

***Industry UFB recommendations for
Minister Steven Joyce***

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1. INDUSTRY UFB RECOMMENDATIONS

At industry Roundtables in Auckland and Wellington, in December 2009, some 60 senior executives from within the New Zealand ICT industry came together to discuss the government's visionary UFB (ultra-fast broadband) plans.

These plans have received widespread support in New Zealand and are also being keenly watched by other governments, notably the Obama administration. In October I gave a briefing on these plans to Professor Susan Crawford, the President's personal advisor on technology in the White House.

Similar interest has been shown by the Secretary General of the ITU in Geneva and several European governments. It is not often that New Zealand is one of the leaders in the international telecoms world.

However we now have to make the move from vision to implementation and in the spirit of government's invitation to participate in this discussion the industry – as presented at the Roundtables – has followed their discussions over the last few weeks and would like to present some further ideas and recommendations to the government on this phase of the process.

Key recommendations:

- *Development of trans-sector policies*
- *One single national UFB plan (covering both urban and rural areas)*
- *National design and architecture of the infrastructure*
- *Utilisation of existing assets wherever possible*
- *Regulatory support to achieve a structurally-separated, wholesale-only infrastructure approach*

2. TRANS-SECTOR APPROACH

The government has very clearly stated that its UFB plans have been developed, not to support the telecoms industry as such, but for the purposes of national interest. On regular occasions the Prime Minister, the Minister for Communications, and others within the Cabinet and the broader government have mentioned the importance of services such as e-health, tele-education, smart grids, etc.

These sectors are all under the control of the government and it is therefore its responsibility to come up with policies that will see these applications developed for UFB delivery. This in general will require a reallocation of funds, away from traditional investments and into e-investments.

The government needs to make what could be quite radical changes to its service purchasing and provisioning to encourage new services to be created that will use the UFB networks. As an example, instead of just building more retirement villages, older-aged people could be monitored from home; the same applies to chronically ill people. The future healthcare needs of this country cannot be solved without e-health, so it will be a win-win situation if the government develops strong policies.

FCC chairman Julius Genachowski recently mentioned that broadband and smart grids are natural cousins.

We need to harvest these synergies; new digital infrastructure offers us this economic multiplier effect. The first few small steps in this direction have been set, but more far reaching policies are needed.

The current economic situation will see more young people continuing their education rather than entering the workforce and the current education system will not be able to cater for this extra demand. An influx of students would pose no problem for tele-education, and it would have the added benefit of offering rural citizens a more evenly balanced access to education.

Recommendation: *Announcement by the government of UFB supporting trans-sector policies and concrete steps to implementation.*

3. RURAL AND REGIONAL CONNECTIVITY

Discussions about the national interest and about embracing a trans-sector approach must also cover the need to ensure that the benefits of these policies accrue to the whole country. The UFB policy should therefore take into account 100% of the population. At present it seems the government has two separate approaches: UFB to provide FTTH in cities, and the RBI to provide school connectivity only for other areas.

Obviously we need to be technology-agnostic here and apply the best technology appropriate to each case. This will include wireless and satellite based broadband. The RBI will improve rural backhaul provision, but it will not on its own deliver better broadband to rural areas if access networks are inadequate.

The cost of connecting the last few percentage points of the population is out of proportion with the cost of connecting the rest of the country and so it makes sense to facilitate this within an overall national plan. To try and solve rural and remote connectivity issues as an afterthought, would be very expensive and it would be politically difficult to obtain support for such a course.

We acknowledge that there is tremendous energy and innovation going into the regional bids – if the subsequent negotiation works well, and a joint problem solving approach is adopted, the results could be quite impressive. Already there are good signs that there will be some natural aggregation.

Recommendation: *Clarification by the Government on the reach of its UFB plans and the relationship with RBI, and extending rural and remote connectivity within the UFB process.*

4. DESIGN AND ARCHITECTURE

Most of the deployment of infrastructure is a rather straightforward utility exercise; the ongoing costs will mainly relate to the critical ICT infrastructure that will be connected to the physical infrastructure.

All of these services require national standards and the same applies to the delivery of other video-based services (media, entertainment). The TCF (via working parties that incorporate non TCF members) could set these national standards, but clarification is needed on this.

We understand that the TCF has already begun work on standards issues, but it would be worth a clear statement of how these standards will be taken up and used by the CFC, especially given that the standards will not be developed before the ITP process is completed.

Without such a design plan in place it will be difficult if not impossible for companies to come up with any accurate costing information. This would have flow-on implications for the appropriate regulatory structure, since clarity on pricing for the UFB services is a critical issue.

