

## ANALOGUE SWITCH-OFF ISSUES FOR DISCUSSION: SUMMARY OF RESPONSES RECEIVED

### Responses received

Broadcasters: 9 (one response covered 4 broadcasters)  
 Transmission providers: 1  
 Telecommunications providers: 1  
 Broadcasting industry groups: 3  
 Funding agencies: 1  
 Consumer interests: 1 (Ministry of Consumer Affairs)  
 Supply chain: 3 (one respondent requested confidentiality).

Note: Two respondents replied by email and their comments are reflected only in the summary.

*Total number of individual responses received: 16*

The table below provides a brief outline of the key points made by submitters in response to each of the numbered questions in the discussion paper on analogue switch-off circulated in December 2006. These summaries are not part of the submissions and are provided for ease of reference only. The summaries have no official status. Although every effort has been made to ensure accuracy, the summaries should not be taken as a complete or authoritative guide to the submissions. You are encouraged to read the submissions in their entirety.

Question Number	Responses received
1(a) Should an ASO date be announced when penetration has reached an agreed percentage? What would an appropriate threshold level be – for example 50% or 60%?	<p><u>FreeView, Orcon</u>: A provisional date or range to be set once penetration reaches 65%. Final date set at 75% penetration or July 2012, whichever is first. <b>Note FreeView responses all fully supported by Orcon.</b></p> <p><u>Kordia, Taranaki TV, Hook Technologies</u>: Date should be announced at 50% to ensure momentum.</p> <p><u>SKY</u>: Announce date when total penetration (all digital TV) is 60%. 2015 is logical date,</p>

	<p>as VHF licences expire then.</p> <p><u>Telecom</u>: Yes, propose 70%. Note importance of new channels to drive take-up.</p> <p><u>NZRB</u>: Yes, propose 70%, given subscription levels to SKY already high.</p> <p><u>NZ On Air</u>: Yes, with penetration at higher level (75% or more) to maximize audience reach. Period then set (4 or 5 years) for remaining 25% to convert.</p> <p><u>Triangle TV</u>: Yes. Two stages, preliminary announcement at 60% and firm date at 75%</p> <p><u>Consumer Affairs</u>: Yes, when suitable level of penetration achieved. Thresholds used by other countries should guide.</p> <p><u>Family TV</u>: Yes, tie to take-up. Higher (e.g. 75%) to better project remaining take-up.</p> <p><u>RBA</u>: Support FreeView. Need momentum and take-up rates first before accurately forecasting ASO date, which should be earliest reasonable.</p> <p><u>Screen Council, SPADA</u>: Government should take a decisive stance and set a firm ASO date, e.g. 2012 to ensure NZ not left further behind other countries.</p>
<p>1(b) How would progress towards this percentage be monitored or measured, and by whom? How would we determine when the agreed percentage has been reached?</p>	<p><u>FreeView, Orcon</u>: FreeView will have monitoring systems (for digital receiver sales and consumer acceptance) in place and will report to government. All other distribution platforms would also need to report. Either independent “audit bureau” or role for steering group. Notes take-up should be measured by households with a digital service (DTT, DTH, cable, broadband etc, FTA or pay), and should be defined by households with at least one TV rather than “all households”.</p> <p><u>Kordia</u>: Data from SKY, FreeView and other DTV providers, plus TV/STB wholesalers and importers. Number of households served to be monitored by MCH. Question on DTV take-up could be included in the next Census.</p> <p><u>SKY</u>: SKY’s digital subscriber numbers available. Develop methodology for FTA digital</p>

	<p>monitoring.</p> <p><u>Telecom</u>: Use govt/industry steering group.</p> <p><u>NZRB</u>: Get regional information from STB distributors. Cross-reference with data from a commissioned survey/audit.</p> <p><u>Hook Technologies</u>: Use combination of sources. Sales volumes (from importers and wholesalers), SKY TV and FreeView (through return path). Broadcaster info not full picture – 20,000 digital receivers are already in market.</p> <p><u>NZ On Air</u>: Monitor equipment sales statistics. Buyers to indicate whether 1<sup>st</sup> or additional STB/receiver purchase. Surveys/stats managed by responsible govt department.</p> <p><u>Triangle TV</u>: Include questions in Census, as well as industry sales figures (STBs and integrated sets). Annual research by an independent company (e.g. AC Nielsen) to confirm. MED could oversee.</p> <p><u>Consumer Affairs</u>: A regular, comprehensive survey by a reputable survey company.</p> <p><u>Screen Council</u>: N/A as firm date preferred.</p> <p><u>RBA</u>: Support FreeView. Industry reporting.</p> <p><u>Taranaki TV</u>: 6-monthly phone survey</p> <p><u>Family TV</u>: Kordia could monitor coverage footprint and coordinate with installers, broadcasters, retailers, broadband ISPs and cellular network providers. Quantitative and qualitative data. ASO take-up rates of other countries important.</p> <p><u>SPADA</u>: No comment.</p>
1(c) What total threshold would be	<u>FreeView, Orcon</u> : Setting final threshold risks a moving target. Propose a firm date once

