

## ITEMS FOR CONSIDERATION - LEGISLATIVE ASSEMBLY SOUND SYSTEMS ENHANCEMENTS

### BACKGROUND

In 1989, the North Dakota Legislative Assembly appropriated \$165,000 for replacement of the sound systems in the House and Senate chambers. The Legislative Management Committee administered the appropriation and considered four options for upgrading the sound systems.

Option 1 was to upgrade the existing microphone coil cords, plugs, and jacks (estimated cost \$3,100 for the House and \$2,320 for the Senate). Option 2 was to upgrade the overall system to include new AKG (handheld) microphones and hardware at each desk, on/off switches at each desk, and new preamplifiers and signal processing (estimated cost \$52,705 for the House and \$32,410 for the Senate). Option 3 was to upgrade the overall system as in Option 2 but with fixed microphones at each desk rather than handheld microphones (estimated cost \$62,440 for the House and \$35,410 for the Senate). Option 4 was to tie the sound system into the voting system so a member would press the "press to speak" button on the voting box and the presiding officer would turn on the member's microphone through a button on the presiding officer's control panel (estimated cost \$4,410 for the House and \$4,440 for the Senate, as part of a voting system enhancement project approved by the committee).

After discussion of concerns over the impact of continuing the current system of four sections per chamber and the effect of one faulty microphone causing others in the same section to become inoperative (Option 1), the possibility of members' forgetting to turn off their microphones if they did not have spring-loaded on/off buttons (Options 2 and 3), and the effect of the presiding officer controlling microphones (Option 4), the committee approved Option 1.

### EQUIPMENT

Depending on the extent of replacing or enhancing the sound systems of the House and Senate, it appears equipment would include automatic mixers; standard mixers; power amplifiers; system processors, including equalizers, filters, and limiters; distribution amplifiers; power supplies; and cabinets.

### ITEMS FOR CONSIDERATION

Based on discussions at the November meeting of the Legislative Management Committee, these items appear to be the alternatives needing resolution concerning the extent of enhancements to the sound systems.

#### Microphones

- A microphone for each member, or continued sharing of microphones.
- A corded microphone, or a fixed microphone (similar to the Roughrider Room).
- A microphone with a spring-loaded on/off switch (if possible), or a microphone with a manual on/off switch.
- If a spring-loaded switch is not possible, location of the on/off switch on the microphone, at the member's desk, or at the presiding officer's desk.
- If control is with the presiding officer, options for manual or automatic override by the leaders or designated others.

#### Speakers

- Use of existing wall speakers; or
- Installation of wall-mounted or ceiling-mounted box speakers; or
- Installation of a speaker at each member's desk and speakers for the balcony and the area under the balcony behind the brass railing.