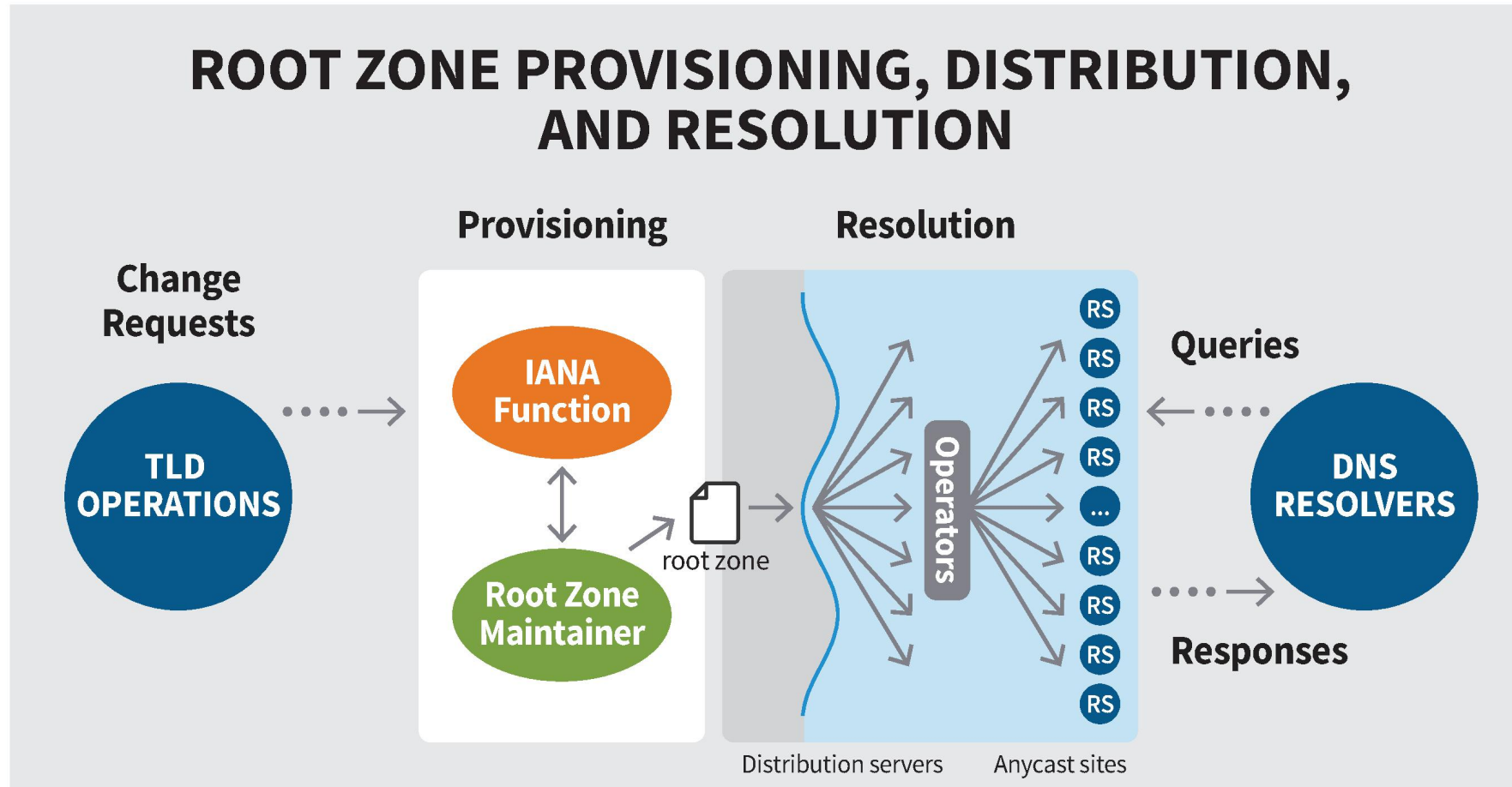
## Principle 10

•RSOs must be neutral and impartial

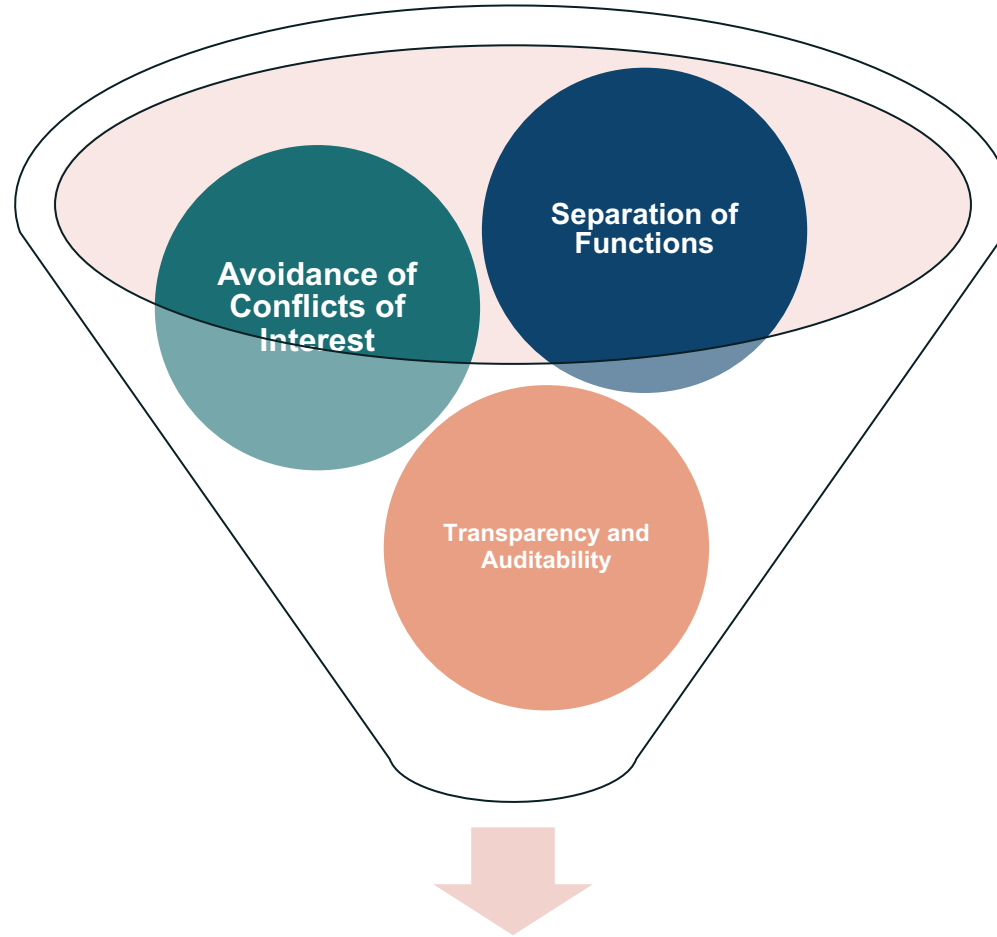
## Principle 11



# Scope of Proposed Model

