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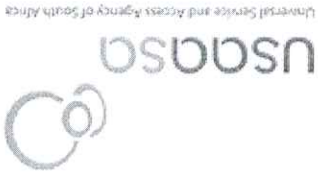
Presentation to the Telecommunications and Postal Services Committee

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Some of the Main Stakeholders



Outline of the Presentation

- How did state-owned telecoms monopolies perform
- What are some of the key drivers of ICT sector
- Impact of globalisation on ICTs
- Components of ICT sector: separation of functions-policy, regulation, operators
- Policy & Regulatory
- international and national policy contexts,
- the regulator and its role in broadening participation in the telecommunications sector;
- matters of convergence,
- electronic communications law and the state of legislation in South Africa.
- Proclamation
- Digital Migration Value Chain

Definition of Telecommunications

- Telecommunications' is defined in *Newton's Telecom Dictionary* as:
The art and science of 'communicating' over a distance by telephone, telegraph and radio. The transmission, reception and the switching of signals, such as electrical or optical, by wire, fibre, or electromagnetic (ie through-the-air) means.
- The definition holds two concepts. The first is the act of communicating, in other words, imparting and receiving information. The second is the means of communicating, in other words, communications infrastructure



Introduction

- **Pre-'94 - Department of Posts and Telecommunications ; Post-1994- Department of Communications(1995/6)**
- **2014 Department of Telecommunications and Postal Services**
- Knowledge is information at work, and information can only work if there are networks!
- Networks that criss-cross and intertwine the globe have become the new arteries to our lifeblood of information.
- These networks make possible multi-trillion dollar transactions hourly
- These are what dreams are made of!
- But there are very poor levels of access to information and communications technology (ICTs) and to telecommunications in developing communities
- It is estimated that the ICT industry in South Africa contributes close to 7% to the gross national domestic product and accounts for 0,5% of worldwide ICT revenue.
- The South African ICT sector is well established and sophisticated



How did the ICT SOCs (telecomms) monopolies perform

- What were the key features of the ICT sector 20 years ago (telecomms, postal, broadcasting and internet)

- Poor network development;
- Poor Universal Service Obligation esp in developing countries;
- Long waiting lists, poor quality of service;

- Lack of customer responsiveness;
- Inefficiently managed and operated;
- Shortage of Capital „
- Shortage of skills and technology;
- Inability of telecomms to enable economic development- knowledge economy



What are some of the Key drivers of ICT sector reform

- Globalisation
- Neo-liberalism/governance paradigm shift
- Technological change

