

ICT Policy framework 2014

Principles

Principle	Meaning	Impact	Policies
Convergence	Technology is blurring the divisions between industries and functions	Government structures and policy settings need to be constantly reviewed and updated	Govt CTO or NZCTO KiwiMap Digital Bill of Rights Strengthened ComCom
Digital Inclusion	Digital technology is becoming the primary means of accessing content and services	ICT is both the means of delivery and the means of interaction. All NZ'ers therefore require an agreed minimum level of access	KiwiCall KiwiCap KiwiCloud
Structural Separation	By separating the layers in the stack each level is optimised rather than hidden	Investment is focussed on competition and innovation. Vertical integration is discouraged.	Genuine Telco Review Strengthened ComCom
Unbundled Content	Digital content is multi-modal and can run on many platforms artificial restrictions frustrate wide spread consumption and adoption	Content production is encouraged, innovation across platforms shifts focus to producers. Broadcasters and publishers become aggregators and streamers	Revised portfolio focus Converged content funding NZ content 'access' charter Appropriate copyright regime NZ access to geoblocked content
Regulated Open Access Monopoly	Platform infrastructure competition is wasteful and anti-competitive. It needs to be open access, regulated for maximum competition and run as a single platform monopoly	Resources are conserved, overbuild is discouraged and investment is rationalised. Investment risk is shared and innovation is not fragmented. Competition focuses on services not access	Genuine Telco Review Strengthened ComCom Review of UFB/RBI Review of International connectivity
Digital education	Widespread adoption of digital training methods in education delivery. (ie MOOC's -Massive Open Online Courses) Bring worlds best to NZ Get core principles in place (problem solving, coding solution design)	Pupils interact with self paced Learning Tech, interacts with the teacher as a Facilitator/Mentor. Improves digital literacy in all career paths to enable the growth of a Digital Economy. Provide a stream of Advanced Digitally Aware Graduates to grow thought leadership in digital possibilities	Digital careers structure through primary, secondary and tertiary education ICT interns ICT apprentices ICT degrees Clearly define IT career paths and specialities ICT 'X' Prizes & scholarships
Digital Economic Development	Growing the NZ economy by creating more jobs for digital coders, developers, creators and makers. Global focus on collaboration and opportunities	The creation of engaging job and business opportunities for NZ'ers The reorientation of much of our educational curriculum Government leadership by example	KiwiMap KiwiCode Govt ICT Procurement KiwiMakers ICT education Maker Culture Kiwis come home- incentives to bring home Kiwis with ICT skills, entrepreneurs in ICT businesses

Digital rights based framework	<p>A framework to ensure</p> <ul style="list-style-type: none"> ● privacy for citizens are enshrined in digital environment ● NZ a trustworthy place to do business and to promote innovation. 	Digital Bill of Right	to sit alongside BORA within Human Rights Commission
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Existing funding

Approach	Purpose	Mechanism	Application	Funding
Existing TSO	Legacy of 'Kiwishare' funds provision of services to remote and underserved communities and 'social' services such as blind & deaf relays	A levy determined by Comcom on 'telcos' the 'TDL' Comcom decides who pays	Via the 'TDF' administered through MBie Funding the RBI then winding back	\$50m p/a shrinking to \$6m p/a
Existing UFB	Delivery of capacity for 75% households to connect to 100Mb/s fibre by 2019	Chorus 3 x LFCs	Via CFH	See CFH for details, currently subject of Copper Tax campaign and ensuing Chorus Crisis (could bring down Govt!)
Existing RBI	Improving rural backhaul and cellular coverage	TDL	TDF	See TSO
4G Spectrum auction	Redeploy 700Mhz spectrum	Auction - nearly finished	The result is looking like a big long term win for Vodafone and might mark decline and demise of 2Degrees	Straight to Govt

Proposed Funding

Approach	Purpose	Mechanism	Application	Funding
Broadband USO	Defines a minimum broadband spec for all (say 5Mb/s access) as well as essential social ICT services	Usually funded out of general taxation	Via wider Govt 'Votes'	TBD