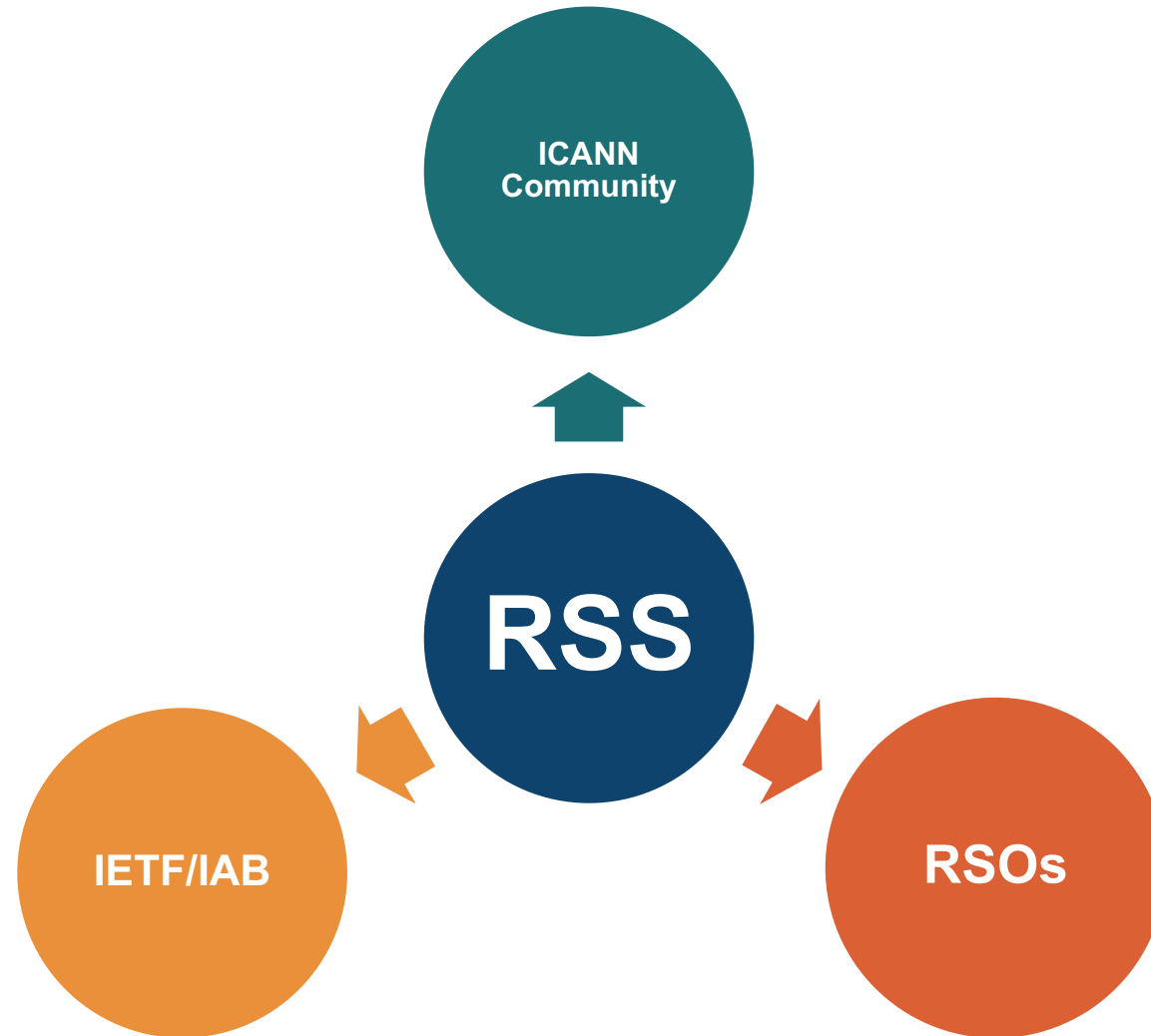


# Model Design Principles



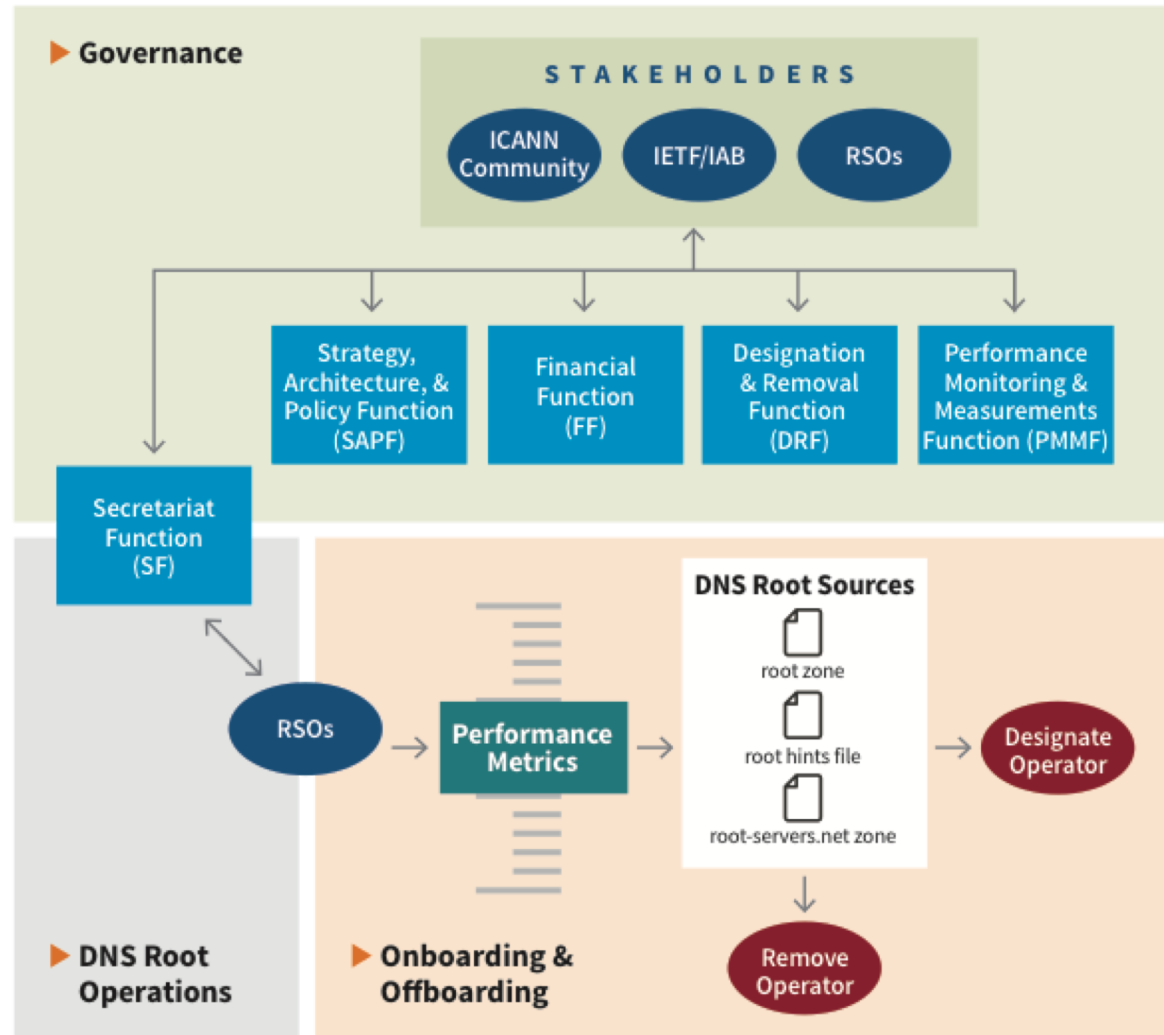
**The Model**

# Stakeholders

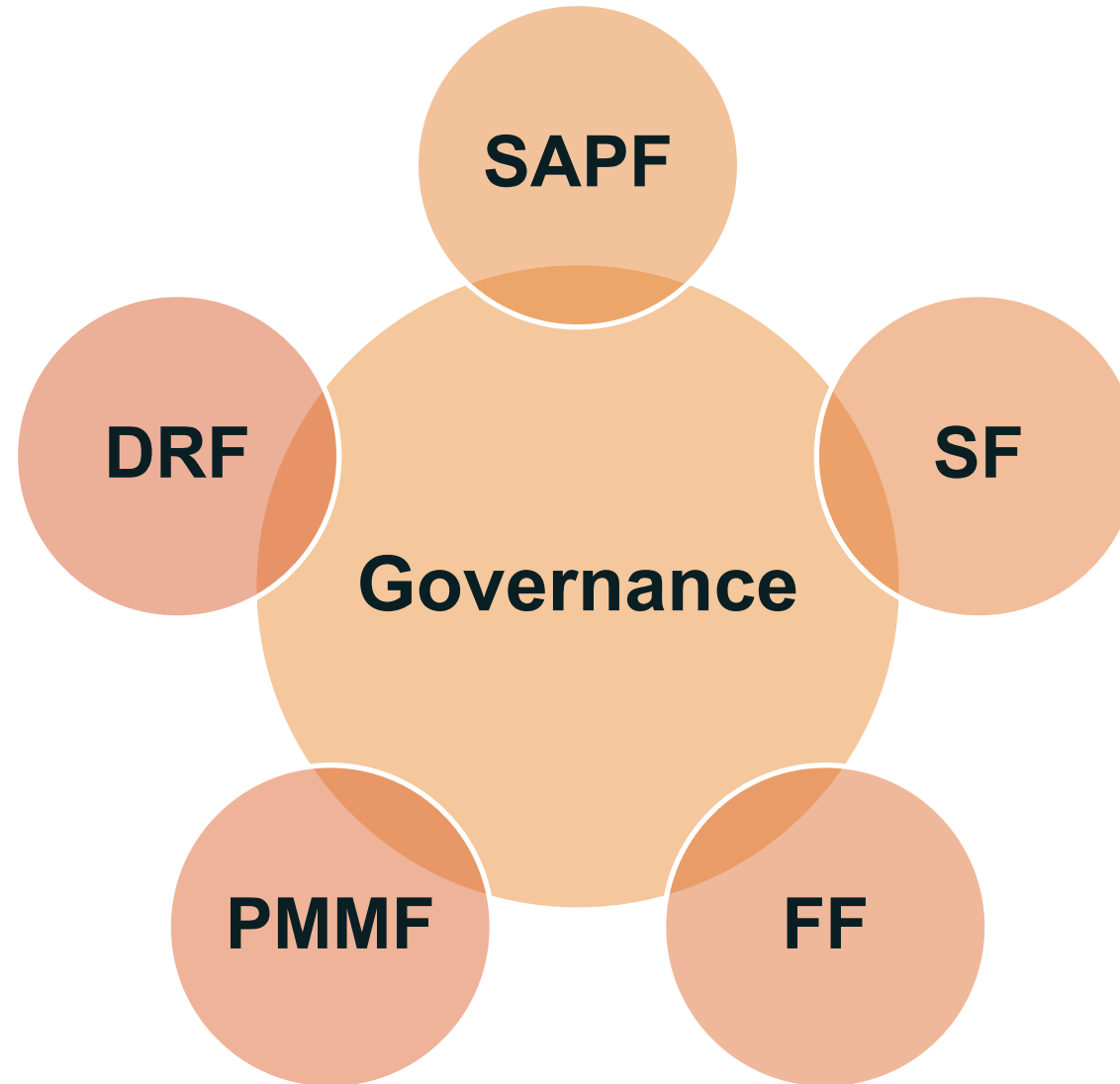


