RAILWAY SAFETY REGULATOR

RAIL SAFETY ON THE RIGHT TRACK

"The role of economic regulation in the South African rail sector on investment, safety and efficiency."

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1. Why are we talking today about economic regulation?
2. What is happening in the space of economic regulation?
3. What could be the implications for me under economic regulation?
4. What can I do to prepare for economic regulation?

- Why do we need to start the discussion?
- Let us provide some context.

- Economic regulation is well established in South Africa - With various levels of success…

Nersa - Eskom
ICASA – Telecoms
Ports Regulator – Ports Authority of South Africa

- Rail is also well regulated elsewhere from an economic or pricing perspective

- However, until now, only safety regulation has been present in the rail sector in South Africa.
- This is going to change…

- The Economic Regulation of Transport Bill was (after many years) submitted to Parliament towards the end of 2020 and gazetted around six months later.

- Something like 34 engagements and more than a few public consultations later, it was endorsed by PCOT in September and passed by the NA on the 27th of September.

- As it is an S76 bill, it now sits with the NCOP

- The Transport Regulator will, with some conditions, provide economic regulation across the transport sector, including rail.
- This regulator (let's call it the Single Transport Economic Regulator or STER) will assume responsibility for price regulation with a mandate that spans the transport sector.

- In the meantime, the NRP was published, clearly showing the State's intent for private access to the network and devolution of passenger rail in the future.

- That begs the question…What role will economic regulation then play?

- The most common avenue for regulators is through price regulation and licencing of access depending on the enabling legislation.

- This is where efficiency, affordability, financial sustainability and safety meet.

First of all, lets ask, what is economic regulation?

- The word ‘regulation’ itself can mean many things. At its most basic level, ‘regulation’ is treated as synonymous with “law” where regulations are rules or norms adopted by the government and backed up by some threat of consequences, usually negative ones, in the form of penalties.
- However, by definition, ‘regulation’ seeks to make improvements in social outcomes by changing individual or organisational behaviour in ways that generate positive impacts in terms of solving societal and economic problems. At its most basic level, regulation is designed to work according to three main steps:
  - Regulation is implemented, which in turn leads to changes in…
  - …the behaviour of individuals or entities targeted or affected by regulation, which ultimately leads to changes in…
  - …outcomes, such as the improvement of an underlying problem.
- To do that, the STER will have to define what the underlying problem is and figure out a way to address that without creating unintended consequences.
- What structure the STER will have to deal with is not clear yet and may be varied across the sector.

“Currently, access to South African rail networks is currently quite limited, with both the state-owned freight operator, Transnet Freight Rail (TFR), and the state-owned passenger rail operator, Prasa, being vertically integrated and unregulated.
Going forward, the policy position of government is that access should be allowed to the rail network, given its potential to increase the efficiency and productivity of the rail system, via increased contestation on price and service quality. However, access provision also holds significant risks, particularly as regards the sustainability of investment in the rail infrastructure. To a substantial extent, the ultimate outcome of allowing competitive access to the rail network will be predicated on whether the right pricing structure is implemented.”
Truen S, 2022

Borrowing from Sarah's paper…

- In perfectly competitive markets, prices go down until they just cover the marginal cost of service provision through competing firms (railway operators in this instance).
- At this price, the level of a good or service provided is also socially optimal as the price reflects the cost of providing the additional service.
- However, when we are faced with high fixed costs, this approach does not hold up. If prices in rail are set at marginal cost, they will only cover the *operational* costs of providing the service and thus will not cover the fixed costs of the network.
- But, if we raise prices to cover fixed costs, then then we will either not provide the optimal level of services or under-recovery will result in an unsustainable system.
- The solution used in many countries (and here) is to subsidize the fixed cost of the network – this is however expensive and where subsidization is not affordable, pricing systems need to be able to spread the cost of infrastructure between customers in a manner which reduces sector efficiency as little as possible – a trade-off.

- Marginal cost. We should at least recover the costs for providing that service – a price floor.
- Stand-alone cost (SAC), (USA). The cost of bringing in a competitive service
- The Regulator will probably set prices at some point in between…

Several issues need to be taken into consideration with the revenue a regulated entity is allowed to recover dependent on:

- Valuation approach (replace or repay)
- Depreciation (intergenerational equity)
- Operational expenditure (incentivise or allow everything)
- Efficiency incentives (safety vs operational efficiency)
- Volume forecasts (inherent circularity depending on elasticities)
- Claw Backs and risk sharing (financial sustainability vs incentivising good business sense)

Pricing set too high or too low
Debt or subsidy mix wrong
Efficiency/safety emphasis wrong

- Price elasticity dependent may result in under recovery
- not achieving socio-economic objectives
- Again may result in not recovering operational costs
- Ageing asset base: operating assets approaching or exceeding the useful life
- Resultant increasing operating costs as a result of running assets beyond their intended design lives
- Capex implementation falling behind due to financial constraints and limited internal capability or capacity,, even when these receive separate funding
- This culminates in increased safety concerns and lower efficiencies

- Given the high fixed-cost nature of rail, it is critical to maximising volumes in order to efficiently spread costs.
- Ramsey-type pricing systems are specifically designed to achieve this using price differentiation.
- Price differentiation allows the infrastructure manager to maximise the volume of freight carried because prices can be set low enough to make rail attractive to customers who would otherwise use other modes of transport.
- While these customers do not cover a ‘fair’ share of fixed/variable costs, they nevertheless do cover some fixed costs and thus help to spread the burden of fixed costs among a wider customer base.
- System-based pricing could be advantageous – Cargo Dues in South African Ports
- Where capital subsidies are not applied, use a repayment valuation methodology (HC or TOC)
- Linking operations, spending and safety outcomes in a transparent efficiency incentive - WEGO in Ports

- Economic Regulation in the Rail environment is coming – IRERC already creating capacity
- You will either be a regulated entity or deal with a regulated entity
- The ”monopolies” will deal with it first
- Access (and I include here concessions) will also be dealt with through the STER.
- Freight rates and Passenger ticket fares – get to understand how it works
- STER’s objective will be to look at the logistics supply chain more holistically and may introduce operational incentives on the interface of the different modes
- All of these have safety concerns, and a very close working relationship between RSR/ATNS/SAMSA/CHM etc., with STER, will be critical.
- Participate

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Thank You