<p>appropriate for ASO to occur – e.g. 90% or 95%?</p>	<p>penetration reaches 75%, based on forward projections of take-up. Once date is set, and with effective communications plan, take-up accelerates.</p> <p><u>Kordia</u>: For better industry planning and consumer certainty, government should set a firm date, in consultation with industry. Survey take-up as fixed date approaches.</p> <p><u>SKY</u>: 95% as optimal trade-off.</p> <p><u>Telecom</u>: 95%</p> <p><u>NZRB</u>: Above 90%. Propose learning from experience, with final threshold set via steering group.</p> <p><u>Hook Technologies</u>: 90% as possible threshold.</p> <p><u>NZ On Air</u>: 100% ideal (to maximize audience reach), but 90% to 95% manageable.</p> <p><u>Triangle TV</u>: 90%, assuming ample notice has been given.</p> <p><u>Consumer Affairs</u>: 90% of households should be the minimum threshold.</p> <p><u>Taranaki TV</u>: About 75% across both DTH and DTT</p> <p><u>Family TV</u>: If leave announcement till 75% reached, a firm ASO date could then be set.</p> <p><u>RBA</u>: No specific comment, but support FreeView. Relatively low threshold to define digital penetration.</p> <p><u>Screen Council, SPADA</u>: N/A as firm date preferred.</p>
<p>2(a) For the purposes of ASO, do all TV sets need to be converted, or would it be a minimum of one per</p>	<p><u>FreeView, Orcon</u>: One per household (digital conversion of primary set).</p> <p><u>Kordia</u>: One per household is minimum.</p>

<p>household?</p>	<p><u>SKY, Telecom, Hook Technologies, NZ On Air, Family TV</u>: One per household.</p> <p><u>NZRB</u>: Focus the criterion on the household.</p> <p><u>Triangle TV</u>: One per household. "Reception capability" should be the criterion.</p> <p><u>Consumer Affairs</u>: Use households and their ability to receive DTV as the criteria. Include businesses that use television as part of the service they provide (motels, universities, schools and hospitals).</p> <p><u>Taranaki TV</u>: One per household, then user pays</p> <p><u>Screen Council</u>: Ideal is one per household, with capability of servicing all sets or VCRs.</p> <p><u>SPADA and RBA</u>: No comment.</p>
<p>2(b) What action, if any, might need to be considered for conversion of VCRs?</p>	<p><u>FreeView, Orcon</u>: None. International experience suggests this is a "non-issue". Technology and pricing trends are making alternatives simple and affordable.</p> <p><u>Kordia</u>: None. VCRs will still be able to play tapes and to record via a digital STB.</p> <p><u>SKY</u>: Can't "convert", but could still use VCRs. Consumer information to advise on reconnecting home entertainment equipment.</p> <p><u>Telecom, NZ On Air</u>: None</p> <p><u>NZRB</u>: New technology, and legacy VCRs will be minimal by time of ASO.</p> <p><u>Hook Technologies</u>: Not possible to convert VCRs, but options of multiple outlets on STBs (to connect VCR), VCR timer setting, or replace with a PVR.</p> <p><u>Triangle TV</u>: None. New technology such as PVRs will get cheaper and replace VCRs. Issue should be included in public information campaign.</p>

	<p><u>Taranaki TV</u>: User pays</p> <p><u>Family TV</u>: Information campaign (broadcasters, retailers, consumer groups) explaining how aerial configuration is affected.</p> <p><u>Consumer Affairs, SPADA, RBA, Screen Council</u>: No comment.</p>
<p>2(c) What is the best approach to ensure optimal functionality and convenience for consumers needing to purchase multiple STBs (including compatibility questions between free-to-air and conditional access options)?</p>	<p><u>FreeView, Orcon</u>: Legacy proprietary systems and pay TV imperatives make a single STB unlikely. A broadband-based delivery platform may make this possible, as it is not yet rolled out. Easy operation by consumers and simple installation are FreeView aims.</p> <p><u>Kordia</u>: Consumer choice. A digital “tick” process for consumer information on compatibility.</p> <p><u>SKY</u>: Conditional access and FTA STBs are, by definition, unlikely to be compatible.</p> <p><u>Telecom</u>: Commercial decision only.</p> <p><u>NZRB</u>: Single STB not possible. Consumer education important (steering group, retailers, installers, and include SKY).</p> <p><u>Hook Technologies</u>: Compatibility not possible, as SKY smart card is unique to their STBs. Minor pay broadcasters use different conditional access encryption system that would allow better compatibility.</p> <p><u>NZ On Air</u>: Industry should take into consideration in procurement process. Industry cooperation should be encouraged.</p> <p><u>Triangle TV</u>: Government role to seek to avoid multiple STBs. Best option would be approved range of “FreeView” STBs, with card access facility for pay platforms (cf Australia with SBS etc).</p> <p><u>Taranaki TV</u>: User pays</p>

	<p><u>Family TV</u>: Good consumer advice at point of sale.</p> <p><u>Screen Council</u>: Ideal is one STB per household capable of converting all sets.</p> <p><u>Consumer Affairs, SPADA, RBA</u>: no comment</p>
<p>3(a) Should New Zealand adopt a target, consensus or obligatory approach to setting an ASO date?</p>	<p><u>FreeView, Orcon</u>: Consensus (broadcaster, transmission, retail, government interests) to set targets. Final decision on ASO date to be made by government, and obligatory once set. Proposes 3-stage approach: (1) Agree milestones to be met before ASO criteria set (50% penetration or 6 months from DTT launch); (2) Confirming criteria, setting provisional timetable, agreeing operational and technical aspects of ASO (65% take-up); (3) Confirm and announce final ASO date (75% or July 2012).</p> <p><u>Kordia</u>: Consensus approach.</p> <p><u>SKY</u>: Consensus approach (government and industry), with criteria of availability, accessibility and affordability.</p> <p><u>Telecom</u>: Consensus, with firm date announced.</p> <p><u>NZRB</u>: Consensus, involving all interested parties (broadcasting, transmission, retail, government), based on accurate take-up information. No ASO date should be set earlier than 1 year from DTT roll-out and minimum 65% (or better 70%) have DTV.</p> <p><u>Hook Technologies</u>: Consensus between government and industry.</p> <p><u>NZ On Air</u>: Target allows technology to bed in, and ensures strong promotion of date.</p> <p><u>Triangle TV</u>: Start with target date, then set obligatory date once set criteria met.</p> <p><u>Consumer Affairs</u>: Definitive date preferable to one that is later delayed. Contingent on consumer take-up for success.</p> <p><u>Taranaki TV</u>: Firm date, and don't let it fail.</p>