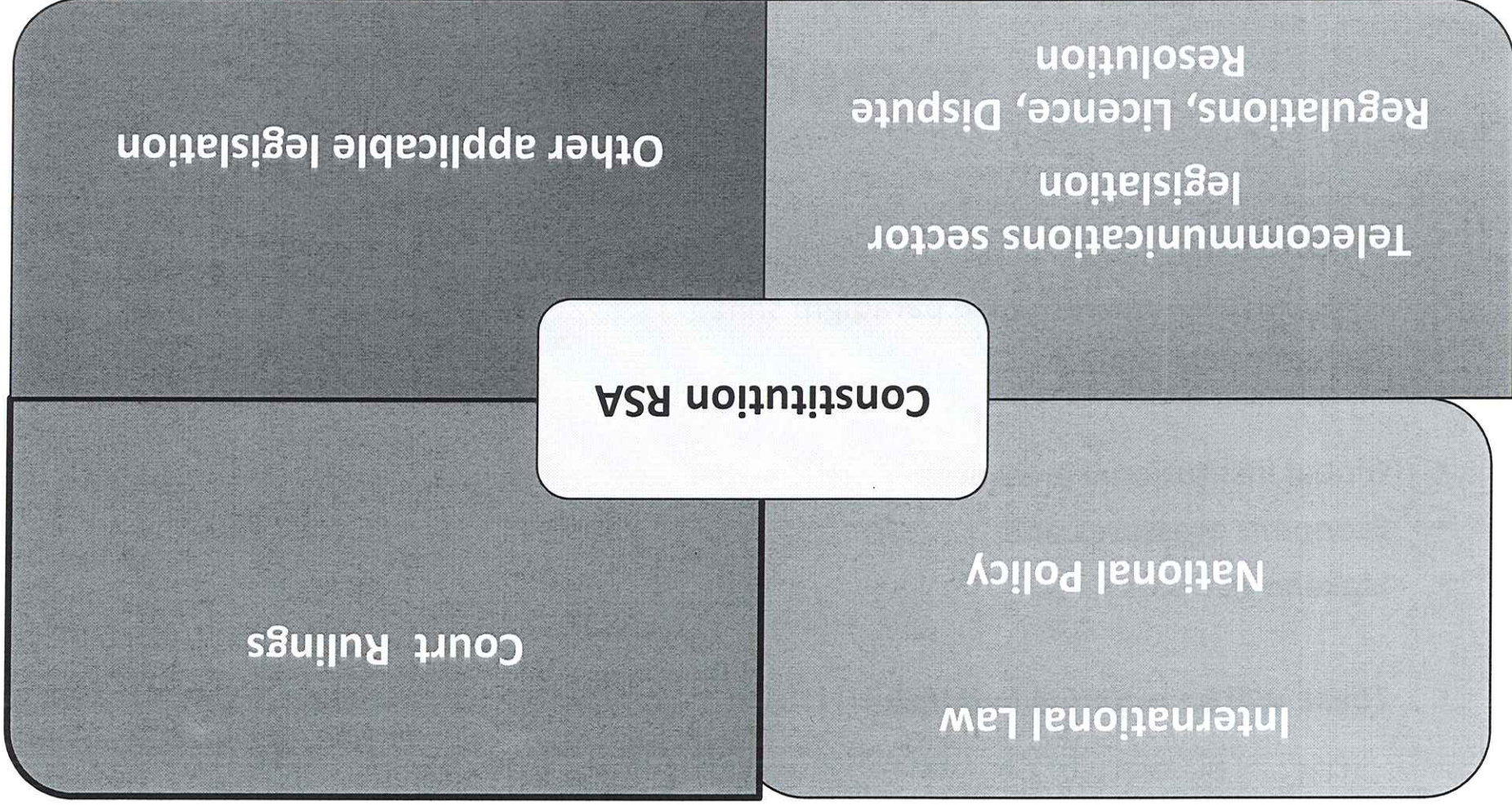
- Global Institutional pressures
- Economic pressures and;
- Stakeholder pressures

- *These will be examine in detail*



Fixing Puzzle Exercise:

The bird's-eye view of the regulatory Model



Why Regulate

- **Monopoly**- telecommunications was seen in the same light as other public utilities, such as water and electricity. Governments generally believed that it was their duty to ensure universal access to such services by providing the services themselves.
- governments thought about telecommunications as a 'natural monopoly'
- regulate telecommunications especially to the extent that a valuable national resource is involved, namely the radio frequency spectrum. Without the exercise of control over how the spectrum is used and who gets to use it, anarchy might prevail or, perhaps even worse – the dominant participants might prevail at great cost to all other participants and consumers.
- That is still true today to a large extent, although the emergence of new digital technologies will make it less so in the future



Why Regulate Continue

- The nature of telecommunications is that it is borderless. To some extent, this is true; however, there is still quite a lot of domestic regulation of telecommunications (Sentech issues).
- the main reasons advanced for specialised regulation of telecommunications are –
 - to maintain control over the use of a valuable national resource, namely the radio frequency spectrum;
 - to control anti-competitive behaviour by dominant players in the market, which in turn leads to the realisation of universal service and to increased quality and choice; and
 - to ensure the development and implementation of effective universal service policies

