Customs IS Strategy 2014-2017

Creating the climate to enable transformation

NEW ZEALAND
CUSTOMS SERVICE
TE MANA ĀRAI O AOTEAROA

PROTECTING NEW ZEALAND'S BORDER

New Zealand Government

Introduction to the IS Strategy

The Customs IS Strategy provides a 4 year view for the priorities for ICT investment across the New Zealand Customs Service.

The strategy is delivered in three components:

Customs IS Strategy	The Customs IS Strategy addresses the organisational and external challenges facing Customs, and identifies the activities that Customs IS will undertake to support the transition of the agency to its long term vision.
Customs IS Technology Roadmap	The Customs IS Technology Roadmap identifies a 4 year change vision across the critical ICT components that support Customs business, including the Border Management System, FMIS, information management, mobility, end user devices, operations management security, connectivity and infrastructure.
Customs IS Technology Architecture	The Customs IS Technology Architecture defines a more detailed technical vision for the delivery of technology services across Customs and the wider border sector. This document is primarily focused on providing technical direction to Information Services.

Customs focus has evolved, and interactions and channels available to customers have increased exponentially.

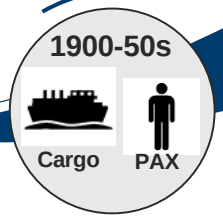
Digital border driving physical trade
Multiple interactions, multiple channels
Online Lodgements via TSW
Intermediaries
Facilitator of Economic Growth
Perishable goods driving processing speed
Fast Freight & Private Importation

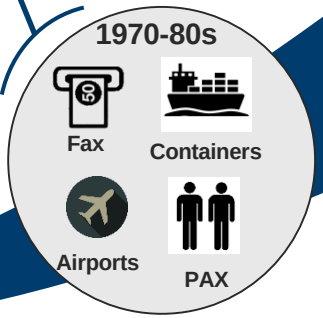
Jet Age
Air travel boom
Containerisation
Facilitating trade
Drug harm avoidance

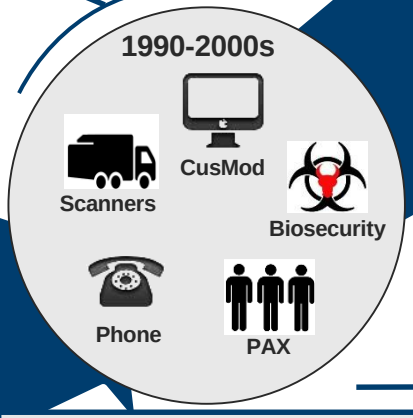
Border Protection
Automation – CusMod
Bio security
Aviation security