There is also the concern that the current approach might be too telco centred. It is essential that in the design stage the trans-sector ICT requirements for their services layer are taken onboard. There is a clear political commitment from the government that the UFB is a national interest project, not just a telco project. Input from the 'other sectors' in this process is therefore essential.

Once policies for rural and remote connections are clarified, these regions will need to be integrated into the design plan – as mentioned above, designing separate plans for these regions would not be the most cost-effective way to go forward.

Only after a proper national architecture and design plan has been developed can the LFCs prepare their own design plans and business models.

While it is theoretically possible to start the civil works earlier, private investors would be wary of venturing into this without a good understanding of the total business plan for their LFC.

Recommendation: *Clarification on the government's position on a national design and architecture plan that the LFCs must adhere to, and a speedy commencement of the development of this plan by CFC and associated standards by the TCF.*

5. BUSINESS PLANS

Without these key policies in place it will be impossible to come up with any serious business plans or business models. Current ITP contenders can't do much more than offer their best ideas and suggestions, all of course originating from their own background. However, as this is a national plan, aimed at the national interest, a more detailed description of what the government wants to achieve, and how it intends to achieve it, is essential before any serious costing and planning can begin.

The current process will no doubt bring more ideas and suggestions to the table. This, of course, is a positive but there is also the risk that, without firm direction, companies might venture into areas that may not necessarily be within the parameters of what the government wants to achieve – and some of them could actually unintentionally undermine the government objectives, simply due to a lack of guidance.

Since it is likely that fairly extensive preparation will be required before further action can be taken the current process may take longer than the government and the industry are envisaging. However this should not be an excuse for failing to develop a proper plan.

The process can be sped up by some early clarification by the government on what the outcomes need to be. Once that has been established a far more efficient process can perhaps be applied to achieve this.

Recommendation: *Government should clarify the outcomes it envisages, and apply an appropriate process to achieve these.*

6. EXISTING PLAYERS

New Zealand cannot afford not to take into account the current assets that are available to build UFB. Key elements of similar plans in Australia and the USA started with government-initiated mapping of existing assets and identification of the gaps that needed extra funding. As we have seen in Australia (Telstra) and Netherlands (KPN), incumbent telcos are willing to embrace the high-level concepts mentioned above, and will accept the structural separation of UFB, if they are embedded in sound government plans and supported by sound trans-sector policies. We note in this regard recent news that Telstra is engaging with the Australian government on how it can transition from the PSTN to using the NBN.

There seems to be enough goodwill in New Zealand at the moment to enable the major players to sit down together and map out a plan that could help the government to achieve the right outcomes. There are different ways to organise participation, such as utilising (selective) outsourcing services from other players, utilising a structurally separated Telecoms as the main builder and combinations of that.

A regulatory plan will obviously be needed around such an approach. The plan could also allow for a transitional regime, moving from the current situation to the requirements needed around UFB.

A regulatory plan will clarify the situation for other investors. Very few of them will be keen to see a competition battle between the LFCs and the incumbent companies. The current players might perhaps not yet have UFB infrastructure in place, but they certainly have already all of the broadband customers on their books – and, in the end, that is what matters.

The regulatory framework for the LFCs is also of critical importance when it comes to pricing of services. The UFB proposal involves the creation of a number of local monopolies. They will not have retail arms, so concerns about discrimination will be limited. But there may still be concerns about their monopoly pricing powers because they will be the only firms able to offer wholesale fibre services to enable retail operators to reach broadband customers. This is especially if the incentives to drive uptake in the early years under the UFB model prove insufficiently strong. There may be some constraint on pricing posed by alternative infrastructure, but ensuring reasonableness in the pricing that the CFC negotiates with each provider will be very helpful in setting up the environment appropriately.

Recommendation: *Through attractive policies as well as the regulatory system, the government could stimulate the existing players to participate in order to ensure that such plans would still deliver the outcomes which are in the interest of the country.*

7. CONCLUSIONS

- Clear government policies are needed about what outcomes the government wants to achieve. This is essential to develop proper business models, investment plans and infrastructure designs. This will necessitate the development of trans-sector policies.
- Such policies will need an integrated national approach to UFB. It will be necessary for all New Zealanders to be guaranteed a UFB connection.
- Without these policies in place it will be impossible to develop a proper infrastructure design and architectural plan.
- The design must be a national one, to cater for national applications. This in turn will set the scene for the LFCs. There is little they can do without such a plan being in place (perhaps with the exception of civil works, if the government is prepared to take that risk).
- New Zealand cannot afford to squander existing infrastructure assets and these assets need to be mapped and taken into account in the national plan. Only after all this is done can a proper plan be developed for and by the LFCs.

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