

Avsec –
Scope of Review:
Initial views

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Avsec

- Avsec is a statutory part of CAA
- Legislation requires certain security services at airports
- Avsec is authorised and certified by CAA as the provider (potentially contestable)
- Avsec is a monopoly provider

Range of services

- Minimum security standards – set by legislation (adopted from ICAO) and country regulators (US and Aus in particular)
- Service levels – demanded by airlines (but not contractual or statutory)
- Service levels – constrained by airport space (commercial lease)
- Non-statutory services – some contractual

Pricing and funding

- 3 year levy
- Passengers pay (levied on ticket)
- BAU costs divided by projected passenger numbers for aircraft with 90+ seats
- Cost of capital not included
- No mechanism to adjust intra-period for unplanned material changes in required services or volumes
- Political process and decision-making for levy – compared to commercial pricing or neutral price regulation

Key cost variables

- Prescription of required services
- Technology to deliver services
- Passenger volumes to be screened
- Timing of passenger arrivals and departures

Key cost variables (cont'd)

- Labour costs to deliver services (manning levels and pay rates)
 - Customer demanded services (contracted delivery)
- = These change over short, medium and long term
- = Significant short to medium term changes (over few days to 24 months) after levy has been set are not captured in pricing or funding

Objective

- **Productive efficiency** – using the minimum amount of resources to produce a certain volume of output given available technology.
- **Allocative efficiency** – efficiency of pricing – where prices closely reflect efficient costs – and efficiency of other value components (service, quality and the like).

[Allocative inefficiency results in a ‘deadweight loss’. In short, higher prices and/or a reduction in service, quality, choice or some other element of value causes some consumers to switch to otherwise inferior or less satisfactory products/services. Allocative inefficiency has two dimensions: price effects and non-price effects]
- **Dynamic efficiency** – efficient investment and innovation over time.

[The optimal introduction of demand-enhancing new products and cost-reducing production processes over time]

Core problem

- Monopoly providers – of any kind – are inefficient over time. This is a well established.
- Reasonable assumption that Avsec will be less efficient – productive, allocative and dynamic – than it could and should be
- Examples of likely specific inefficiencies below

Core solutions

- Need mechanisms that proxy behaviour and outcomes that would occur if Avsec was operating in a competitive environment
- Introduce a suite of mechanisms on a staged basis
- Examples outlined below

Customer

- Any business exists to serve its customers – to provide the best possible solution to meet customers' needs (price, quality and other value components) on an on-going basis
- In short, customer ordinarily drive a business. So any business must have a clear understanding of its customer.
- Who drives Avsec's business? Airport ? Passengers? Politicians?
 - = ICAO rules and overseas aviation regulators
 - = Airlines (on time departure)
- Passengers (and the aviation industry in general) are key beneficiaries – but not the drivers

Avsec's approach

- Highly procedural (mechanistic)
- Very operational short term focus
- Confused organisational structure
- Uncertain organisational capacity
- Bureaucratic processes
- Political back-drop in reactionary (security) environment

Measures and mechanisms

- Understanding the business
- Service definition
- Labour
- Pricing
- Operational processes

Measures and mechanisms *(cont'd)*

- Infrastructure (airport space)
- General assets review
- Corporate capacity
- Organisational form

Understanding the business

- Develop a set of analytical tools, including:
 - A financial model that allows different cost/price scenarios to be properly tested
 - Carry out sensitivity analysis on all the key price and cost variables to be understand and measure potential impacts
 - Better understand correlations:
 - Costs and revenues over time
 - Passenger volumes, levy levels, and labour costs over time
 - Labour costs and passenger flows on a daily, weekly and monthly basis
 - [and so on]

Service definition

- Define more clearly, and in a consumer-focused manner, the range of services delivered by Avsec
- Set out this out in a Services Framework – as a commercial service provider would