	<p><u>Family TV</u>: Obligatory approach in consultation with industry. Legislation to mandate sale of integrated digital receivers.</p> <p><u>SPADA</u>: Firm date. 2012.</p> <p><u>RBA</u>: Consensus important. Learn by experience.</p> <p><u>Screen Council</u>: Mandatory approach, government led.</p>
<p>3(b) Should some form of switch-over steering group be considered for New Zealand, and if so what form should it take? What role would it have?</p>	<p><u>FreeView, Orcon, RBA</u>: Yes, limited duration, publicly-facing, stakeholder supported and government funded steering group. Needed once criteria for ASO to be finalized. Role of identifying technical, coverage, timetable and process issues, promoting take-up, coordinate any regulatory issues, coordinate with wider government policies, and provide consumer information/advice.</p> <p><u>Kordia</u>: Yes, strongly recommended. Representatives of key stakeholders (broadcaster, consumer, infrastructure, government, distribution supply chain). Group should drive ASO work programmes, and report back to MCH.</p> <p><u>SKY</u>: Yes. Broadcasters and other key stakeholders. Independent, not-for-profit form. Role would be to meet stated policy objectives, provide consumer education, develop technical strategy and ensure stakeholder coordination.</p> <p><u>Telecom</u>: Yes. Led by MED, with industry stakeholders. Manages ASO upwards (government/industry) and downwards (public). Shared government/industry funding.</p> <p><u>NZRB</u>: Essential. Government funded with representation by all stakeholders. Set up group asap to determine milestones, collect data, promote DTV education and take-up.</p> <p><u>Hook Technologies</u>: Less time/money-wasting if a government department does it.</p> <p><u>NZ On Air</u>: Yes. Use Digital UK model, with broadcasters and officials (and consumer experts, retailers, installers and manufacturers) as members. Group to promote, provide</p>

	<p>information and drive ASO work programme. Board structure proposed.</p> <p><u>Triangle TV</u>: Yes, with representatives from government (MED, MCH), suppliers, retailers and broadcasters. Group to set ASO dates, plan switch-over, public and trade education. Clearing house for stats and other information.</p> <p><u>Taranaki TV</u>: spend money on PR campaign rather than a committee.</p> <p><u>Family TV</u>: Yes, representation from government and broadcasters (FTA, CA and regional), in consultation with retailers/installers.</p> <p><u>Screen Council</u>: Yes. Broadcasters, infrastructure providers and consumer electronics retail sector are core affected parties. If industry groups opted out of a steering group, a dedicated resource person in MCH or MED could be alternative.</p> <p><u>Consumer Affairs, SPADA</u>: No comment</p>
<p>4(a) To what free-to-air services would ASO apply? All those services being simulcast on the DTV platform? All those services being simulcast on <i>any</i> digital TV platform? All services?</p>	<p><u>FreeView, Orcon, RBA</u>: All services on analogue, on the same date.</p> <p><u>Kordia</u>: All FTA services using radio spectrum, to avoid consumer confusion. Should there be a refund on licence renewal fees if ASO occurs before expiry?</p> <p><u>SKY</u>: All national analogue FTA broadcasters.</p> <p><u>Telecom, Triangle TV</u>: All free-to-air services.</p> <p><u>NZRB</u>: No exceptions, as these would confuse public and create technical issues.</p> <p><u>Hook Technologies</u>: All services being simulcast on any digital TV platform.</p> <p><u>NZ On Air</u>: All parties should be affected in similar fashion, for level playing field in terms of audience/commercial advantage.</p> <p><u>Taranaki TV</u>: All services.</p>

	<p><u>Family TV</u>: All services. Address barriers to entry for regional broadcasters.</p> <p><u>Screen Council</u>: Apply across the board to all services. Exceptions, compensation or equity issues should be dealt with case-by-case.</p> <p><u>SPADA, Consumer Affairs</u>: No comment</p>
<p>4(b) Should analogue conditional access systems, such as SKY UHF, be included in an ASO process?</p>	<p><u>FreeView, Orcon, RBA</u>: Yes – all broadcast services on VHF and UHF.</p> <p><u>Kordia</u>: No. Consumer confusion not an issue for a managed STB environment.</p> <p><u>SKY</u>: No.</p> <p><u>Telecom</u>: No. A decision for them as a private-sector funded, pay operation. ASO for public broadcasting and FTA.</p> <p><u>Hook Technologies</u>: Yes.</p> <p><u>NZ On Air</u>: No specific comment beyond response to 4(a).</p> <p><u>Triangle TV</u>: No need for analogue service to be retained. Pay operators have customer details enabling them to convert the service to digital, if client so wishes.</p> <p><u>Family TV</u>: Yes. Consult with CA suppliers about ASO date.</p> <p><u>Screen Council, Taranaki TV</u>: Apply across the board – as above.</p> <p><u>NZRB, Consumer Affairs, SPADA</u>: No comment.</p>
<p>4(c) Would ASO apply to free-to-air services, such as Prime, NZRB and local or regional broadcasters, which may not</p>	<p><u>FreeView, Orcon, RBA</u>: Yes. Such broadcasters will also want digital distribution.</p> <p><u>Kordia, Telecom</u>: Yes, apply ASO to all FTA services.</p>