Vessels
Cargo Shipping
2 World Wars

Customs House
Human Resources
Pen & paper
Revenue Collection





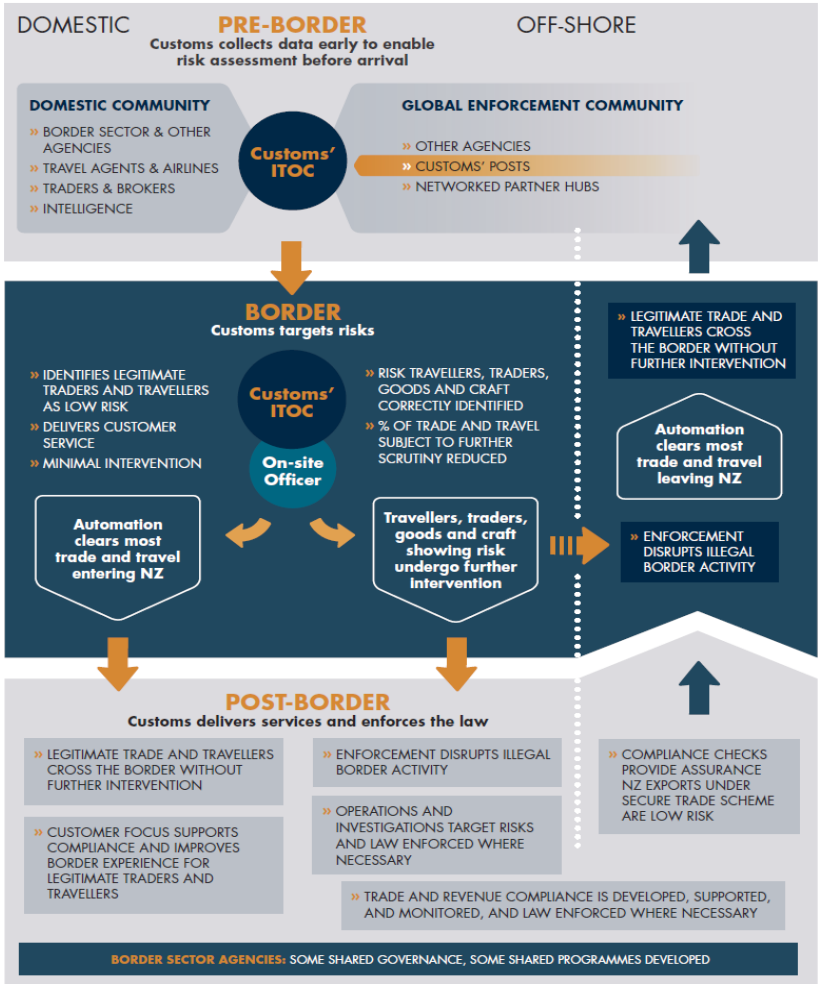


Implications for Customs
Rapid year-on-year data growth
Reduced acceptance of transactional delays
Increasing sophistication of customs avoidance
Increased reliance on accurate information while mobile
Increasing requirements for business change within systems
Need for closer and more responsive engagement with customers and stakeholders

Long Term Vision for Managing the Border

To address volume growth in passenger and trade volumes, and an increasingly complex risk environment, the Customs Statement of Intent for 2014-2017 identifies a future-state operating model with implications for Customs IS

Increased reliance on automation	The long term vision sees an increasing reliance on automation to process passenger and trade crossing the border. Systems that support this automation will be critical
ITOC provides co-ordination	Customs ITOC takes a central role in co-ordinating pre-border and border control activities. Customs IS support of ITOC will be essential
Connectedness is key	For Customs to enable the long term vision, real-time connectivity to information and systems will be required



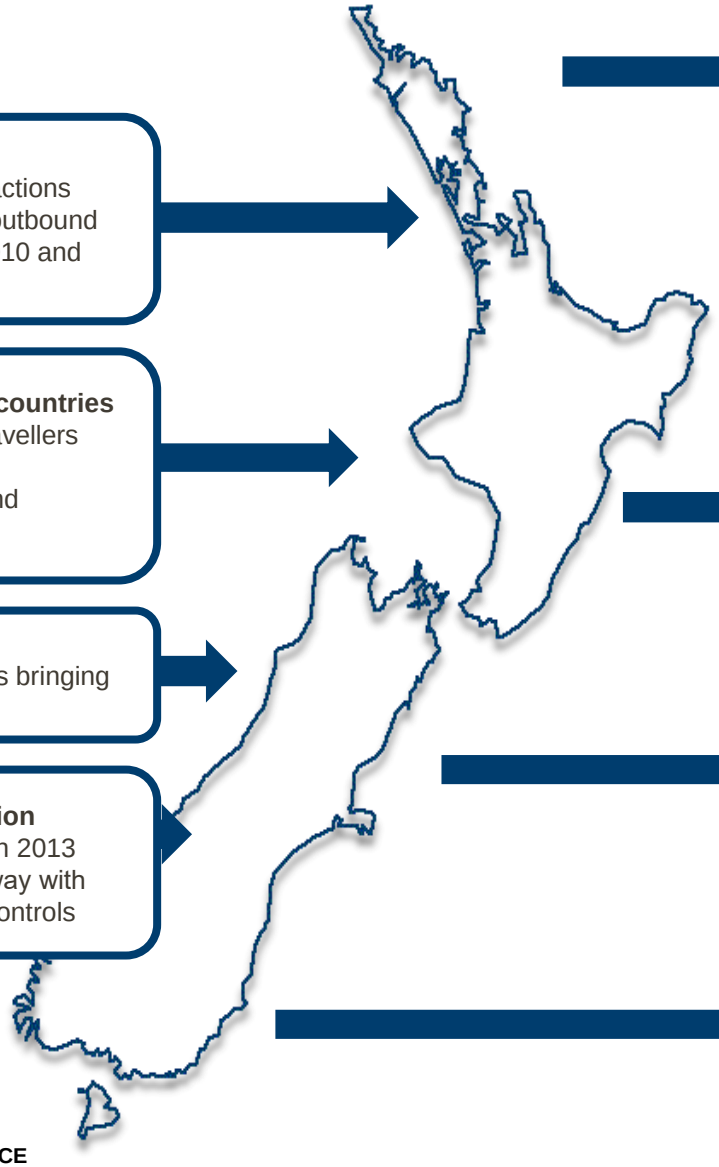
External Drivers for Change

Trade increasing year on year
- 9.7 million import and export transactions
- Forecast increase of inbound and outbound travel of 25% increase between 2010 and 2018