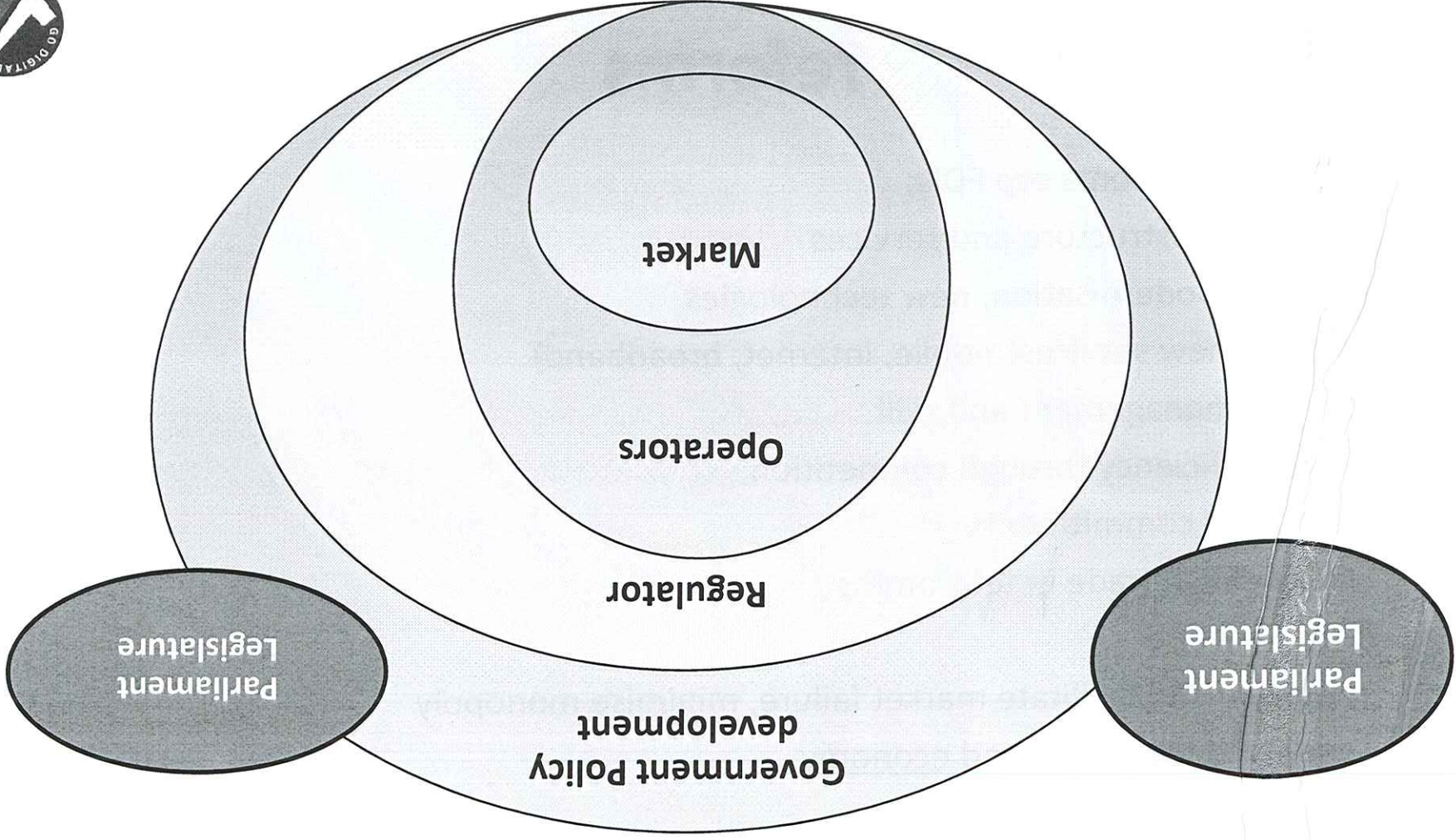


Why government implement sector reforms

- Attract investments esp FDIs;
- Roll out infrastructure and services
- Promote modernisation, new technologies
- Cater for new services(mobile, internet, broadband)
- Improve management and skill
- Market efficiency through competition
- Meet WTO commitments
- Enable global trade in telecomms
- Raise Revenue
- regulations to facilitate market failure, minimise monopoly
- Benefits to the sector and economy