<p>initially be included on the DTT platform?</p>	<p><u>SKY</u>: Prime will be on DTT service from start.</p> <p><u>NZRB, Consumer Affairs, SPADA</u>: No comment.</p> <p><u>Hook Technologies</u>: Yes – otherwise ASO wouldn't work and consumers would need to maintain both analogue and digital reception. ASO for all broadcasters – who should have ability to be on DTV service well before ASO.</p> <p><u>NZ On Air</u>: Implication of response to 4(a) is yes.</p> <p><u>Triangle TV</u>: Yes. Broadcasters not using Kordia have choice to make (use Kordia, form alliances for access to digital platform(s), or cease broadcast). Plenty of lead time for decision.</p> <p><u>Family TV</u>: Government should take an inclusive approach, and assist regional broadcasters to make transition.</p> <p><u>Screen Council, Taranaki TV</u>: Apply across the board – as above.</p>
<p>4(d) If some analogue services are not covered by ASO, what are the implications for use of spectrum, maintenance of the transmission infrastructure etc? Who would bear the costs? Would Kordia be ready to continue providing a dual analogue/digital transmission service?</p>	<p><u>FreeView, Orcon</u>: This situation should be avoided.</p> <p><u>Kordia</u>: Commercial issue. Kordia will continue to supply services where there is a demand.</p> <p><u>SKY</u>: A commercial question for Kordia and any analogue broadcaster. Competition issue if Kordia declined access to transmission for reasons other than commercial ones.</p> <p><u>NZRB</u>: No exceptions, but if there were, this would be a commercial matter for Kordia and its client.</p> <p><u>Hook Technologies</u>: ASO should apply to all broadcasters.</p> <p><u>Triangle TV</u>: Not applicable if all services covered. Public service role played by non-commercial regional/local broadcasters needs to be recognized in transmission costs.</p>

	<p><u>Taranaki TV</u>: Avoid issues by clean and comprehensive ASO</p> <p><u>Family TV</u>: Question for Kordia. Increased cost to broadcasters and consumers for any analogue services post-ASO seems likely.</p> <p><u>Telecom, NZ On Air, Consumer Affairs, SPADA, RBA, Screen Council</u>: No comment.</p>
<p>6(a) Which approach (“big bang” or progressive) to ASO would be best suited for New Zealand?</p>	<p><u>FreeView, Orcon</u>: Big bang should be possible, coordinated by steering group. Decision mandated by government, and based on industry/government consensus.</p> <p><u>Kordia</u>: Progressive roll-out more manageable, over no more than 12 month period. One option could be to switch-off in areas with DTT coverage as first phase.</p> <p><u>SKY</u>: Progressive. Few have tried “big bang” except where digital penetration already very high (e.g. Berlin).</p> <p><u>Telecom</u>: Progressive – to plan and learn from experience.</p> <p><u>NZRB</u>: Big bang simpler and less costly. Progressive risks confusion, logistics and communication issues.</p> <p><u>Hook Technologies</u>: Big bang, because of concern remote areas could miss out on a genuine service. One hit means retailers and installers could gear up for heavy sales.</p> <p><u>NZ On Air</u>: Progressive, to learn lessons along the way. Keep total time span for progressive ASO small, however.</p> <p><u>Triangle TV</u>: Big bang if technically feasible.</p> <p><u>Consumer Affairs</u>: Big Bang approach. Public education programme and suppliers/installers would then be properly focused.</p> <p><u>Taranaki TV</u>: Big bang, and make it a celebration.</p>

	<p><u>Family TV</u>: Progressive, with urban centres first. Consult with broadband ISPs and cellular network operators re take-up.</p> <p><u>SPADA</u>: No specific comment. Big bang implied.</p> <p><u>RBA</u>: Should be negotiated between broadcasters and infrastructure providers, with government as interested party. If progressive regional approach, should be a single ASO date per region.</p> <p><u>Screen Council</u>: Big bang ensures certainty.</p>
<p>6(b) If a progressive approach were selected, who would make the decision about which sites to switch off and when? (Kordia? Broadcasters? Government? All three groups, by consensus?)</p>	<p><u>FreeView, Orcon, NZRB, Taranaki TV, Screen Council</u>: Big bang preferred.</p> <p><u>Kordia</u>: Consensus approach. Steering group could undertake.</p> <p><u>SKY, Telecom, Family TV</u>: Industry steering group.</p> <p><u>Hook Technologies</u>: Big bang would avoid need for consensus and steering group.</p> <p><u>NZ On Air</u>: Consensus (implies amongst the 3 groups: Kordia, broadcasters, government).</p> <p><u>Triangle TV</u>: All affected parties, by consensus. Kordia could not act unilaterally.</p> <p><u>Consumer Affairs</u>: Big bang approach preferred. Recognise that some sites may be uneconomic to maintain in lead up to ASO and could be switched off earlier.</p> <p><u>SPADA</u>: No specific comment. Big bang implied.</p> <p><u>RBA</u>: no specific comment, but see above.</p>
<p>6(c) Should a trial switch-off in one or two areas be arranged to</p>	<p><u>FreeView, Orcon</u>: Single area trial as pre-cursor to big bang ASO supported. Some analogue transmitters likely to be switched off by individual broadcasters in interim, and</p>