Travel growth from non-traditional countries
- Growth of non-English speaking travellers
- 509,000 Chinese tourists by 2020
- 10.7 million international arrivals and departures in 2013

Vessels
- Cruise market booming, 121 cruises bringing 200,000 passengers in 2013-14

Illicit traders increasing sophistication
- $57 million worth of drug seizures in 2013
- A “technology arms race” is underway with those looking to bypass Customs controls



Intelligence led
Increasing trade and passenger volumes will require effective automated intelligence support systems

Efficiency
Customs systems must enable an efficient workforce, automating functions where appropriate, eliminating duplication and reducing processing delay

Cost effectiveness
Customs systems must enable a cost-effective agency, supporting re-use and minimising costs across both border sector agencies and the external stakeholder community

Information management and collaboration
Customs will drive additional value from existing data sets, and make more intelligent use of both structured and unstructured information

Enabled workforce
Customs will enable a mobilised front-line workforce, providing the right information & functions in the right place at the right time

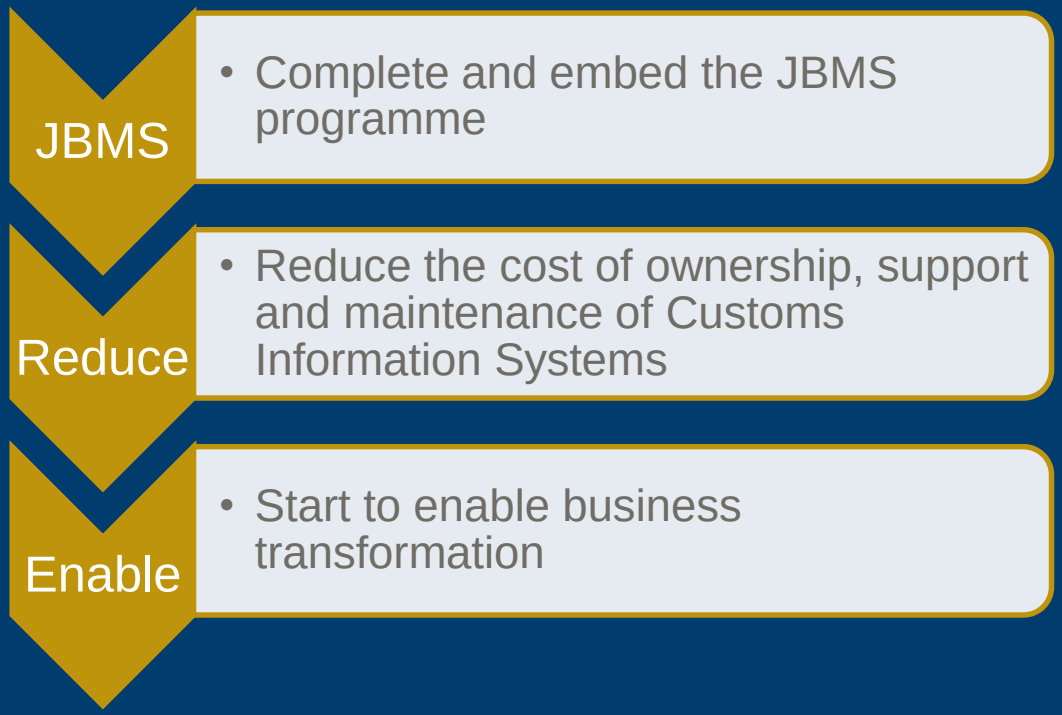
Government and Sector Drivers for Change