Separation of Functions: Policy, Regulation, Licenses



Degree of Liberalisation

Market Structure	No. of Operators	Market Behaviour
1. Monopoly	One	Uncompetitive-the only provider in the market
2. Duopoly	Two	Uncompetitive-risk of collusion
3. Oligopoly	Three	Uncompetitive- risk of cartel & collusion
4. Competitive	Multiple	Competitive



ICT Regulation Reforms(Five-Spheres)

International law

- Contextualised within global institutions, agreements-World Trade Organisation (WTO155 member state) on trade in services(1995)
- WTO-agreements on Basic Telecoms Services - to facilitate trade in telecoms services
- Regulatory Reference Paper(1996)-90 WTO members made commitments
- World Bank
- International Telecommunications Union,(ITU)
- Universal Postal Union(UPU)

Domestically, in South Africa, the Constitution and myriad legislations – including the following:

- **The Constitution of the Republic of South Africa Act, 108 of 1996** guarantees the right to communicate. Section 16(1) states: Everyone has the right to freedom of expression, which includes – (b) freedom to receive or impart information or ideas.
- The right to freedom of expression has been interpreted to mean not only the right to speak and the right to hear speech but also the right to have access to the means by which to communicate.



ICT Regulation Reforms Continue..

National Policy

- National policy is the responsibility of the Minister supported by the Department which is primarily responsible for telecommunications and postal policy.
- National policy is articulated in government white papers, often lead to the promulgation of legislation, which is primarily the responsibility of Parliament. E.g, the White Paper on Telecommunications Policy led to the passage of the Telecommunications Act in 1996.
- Telecommunications policy must take account of South Africa's commitments in terms of the General Agreement on Trade in Services (Gats)

Role of Minister

- The Minister carries out functions in terms of the ECA Act, and must do so consistently with the Act and the Constitution.
- The Minister is empowered in terms of section 5(4) of the Act to issue policy directions to the regulator.
- The regulatory must carry out its functions(regulations) in terms of such policy directions.
- Act also empowers the Minister, among other things, to invite applications for certain kinds of telecommunication services licences



ICT Regulation Reforms Continue..

National Legislation

- ECA Act, the ICASA Act, 13 of 2000 , the Competition Act, 89 of 1998, the Electronic Communications and Transactions Act, 25 of 2002 ; *The Sentech Act, 63 of 1996 ; and* The State Information Technology Agency Act, 88 of 2002 (Sita Act)

The Telecommunications Act, provided for the primary regulation of the

telecommunications industry and defined telecommunications more narrowly as the means by which to communicate.

Converge and its effects on ICASA-convergence is a term used in the information and communications industries to apply to the blurring of the lines between information

- This inter alia, the promulgation of the ICASA Act – the merger of the Independent Broadcasting Authority (IBA) and the South African Telecommunications Regulatory Authority (Satra) into ICASA being prompted partly by convergence.
- ICASA acts through its Council
- **ICASA Chapter 9 institution?**



ICT Regulation Reforms Continue..

National Legislation

- **ICASA-** must act in a manner that is consistent with South Africa's international law obligations in terms of section 4(1)(c) of the ICASA Act.
- **Regulations are made by ICASA, and approved Minister and published by it**

ICASA is also empowered by the Act to make the following regulations:

- the manner in which applications for certain telecommunications service licences are to be made
- the procedures in relation to applications for frequency use licences
- rules to be used by the parties in negotiating **interconnection or facilities leasing agreements**
- Determining fees and charges for the kinds of telecommunication services licensees where insufficient competition exists, (**MTRS**)
- the annual contributions for telecommunication services licensees to the USF(transferred to USAASA)



ICT Regulation Reforms Continue..

