

## 2.4. Emergency Voice Evacuation or Communication System (EVC) Specifications

**2.4.1.** The Emergency Voice Evacuation or Communication System requirements shall comply with Table 7.1.

Table 7.1: Specifications of Emergency Voice Evacuation or Communication Systems	
ITEMS	REQUIREMENTS
1. LOCATION	i. EVC control unit shall be next to FACP, at continuously monitored location, which is attended by facility management or designated personnel at all times, such as reception areas, security guard houses, Central command centres, Facility monitoring rooms, nurse stations at hospitals etc. See FACP location, Chapter 8, Table 8.1.14.1.
2. VOICE MESSAGES	<ul> <li>i. Emergency communications systems shall be capable of the reproduction of prerecorded, synthesized, or live (e.g., microphone, telephone handset, and radio) messages with voice intelligibility.</li> <li>ii. Intelligibility is a complex function of the source audio, the acoustic response of the architectural features and materials of the immediate vicinity, and the dynamics created by the room's occupants.</li> <li>iii. Voice alarm speakers shall be listed and approved by Civil Defence and they shall be tested as part of the voice evacuation system.</li> <li>iv. Voice Messages shall be developed for each scenario developed in the emergency response plan. Based on the emergency response plan, emergency messages shall have content that provides information and instructions to people in the building, area, site, or installation.</li> <li>v. Evacuation voice messages shall be preceded and followed by a minimum of two cycles of the emergency evacuation signal.</li> <li>vi. Where the system is used to transmit relocation instructions or other nonevacuation messages, a continuous alert tone of 3-second to 10-second duration followed by a message (or messages where multi-channel capability is provided) shall be automatic, and the sequence shall be repeated at least three times to direct occupants in the evacuation signalling zone where the alarm initiation originated and other evacuation signalling zone where the alarm initiation originated and other evacuation signalling zones in accordance with the building's fire evacuation plan.</li> <li>2. MICROPHONE</li> <li>i. Where microphones are provided for the live emergency voice messages to be delivered, "usage instructions" with schematics shall be posted next to the microphone with user instructions such as distance that the microphone to be held from mouth.</li> </ul>
3. POSITIVE ALARM SEQUENCE	<ul> <li>i. Emergency Voice Evacuation or Communication System in Positive Alarm Sequence (Delayed Alarm sequence), as per Chapter 8. Table 8.1.14.2. shall be permitted.</li> </ul>