Result 7: Reduce the rates of total crime, violent crime and youth crime Result 9: New Zealand businesses have a one stop online shop for all government advice and support they need to support and grow their business Result 10: New Zealanders can complete their transactions with government easily in a digital environment Support of NZ Open Data Standards	**Better Public Services** *These drivers will improve public services once implemented* 	Further integration and collaboration with other sector agencies covering both service and information provision Increasing requirement for high reliability integrated online systems to enable businesses to import and export quickly and efficiently. Growing need for simple and reliable online systems for New Zealanders travelling for business or recreation which enable both traditional and innovative modes of access
Common Capabilities will free up Customs resources to focus on Border Management Systems Consume before Buy before Build Automation of low value, routine tasks Move resources from Run to Transform	**GCIO** *These drivers from the GCIO need to be accounted for* 	Transition away from Customs built or purchased solutions to common capabilities will require a change from highly customised solutions to a make-it-work approach and increased commercial acumen Two speed ICT provision; with a strong team supporting a reliable business as usual environment, coupled with capacity flexible services supporting business transformation
Common services approach across sector Increased demand for provision of systems to sector partners who are transforming their business	**Sector** *These sector-level drivers impact on the plan*	Increasing need to work with sector partners to share information and provide systems and services

The future of Customs IS 2014-2017

- Experts in Border Management Systems
- Enabling an agile organisation
- A trusted partner for the Customs business

IS Focus


JBMS
• Complete and embed the JBMS programme
Reduce
• Reduce the cost of ownership, support and maintenance of Customs Information Systems
Enable
• Start to enable business transformation

IS Strategic Themes

To support the Customs Challenges, IS will deliver change through a series of Strategic Themes:

JBMS

Enable

Intelligence Led

An Intelligence led, risk based approach will ensure Customs is positioned to combat illicit traders and organised crime more effectively and efficiently, and reduce harm to the community

- Integrated intelligence and operational data sets that support a more efficient frontline and interception capability
- Customs will offer sector wide alerting services to border agencies
- Real-time data sharing capabilities between operational functions across the agency
- Passenger imaging and biometric passenger processing capabilities

Reduce

Efficiency

Efficiency for Customs will ensure the best possible services are delivered within baseline

- Effective collaboration between Customs IS teams
- Integrated systems and increased reuse reduce time to deliver and cost
- Increased automation (e.g. Scaled SmartGate and Next Generation SmartGate)
- Deliver well defined transparent and agile services to Customs

Reduce

Cost Effective

ICT solutions must be fit for purpose and cost effective

- Strategic sourcing of solutions, including consumption of government Common Capabilities
- Pragmatic transition to consumption based ‘as a Service’ constructs
- Extract value from existing Investments, focus on reusable assets, optimise capacity

Enable

Information Management and Collaboration

Information drives intelligence. Developing new information sources, and extracting value from the information Customs holds in systems is key to future success

- Drive additional value out of Customs data and information sets
- Develop and execute Information Management Strategy
- Look for opportunities to intersect with sector information management work
- Establish Customs wide content management and workflow capability

Enable

Enable People

The right information and right functions in the hands of skilled officers drives better outcomes

- Customs IS will engage with Customs business units to understand requirements and identify where technology can transform current processes
- Mobilise frontline staff through real-time connected access to information
- Increase device choices to provide the right form factor for Customs staff
- “Right information & functions in the right place at the right time“

IS Principles

Principles help guide how services are provided, how solutions are developed and how Customs IS will interact with Customs business units and other stakeholders. The following principles are proposed:

Know what success looks like	Done is better than perfect. Look for short-term incremental improvement
Consume before buy before build	Consume Common Capabilities and services from providers in preference to building systems Buy COTS applications where they meet IS customers needs and services are not available or fit for purpose Focus development effort on functionality that is specific to Customs (e.g. JBMS, CusMod and Nexus)
Outcome based delivery	Delivery of programmes will be on a business outcome basis. Prioritise business outcomes. We will give preference to activities that give value to the business
Responsiveness and agility	Customs IS responds to changing business demand and priority, and meets requirements within reasonable timeframes. The speed of ICT change matches the business demand for change

IS Principles (continued)

Pervasive security and risk management	Security is pervasive in all Customs systems and aligned to the business risk framework. Security enables Customs' business. Customs IS will understand the risks faced, the implications of the risk materialising, applicable mitigation actions, and weigh the risk against other factors when making decisions
Value from investment	Ensure that maximum business value is gained from investments in technology. Costs are balanced against other factors such as performance, delivery timelines and security. Contract for continuous year-on-year savings
Transparency	Transparency engenders trust, and trust enables IS the allocation of resources required to deliver to Customs
Clear responsibilities and accountabilities	Customs IS assigns clear, logical responsibilities and accountabilities for all activities