- ICASA also prepares a frequency band plan; prescribes a numbering plan in terms of section 89 of that Act.
- make certain licensing decisions
- ICASA also holds enquiries
- monitors compliance with the Act
- considers contraventions by licensees (Complains Compliance Committee), and initiates prosecutions for contraventions of the Act that are listed as offences
- **The Competition Act**, relates generally to competition matters across all industries. It applies inter alia to the telecommunications industry. Section 3(1) of the Competition Act indicates that it applies to 'all economic activity within, or having an effect within' South Africa.
- **The Sentech Act**, 63 of 1996 provided for the transfer of ownership of Sentech from the SABC to the state regarding broadcasting signal distribution



ICT Regulation Reforms Continue..

National legislation

- The State Information Technology Agency Act, provided information technology, information systems and related services in a maintained information systems security environment to, or on behalf of, participating departments and organs of state'

The Telecommunications Act

- provides that the primary object of the Act 'is to provide for the regulation and control of sector matters in the public interest **in three different ways:**
- **sets out fundamental rules for the telecommunications industry.**(no one may provide a telecommunications service/ signal by radio or use radio apparatus without a licence)
- **initially established of ICASA (convergence)and USAASA to, among other things, manage the Universal Service Fund; and**
- **Act also sets out that ICASA must establish other rules**



ICT Regulation Reforms Continue.

Electronic Communications and Transactions Act (ECT Act)

- The primary object of the ECT Act is to 'enable and facilitate electronic communications and transactions in the public interest';
- It does not regulate telecommunications infrastructure in the manner of the Telecommunications Act.

- Rather, it removes some of the either real or perceived legal uncertainties regarding electronic communications and transactions and facilitates the use of telecommunications, the conduit

- Chapter III of the ECT Act defines 'Data message' as 'data generated, sent, received or stored by electronic means and includes voice, where the voice is used in an automated transaction; and a stored record';
- 'Data' in turn is defined as 'electronic representations of information in any form; Chapter X establishes a 'za Domain Name Authority' to assume responsibility for the .za domain name space.



Types of Regulators

- ***Single-Sector Regulator***

- The single-sector regulator's sole function is to oversee the telecommunications sector. This structure focuses mainly on telecommunications (and sometimes postal) with other government entities responsible for broadcasting and information technology issues.
- The advantage of this option relates to staffing, staff is specifically dedicated to telecommunications issues. This establishes a core of specialised professionals with a strong set of legal, policy, engineering, and technical skills focused on sector issues