Labour

- Need to improve efficiency of labour costs over time
- High probability of 'monopoly rent' in collective agreement
- To reduce cost and improve efficiency, develop transition path to achieve:
 - Better optimisation in staffing levels
 - Greater flexibility (analogous to Port of Ak v Port of Tauranga) – need to better match service provision (and cost of provision) with service demand
 - Pay based on performance, not years of service
 - Pay based on skills for position, not same pay for all
- 92% on collective exposes business to unnecessary risk – reduce to below less critical level

Pricing

- Establish an efficient and practical Pricing Framework (based on robust principles) for Service Framework
- Pricing should closely reflect marginal (efficient) costs:
 - In principle, costs that don't vary significantly with use should be charged as fixed prices. Costs that vary with use should be charged as variable prices
 - In addition, incentives are best aligned when users pay
 - These basic principles need to be applied to and by Avsec in a practical manner with an appropriate transition path

Pricing (cont'd)

- Evaluate potential pricing structures, including:
 - A mechanism for adjusting prices intra-period for unplanned material changes in required services or volumes
 - An appropriate cost of capital (currently not charged)
 - Option for an annual network charge (paying to connect to the fixed cost elements of Avsec's security system that meets minimum statutory standards)
 - Variable charges for different levels of service – eg different rates of through-put, and different levels of customer service

Pricing *(cont'd)*

- Also:
 - Charge all users of Avsec services, whether passengers or not
 - Improve contract charges for non-core customer-demanded services
 - Develop pricing options for delivering regulated services on a customer-specific (or airline specific) basis
 - Explore options for possible penalties on passengers (for carrying unlawful items) or airlines (for failing to properly advise or check) – strengthening incentives on other parties as part of a package of measures to achieve regulatory requirements in a more efficient manner

Pricing *(cont'd)*

- Transition process on pricing regulated services from political decision-making to:
 - More structured statutory process that better mimics a commercial process (to be specified), or
 - Objective regulatory process with prices set by Avsec on a commercial basis subject to:
 - ‘Disclosure’ review by Commerce Commission (like airports); or
 - Price determination by Commerce Commission on application by an interested party; or
 - Full price determination by Commerce Commission [like electricity lines companies and Fonterra (in relation to raw milk sales to third parties)]

Operational processes

- Recognise that Avsec operational processes are reputed to be well regarded by overseas peers.
- Process of improvement seems to be reactive and short term
- Ongoing experimentation is vital. Recommend a dedicated team to model and test possible configurations and methods to improve (on an ongoing basis)
- Trial 3rd party provider at one (smaller) airport – to get comparative benchmark (on costs, process method, and compliance issues)

Infrastructure (airport space)

- While Avsec's passenger processing space at AK international appears to be constrained space, it's peak capacity seems to match the airport's peak capacity
- If regulated service delivery requires more space, ALL's incentives are aligned with Avsec's (and the airlines') to provide the additional space (otherwise ALL's airport is not useable)
- The recent ad hoc political approach to increasing space is clearly suboptimal

Infrastructure (airport space) (cont'd)

- Need to get this issue (across all airports) on a more consistent and 'mature' basis
- Airports should be closer to commercially neutral in relation to providing additional space (rather than close to commercially harmed)
- Pay for queuing space if required to optimise service – recover in levy. As with any pricing changes, do cost-benefit first

General assets review

- Systematic review of all assets – including plant and equipment, premises and leases, vehicles, uniform costs, and so on
- Very likely to be higher than if subject to competitive pressure
- Note (among other examples) that Avsec's AK office facility is surprisingly large.

Corporate capacity

- Need to 're-balance' Avsec's current short term operational focus
- Refine roles to better service areas for priority improvement
- Enlarge strategic and innovation capacity for Avsec
- Review quality of Avsec's financial and organisational systems
- Clarify organisational balance and accountability between Shared Services, CAA (regulatory) and Avsec
- Not clear that new organisational structure will be effective (Avsec should be able to purchase services from 3rd parties if Shared Services not up to scratch)

Organisational form

- Avsec is a service provider
- Operates within the industry regulator
- Two businesses are entirely different – different organisation and competencies required to address different strategic and operational challenges to achieve different objectives
- Given the nature of its business, Avsec would be better as an SOE.
 - It is analogous to Airways Corporation as a provider of regulated (and some unregulated) services.

