



Cyber Security and CIIP

- RWANDA -

Cyber Security and CIIP

*Towards a primarily knowledge based economy
by the year 2020*

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Agenda

- NICI Plan
- Challenges
- Strategies to overcome challenges
- Regulator Obligations



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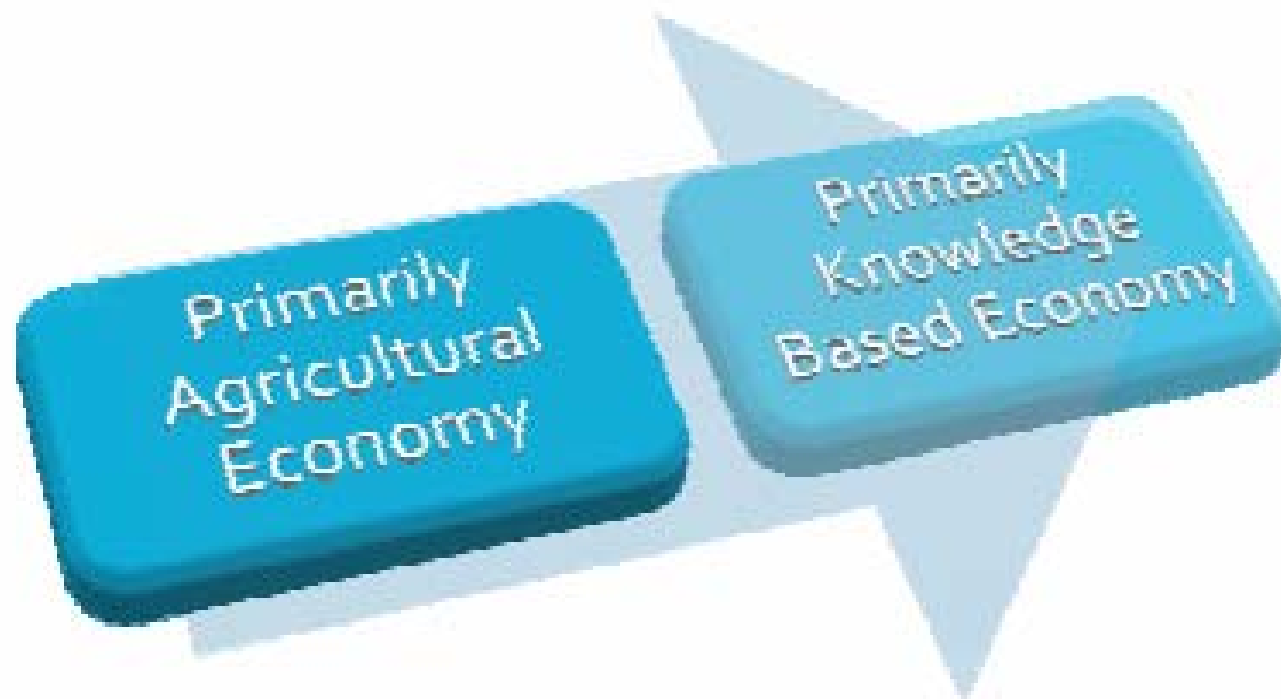
NICI Plan

- NICI Plan: National Information and Communication Infrastructure Policy and Plan.
- 1999 - 2020, 20 years journey to reduce poverty
- Objective: Move from a primarily agricultural economy to a primarily knowledge based economy by the year 2020.
- 2000: NICI Plan framework created to achieve this ambitious mission.