# Governance: An Interplay of Three Constructs Operating in Parallel

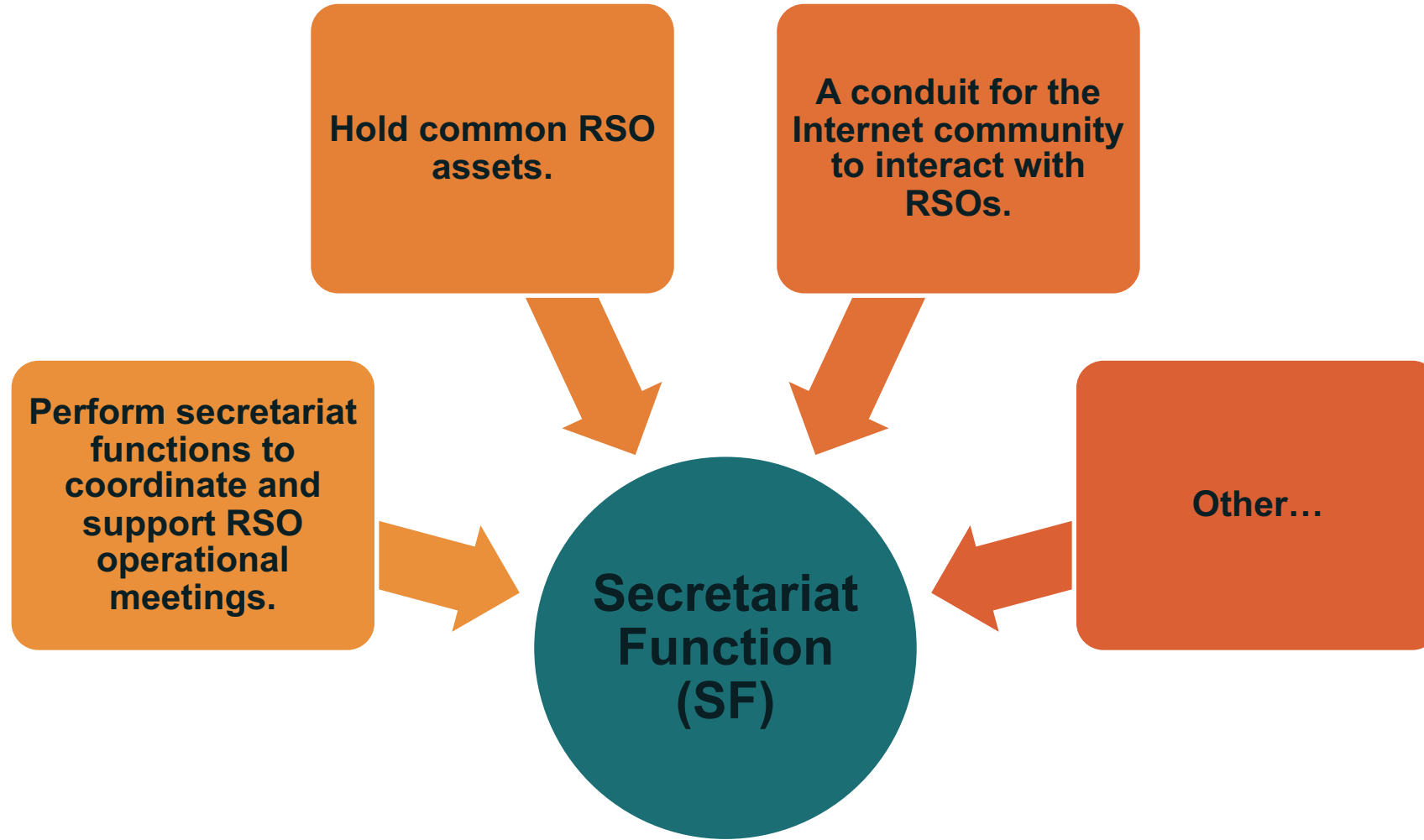
## THE MODEL



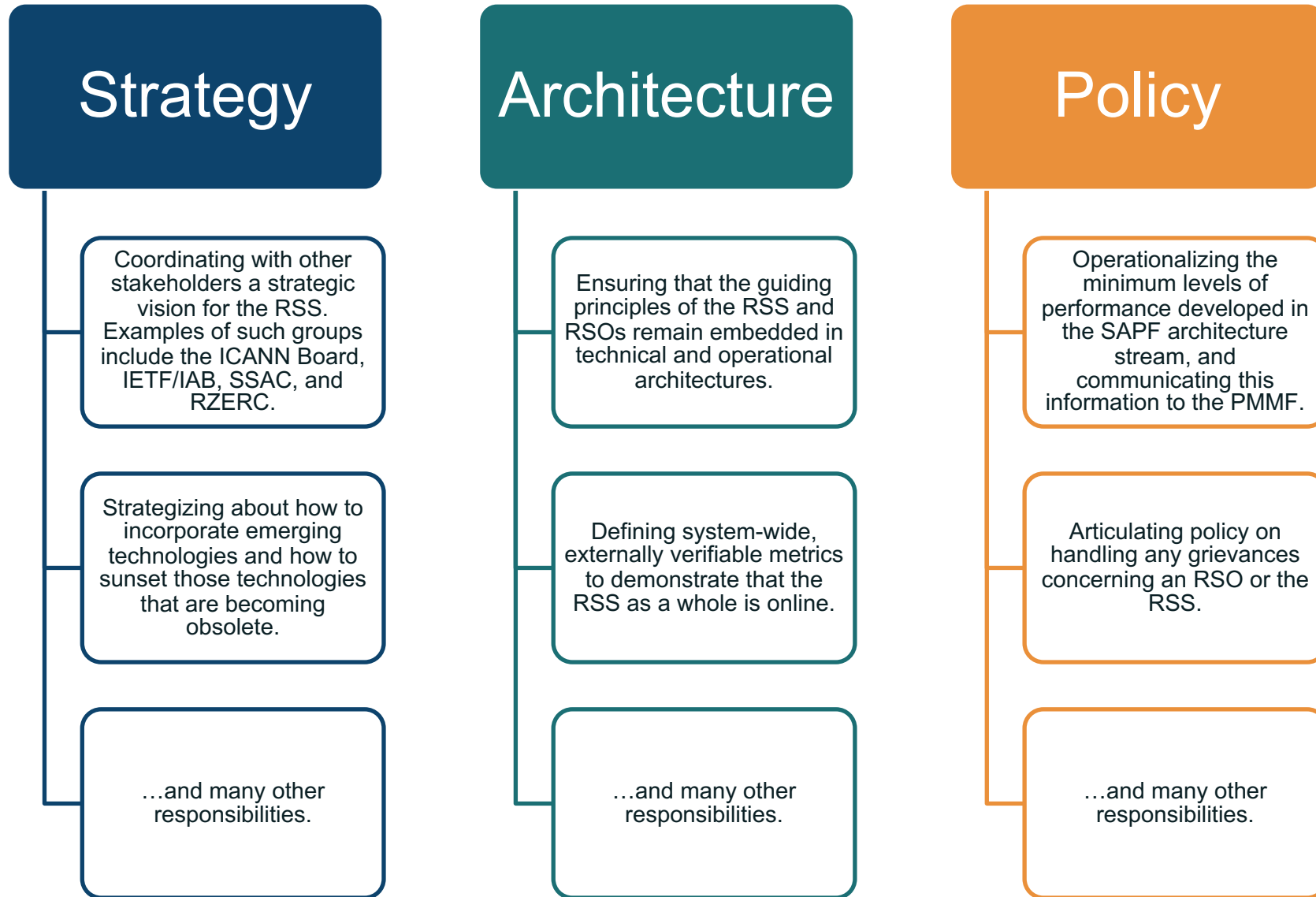
# Governance: A Balance and Interplay of