<p>test the process in advance of a full switch-off?</p>	<p>would assist steering group with feedback data.</p> <p><u>Kordia</u>: Sensible approach to test range of processes and communications.</p> <p><u>SKY</u>: Yes, consistent with progressive ASO.</p> <p><u>Telecom, NZ On Air</u>: Yes – to learn from any mistakes.</p> <p><u>NZRB</u>: May be merit in trialling one small area to check unforeseen issues.</p> <p><u>Hook Technologies</u>: No need for trials. Will have had digital TV for some years by then.</p> <p><u>Triangle TV</u>: To be decided by government, broadcasters and Kordia. Trial switch-off only if absolutely necessary.</p> <p><u>Consumer Affairs</u>: No specific comment. See above.</p> <p><u>Taranaki TV</u>: Yes, but keep it small and quiet.</p> <p><u>Family TV</u>: Yes.</p> <p><u>SPADA, RBA</u>: No comment</p> <p><u>Screen Council</u>: No specific comment, but all services on same date preferred.</p>
<p>6(d) How would liaison with distributors, retailers and installers best be managed? What sort of notice period would they require?</p>	<p><u>FreeView, Orcon, RBA</u>: In commercial interests of FreeView and supply chain to plan carefully. Closer to ASO, would need coordination with the public information campaigns provided by steering group.</p> <p><u>Kordia</u>: A role for the steering group (with supply chain reps as members).</p> <p><u>SKY</u>: Close liaison by government and broadcasters necessary. Steering group to coordinate. Some broadcasters arrange consumer use of their own equipment/installation.</p>

	<p><u>Telecom</u>: A role for the steering group.</p> <p><u>NZRB</u>: Steering group. Public and industry information campaigns need to start before completion of DTT network.</p> <p><u>Hook Technologies</u>: Use a government-driven consultative process. Quarterly emails/website postings on take-up stats.</p> <p><u>Triangle TV</u>: Set up broadcast industry body to oversee information, training and technical issues. Involve consumer electronics association.</p> <p><u>Taranaki TV</u>: PR campaign.</p> <p><u>Family TV</u>: If they are consulted on ASO (steering group to decide on extent), this would secure their participation.</p> <p><u>NZ On Air, Consumer Affairs, SPADA, Screen Council</u>: No comment</p>
<p>7(a) Is a termination date for the allocation of new analogue licences necessary? If so, should it be the same time as when an ASO date is determined?</p>	<p><u>FreeView, Orcon</u>: No new licences should be issued, as would complicate ASO. Existing licences should not be extended for any activity that would complicate ASO.</p> <p><u>Kordia</u>: Yes, for sensible planning by industry.</p> <p><u>SKY</u>: No reason for compulsory restrictions on use except for those covered by ASO decision. Normal technical, economic and commercial considerations should apply to other situations.</p> <p><u>NZRB</u>: No. Granting more licences going beyond ASO would defeat purpose.</p> <p><u>Hook Technologies</u>: If there are valid commercial reasons for such new licences, they should be issued as temporary ones.</p> <p><u>Triangle TV</u>: Yes, if confirmed ASO date and process. Termination date should align</p>

	<p>with ASO, so “buyer beware” if ASO date varies.</p> <p><u>Taranaki TV</u>: Yes, to make it clean with one ASO date for all.</p> <p><u>Family TV</u>: Yes.</p> <p><u>Telecom, NZ On Air, Consumer Affairs, SPADA, RBA, Screen Council</u>: No comment</p>
<p>7(b) Would it be a viable alternative for any new analogue licences to be issued from 2007 to include a requirement that they will be cancelled at ASO – i.e. the term of the licence would be limited to planned ASO date, with the resource charge to be adjusted accordingly?</p>	<p><u>FreeView, Orcon</u>: Preferred option is for no new licences to be issued.</p> <p><u>Kordia</u>: Yes.</p> <p><u>SKY</u>: Likely to be an ongoing and occasional temporary requirement for analogue licences.</p> <p><u>NZRB</u>: same as response to 7(a)</p> <p><u>Hook Technologies</u>: Yes. Consumers would also need to be informed that broadcast is temporary.</p> <p><u>Triangle TV</u>: Yes. Note that in absence of “ASO void” clause, government has responsibility to assist those with valid analogue licences in transition to digital</p> <p><u>Taranaki TV</u>: Yes, for all off on one date.</p> <p><u>Family TV</u>: Yes, provided government takes inclusive approach and assists other broadcasters with transition to DTV.</p> <p><u>Telecom, NZ On Air, Consumer Affairs, SPADA, RBA, Screen Council</u>: No comment</p>
<p>8(a) What cost-effective options for the digital delivery of local and regional services can be identified?</p>	<p><u>FreeView, Orcon</u>: Government needs to define and categorise local, regional and community broadcasters, whether commercial or not-for profit, as an early priority. Also needs to determine what frequency licensing terms would be appropriate in digital era. DTT cost-effective.</p>

Kordia: “Cost effective” needs to be considered in context of stakeholder perspectives and government policy objectives.

SKY: Broadcasters could choose to have their channels re-broadcast on SKY satellite.

NZRB: DTT seems more economically viable.

Hook Technologies: IPTV

NZ On Air: Cost-effective solutions should be discussed to ensure the reach and relevance of local broadcasters is not compromised. NZ On Air interested in ensuring funded content remains available to audiences.

Triangle TV: There is range of licence types (commercial, non-commercial), services (broadcaster-controlled content or access models), and purpose/intent of regional television. Should same approach be taken to all local broadcasters, regardless of licence conditions, or should licences be re-issued with common requirements and constraints? Proposes series of questions to determine cost-effective options.

Low-cost transmission options for regional or local broadcasters may not exist without some requirements on the provider (Kordia). Small operators may need to “crash” from UHF analogue to digital, and ability to do this will depend on spectrum licensing policy.

