Railway Safety
REGULATOR

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Background

Why the need for a Railway Safety Regulator?

- OHS Act of 1993 and Mines Health and Safety Act do not adequately address railway operational safety
- Land Transport Transitional Act, 2000 does not provide for railway operational safety
- No operator can be both “player” and “referee”
- Large number of operators, with no process for verifying safety performance
- Possible changes in the industry will introduce more operators (and more interfaces)

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Background (continued)

- MOU between Transport Canada and DoT
- S Khosa produced business plan motivating creation of a railway safety regulatory regime
- Oct. 2000 NDoT delegation visited Canada
- Canadian Govt. contracted Mr. Bob Fish to advise DoT in developing legislation
- Project Team established November 2000

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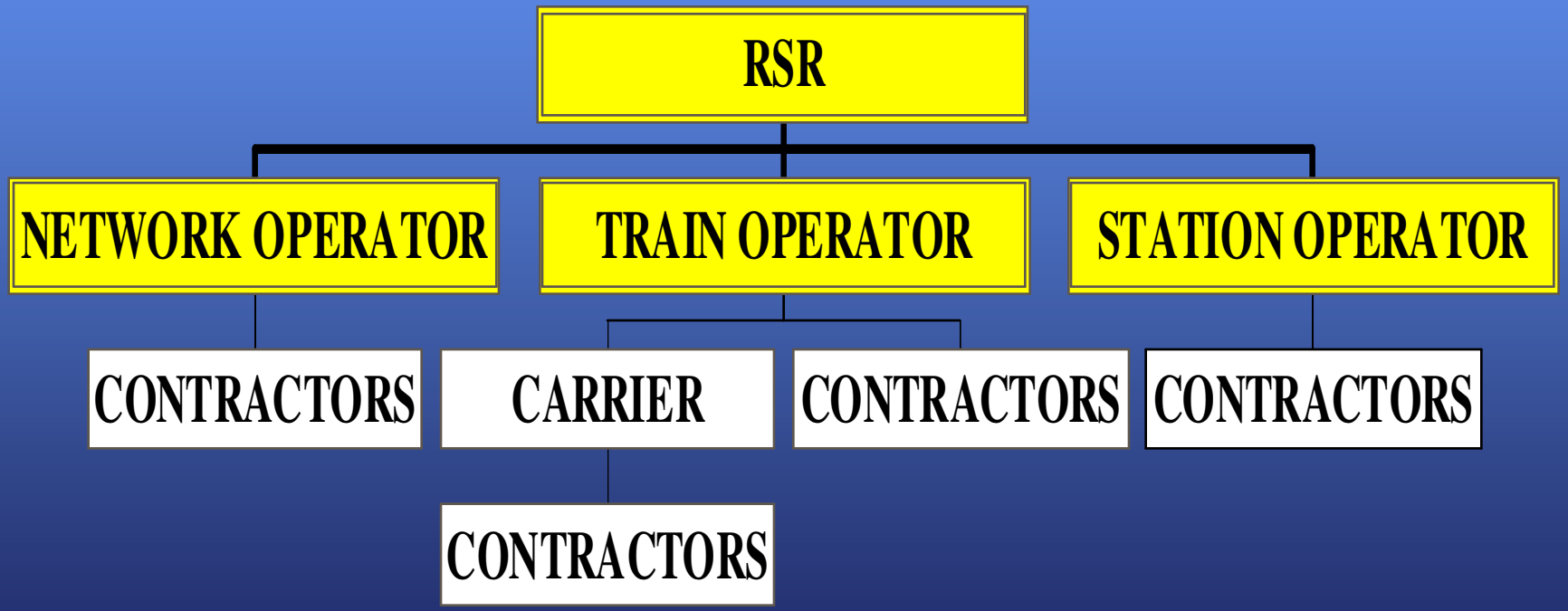
Who will be Regulated



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Developments to Date

- Promulgation of National Railway Safety Regulator Act, 2002 (Act 16 of 2002)
- Appointment of board- June 2003
- Appointment of CEO
- Appointment of GM's
- Issuing of Temporary Safety Permits
- Issuing of "permanent" Safety Permits
- Development of internal processes and procedures

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Developments to date (cont.)