Separate Functions



# Secretariat Function (SF)



# Strategy Architecture and Policy Function (SAPF)



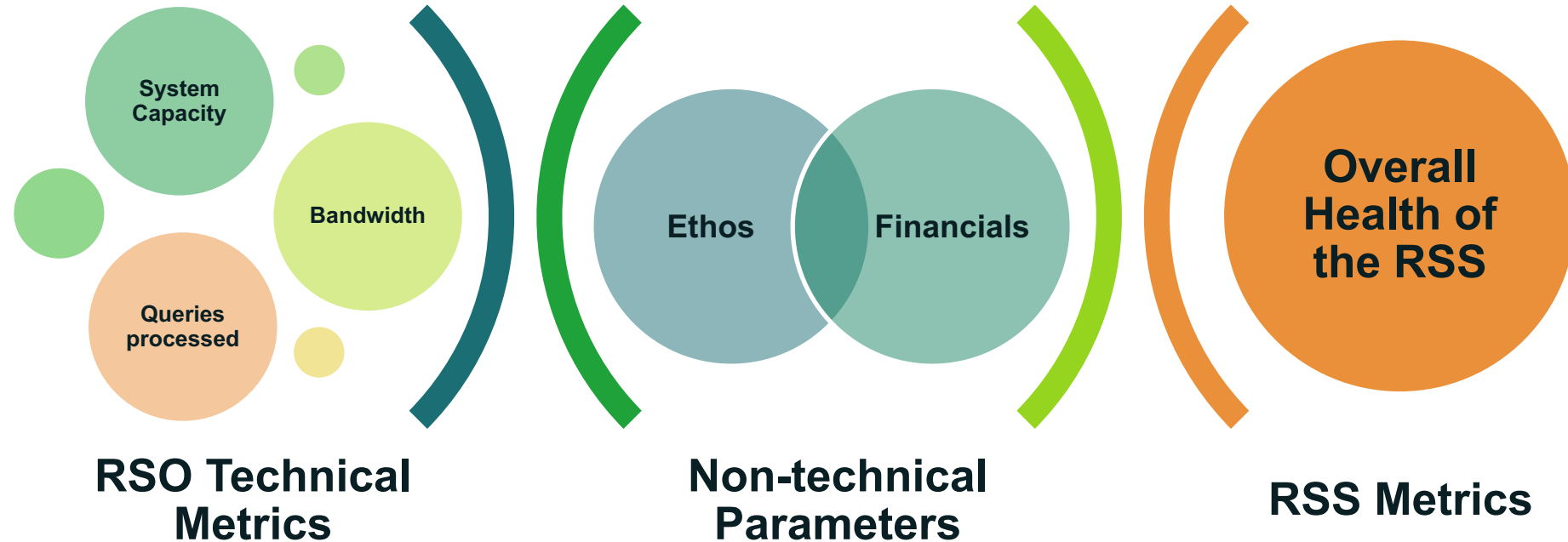
# Designation and Removal Function (DRF)



