

An aerial photograph of a residential neighborhood with a parking lot in the foreground. The image is overlaid with a blue-to-white gradient at the top. The text is centered in the middle of the image.

**REGULATORY COMPLIANCE READINESS
CONSULTING SERVICE**

EXECUTIVE SUMMARY

Various regulations such as EU GDPR, PCI-DSS, SOX, HIPAA and SSAE are being applied to your company or organization at the government or industry level.

RURA, which operates under strong regulation at the government level, is a regulation that is applied to companies and institutions operating public facilities in Rwanda, and according to Law N° 09/2013 of 01/03/2013, which governs RURA, it is applied as a mandatory to seven business areas as follows.

1. Telecommunications, information technology, broadcasting and converging electronic technologies including the internet and any other audiovisual information and communication technology;
2. Postal services;
3. Renewable and non-renewable energy, industrial gases, pipelines and storage facilities;
4. Water;
5. Sanitation;
6. Transport of persons and goods; and
7. Other public utilities, if deemed necessary.

EXECUTIVE SUMMARY

As most government-level regulations operate in general with strong penalties, a thorough preliminary preparation is required, since a large amount of penalty will be imposed if the RURA regulation is violated.

In addition, RURA's information security regulations consist of detailed requirements that encompass not only technical security but also administrative security and physical security, therefore you have to organize and prepare an enterprise-wide T/F team.

Our consultants who have a thorough understanding of RURA regulations and have many years of experience in information security and various cases, can solve your troubles enough.

Once this project is completed, You will achieve the following goals:

- A good understanding of the information security experts for Audit Results
- Sufficient corrective action preparation and virtual simulation for Audit Results
- Implementing security document sets for managerial security required by Regulation
- Building cost effective security system for technological security required by Regulation
- Exhaustive advanced preparation for the all detailed requirements of Regulations

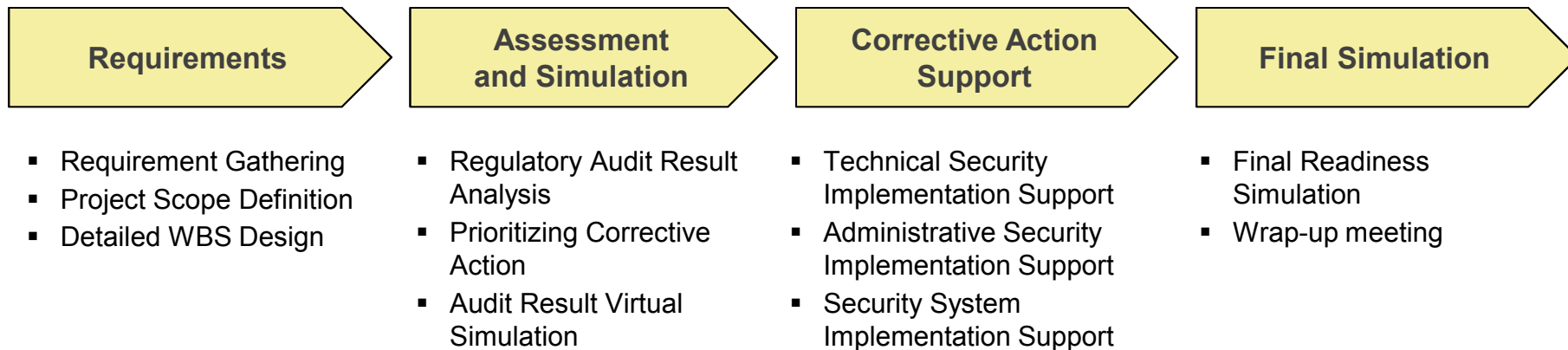
SERVICE STRATEGY

Our strategies to provide sufficient advanced preparation and corrective action for thorough regulatory response are as follows.

- **Professional Consultant T/F Team Composition**
 - Consists of consultants with years of experience dealing with various regulations in information security
 - Consists of consultants who have a perfect understanding and experience for the regulation
 - Consists of experts in the field of technical security for many years and experts in management and operational security
- **Rapid and Systematic Service Providing using by Pre-prepared Solution Portfolio**
 - Utilize pre-prepared standard templates and corrective actions for sectoral requirements such as Telecom, Broadcasting, and Information Technology
 - Utilizes already prepared information security standard document set including appropriate information security policies, guidelines and procedures
 - Use cost effective security solution portfolio already secured by technical security requirements of regulations

METHODOLOGY

The consulting methodology consists of 4 phases from Understanding to Certification Support. Depending on the scope of project, there are a little bit difference tasks and steps of each phase.



