

# The Analysis of the Potential for Applying the CCSDS Recommendations with a View to Improve Technical Characteristics of the Domestic Space Radio Links Intended for Transmitting Telemetry from Objects of Different Purposes

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**Abstract.** Analysis is made available of applying the CCSDS recommendations for the domestic radio links serving to transmit telemetry in the absence of the required domestic telemetry standards. Advantages and problematic issues are highlighted as related to applying the CCSDS recommendations for the domestic practice. The most important features of the CCSDS recommendations in force are related to integrating operations with data (signals) and combining data (signals) with a view to implement certain functions ensuring significant advantages and employed for developing space radio links. However, consideration should be given to specific features of domestic space radio links (notable differences exist) and to the procedure for applying the CCSDS recommendations (particularly, using the patented technical solutions).

**Keywords:** space agency, CCSDS recommendations, space radio link, telemetry, modulation techniques, noiseless coding techniques