# Interoperability Progress Across the Globe SOUTH AFRICA



#### **Contents**





**Overview Interoperability Models Baseline Policies SA Interoperability Timeline SA Interoperability Model Risk Analysis & Lessons Learnt** 



#### **Overview**

- Toll roads first introduced in 1984
- Grown from 27 km to 3,089 km in 2016
  - 1,819 km managed by SANRAL
  - 1,270 km managed by three Concessionaires



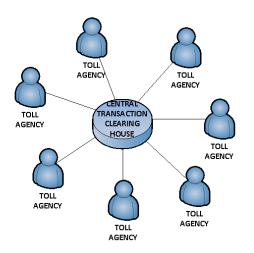
- Toll roads = 14,1% of the National Road Network of 21, 946 km
- Human Population = 55 Million
- Vehicle Population = 11 Million
- Tag Population = 1,4 Million(1,3 Million active)
- Daily tag transactions = 800 000

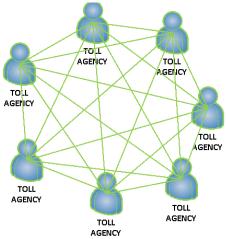


#### **Interoperability Models**

- Clearing possibilities:
  - **National Co-ordinated Central Clearing**

**Multiparty Roaming Agreements** 









#### **Baseline Policies**

- CEN Standard Adopted Nationally (EN15509)
- Central -
  - Transaction Processing and Clearing
  - Violation Processing(VPC) (Opt in or out)
  - Account Management and Tag Procurement
  - Database with Distributed Access
  - Pre-Paid or Guaranteed Post-Paid Accounts

### ONE CENTRALLY MANAGED ACCOUNT MULTIPLE TAGS LINKED (ONLY ONE TAG PER VEHICLE)

- Operated by SANRAL on Commercial Principles
  - based on total recovery of TCH expenses

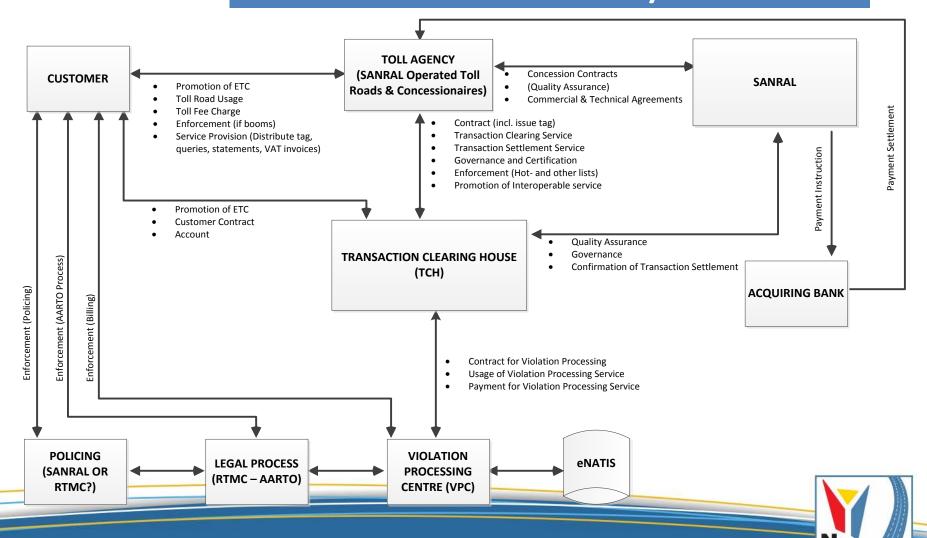


#### **SA Interoperability Timeline**

| Year        | Activity  |
|-------------|---|
| 2000/01     | ETC Considered - CEN Standard Adopted by Sanral     |
| 2002        | First ETC Implemented by Concessionaire(Bakwena)    |
| 2003 - 2005 | Interoperability options considered                 |
| 2006        | Interoperability Framework drafted                  |
| 2007/8      | Design of Transaction Clearing House                |
| 2009        | Tender for GFIP ORT Project Awarded                 |
| 2010        | Completed GFIP Facilities opened to SWC2010 traffic |
| 2011/12     | Legal Challenges on GFIP                            |
| 2013        | GFIP E-Toll Commences                               |
| 2014        | Sanral and Concessionaires: Commercial terms agreed |
| 2015        | Go – live on all existing toll roads                |
| 2016        | ETC operational nationally                          |