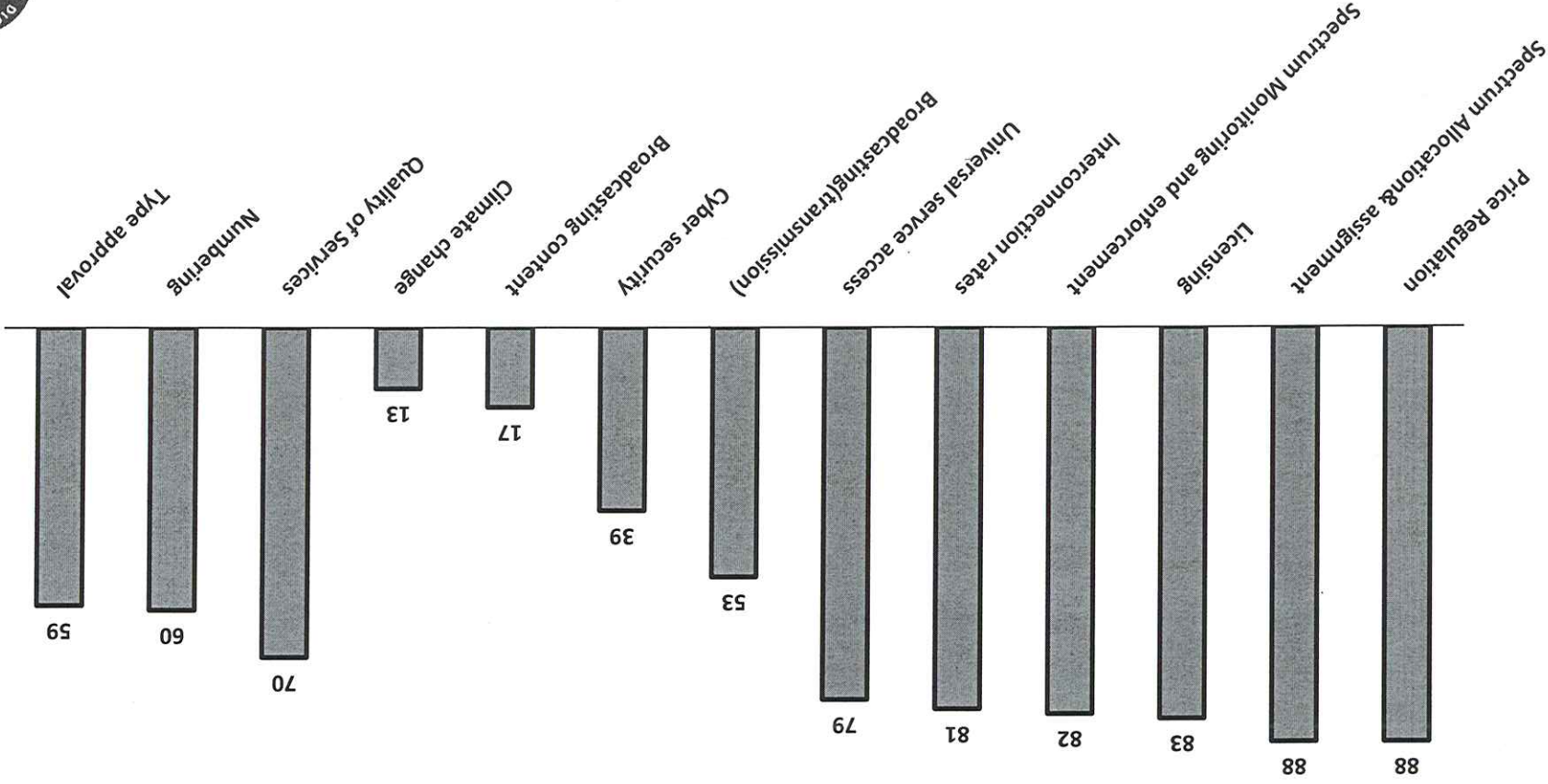
- ***Converged Regulator***

- All communications services i.e. telecommunications, including radio communications, broadcasting and media (and in some instances postal services), are under the umbrella of one agency.
- Several countries such as Austria, Italy, Finland, the Netherlands, Saudi Arabia, Singapore, South Africa and the United Kingdom, have followed the route of converging their institutions dealing with the ICT sector, typically combining formerly discrete agencies responsible for telecommunications, broadcasting or information technology into one entity.
- The advantage is that the regulator, tends to be strong in specialised engineering skills in the telecommunications sector, a critical skill set to deal with complex network issues