Options are to: (a) retain the status quo (stations transition as they are able to, with no simulcast); (b) subsidise transition/simulcast for major local broadcasters and encourage smaller players to work with these; (c) encourage smaller players to move to IPTV or bundled options; or (d) support the development of a digital satellite backbone for regional television.

Taranaki TV: Inclusion of regionals would encourage consumer take-up. Government subsidy for first few years required.

Family TV: Give help to enable right-holders to convert their analogue licences to digital

	<p>at time they make decision. Recoupment from those late in converting to digital.</p> <p><u>RBA</u>: the “digital dividend” from cleared spectrum would justify government contribution to the costs of all broadcasters making conversion to digital (including radio).</p> <p><u>Screen Council</u>: Most local broadcasters on UHF, so conversion to digital at same sites would be simplest.</p> <p><u>Telecom, Consumer Affairs, SPADA</u>: No comment</p>
<p>8(b) Is DTH delivery of local and regional services viable, and if so, how could it be achieved?</p>	<p><u>FreeView</u>: DTT more cost-effective.</p> <p><u>Kordia</u>: DTH viable, but bandwidth intensive. Best for areas not served by DTT.</p> <p><u>SKY</u>: SKY already carries some regional services. If subsidy to be available for transition to digital (DTH service), it should be offered through open tender managed by an independent party (e.g. NZ On Air).</p> <p><u>Telecom</u>: Not economical.</p> <p><u>NZRB</u>: DTH seems unlikely to be viable.</p> <p><u>Hook Technologies</u>: Limited bandwidth makes DTH an uneconomical use for local or regional broadcasters. Could be beneficial if some services wish to become national.</p> <p><u>Triangle TV</u>: DTH is viable, but only if programming is centralized and service fulfils multiple objectives.</p> <p><u>Taranaki TV</u>: DTH may be only option for some, if DTT roll-out doesn't reach them. Government subsidy for 1<sup>st</sup> 2 years of satellite would help. Increased viewing choice will help take-up.</p> <p><u>Family TV</u>: Regionals important and need to be included in any DTV strategy.</p>

	<p><u>RBA</u>: No specific comment. See 8(a) above.</p> <p><u>Screen Council</u>: Satellite footprint seems inconsistent with purpose of local services.</p> <p><u>NZ On Air, Consumer Affairs, SPADA</u>: No comment.</p>
<p>8(c) Should consideration be given to the creation of a dedicated local/regional DTT multiplex, subject to the availability of suitable spectrum?</p>	<p><u>FreeView, Orcon, NZRB</u>: Assume this is a policy being considered by government.</p> <p><u>Kordia</u>: Yes. Current UHF spectrum reserved for community purposes could be used to create mux, with criteria for access to be decided by government.</p> <p><u>SKY, Telecom, Taranaki TV, Family TV</u>: Yes, should be explored.</p> <p><u>Hook Technologies</u>: No. IPTV better solution, so money should not be wasted.</p> <p><u>NZ On Air</u>: No specific comment</p> <p><u>Triangle TV</u>: A national DTT multiplex for regional/local television may not be ideal (a local service would be better for most regionals).</p> <p><u>Consumer Affairs, SPADA, Screen Council</u>: No comment</p> <p><u>RBA</u>: No specific comment. See 8 (a) above.</p>
<p>8(d) Are there other delivery platforms (existing or emerging) that might provide the best long-term solution to the digital delivery of local and regional services?</p>	<p><u>Kordia</u>: DTT is excellent option for local delivery. IPTV has potential in future (cf USA).</p> <p><u>SKY</u>: No single platform suitable for all. Address case-by-case depending on access networks available, nature of content (linear or interactive) and costs of delivery.</p> <p><u>Telecom</u>: IPTV platforms and associated VoD capabilities would enable delivery of local content.</p> <p><u>NZRB</u>: Difficult to comment, but broadband and IP technology should be monitored.</p>

	<p><u>Hook Technologies</u>: IPTV is way of future. Put all public funding into one thing. Better, cheaper broadband would mean IPTV would be available to everyone.</p> <p><u>NZ On Air</u>: IPTV is most obvious option.</p> <p><u>Triangle TV</u>: IPTV too formative, and broadband performing poorly. Bundled services (as proposed by Telecom, Vector, Telstra etc) might be an option, but as additions to DTT or DTH service.</p> <p><u>Taranaki TV</u>: Possibly for some, but DTH/DTT seems wiser choice.</p> <p><u>Family TV</u>: Most are on UHF and have access to masts etc. Efficient to utilize existing infrastructure.</p> <p><u>Screen Council</u>: IPTV, but at present is more suited to densely populated areas. MMDS used as one-way service overseas, but better suited to dense population locations. Digital cable best solution, but limited infrastructure in NZ.</p> <p><u>FreeView, Orcon, Consumer Affairs, SPADA, RBA</u>: No comment.</p>
<p>8(e) How important is it for local and regional broadcasters to be included on an EPG?</p>	<p><u>Kordia</u>: Important so local channels are visible. Compromise might be a lower cost, simple EPG identifying presence of local station (not fully dynamic or full SI).</p> <p><u>SKY</u>: Critical. Regional/local broadcasters are included in SKY EPG.</p> <p><u>Telecom</u>: Is important if they are to compete viably.</p> <p><u>NZRB</u>: Not essential, as EPG listing could “get lost”, services are parochial, and there are other means to reach local audience.</p> <p><u>Hook Technologies</u>: Important as an incentive to take up DTV. Commercial damage to a local broadcaster if they are not on EPG.</p>