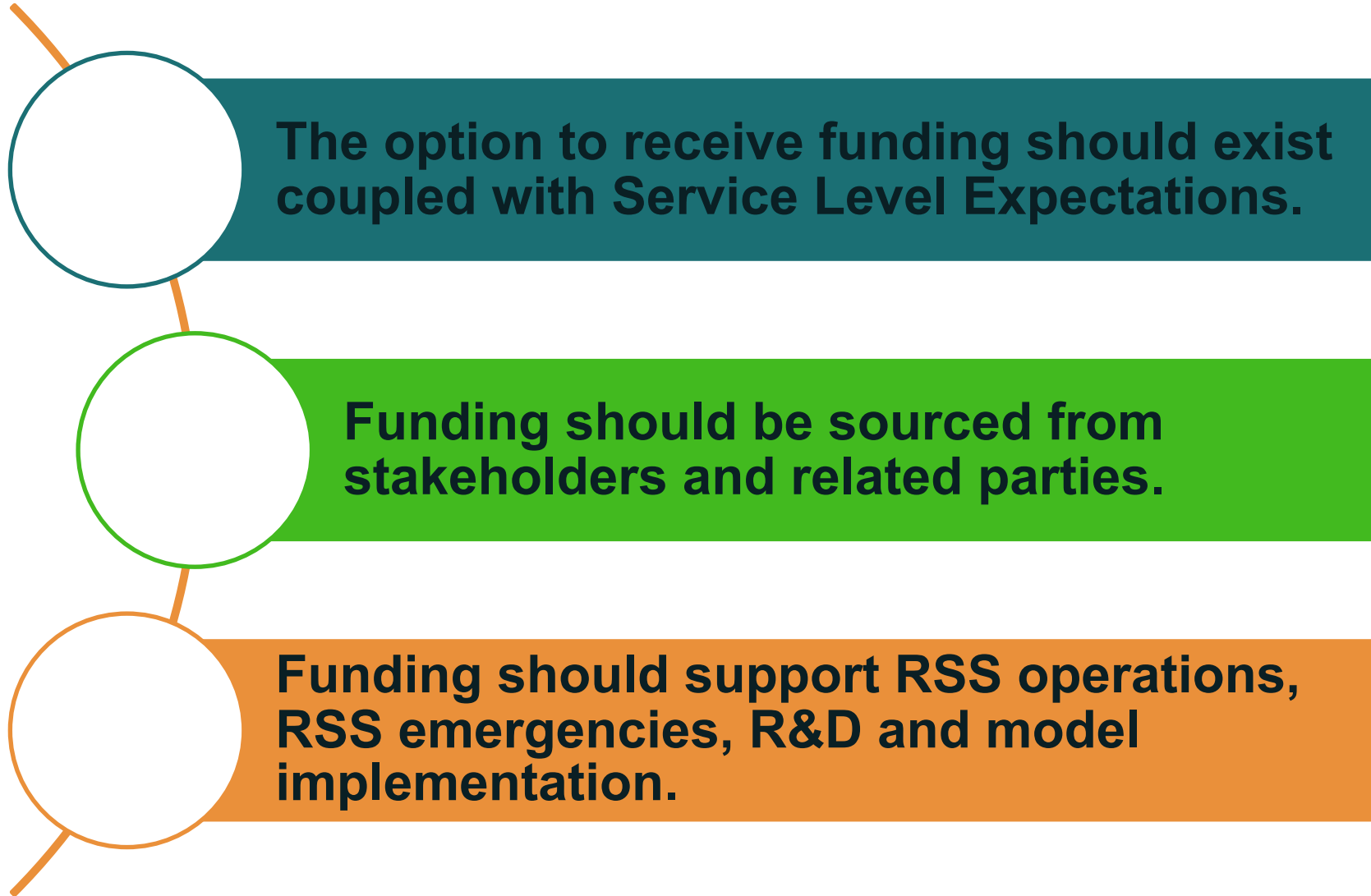


# Performance Monitoring and Measurements Function (PMMF)

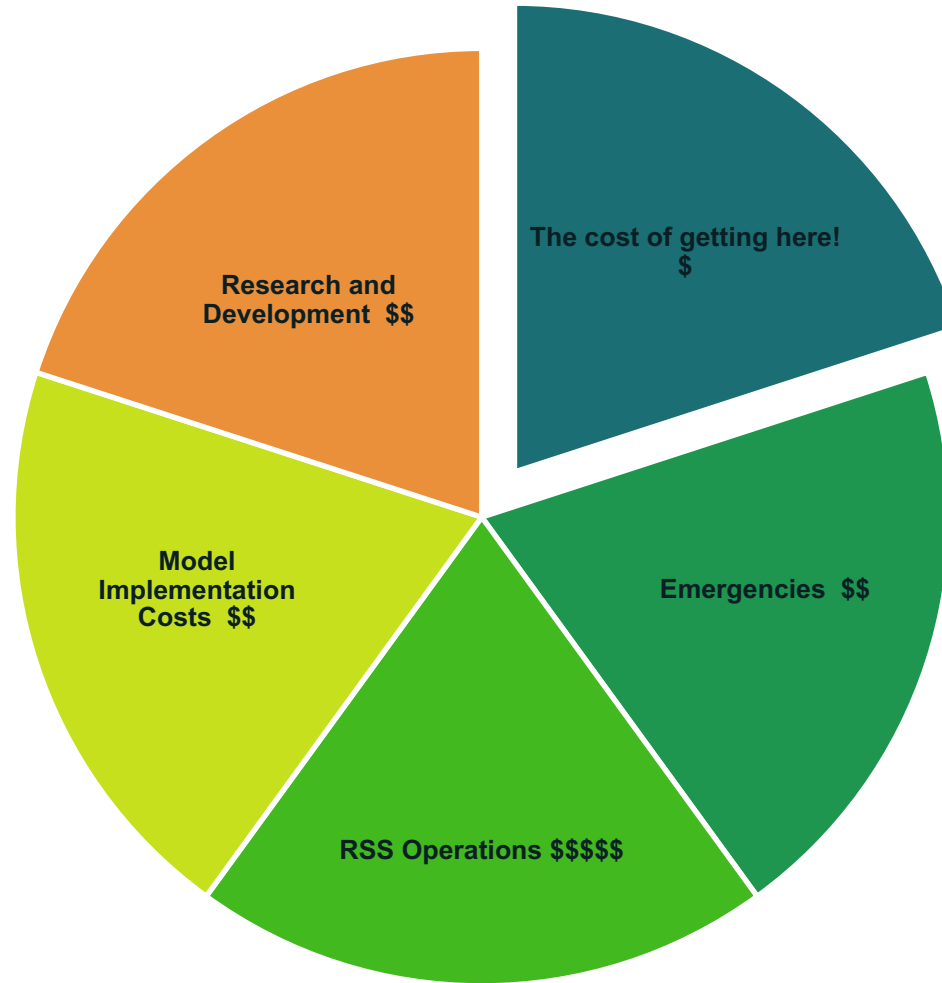
A sample of what could be measured and monitored



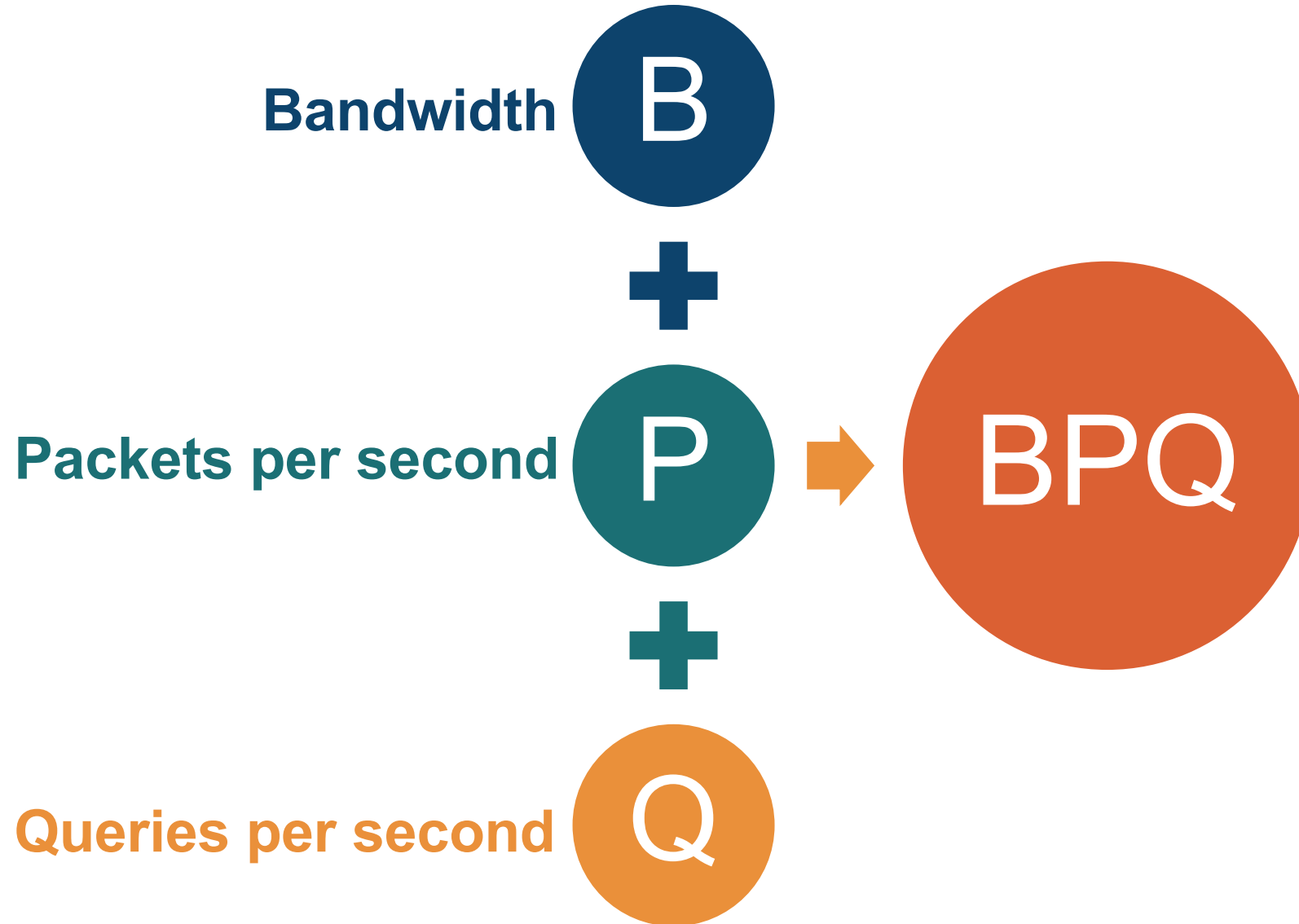
# Financial Function (FF)



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# Introducing BPQ – A Proposed RSS Capacity Indicator