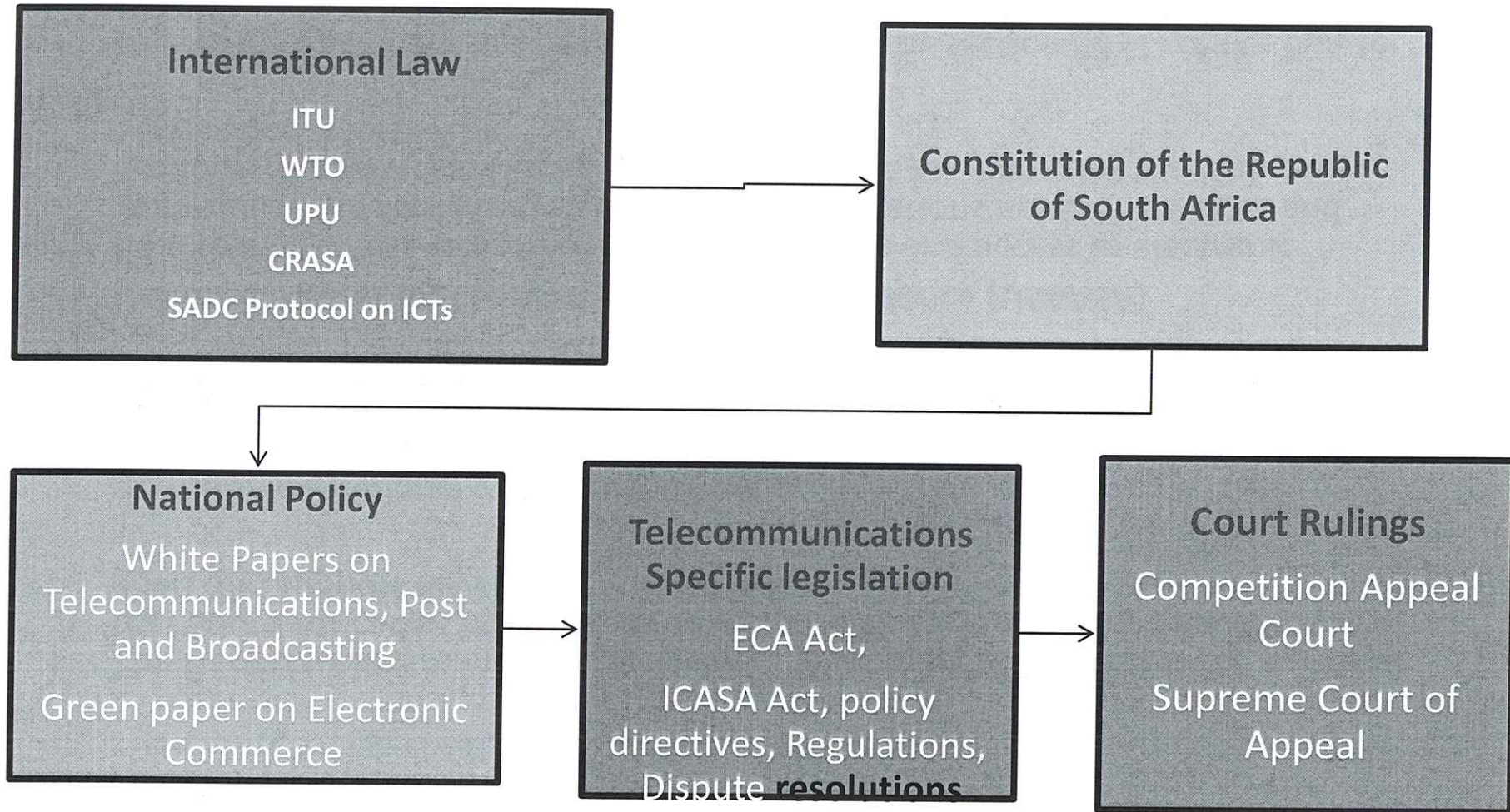


What does the Regulator Do

Mandate of ICASA



Complete Puzzle



2014 Proclamation

- **The Departments'** mandate is to create a favourable ICT environment, ensuring that South Africa has the capacity to advance its socio-economic development goals and support development in Africa.

- developing a national integrated ICT policy
- rolling out a national broadband network
- implementing the digital broadcasting migration policy

Universal Access and Service Agency of South Africa (USAASA)

- its sole mandate is to promote universal service and access to electronic communications services, electronic communications network services and broadcasting services. The agency is responsible for managing the Universal Service and Access Fund.

- USAASA/government has decided as mandated by section 88 (1) of the ECA to subsidise about 5 million poor TV-owning households through the USAF. The subsidy will cover 70% of the total cost of the STB's which include antennas whereas in the 2008 Policy the Antennas were not included.