	<p><u>NZ On Air</u>: Very important – for accessibility of funded programmes to audiences. Multiple outlets for programmes are a positive.</p> <p><u>Triangle TV</u>: May not be necessary for all services. Provision of information in form required may not be feasible for some. Rights issues also in relation to programming sourced from satellite (clearances likely to be needed).</p> <p><u>Taranaki TV</u>: Critical. Being on DTH or DTT would allow regionals to build advertising revenue by reaching national audience, and thus improve channel quality.</p> <p><u>Family TV</u>: Vital, for viewer choice and for a unified face to public.</p> <p><u>FreeView, Orcon, Consumer Affairs, SPADA, RBA, Screen Council</u>: No comment.</p>
<p>9(a) What, if any, adjustments need to be made in respect of commercially acquired licences being renewed in 2010 to take account of ASO occurring prior to 2020?</p>	<p><u>FreeView, Orcon</u>: Renewal process should be re-visited asap, before 2010 renewals. Clarify licences to be renewed for continued analogue, and which cancelled and issued for digital. Impact on value of remaining licences, and value of licences if ASO prior to 2020, also needs to be reviewed.</p> <p><u>Kordia</u>: None for digital licences. For those used for analogue services, right of cancellation needs to be in place if licence is not converted to digital and used. See refund issue raised in response to question 4(a).</p> <p><u>SKY</u>: No adjustments without voluntary agreement of right-holders (SKY and NZRB). Ability to convert analogue licences to digital is an important incentive. SKY considers UHF licences should now be renewed from 2020 to 2035.</p> <p><u>NZRB</u>: Renewal process should be addressed at an early stage, at an individual licence-holder basis.</p> <p><u>Hook Technologies</u>: Similar position to responses to Question 7. Licences should be temporary until ASO.</p> <p><u>Triangle TV</u>: None. At ASO (or when no longer in use) licences should be cancelled and</p>

	<p>returned to Crown.</p> <p><u>Taranaki TV</u>: All finish at ASO</p> <p><u>Family TV</u>: Give priority to existing right-holders to convert licences to digital.</p> <p><u>RBA</u>: Support FreeView. Conversion to digital has major impact on value of analogue licences. “No cost simulcast” licences establish an important principle for radio.</p> <p><u>Telecom, NZ On Air, Consumer Affairs, SPADA, Screen Council</u>: No comment</p>
<p>10(a) Would the conversion costs to some MUSH institutions be such that they would be likely to seek government support?</p>	<p><u>FreeView, Orcon</u>: Government agency should take lead in providing information and advice. Platforms for wider public information on government’s digital initiatives.</p> <p><u>SKY</u>: Should be decided on a case-by-case basis.</p> <p><u>NZRB</u>: Some will seek funding, but most are publicly funded, and should seek budget through respective Ministries.</p> <p><u>NZ On Air</u>: government support likely to be sought. Full information and communication targeted at institutions therefore important.</p> <p><u>Triangle TV</u>: No need for government support, as replacement should be factored in to normal upgrade/depreciation planning. ASO will have plenty of notice.</p> <p><u>Consumer Affairs</u>: MUSH institutions no different from other consumers, and must be kept informed.</p> <p><u>Taranaki TV</u>: Yes.</p> <p><u>Family TV</u>: Asset depreciation management combined with good information campaign.</p> <p><u>Screen Council</u>: No specific comment. Sufficient lead-time will result in improved technology and reduced consumer costs. Recommends a social-equity approach, which</p>

	<p>should be developed by government.</p> <p><u>Kordia, Hook Technologies, Telecom, SPADA, RBA</u>: No comment</p>
<p>10(b) What is the best means of ensuring appropriate information is conveyed, and in a timely manner?</p>	<p><u>FreeView, Orcon</u>: Government agency, as above.</p> <p><u>Kordia</u>: Comprehensive and complex communications strategy needs to be developed to ensure information is effectively disseminated.</p> <p><u>SKY</u>: Steering group should develop and monitor timely public information strategy.</p> <p><u>NZRB</u>: Steering group role to provide information and encourage planned replacement consistent with ASO. Similar information important for planning by other high-volume TV owners, such as Trackside.</p> <p><u>Hook Technologies</u>: regular email updates and website postings by government department managing ASO.</p> <p><u>NZ On Air</u>: Using existing networks within the MUSH communities, and advertising.</p> <p><u>Triangle TV</u>: FreeView should lead the charge, and be advised by the steering group.</p> <p><u>Consumer Affairs</u>: A universal education programme could be directed at MUSH entities via advertising and access to websites etc.</p> <p><u>Taranaki TV</u>: Major PR campaign</p> <p><u>Family TV</u>: Steering group identify stakeholders and develop communication strategy.</p> <p><u>Telecom, SPADA, RBA, Screen Council</u>: No comment</p>
<p>11(a) Most of the factors considered important in maximising take-up of DTV</p>	<p><u>FreeView, Orcon</u>: Government needs to lead to ensure local bodies do not use planning rules to restrict placement of aerials/dishes etc on dwellings/premises. Issues also with building codes and standards (to ensure “digital ready” buildings) and multiple dwelling</p>

