Abstract

Let $\hat{u}_n = (u_n, a_n)$, $n = 1, 2, \ldots$ *be some complete and minimal system of vectors in* $\mathcal{X} = \mathcal{X}_0 \oplus C^m$ *and let* $\hat{\vartheta}_n = (\vartheta_n, b_n)$, $n = 1, 2, \ldots$ *be corresponding biorthogonal system.* N *is a set of natural numbers,* $J = \{n_1, \ldots, n_m\} \subset N$ *is some set of different and natural numbers,* $n_0 = N \setminus J$, $b_n = (\beta_{n1}, \ldots, \beta_{nm})$, $\delta = \det \left\|\beta_{n_k j}\right\|_{k,j=1}^{m}$. *In the present paper it is shown that in case of* $\delta = 0$ *statement on non-minimality of the system* $\{u_n\}_{n \in N_0}$ in the space $\mathcal{X}_0$, *in generally, is not true, and sufficient conditions are cited when this statement becomes true.*