# Determining the Cost for the Value of BPQ

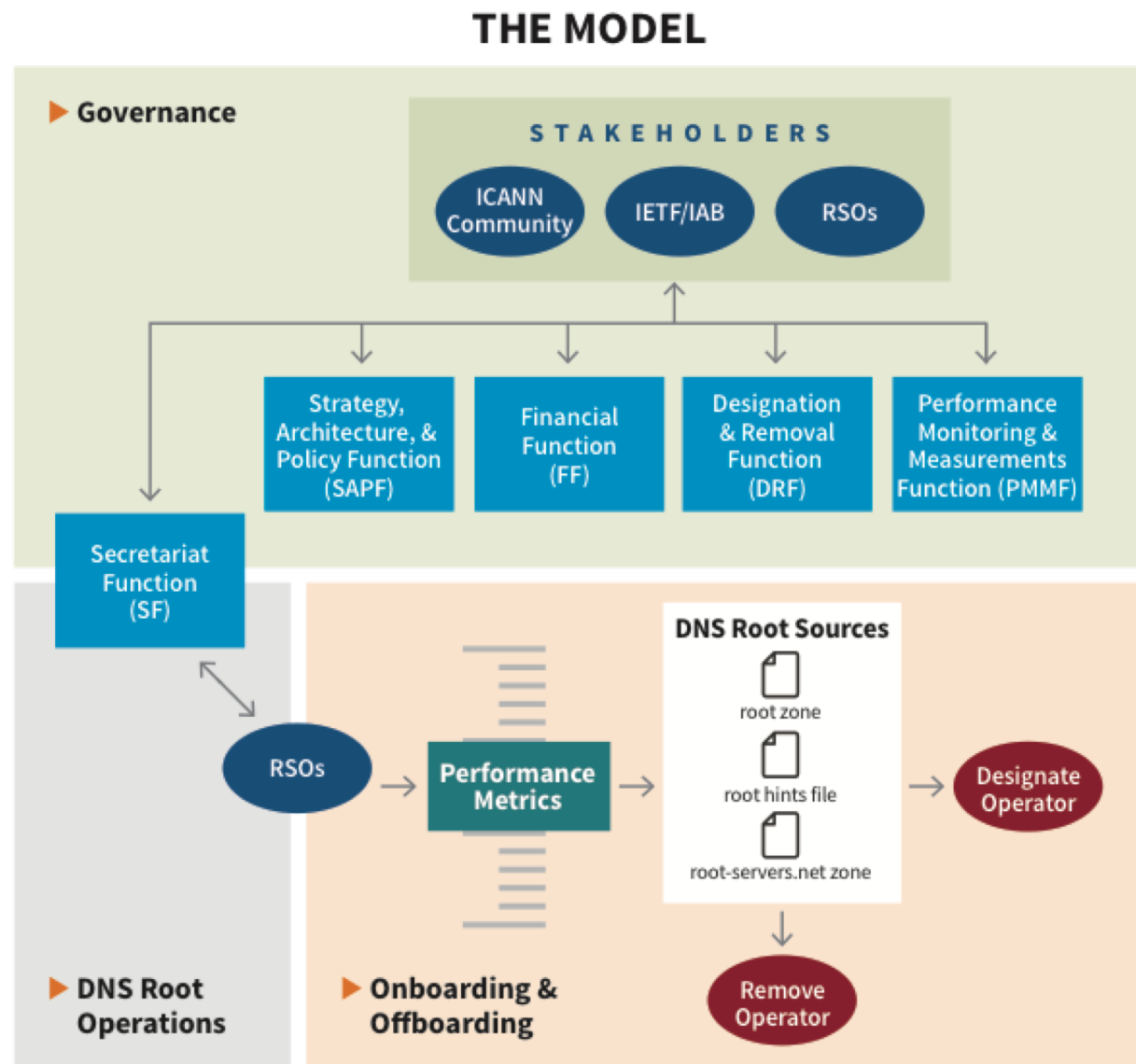


# Estimated Cost of the Model

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# Manifesting the Model: A Set of Three Recommendations



## Recommendation 1

- The RSSAC recommends that the ICANN Board initiate a community process to produce a final version of the Model for implementation.

## Recommendation 2

- Use the provided methodology (or a similar one) to cost out the implementation and operations of the Model.

## Recommendation 3

- Implement the Model based upon the principles of accountability, transparency, sustainability, and service integrity.