Organisational form *(cont'd)*

- Avsec is more likely to delivery its services efficiently over time it is organised and incentivised to operate as if it were private business in a competitive environment. This is, in essence, the purpose of an SOE.
- Transitional issues would need to be addressed – including legislative changes
- Even in current form, Avsec should be run within CAA as if it were a separate company (in terms of processes and approach) – also required to apply to the CAA be the provider of aviation security, and follow a evaluation process as if service was contestable (promote strong disciplines and performance by Avsec)
- Transition to actual contestability

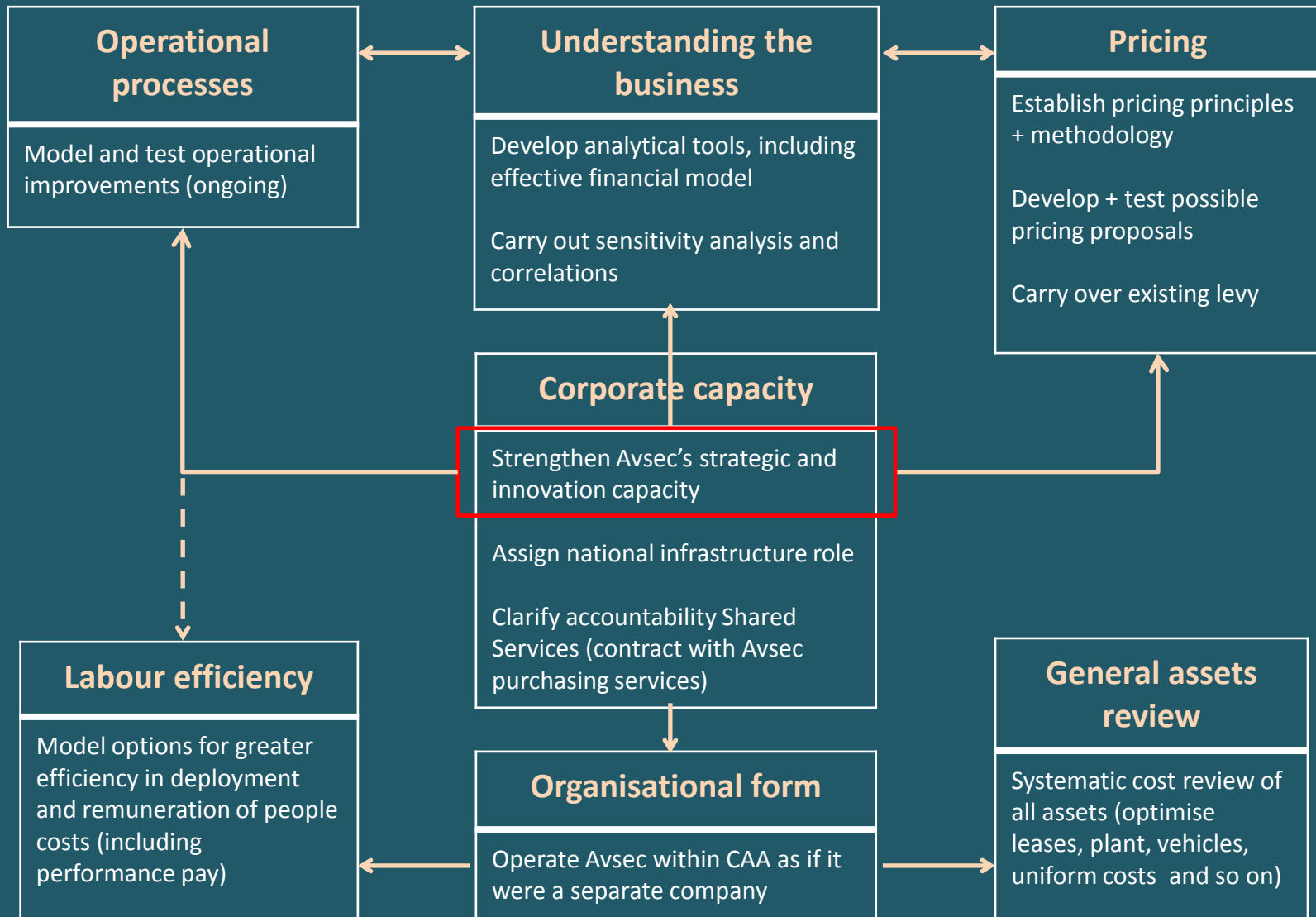
Work plan

- The work-streams outlined above would be implemented in series of building-block stages. The following slides gives an indication of the possible staging
- The subsequent slide focuses on the 2013 work-streams – in particular:
 - how one relates to the others (and overlays the work-streams proposed in the draft terms of reference for the review)
 - the specialist skills required for each work-stream

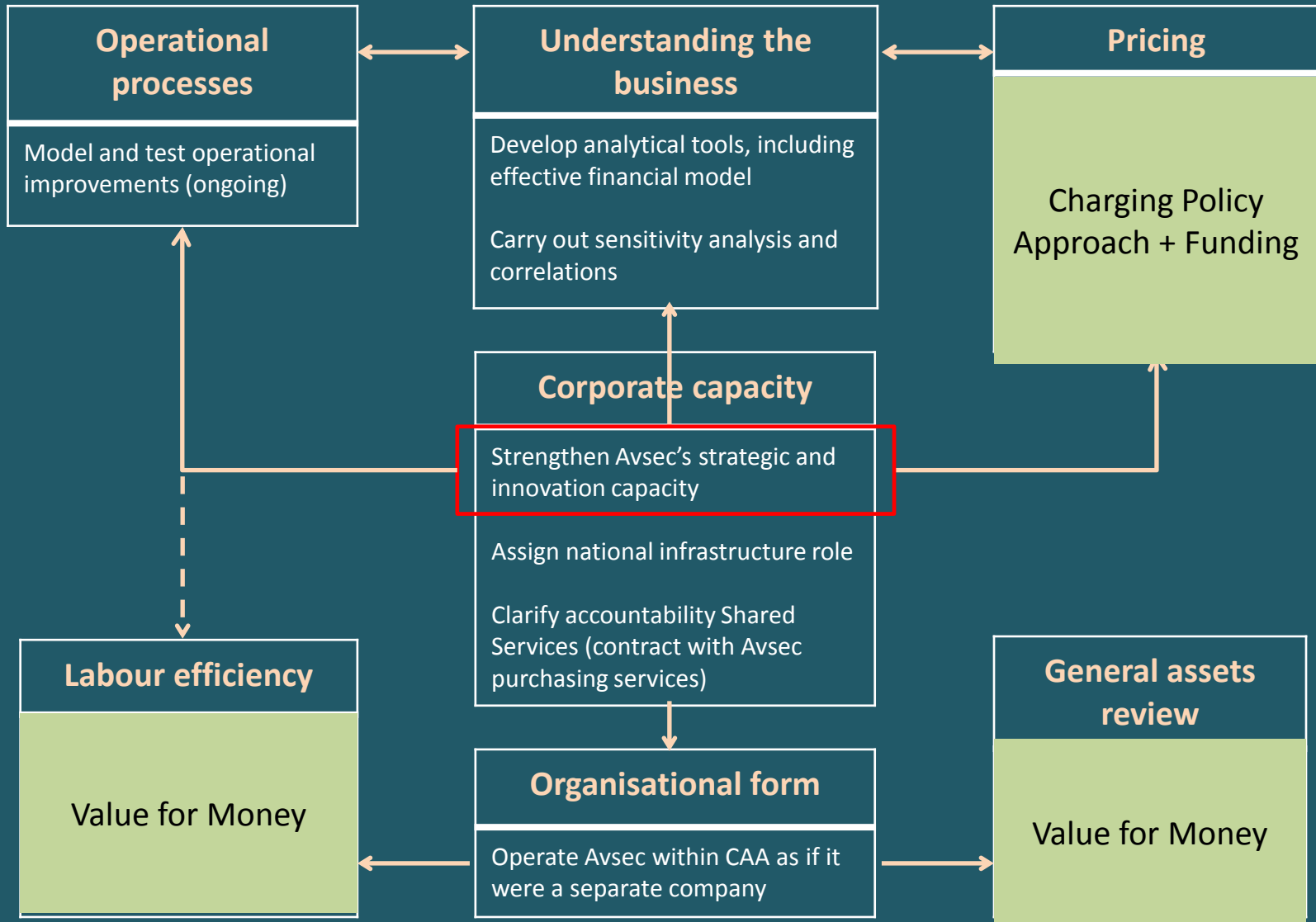
	Understanding the business	Service definition	Pricing	Operational processes
2013	<p>Develop analytical tools, including effective financial model</p> <p>Carry out sensitivity analysis and correlations</p>		<p>Establish pricing principles + methodology</p> <p>Develop + test possible pricing proposals</p> <p>Carry over existing levy</p>	<p>Model and test operational improvements (ongoing)</p>
2014	<p>Scenario planning for significant changes in aviation security</p>	<p>Outline services/products provided in Services Framework</p>	<p>Establish Pricing Framework for Service Framework , including:</p> <ul style="list-style-type: none"> – charge all users – recover cost of queuing space if optimal – intra-period price adjustment mechanism – penalties for passengers (airlines) – formal disclosure rules on Avsec 	<p>Introduce ability to distinguish passengers from others (and their employer) (for charging purposes)</p> <p>Pilot 3rd provider at small airport</p>
2015	<p>[Ongoing]</p>	<p>[Ongoing]</p>	<p>Introduce new pricing components:</p> <ul style="list-style-type: none"> – fixed charged for fixed costs – service level charges – recover cost of capital – chargers for airline- specific services – ComCom oversight of prices (if required) 	<p>Introduce ‘premium’ or airline-specific services (if demanded)</p>