Customs IS Will Support Business Priorities

Increased need for effective business intelligence

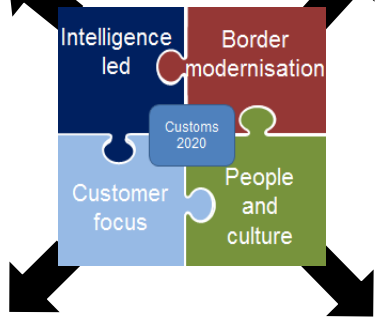
Increasing volume of data to manage, integrate and make available

New or enhanced intelligence and case tools will be required

Maintain FMIS to reduce customs avoidance

Deliver efficient and effective **revenue collection**

Increase our ability to **identify risk**, detect non-compliance and **carry out enforcement**



Deliver **Future Direction** and JBMS

Build partnerships with key government, industry and international stakeholders

Ensure a modern **regulatory framework** that enables the future border environment

Increased data sharing and integration with sector partners

Increasing need for high reliability business transaction systems

Increased change in border sector processes is anticipated

Regulatory reform will drive system change

Existing customer facing systems will need user experience improvements

Need to integrate with other agencies to provide a one stop shop for importers and exporters

Need manage authoritative information assets, security and privacy

Positively contribute to the **Better Public Services** transformation

Enhance customer experience, value and confidence

Maintain **public trust** and confidence in Customs

Create a **great place to work** where our people have a sense of belonging and the capability and desire to meet our challenges

Continuously improve our processes to deliver better services

Maximise the **sustainable use of resources** within the context of increasing workloads and reducing baselines

Need to provide modern efficient user experience for staff

Increased need for technology training and skills development for all staff

Systems changes will be required to support streamlined efficient front line working

Future State ICT Vision

Align IS to operational business

Understand Customs business	Customs IS will understand the needs and constrains of the Customs business and focus on delivering services that support Operations
Move technology to the frontline	Customs IS will provide services that put the appropriate technology at the hands of Customs staff wherever they are working. **"The right technology services at the right time"**
Update technology regularly	IS will scan the market for innovative, near leading edge technologies, which will be deployed where they will best meet the business requirements of the border sector

Focus on information

Gather information	Information, and the effective management of information will be critical to the success of Customs. Customs IS will focus on gathering information that can be used to create intelligence to support enhanced risk assessments

Drive for efficiency

Support GCIO ICT strategy	Customs IS will aggregate commodity ICT services in preference to building systems. Customs IS will support the government ICT Strategy and Action Plan. "**Consume before Buy before Build"**

Future State ICT Vision (continued)

Operating model

In house ownership	IS will always own Customs' technology strategy with decisions being made in house
Work with partners	IS will work with key partners to deliver services

Services aggregator

Integrate Common Capabilities	Customs IS will integrate Common Capabilities with Customs-specific applications, data sets and systems to deliver outcomes that deliver business value while also aligning with Government ICT strategies
Support government ICT direction	Customs will support the direction of government ICT as identified in the GCIO Strategy and Action Plan, and will drive additional value out of Customs' data and information sets

Information led

Integrate new information sources	Customs IS will integrate new information sources to enable Customs intelligence and delivery of enforcement outcomes

Two speed ICT

Change is not uniform	Speed of change matches the business demand for change, and the risk and complexity of systems. Large core systems change at a slower rate than smaller more agile systems