'ICT' USO	Defines a minimum level of service access, may include some communication capability, access to online social services & content	Usually funded out of general taxation	Via wider Govt 'Votes'	TBD
Digital Content Levy	Support for creation and 'accessible' distribution of NZ digital content	A revenue based levy on ICT 'carriers'	Via a competitive mechanism c/f NZ on Air & NZ Film Commission etc	TBD

Policy Options

Policy	Description	Purpose	Mechanism	Outcome	Funding
KiwiMap	An annual ICT roadmap for NZ produced by the Govt CTO	To give NZ a neutral view of what's coming and the implications	Neutral Technology Roadmap	Better decisions for Kiwi's not just telcos Avoid debacles	Directly funded thru new 'office of Govt CTO'
KiwiCode	A requirement for Govt ICT projects to employ NZ ICT resources	Keep projects grounded and realistic Develop NZ ICT sector	Revised Govt tendering and procurement	Develop ICT sector Jobs Increased skill base	Built into projects
KiwiCall	A revision of NZ telephony architecture to recognise technological advances	Creating secure, portable digital identity for all Kiwis Facilitates eServices	Review with industry, users and Govt CTO Allow NZ based service to compete with OTT threats	Removal of unnecessary costs Can have social USO component for underprivileged	Some USO
KiwiCap	A fixed monthly amount of bandwidth per citizen Can be provided to some as a 'benefit'	Enable participation in digital society, e govt, e health etc	GB at a Comcom determined regularly reviewed regulated price based on genuine wholesale costs	Drive market to innovate Digital 'inclusion' Eliminate 'Cap Fear' as barrier to uptake and adoption	Market & USO
KiwiCloud	A fixed amount of encrypted digital storage provided to every citizen again can be provided to some as a benefit. Must be NZ based	Provide all citizens with digital storage for key documents etc	GB at a Comcom determined regularly reviewed regulated price based on genuine wholesale costs	Eliminate another digital divide barrier. Provide all with encrypted storage. Market can enhance offerings	Market & USO

Kiwis Come Home	Provide a set of initiatives to attract Digital Kiwis home.	Create the most attractive environment for returnees to continue digital business and lifestyles	Under MBIE provide Digital Business Migration Incentives	Grow NZ Digital Economy by capturing International Digital business opportunities	USO or DCL, MBIE
ICT Careers	Ensuring Kiwis are equipped for 21st century careers	Ongoing social development through having high earning jobs to support NZ future needs.	Education, experience and opportunity. Creating structures for successful participation in global collaborative digital economy Foster real 'Digital Trade Routes' make international connectivity a strategic priority	Opportunities for domestic jobs and incomes from global sources	Further work required
Kiwi Content	Ensuring NZ digital content can be created, shared and distributed without impediment	Create the skills, tools, channels and safeguards for an authentic digital Kiwi presence	Ensure educational provides the skills and the market the opportunities while the legal framework provides the protection	A strong and self sustaining environment for NZ content	Further work required
Modern Digital communities	Actually applying UFB, RBI and digital architecture in the real world	Personal, economic social and community development by taking an integrated and holistic approach to availability of and access to digital infrastructure	Developing digital architectures at the individual, family/ whanau, community, regional and national levels	Many including improved social inclusion and cohesion, lower government service delivery costs with improved outcomes, digital workforce development, global economic opportunities	Needs further work
Digital Bill of Rights	A Digital Bill of Rights would establish New Zealand's as an innovative nation in a digital environment. It would guarantee a citizen privacy and also promote a digital economy is New Zealand with certainty around operating and setting up in a fair, open, and transparent environment	<ul style="list-style-type: none"> ● privacy for citizens are enshrined in digital environment ● NZ a trustworthy place to do business and to promote innovation. 	to sit alongside BORA within Human Rights Commission	Rights-based framework for digital rights for citizens and business. Sits alongside security laws to provide balance against intrusive surveillance	Needs further work