- Development of strategic plan
- Development of structure, evaluation of posts
- Railway Safety Management Regulations
- Railway Safety Standards Development Regulations
- Railway Safety Management Standards: Part 1: General (SANS 3000-1/ RSR 001)
- Lessons learned

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Engineering Involvement

- Development of standards
- Occurrence investigations
- Exempted small operators

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Development of standards

- Regulator Standards
- Industry Standards
- Local Standards

- Recognition of Industry Association

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Regulator Standards

- South African National Standard: Railway Safety Management: Part1: General (SANS 3000-1: 2005/ RSR 001: 2005)
- SANS 3000-2: Technical requirements for Technical and Operating standards: Part 2: General
- SANS 3000-3 to SANS 3000-8: Technical Standards: Parts 3 to 8
  - Track, Civil and Electrical Infrastructure
  - Rolling stock
  - Train Control Systems and equipment
  - Operational systems
  - Railway interfaces with other modes
  - Human factors

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Cascade of Documentation

Railway Safety Regulator Act, 2002 (Act 16, 2002) (mandatory)

Railway Safety Management Regulation, 2004: SMS; SMSR; Safety performance assessment (mandatory)

SANS 3000/RSR Standard

- **Part 1: Railway Safety Management: General : (Describes the elements of Railway Safety Management Regulation and refers to Parts 2 to 8)**
- **Part 2: Technical requirements for Engineering and Operational standards: General**
- **Part 3:Track, Civil and Electric Traction Infrastructure**
- **Part 4: Rolling Stock**
- **Part 5:Train Control Systems and equipment**
- **Part 6:Operational Systems**
- **Part 7:Railway interface with other modes and utilities**
- **Part 8: Human Factors**

Industry Standards

- **Standards generally applicable throughout the industry and which detail Parts 2 to 8**

Local Standards

- **Standards applicable to unique local situations**

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Expertise for the development of standards

- Pool of expertise limited
- RRA recognised (CRE by implication)
- Working groups to develop standards
- Agreed in principle to compensate indirectly or directly
- Commence SANS 3000-2 to -8 next month
- Investigate approval of equipment (not in paper)

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Occurrence investigations

- Definition of Occurrence
- Types of investigation
  - Operator
  - DoL, DME, other organisations
  - SAPS
  - RSR
    - Internally
    - Independent appointed body

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Occurrence Investigations (cont.)

- Complexity increases as interfaces increase and number of operators increases
- Vertical separation of network and train operations- wheel/rail interface
- Ascribing responsibility more difficult
- Operators required to investigate

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Occurrence investigations (cont.)

- Business opportunity
  - Engineering experts to conduct investigations- produce unbiased reports
  - Enable operators to make informed decisions to prevent a recurrence
  - Give insurers confidence of their exposure and actions to address the root cause
- RSR could recognise experts, especially professional engineers
- Make operators and owners aware of value adding; to find the root causes and actions required to address them

Exempting small operators

- Act applies to all operators with track gauge >600mm.
- Applies equally to 100m siding and to Spoornet
- Complexity of SMS depends on risks and size of operation
- Issuing of Safety Permits has shown opportunity to consider exemptions

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Exempting small operators (cont.)

- Need regulations for granting exemption
- Propose exemption sidings of nominal length 500m, subject to:
  - Network operator only
  - No dangerous goods
  - Network certified by a competent person
- Propose Prof. Engineers and Technologists with railway experience certify network safe
- RSR could grant exemption
- Quarterly reports to be submitted

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Conclusion

- RSR top structure is in place
- Shortly be advertising for support staff
- For foreseeable future will need support from railway engineering fraternity
- Highlighted 3 areas, but I could have added risk assessments and training, as examples
- We need to invest in the future, but there are challenges right now that must be faced
- The RSR will depend on you- grab the opportunity;

Thank you

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