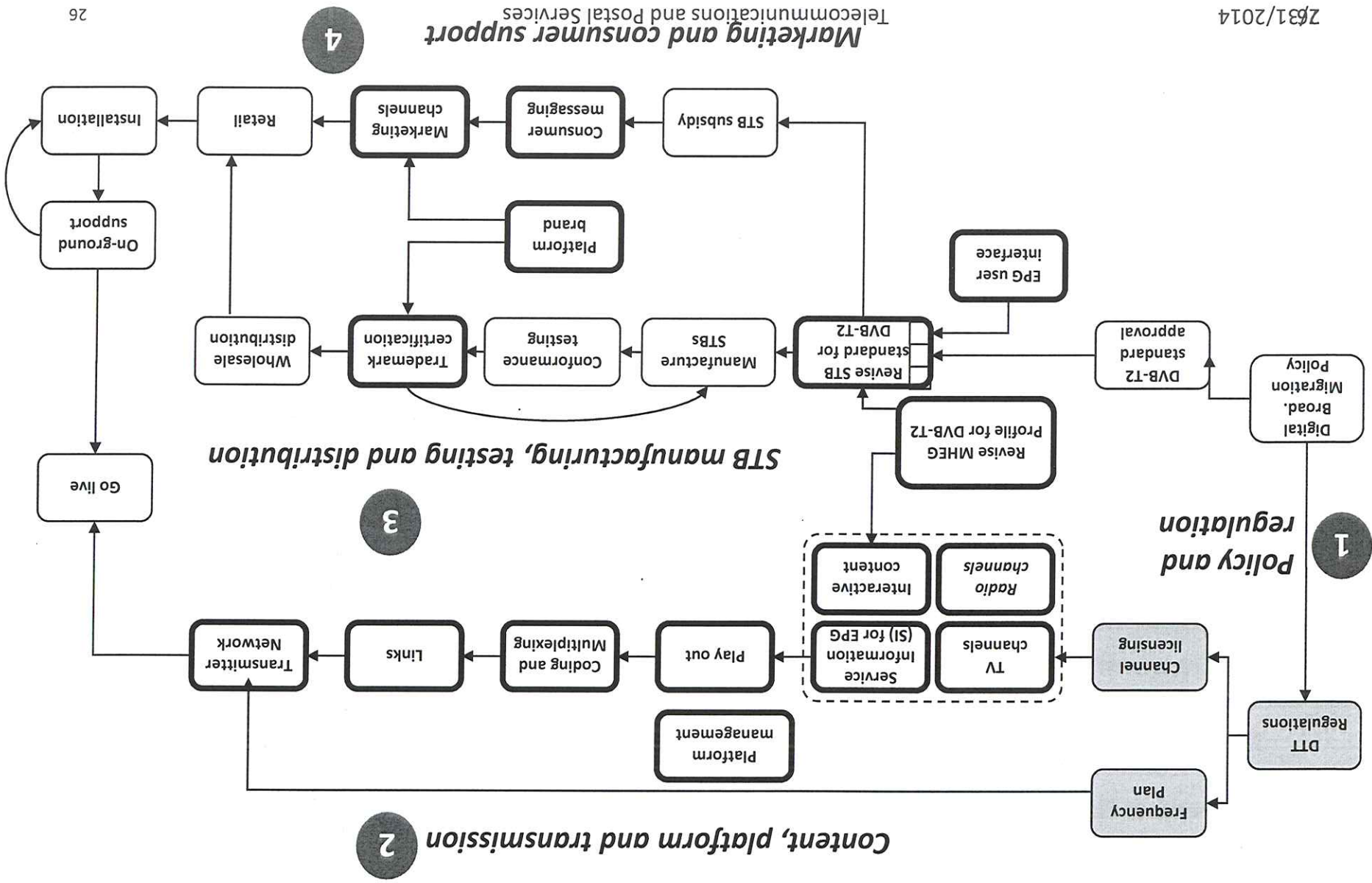


Proclamation continue

- **IKAMVA National E-Skills Institute(iNeSI)**
- The institute offers hands-on training in electronic media, including content design and production, technical operations and content transmission.
- **State Information Technology Agency(SITA)**
- **Sentech**
- Sentech is the signal distributor for Free To Air (FTA) and commercial DTT transmissions
 - Sentech is mandated to provide signal distribution services to the public and commercial broadcasters whereas the 2012 makes inclusion of Sentech as a common carrier on a non-preferential discriminatory basis including services to the community media
- **South African Post Office(SAPO)**
- **.ZA.Domain Name Authority**
- The .za Domain Name Space is responsible for the .za DNA.



Value Chain of Digital Migration



Thank You