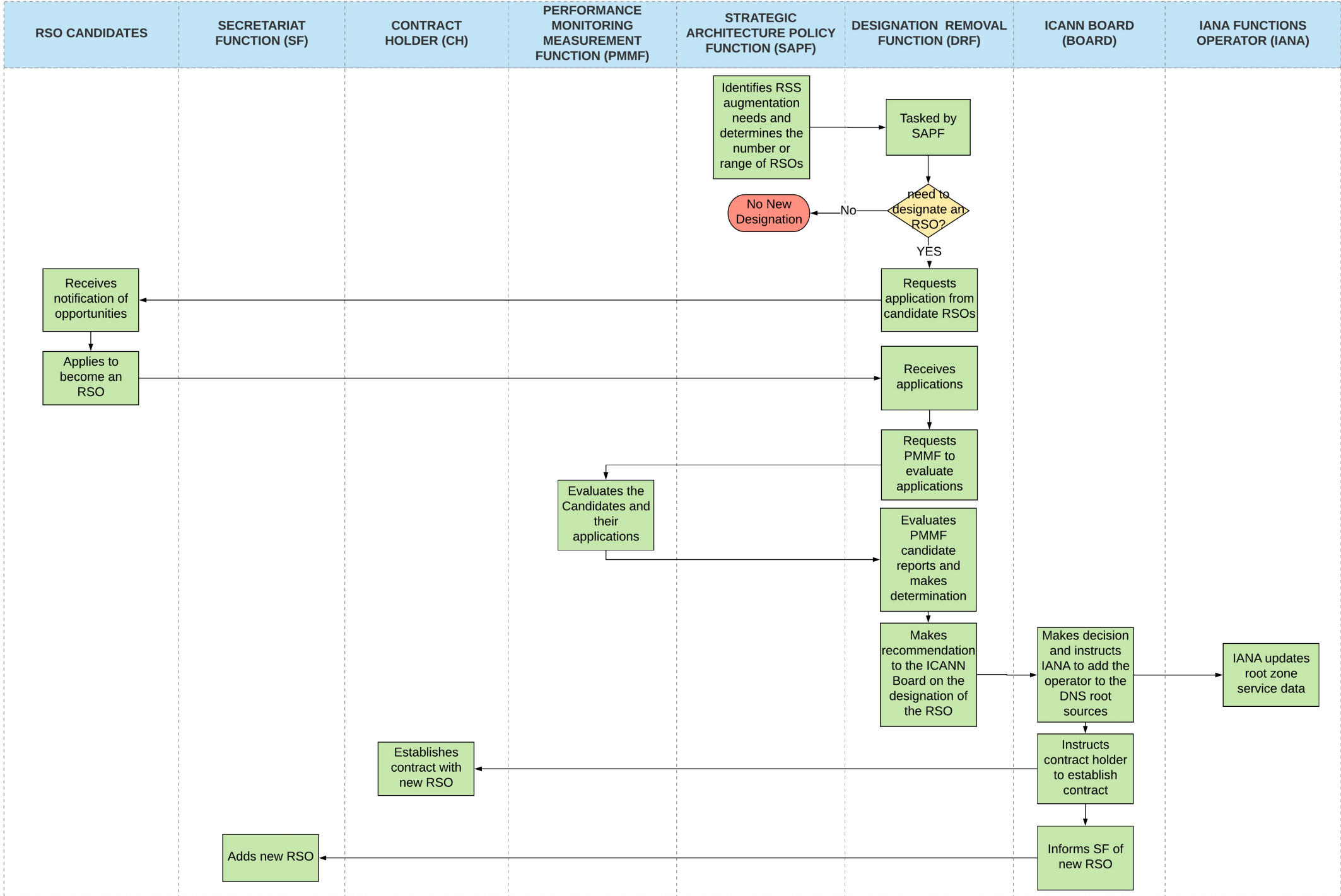


# Scenarios – Testing the Model

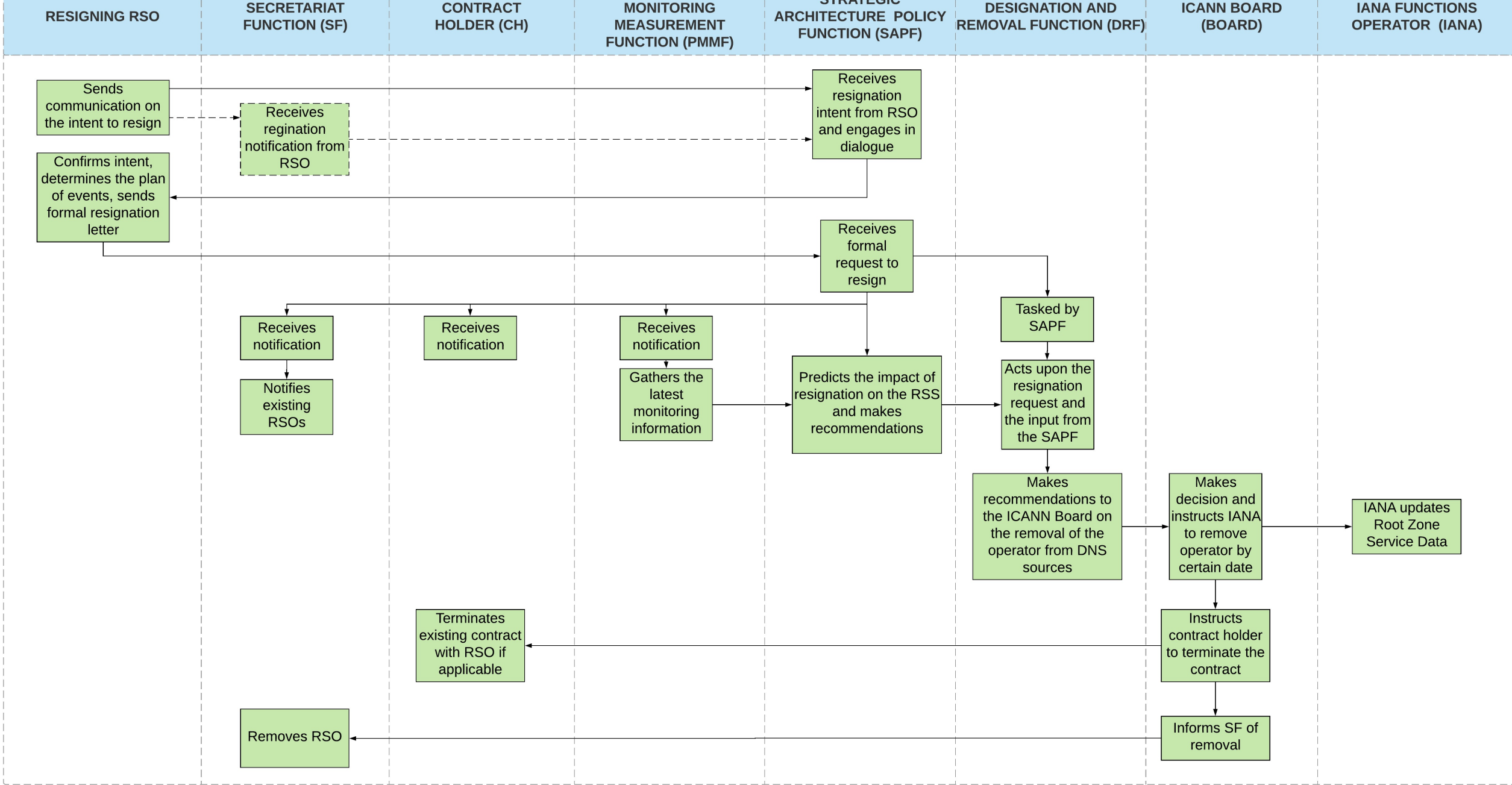
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1. Designation
2. Voluntary Resignation
3. Poor Performance
4. Catastrophic Shutdown
5. Rogue Operator