RURA

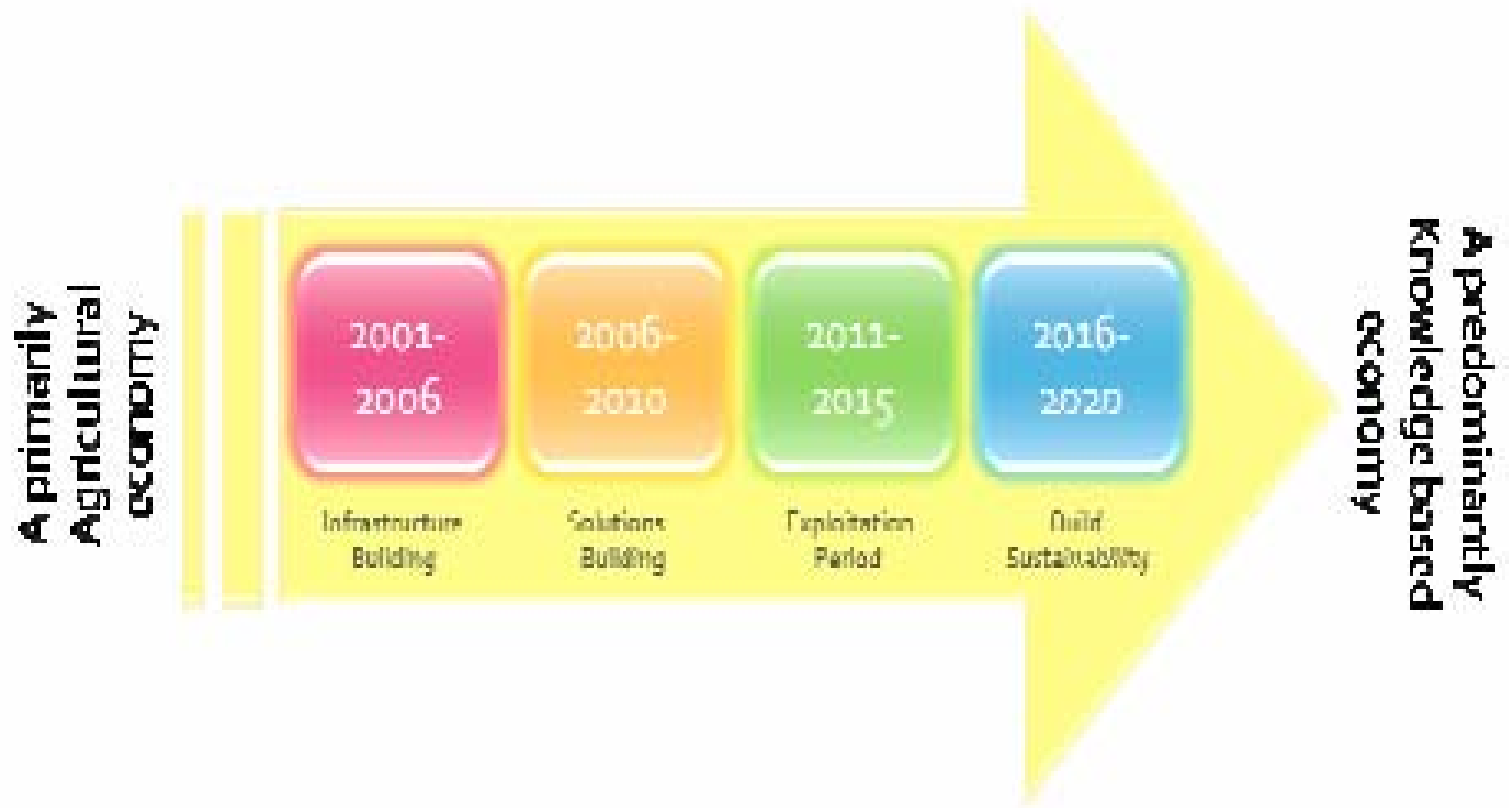
NICI Plan objective





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NICI PLAN phases





Challenges

- 2006: <<Solution Building>> phase introduces new ICT applications and Cyber Security issues.
- Lack ICT applications policy and regulatory framework
- Lack of awareness of Cyber Security Issues.



Strategies to overcome Challenges

- ❑ 2001: Creation of RURA (Rwanda Utilities Regulatory Agency)
- ❑ With mission to regulate certain public utilities, namely:
 - Telecommunication
 - **ICT**,
 - Water
 - Gas
 - Transport
 - Electricity