Deliverables

- Corrective Action Plan
- Phased Regulatory Compliance Virtual Simulation
- Establish Security System Required by the Regulation (optional)
- Information Security Policies and Procedures required by Regulation
- Information Security Education and Training required by Regulation

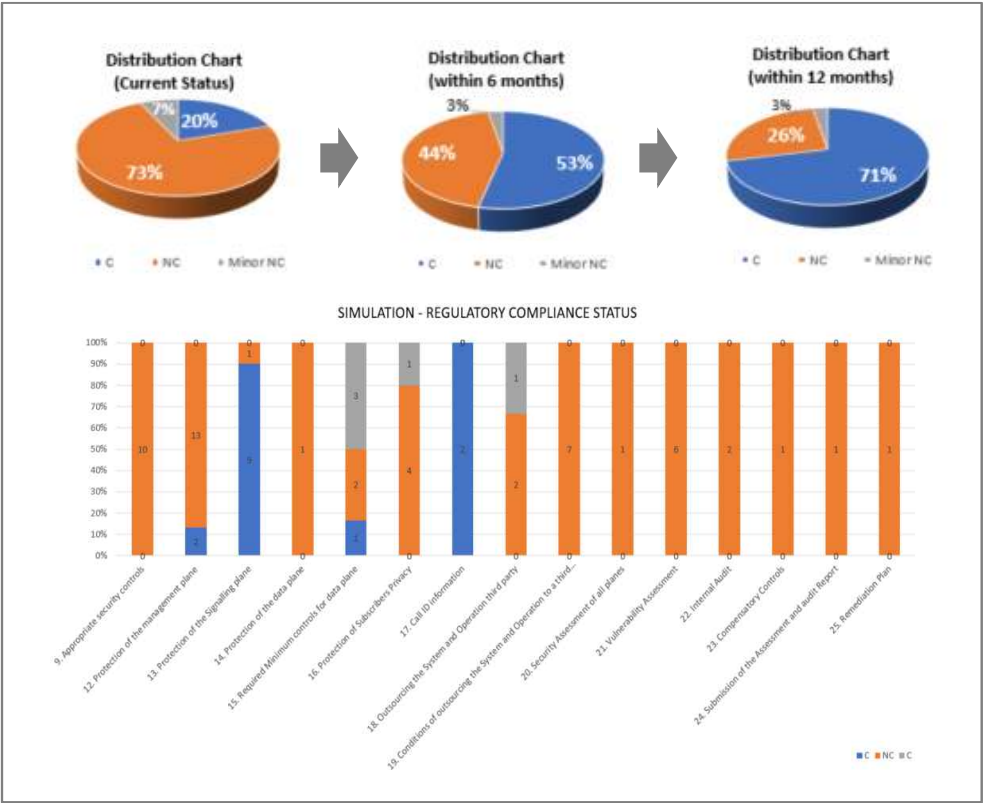
CASES-TELECOM

Simulation of Compliance Status for RURA's Telecom Network Security Requirements (15 Articles, 71 Requirements)

Prioritizing Corrective Action considering technical difficulty and budget

Step-by-step Regulatory Compliance Virtual Simulation (Current Status > within 6 months > within 12 months)

