

CAB Technical Coordinating Committee Update



Presented to the WABE Conference
Edmonton, Alberta
October 27, 2014



Technical Coordinating Committee

- TCC Mandate
- Participation
- Recent Changes
- BTAC Vs. RABC
- Current Activities
- Future Issues





TCC Mandate

- Make your job easier
- The mandate is to assist private broadcasters in technical and engineering dealings with government, standard-setting bodies and like-minded associations.
- Provide timely information concerning technological and regulatory developments.
- Liaison with Canada's regional broadcast engineering associations (CCBE and WABE).



Participation

- All TCC activities are coordinated through the Main Committee and /or the Radio/TV subcommittees, depending upon the issue.
- TV Subcommittee is chaired by Bruce Cowan of Corus Entertainment
- Radio Subcommittee is chaired by Wally Lennox of Bell Media
- Participation is open to all CAB members



Recent Changes

- Industry Canada dissolved the Broadcasting Technical Advisory Committee after its last meeting in October 2013
- Industry Canada activities are now coordinated through the Broadcasting Committee of the Radio Advisory Board of Canada (RABC)
- The CAB is an active member of the RABC
- I am also the Chair of the RABC Broadcasting Committee



BTAC Vs. RABC

- BTAC provided an open dialogue between the Department, broadcasters and engineering consultants.
- The process is now more formalized through RABC
- But, RABC is also a unique and efficient vehicle to liaise with IC compared to other countries.
- RABC is an association of associations.
- Funded through membership fees plus an annual government grant.



Current Activities

- CRTC Radio Review
- BPR-1
- BETS-7
- Health Canada Safety Code 6
- Emergency Alerting
- White Space Devices
- C Band Satellite Interference
- Tower Lighting & Standard 621
- Tower Siting Requirements
- National Radio Systems Committee (US)



CRTC Radio Review

- BNC 2013-572; policy review included two technical issues;
 - Conversion of low power unprotected stations to protected status,
 - TCC recommended that CRTC should only consider if affected broadcasters in same or adjacent markets are given opportunity to file competing applications
 - Possible use of HD Radio technology in Canada
 - TCC advised that hybrid HD Radio on AM and FM bands should be permitted on a voluntary, not mandatory basis.
 - TCC responded to technical questions posed by CRTC
 - A supporting report, “Practical Considerations to Implement HD Radio in Canada” was submitted
 - TCC also supplied comments supporting use of nested FM repeaters for AM stations



BPR-1

- Broadcast Procedures and Rules, Part I, General Rules
- Updated to align with pending Health Canada revision of SC6
- Section 8 deals with the prediction, analysis and assessment of exposure to RF energy
- AM; new methodology to predict required distance from AM towers.
- TCC, through the RABC Working Group provided input to all sections of the document.



BETS-7

- Broadcast Equipment Technical Standard 7 “Technical Standards and Requirements for Radio Apparatus Capable of Receiving Television Broadcasting”
- TB-1 “Information Relating to the Regulation of Radio Apparatus Capable of Receiving Television Broadcasting
- Input was provided via a Working Group of the RABC Broadcasting Committee
- The current draft incorporates the TCC recommendations that all receivers with displays must include both analog and digital reception, and mobile digital television is out of scope
- A new “cable compatible” definition aligns with FCC rules



Safety Code 6

- Health Canada: “Limits of Human Exposure to Radiofrequency Electromagnetic Energy in the Frequency Range From 3 kHz to 300 GHz – Safety Code 6”
- Last updated in 2009
- Last year, substantial effort and cost to analyze all sites to meet anticipated 2013 levels
- Health Canada asked the Royal Society to review and initiated a public consultation.
- HC may adopt the revised 2014 levels this Fall, and broadcasters will be required to comply immediately.
- Industry Canada will then publish an update to GL-01



Emergency Alerting

- CRTC Broadcasting Regulatory Policy 2014-444
- TCC Working Group established to;
 - Identify and correct technical and operational issues for the successful deployment, distribution, broadcast and testing of emergency alerts
 - Share information and solutions with CAB members
 - Liaise with Environment Canada and other alerting agencies as needed
 - Collaborate with equipment manufacturers to ensure workable solutions
 - Contribute to Common Look and Feel Guideline update



White Space Devices

- Track 1; WSD equipment standards,
 - New RSS-222
- Track 2; WSD separation distances, TV protection criteria and coordination
- Track 3; WSD database administration procedures
- Track 4; Rules for interference protection from WSD for licence-exempt Low Power Apparatus
 - Updated Client Procedure Circulars (CPC) and RSS
- IC expected to publish documents this Fall.
- Target deployment in early 2015.



C Band Satellite Interference

- Industry Canada consultation on 3500 MHz; DGSO-003-14
- Proposes to add “mobile” as co-primary in band 3475-3650 MHz to Canadian Table of Frequency Allocations
- Studies show potential interference to C Band satellite reception in 3700-4200 MHz
- C Band is heavily used for TV and Radio distribution and program acquisition
- TCC indicated its disapproval with comments to Industry Canada as part of the RABC response to the consultation
- Waiting for Industry Canada response



Tower Lighting & Standard 621

- New “Aeronautical Assessment Form for Obstruction Marking and Lighting”
 - http://wwwapps.tc.gc.ca/wwwdocs/Forms/26-0427E_1405-04_E_X.pdf
- Standard 621; Obstruction Marking and Lighting
 - Section 4.7 requires that tower lighting is monitored
 - Visually every 24 hours on all operating intensities, or
 - Automatic monitoring system: For remote monitoring, communication status and operational status of lighting is confirmed every 24 hours
 - All sections now being updated



Tower Siting

- CPC-2-0-03 Radiocommunication and Broadcasting Antenna Systems
- Process Requirements;
 - Investigating Sharing or using existing infrastructure
 - Contacting the local Land Use Authority
 - Public notification and addressing relevant concerns
 - Satisfying Industry Canada requirements
 - Completing construction
- Exclusions;
 - New antenna systems less than 15 m. in height
 - Change to existing antenna systems; height increase < 25%
 - Temporary antenna systems



NRSC

- MDCL; Modulation Dependent Carrier Level
 - Evaluating IBOC compatibility
- FM Multiplex Task Group
 - Single Side Band stereo evaluation
- RBDS Usage Guidelines;
 - New version G-300B includes security recommendations
 - Work starting on version C; PI codes for translators, RBDS emergency alerting, RBDS/SCMO crosstalk



Future Issues

- Emergency Alerting Working Group
- White Space Devices
- HD Radio
- MDCL
- BPR Updates
- Transport Canada Standard 621



Thank you!

Kirk Nesbitt
October 27, 2014