<p>have been taken into account by government decisions and the coordinated approach developed within the broadcasting sector. Are there further actions that should be considered by these parties to encourage take-up? If so, at what point in the transition should they be initiated?</p>	<p>units (avoid “gatekeeper” issues for supplies of digital services). Marketplace likely to resolve most issues, but government monitoring important.</p> <p><u>Kordia</u>: Setting a firm date within the next 2 years will enable consumers to plan ahead with certainty. Supplies of STBs should be available with access features such as subtitles, signing and audio description.</p> <p><u>SKY</u>: Digital installs for elderly and disabled should be subsidized (covering both FTA and pay television). Public information strategy also critical factor in take-up.</p> <p><u>Telecom</u>: Too early to know. Successful communications strategy important at this stage. Role of steering group.</p> <p><u>NZRB</u>: Other issues will arise, e.g. from Local Bodies. Biggest driver of consumer take-up is what content/services they will get. Needs to be promoted by broadcasters.</p> <p><u>Hook Technologies</u>: Don’t know.</p> <p><u>NZ On Air</u>: Availability of compelling content is key factor. NZ On Air keen to support innovative content to enhance viewer experience. Content funding for private broadcasters will be a key issue for an NZ On Air review of its policies.</p> <p><u>Triangle TV</u>: All serious players meeting the government’s policy objectives should be on a level playing field, with support provided on the same basis for all – or no support for anyone. Issue needs to be addressed now.</p> <p><u>Consumer Affairs</u>: Coverage of DTV services is likely to be an issue (e.g. some homes do not have line of sight to satellites). Planning/resource consent issues may also arise. Existing aerials may not be suitable, and there could be ownership issues about previously installed aerials.</p> <p>Affordability of equipment also an issue for some, especially those on fixed incomes. Households may not be able or willing to replace TV sets for some years, especially if they are relatively new.</p>
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	<p>People with disabilities (visual, hearing, dexterity impaired, for example) will need support. Socially isolated people need to be advised of the change and its implications. A scheme could offer such groups assistance for converting TV sets and help with installation and use.</p> <p><u>Taranaki TV</u>: Consumer choice – more channels, with diverse content (especially NZ)</p> <p><u>Family TV</u>: Establish steering group as soon as possible to guide ASO process.</p> <p><u>SPADA</u>: Diverse, high-quality content is key to take-up and should be supported. This is at risk through lack of regulation, potential for low commissioning budgets for digital services, and budget pressures on other commissioned content.</p> <p><u>RBA</u>: Support FreeView comments on local bodies and building codes. Government role to ensure transition to digital not obstructed.</p> <p><u>Screen Council</u>: No specific comment. Sufficient lead-time will result in improved technology and reduced consumer costs. Recommends a social-equity approach, which should be developed by government.</p>
<p>12(a) Is retailer/installer aspect of the transition to ASO well-prepared and coordinated? If not, what more needs to be done?</p>	<p><u>FreeView, Orcon</u>: Yes. Once DTH and DTT services on stream, would review to identify issues needing any increased support. Steering group should include supply chain representatives once established, and should address any public confusion about “non-digital” activity at retailer/installer level. Incentives and public education for take-up preferable to government-mandated sale of integrated digital receivers.</p> <p><u>Kordia</u>: Not able to comment. Steering group with supply chain representation is recommended.</p> <p><u>SKY</u>: Careful planning important, and responsibility of broadcasters. Retailers and installers need to be well-briefed to provide accurate information/advice to consumers. Question of accuracy of information about own equipment being promoted by broadcasters.</p>

	<p><u>NZRB</u>: In retailer/installer interest to be prepared and promote DTV/ASO. Should be represented on the steering group, or advise it.</p> <p><u>Hook Technologies</u>: So far, so good. Effective communications strategy important once DTV launched</p> <p><u>Taranaki TV</u>: Major PR campaign</p> <p><u>Family TV</u>: Consult regional broadcasters on a closer basis.</p> <p><u>RBA</u>: All supply chain members have a responsibility to coordinate. UK experience.</p> <p><u>Screen Council, Telecom, SPADA, Consumer Affairs, NZ On Air, Triangle TV</u>: No comment.</p>
<p>13(a) Is such a carefully targeted and modest information campaign warranted? If so, what is the optimal form and timing? How might it best be delivered (e.g. through any switch-over steering group)?</p>	<p><u>FreeView, Orcon</u>: Set scope of steering group activities once 65% threshold reached.</p> <p><u>Kordia</u>: Switch-over steering group is recommended. Communication needs to begin many years in advance of ASO. Digital UK model should be reviewed for its applicability to NZ.</p> <p><u>SKY</u>: Yes, a carefully targeted information campaign should be administered by steering group. Take account of key milestones and need to maintain momentum for ASO.</p> <p><u>Telecom</u>: A primary role of the steering group.</p> <p><u>NZRB</u>: Of critical importance to have effective, regular, on-going communications. Role of Steering group.</p> <p><u>Hook Technologies</u>: Yes, if want ASO within 50 years. Consumer awareness is very low. Need to start now, so there is a chance of reasonable sales volume with momentum from beginning. Importers/retailers taking risk with new product. MED or MCH could oversee information campaign.</p>

	<p><u>NZ On Air</u>: Targeted campaign is crucial to successful ASO, especially at later stage. Mix of print, TV, radio and internet within last year before ASO. Coordinated by the steering group.</p> <p><u>Triangle TV</u>: Yes. Include an education campaign for installers to ensure current UHF analogue services are not disconnected when DTV installed (this can currently happen with SKY installations). Steering group role.</p> <p><u>Consumer Affairs</u>: Most NZers have no real understanding of the implications of ASO for them, so information additional to that provided by FreeView broadcasters is an “absolute must”. This also needs to cover what services are available. Government must demonstrate support for the process to help give consumers confidence to convert to DTV. Retailers also need to be fully informed, as consumers rely on their wisdom.</p> <p><u>Taranaki TV</u>: Yes, major PR campaign.</p> <p><u>Family TV</u>: Yes. In interests of all participating broadcasters also to promote ASO.</p> <p><u>RBA</u>: Support FreeView. Public information will be necessary, especially as new content is key driver for take-up in countries such as UK.</p> <p><u>Screen Council</u>: Targeted information campaign by government in conjunction with broadcasters and others is warranted.</p> <p><u>SPADA</u>: No comment</p>