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INTERFERENCE ENVIRONMENT FOR RADIO ASTRONOMY IN THE SHIELDED ZONE OF THE MOON.

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The far side of the Moon possesses some unique advantages for future radio astronomy observations over the entire radio spectrum. Among these advantages is the shielding from terrestrial interference. However, because of the general increase in space communication activities and the emerging plans for the Moon exploration, RFI produced by the space/Moon-based communication systems may present serious problems for future radio astronomy in the Shielded Zone of the Moon (SZM). The paper provides the estimates for achievable sensitivity for some types of radio astronomy observations planned to be conducted by the radio telescopes located in the SZM. It considers the potential sources of interfering man-made radio emissions and the RFI mitigation factors and techniques that can reduce harmful effects of interference on such observations.