

SOCIEDADE BRASILEIRA DE  
ENGENHARIA DE TELEVISÃO

SET – SOCIEDADE BRASILEIRA DE  
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São Paulo, July 11th 2007

To:  
Mr. Victor Garay Silva  
Subsecretario de Telecomunicaciones  
Amunátegui, 139  
Santiago- Chile

Ref: “Especificaciones y Protocolo para las pruebas de la TV Digital Terrestre in Chile”

**Mr. Victor Garay Silva,**

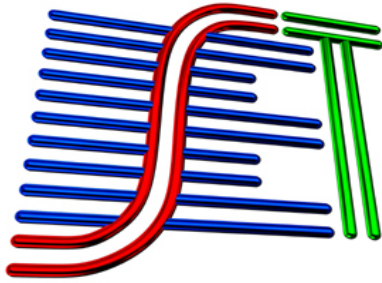
We received a copy of “Especificaciones y protocolo para las pruebas de campo de la television digital terrestre in Chile” through ARIB, from Japan.

We would like to present the SET comments concerning the referred document as a collaboration.

In general terms the tests proposal from Subtel is coherent and complete enough.

We would like to add some suggestions, like shown below:

- 1) The blocks diagrams of figure 2, should include amplifiers and variable signal attenuators, to allow that measurements can be done with accuracy and within the range of the measurement instrument.
- 2) Item 2.3.1 describes the antennas placement for external reception measurements at 9 meters height, when usually 10 meters telescopic masts are applied.
- 3) It is recommended that the reception measurements with external antennas should be repeated at the same place and address of measurements with internal reception.
- 4) Among the items of the measurements car described on item 2.3.3 should be added one angle measurement ruler to facilitate the appointment of reception antenna in relation to the transmission site.



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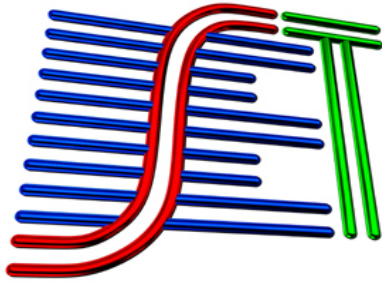
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- 5) On digital transmissions the difference regarding C/N between TOV and the reception level defined by ITU as level 2, is generally below 1 db. TOV is the most precise measurement.
- 6) It is recommended the inclusion on the item 2.4.1 of measurements that allow the characterization of multi paths profiles. This kind of measurements is known as Delay Profile, provided by measurement instruments like for example Anritsu model 8901 or 8911.
- 7) Recommended inclusion of measurements of BER and MER (Modulation Error) at each measurement point. Additionally, the measurements preferentially should be repeated in the direction of the highest level signal and better reception, considering that in some cases they don't match.
- 8) It is strongly recommended to modify the ISDB configuration to Mode 3 , as 8k.
- 9) It is suggested to include standard procedure to calibrate and provide daily checking of the measurement car instruments. This procedure avoids measurements without meaning and allows finding problems within the measurement system, in order to not compromise the previous measurements of sites.
- 10) There is no information on the text about the geographic dispersion with internal reception points, which are important to obtain results statistically valid.
- 11) As a suggestion, it is important to add theoretically strength fields for each measured point, to help on the results analysis.

Sincerely,

Olímpio José Franco

Technology Director



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