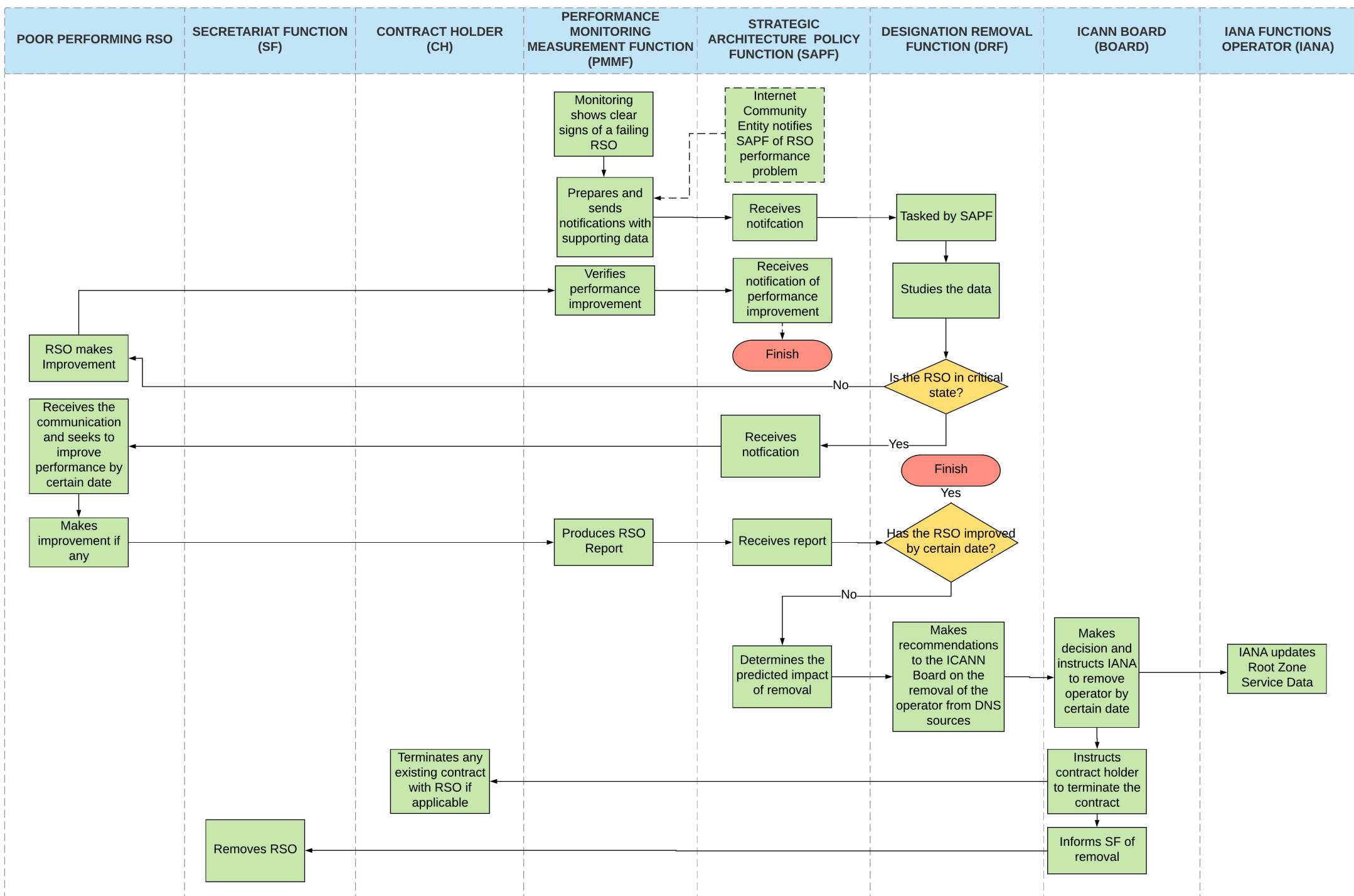
# 1. Designation



## 2. Voluntary Resignation

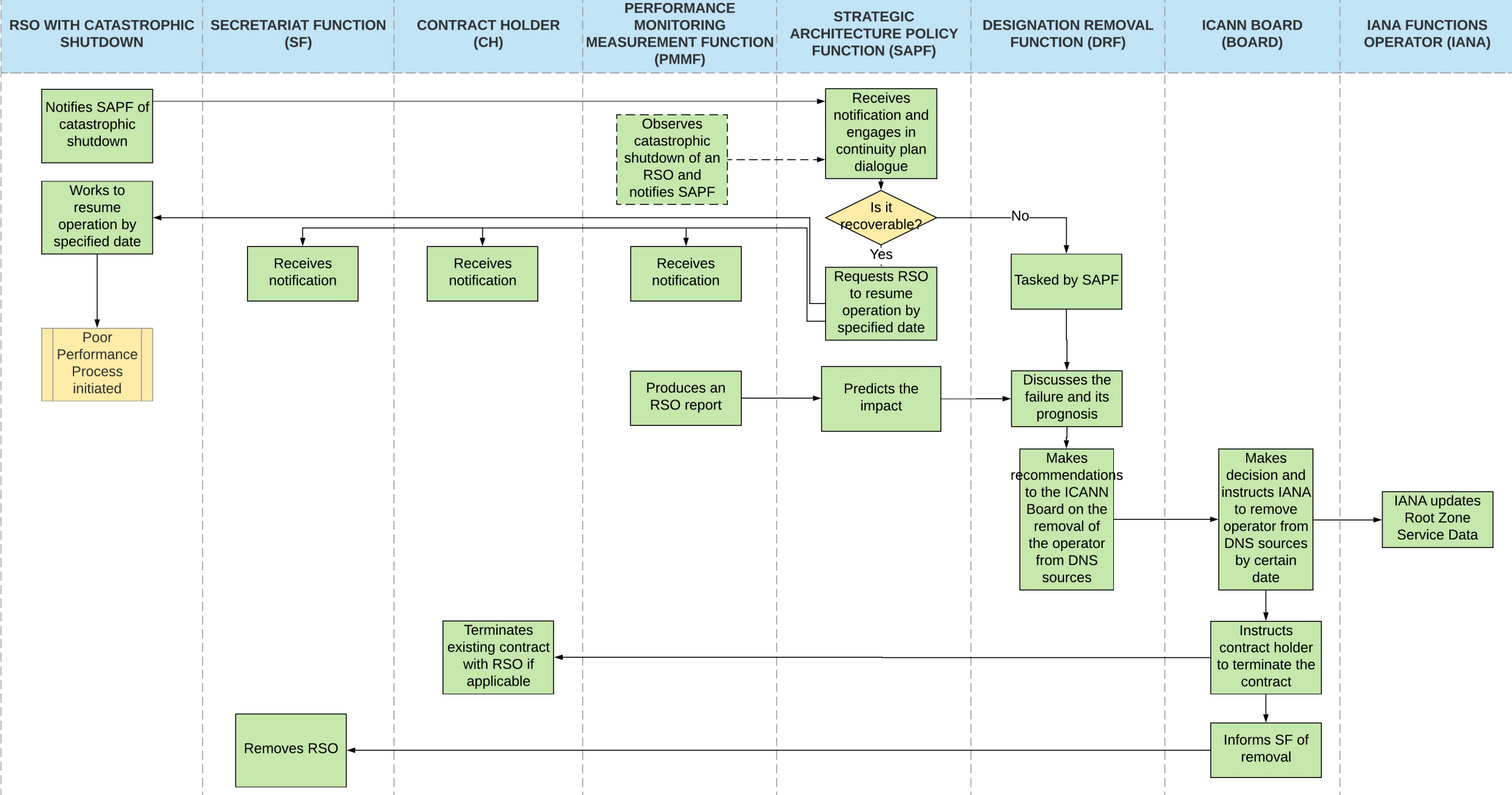


## 3. Poor Performance

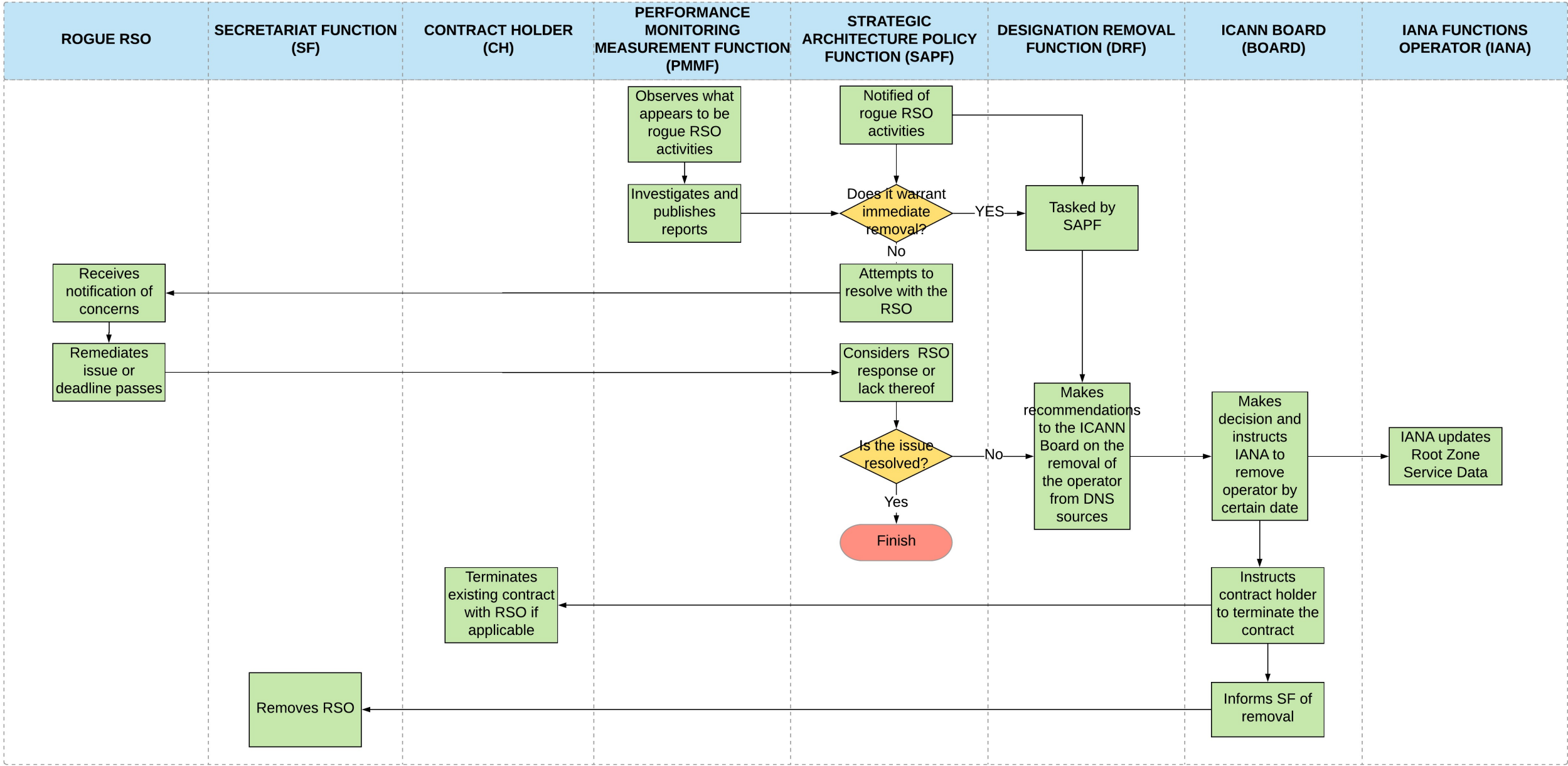


## 4. Catastrophic Shutdown





## 5. Rogue Operator



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Thank you.

Questions?

## 4. Any Other Business

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- a. Review of Action Items
- b. Next Teleconference: Thursday, 2 April 2020, 22:00 UTC

# Adjournment



RSS GWG workspace: <https://go.icann.org/rssgwgworkspace>