	Labour efficiency	General assets review	Corporate capacity	Organisational form
2013	Model options for greater efficiency in deployment and remuneration of people costs (including performance pay)	Systematic cost review of all assets (optimise leases, plant, vehicles, uniform costs and so on)	Strengthen Avsec's strategic and innovation capacity Review quality of Avsec's financial and organisational systems Assign national infrastructure role Clarify accountability Shared Services (contract with Avsec purchasing services)	Operate Avsec within CAA as if it were a separate company
2014	Optimisation staff numbers (low profile)	Change leases + premises (lower cost)	Allow Avsec to purchase any Shared Services from 3 rd parties (if Shared Services is poor)	Require Avsec to apply to be the provider of aviation security
2015	Restructure collective – get greater flexibility, better align rates to skill + demand	Ongoing optimisation	Transition to SOE	Establish Avsec as a an SOE
2016	Aggressive transition path to reduce % on collective			Make provision of aviation security contestable (subject to CAA oversight)

2013 Work-streams



Overlay draft TOR



Comparison

- Recommended review incorporates the three workstreams in the draft terms of reference, but expands (pricing, in particular), increases focus (labour costs), and adds (corporate capacity, understanding the business, and operational processes)

Resources

- To do it well, the project would need additional external resources, including for example:
 - Operations research analysts (queuing and process-flow efficiency options)
 - Financial and economic advisers (for pricing, and developing analytical tools)
 - Financial systems reviewers (quality of budgeting and cost systems)
 - Labour market adviser (to work with HR team on optimising and transitioning labour force)
 - Provision for external legal advice (if required)
 - Property adviser (on options for optimising premises and lease arrangements)

Conclusion

- Avsec operates on relatively short term, mechanistic, reactive basis with limited strategic capability
- In reality, it operates in a constantly changing environment, where the type of services it is required to provide, the way in which they are provided, and the costs of providing those services, can all change in relatively short time-frames
- Avsec needs to constantly innovate, and anticipate those changes, so it can perform efficiently across the organisation on an ongoing basis