IS Future State Capabilities

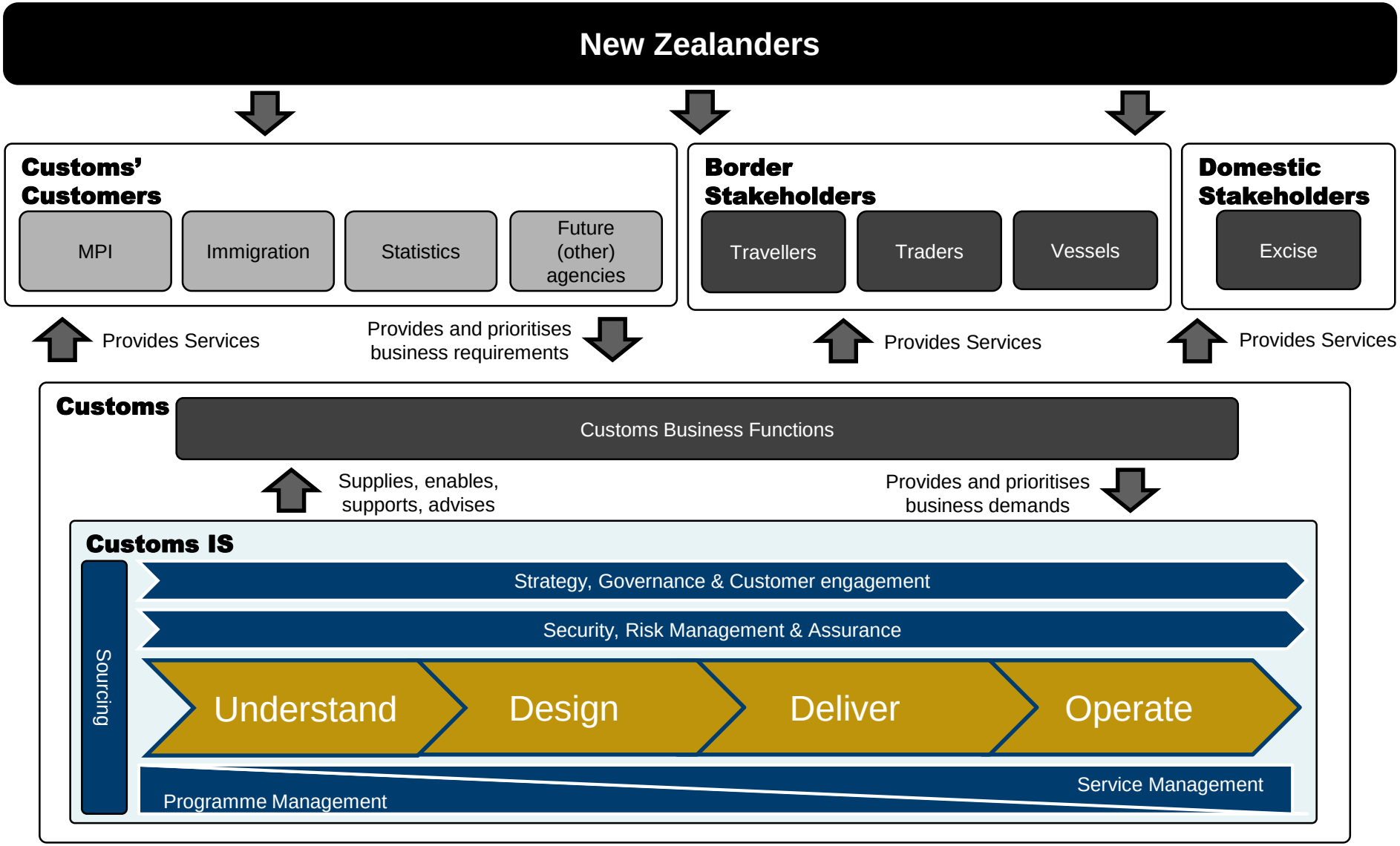
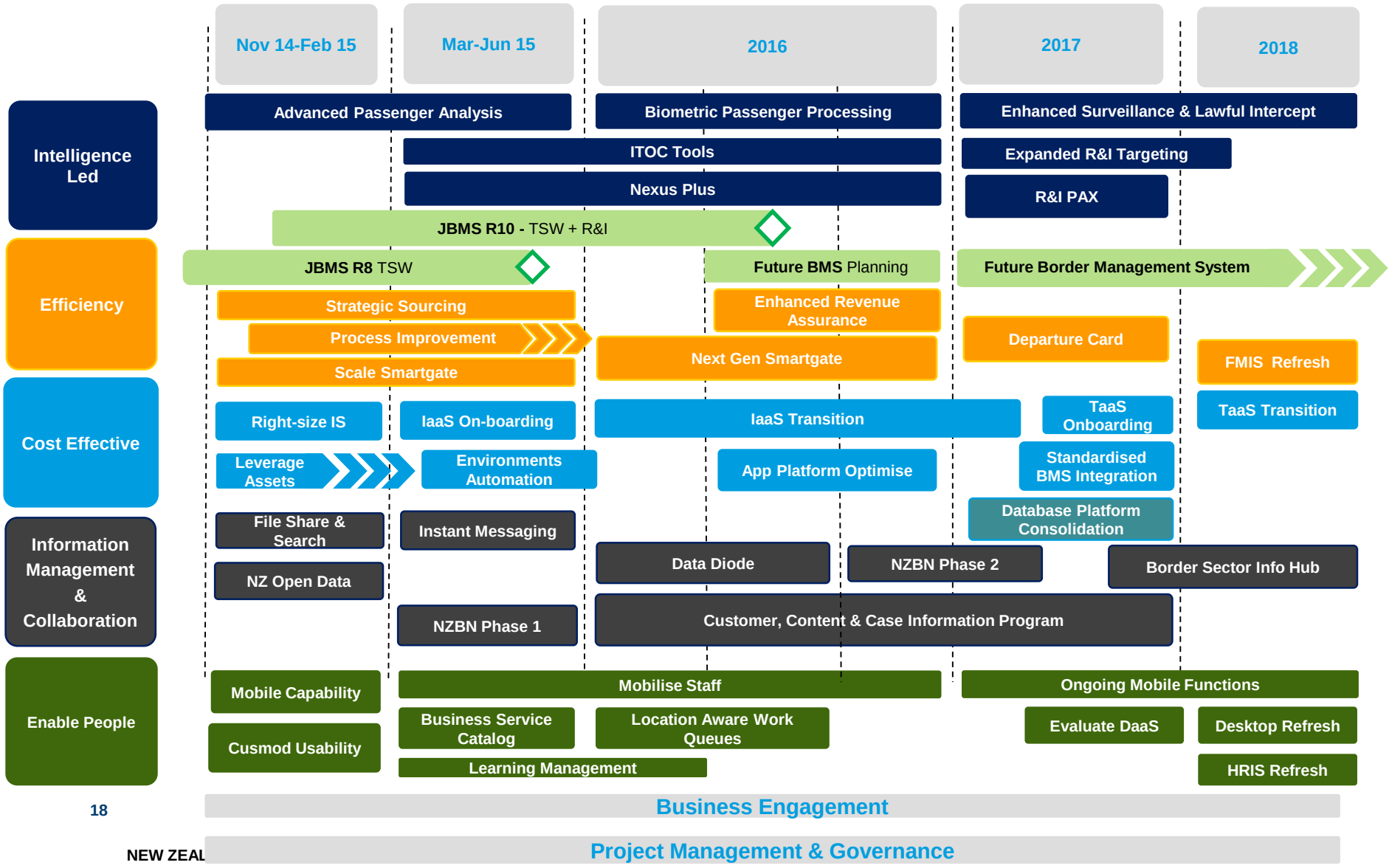
The Customs IS future state will rely upon a number of capabilities. The following two slides provide an overview of each of the capabilities, which are then shown in the Customs IS operating model