RURA

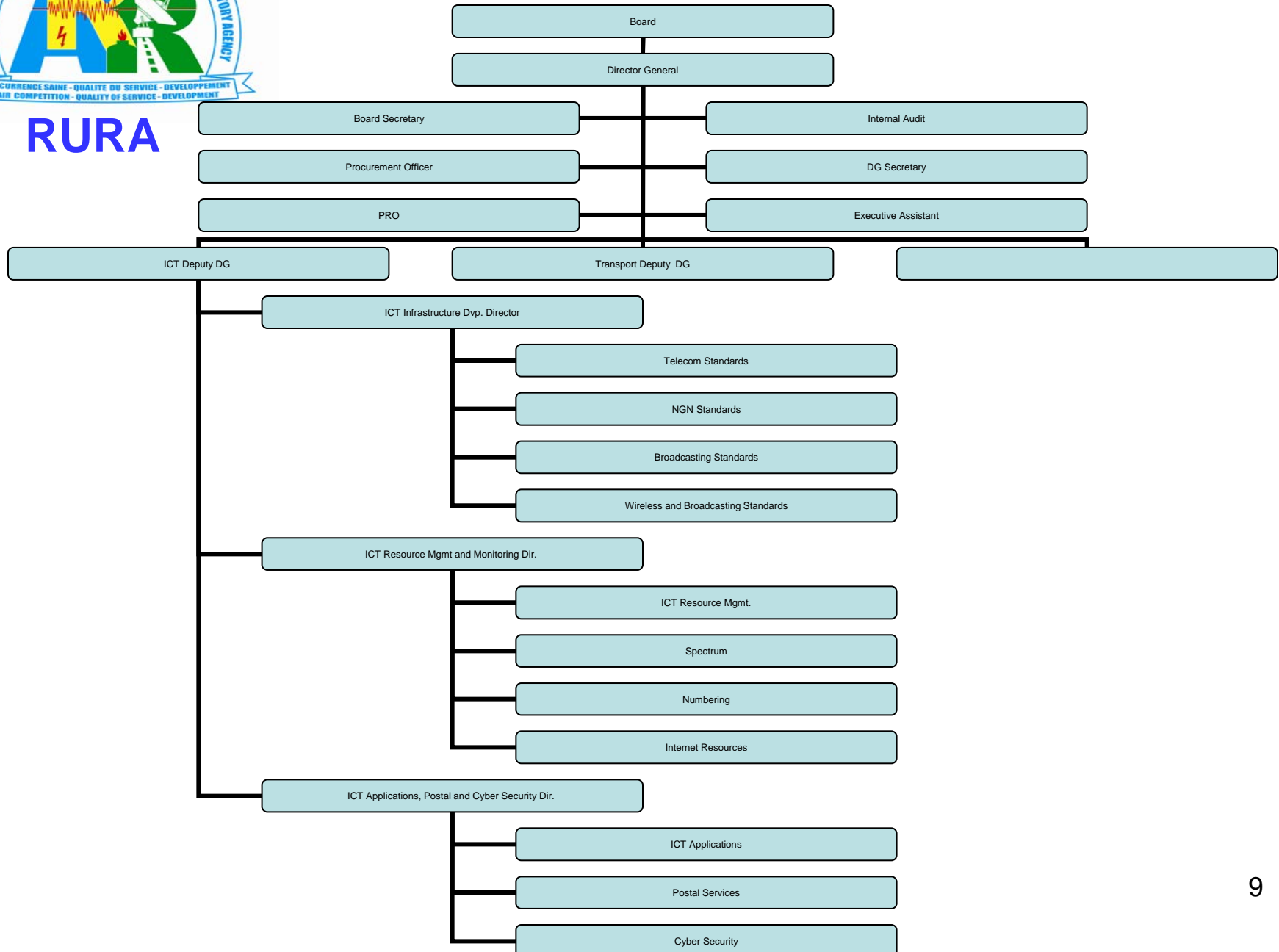
Strategies to overcome challenges

- Security is a principal Concern
- Adoption of appropriate **legislation** against the **misuse** of ICTs for **criminal** or other purposes and **activities** intended to affect the **integrity** of our national **CII**.
- Targeted stakeholders:
 - Policy Makers: Ministry of ICT
 - Licensing and Regulatory Framework: Regulator
 - Judiciary power professionals
 - Business owners & Managers
 - IT providers and professionals
 - End Users

RURA: Organization Structure



RURA





RURA

Cyber Security & CIIP: Obligations

Regulator:

- Define National Cyber Security strategies and guidelines (ITU standards)

Judiciary Power professionals:

- Define a legal framework enforceable at a national level but compatible with international level
- Develop measures to fight against cyber crime and collaborate at international levels



Cyber Security & CIIP: Obligations, contd.

Business owners & Managers

- Produce effective security processes
- Awareness of ICT related risks and security costs
- Collaborate with the Cyber Security regulator and technical professionals.



Cyber Security & CIIP: Obligations, contd.

IT providers and professionals

Analyze, design, develop and implement efficient security tools and measures of protection that are:

- Cost effective
- user friendly
- Transparent
- Auditable
- Third party controllable



Cyber Security & CIIP: Obligations, contd.

End-Users

Awareness among all users

❑ Adoption of a security behaviour for ICTs

Help the end user to understand the threats (virus, spam, identity theft, data protection, privacy...):

- Raise awareness of Cyber Cafe managers and school managers
- To make them define practical recommendations for the safe use of ICT and communicate them to people they interact with.



Cyber Security & CIIP: Obligations, contd.

End-Users

- ❑ Facilitate definition and deployment of national cyber security strategies and international cooperation:
 - Create local know how based on well recognized standards and answer specific local needs by integrating local cultural values in national standards derived from international standards and recognized best practices.



Cyber Security & CIIP: Obligations, contd.

End-Users

- Vehicle a common understanding of what Cyber Security means to all.
- Educational events in partnership with local actors (schools, private or public institutions etc...)



Thanks for your attention