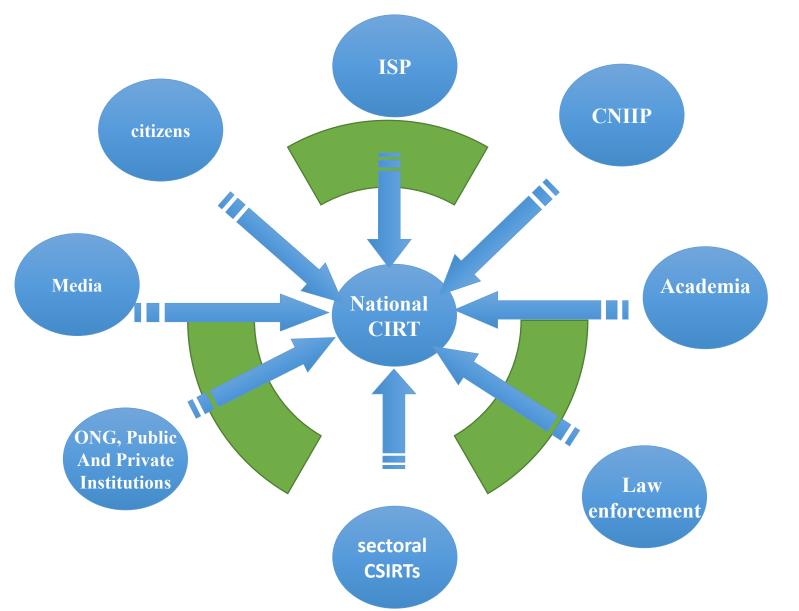


### Introduction National Stakeholders



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### CIRT

### ISP

A specialized entity for incident and emergency response, ensuring preventive and proactive services.

A CIRT is acting at a national level to secure the cyberspace, and assist home users to handle incidents and to protect their assets.

A trusted Point of Contact for national and international cyberspace stakeholders Providing all internet related services,
including Security. The first Point of
Contact for their customer in case of
incident.



A trusted Point of Contact for their customers

### Incident response coordination

Web defacement	DDoS	Massive malware infection
Phishing	Massive vulnerability exploitation	Data leakage
Spamming	Massive Identity theft	Massive scan



# We are all facing the same problems



National CIRT are the key player and the key coordinator National CIRT should be integrated in their ecosystem

We need to collaborate

### Introduction

You can build the best national CIRT, but without this collaboration it will be useless

## ISP must collaborate with national CIRTs

#### By default, there is no collaboration

CIRT should define their own strategies to approach ISPs and to convince them to collaborate

### How to get ISPs involved? What CIRTs need to do?



## Select carefully your target

- Identify the key stakeholders and focus all your efforts on them (the biggest, the most critical, the most targeted, the easiest, etc.)
- Others will follow,
- There will be some good and positive partners and there will be others considering themselves as better than you,
- For those who will resist, just wait for some critical incidents and they will come.

### Show your expertise: you are the expert

- ISPs must consider the CIRT as an expert and focused team ready to help them to respond to their incidents,
- CIRT must spend all their efforts to develop their technical skills and to get ready to any kind of incident while ISP cannot afford this investment,
- ISP will trust this technical expertise and will start to rely on CIRT,
- To show the expertise: workshop, site visit, labs, success stories, procedures, etc.



## Help ISPs to respond to their incidents

• If needed send them a team on site,

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- Offer them a premium 24/7 service,
- Provide a dedicated incident reporting (online ticketing systems, dedicated email, etc.)



## Help them to detect their incidents

- Run a dedicated monitoring and threat intelligence,
- Alert them in case of attacks: web defacement on their customers websites, infected users, phishing, etc.
- Help them to deploy monitoring systems:
  - IDS,
  - Honeynet,
  - DNS sinkhole,
  - Netflow,



## Share information

#### Gather information coming from:

- Public sources,
- Other CIRTs,
- Other Honeynet,
- Share information about current threats:
  - vulnerabilities,
  - exploits on the wild,
  - Malware infection,
  - Cyber-threats
  - Detected attacks (Web defacement, Malware infection, Spam, DoS/DDoS, Phishing, etc.)

## Better to give than ask

# 6 Offer free assistance

- Security assessment after incident closure,
- Assistance to secure and implement recommendations and best practices,
- Help them to deploy security solutions (Firewall, IDS, WAF, VPN, etc.) mainly from open source,
- Help them to develop cybersecurity awareness program for their staff and for their customers.



## Train and do cyber exercices

- Train them on incident response,
- Train them on coordination procedures,
- Organize periodic cyber exercises/ Cyber drill,
- During incident response ask your team to explain and to do some transfer of competence,
- Share your experience with them.



### Ensure a continuous communication

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- Make sure that you have a good communication with ISPs especially during emergencies,
- Maintain efficient communication channels between teams: email and phone mainly,
- Hold a meeting with top management and periodic ones with technical teams, do technical workshops/forum, etc.

## Show your engagement to secure their data

- Insist on applying security controls like:
  - Email encryption,
  - Securing your network,
  - Physical security,
  - Data destruction,
  - Etc.

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• Make sure they are informed about your security policy and recommend them to adopt similar controls.

## You are the trusted Point of Contact

- Develop your international collaboration network and inform them that you are the main Point-of-Contact with foreign entities,
- As a trusted PoC you can easily help them to solve their issues: incident, blacklisting, etc.
- Being member of AfricaCIRT, FIRST, OIC-CIRT, etc. can help to achieve it.



### What to avoid?

- Don't report incident to their top management,
- Don't ask them to spend q lot of money,
- Don't be pretentious,
- Don't tell them you are mandated by law and the should comply,
- Don't be late in case of emergencies.



Sectoral CSIRTs

CNIIP

Law enforcement

ONG, Public And Private Institutions

citizens

Academia

Media

# Build a Trusted and A win-win Relationship

**Global Initiatives** 













#### **Regional Initiatives**









Organization of American States





#### International Telecommunication Union



- The organization of Trainings and Workshops
- Conduction a Regional and National Cyberdrills (16 Cyberdrill)
- Assistance to their member states in the establishment and the improvement of their National CIRT (65 National CIRT Assessment , 14 National CIRT designed and established )
- Development Training Materials , Guidelines and Best Practices
- Development of common standards (X.1500 : cybersecurity information exchange techniques)
- Development of CIRT Tools



#### Forum for Incident and Security Response Team



- FIRST is a premier organization and recognized global leader in incident response
- Annual FIRST Conference on Computer Security Incident Handling
- The organization of Trainings and Workshops (FIRST Symposia, FIRST Technical Colloquia)
- Development Training Materials , Guidelines and Best Practices
- Development of common standards
- Development of CIRT Tools (CIRT in a BOX).
- Research & development activities







- The organization of Trainings and Workshops.
- The Annual Technical Meeting for CSIRTs with National Responsibility
- Development Training Materials , Guidelines and Best Practices
- Research & development activities



#### **TF-CSIRT** and **TERENA**





- Act as accreditation body for the CSIRT
- Development of training materials (TRANSITS I and TRANSITS II)
- Research & development activities (SIM3 : Security Incident Management Maturity Model)



#### Global Forum for Cyber Expertise



- CSIRT Maturity Initiative
- Help emerging and existing CSIRTS to increase their maturity level
  - > ITU
  - Microsoft
  - ≻ OAS
  - The Netherland



Organization of American States **Regional Organizations** 





- The organization of Trainings and Workshops
- Conduction a Regional Cyber Exercises
- Assistance to their member states in the implementation of a CSIRT
- Development Training Materials , Guidelines and Best Practices