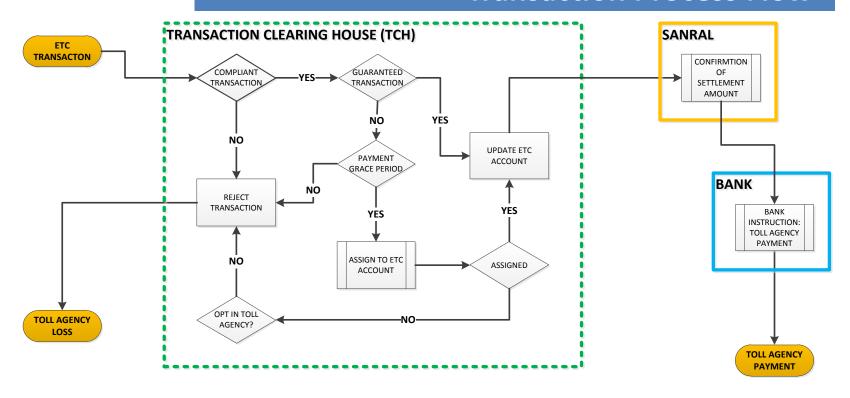


### **SA Interoperability Model Key Stakeholders**



#### **SA Interoperability Model**

#### **Transaction Process Flow**

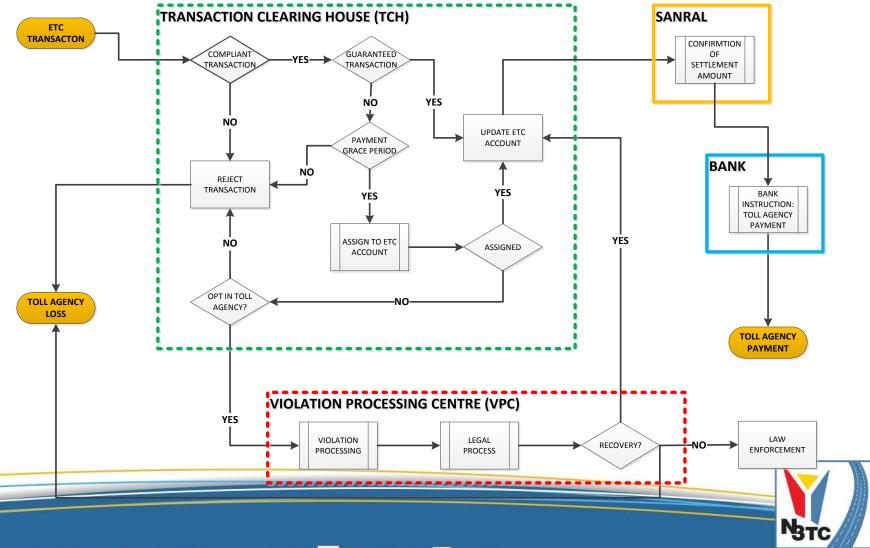




#### **SA Interoperability Model**

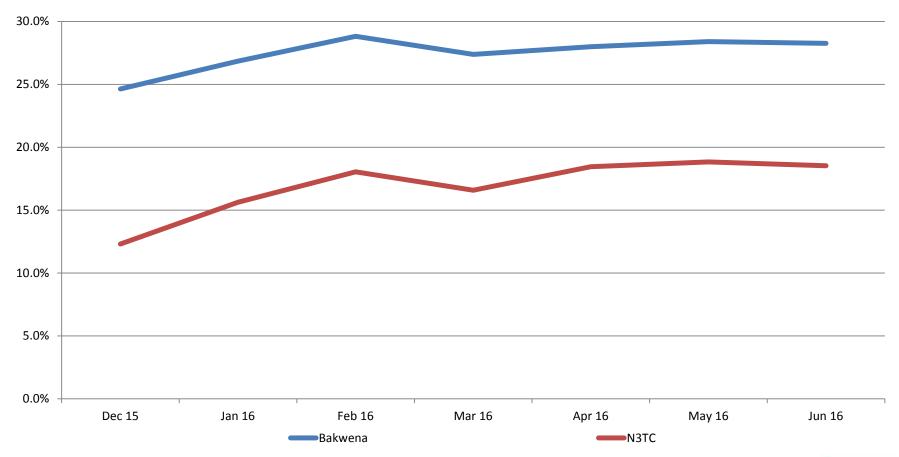
SAFETY, CONVENIENCE, MOBILITY,

#### **Violation Processing**



#### **TAG Market Share**

#### **ETC Market Share % of Total Traffic**





#### Risk Analysis & Lessons Learnt

- Technical Interface
- Legislation
- Political Support
- Payment Compliance
- Third Party Dependence
- Public Relations and Marketing
- Operational Strategy / Change in business processes





## End



www.n3tc.co.za | 0800 N3 HELP (0800 63 4357)