Req. #	Req. # - Article	Req. Description	Priority	Level of risk	Control to be implemented	Treatment	Start date	Status
91	411.1.4	The wireless service access control system should be implemented in accordance with the requirements of the RHC and # 1413.	3	3	Access control system should be implemented in accordance with the requirements of the RHC and # 1413.	IP and LTE RHC Manager	April 30, 2019	Not started
92	411.1.4	Emergency call service (including 911) should be implemented in accordance with the requirements of the RHC and # 1413.	3	3	Emergency call service (including 911) should be implemented in accordance with the requirements of the RHC and # 1413.	IP and LTE RHC Manager	April 30, 2019	Not started
93	411.1.1	In LTE RHC (upland flow) a CTV system is installed, but there is a need of an additional CTV system because of the size of the network. In RHC (downlink flow), CTV system is not installed in both uplink and downlink.	3	3	CTV system should be installed in both uplink and downlink.	IP and LTE RHC Manager	April 30, 2019	Not started
94	411.1.4	The device for the identification of equipment is not used and managed because the device is not a Subscriber Unit. The device is to be used only for the identification of equipment.	3	3	The device for the identification of equipment is to be used and managed.	IP RHC Manager	March 31, 2019	Not started
95	411.1.2	The device for the identification of equipment is not used and managed because the device is not a Subscriber Unit. The device is to be used only for the identification of equipment.	3	3	The device for the identification of equipment is to be used and managed.	IP RHC Manager	March 31, 2019	Not started
96	411.1.2	The device for the identification of equipment is not used and managed because the device is not a Subscriber Unit. The device is to be used only for the identification of equipment.	3	3	The device for the identification of equipment is to be used and managed.	IP RHC Manager	March 31, 2019	Not started
97	411.1.2	The device for the identification of equipment is not used and managed because the device is not a Subscriber Unit. The device is to be used only for the identification of equipment.	3	3	The device for the identification of equipment is to be used and managed.	IP RHC Manager	March 31, 2019	Not started
98	411.1.2	The device for the identification of equipment is not used and managed because the device is not a Subscriber Unit. The device is to be used only for the identification of equipment.	3	3	The device for the identification of equipment is to be used and managed.	IP RHC Manager	March 31, 2019	Not started
99	411.1.2	The device for the identification of equipment is not used and managed because the device is not a Subscriber Unit. The device is to be used only for the identification of equipment.	3	3	The device for the identification of equipment is to be used and managed.	IP RHC Manager	March 31, 2019	Not started
100	411.1.2	The device for the identification of equipment is not used and managed because the device is not a Subscriber Unit. The device is to be used only for the identification of equipment.	3	3	The device for the identification of equipment is to be used and managed.	IP RHC Manager	March 31, 2019	Not started
101	411.1.2	The device for the identification of equipment is not used and managed because the device is not a Subscriber Unit. The device is to be used only for the identification of equipment.	3	3	The device for the identification of equipment is to be used and managed.	IP RHC Manager	March 31, 2019	Not started
102	411.1.2	The device for the identification of equipment is not used and managed because the device is not a Subscriber Unit. The device is to be used only for the identification of equipment.	3	3	The device for the identification of equipment is to be used and managed.	IP RHC Manager	March 31, 2019	Not started
103	411.1.2	The device for the identification of equipment is not used and managed because the device is not a Subscriber Unit. The device is to be used only for the identification of equipment.	3	3	The device for the identification of equipment is to be used and managed.	IP RHC Manager	March 31, 2019	Not started
104	411.1.2	The device for the identification of equipment is not used and managed because the device is not a Subscriber Unit. The device is to be used only for the identification of equipment.	3	3	The device for the identification of equipment is to be used and managed.	IP RHC Manager	March 31, 2019	Not started
105	411.1.2	The device for the identification of equipment is not used and managed because the device is not a Subscriber Unit. The device is to be used only for the identification of equipment.	3	3	The device for the identification of equipment is to be used and managed.	IP RHC Manager	March 31, 2019	Not started
106	411.1.2	The device for the identification of equipment is not used and managed because the device is not a Subscriber Unit. The device is to be used only for the identification of equipment.	3	3	The device for the identification of equipment is to be used and managed.	IP RHC Manager	March 31, 2019	Not started
107	411.1.2	The device for the identification of equipment is not used and managed because the device is not a Subscriber Unit. The device is to be used only for the identification of equipment.	3	3	The device for the identification of equipment is to be used and managed.	IP RHC Manager	March 31, 2019	Not started
108	411.1.2	The device for the identification of equipment is not used and managed because the device is not a Subscriber Unit. The device is to be used only for the identification of equipment.	3	3	The device for the identification of equipment is to be used and managed.	IP RHC Manager	March 31, 2019	Not started
109	411.1.2	The device for the identification of equipment is not used and managed because the device is not a Subscriber Unit. The device is to be used only for the identification of equipment.	3	3	The device for the identification of equipment is to be used and managed.	IP RHC Manager	March 31, 2019	Not started
110	411.1.2	The device for the identification of equipment is not used and managed because the device is not a Subscriber Unit. The device is to be used only for the identification of equipment.	3	3	The device for the identification of equipment is to be used and managed.	IP RHC Manager	March 31, 2019	Not started



CASES-TELECOM

RURA regulatory requirements are largely divided into three categories, and service portfolios are provided according to requirements.

- Article 9 :Appropriate security controls
- Article 12 :Protection of the management plane
- Article 13 :Protection of the Signaling plane
- Article 14 :Protection of the data plane
- Article 15 :Required Minimum controls for data plane
- Article 16 :Protection of Subscribers Privacy
- Article 17 :Call ID information
- Article 18 :Outsourcing the System and Operation third party
- Article 19 :Conditions of outsourcing the System and Operation to a third party
- Article 20 :Security Assessment of all planes
- Article 21 :Vulnerability Assessment
- Article 22 :Internal Audit
- Article 23 :Compensatory Controls
- Article 24 :Submission of the Assessment and audit Report
- Article 25 :Remediation Plan



REGULATIONS N° 001/R/TD-ICS/RURA/016 OF 06/05/2016 GOVERNING
TELECOM NETWORK SECURITY IN RWANDA

ADOPTED BY THE
REGULATORY BOARD
OF

RWANDA UTILITIES REGULATORY AUTHORITY (RURA)



Information Security Policies	<p>In Article 12, 19, 31;</p> <ul style="list-style-type: none"> ▪ General Part Security Policies and Procedures ▪ Network Security Part Polices and Procedures ▪ Server Security Part Policies and Procedures ▪ Application Security Part Policies and Procedures ▪ and others
Establish Security System	<ul style="list-style-type: none"> ▪ Network Layer: SIEM, Firewall, IPS/IDS, AAA system, Log Management, VPN, DDoS, NAC, etc. ▪ Server Layer: PMS, VPN, Spam Filter, Anti-malware, anti-APT, etc. ▪ Application/Data: WAF, DLP, DBMS Firewall, Secure USB, DRM, SSO/EAM, HSM, OTP, etc. ▪ PC Layer: Anti-virus, etc
Education and Training	<ul style="list-style-type: none"> ▪ Education for Security Vulnerability Test and Penetration Test ▪ Security Test Training for DRP, DDoS, ▪ Awareness education for general users