Strategy, Governance & Customer engagement	Understanding customer requirements and setting strategies that address these requirements is a critical function for Customs IS. This capability addresses the activities required to proactively build and maintain strong relationship with customers, both within Customs, and across the border sector entities. Manage the technology landscape to meet Customer needs, achieve business-aligned prioritisation of initiatives
Security, Risk Management and Assurance	Physical and information security, and risk management are critical functions within the border sector. Customs IS requires the ability to develop, operate and maintain a pragmatic, business-aligned information security and risk assurance framework
Understand	Customs IS must understand the needs and challenges of the business. Through this function Customs IS will engage with the business to both understand the business and to share how technology can best enable and transform Customs operations
Design	Design addresses the ability to design and develop an ICT architecture that is aligned with customers' business strategies and delivers increased flexibility and, cost effectiveness. Ensure compliance with Customs IS strategy by delivery teams architectural standards and blueprints

IS Future State Capabilities

Deliver	The deliver phase addresses all activities associated with the development, maintenance and support of Border Management applications and systems, and integration of those applications into a cohesive end-to-end solution that meets Customs and border stakeholder needs. This also includes the delivery of all infrastructure (server, desktop, security, storage etc.) and connectivity required to support Customs Border Management applications and systems
Operate	This phase addresses activities associated with the management and operation of technology for Customs, and the quality of service provided by the environment, service delivery teams and vendors
Programme Management	The capability to manage technology projects, e.g. project management, business requirements gathering, procurement, deployment and testing
Support	The capability to provide support functions that enable IS teams to deliver outcomes
Sourcing	The capability to manage relationships with strategic vendors to deliver ongoing value for Customs, manage contacts, and ensure that contracted services are delivered

IS Operating Model



Proposed High-level IS Roadmap