

This manuscript proposes a new pilot structure to support the channel estimation in time domain for the fast time-varying OFDM channels. I interpret the idea in the manuscript with following steps. (1) Inserting a pilot with guard intervals so to avoid the ISI which appears in time domain. (2) Using this ISI-free pilot to derive the channel coefficients of each channel tap at the pilot position. (3) Deriving the channel coefficients of each channel tap at data position by means of the proposed interpolation. Overall, the manuscript is well written. However, the method itself could be seriously faulty as described in followings. I suggest that the authors clarify these technological details if this manuscript is revised.

1. The proposed pilot structure violates the principle of the OFDM systems. I suggest that the pilot be modified to  $x^{(i)} = [x_{N_c-G}^{(i)}, x_{N_c-G+1}^{(i)}, \dots, \mathbf{0}, P, \mathbf{0}, x_0^{(i)}, \dots, x_{N_c-1}^{(i)}]$ .
2. The parameter  $l$  appears in the left side of (12) but not in the right side. Therefore, we derive a mistaken result having  $h_p^{(i)}(1, n_p) = h_p^{(i)}(2, n_p) = \dots = y_p^{(i)}(n_p)/P$ . A direct result for (12) could be  $h_p^{(i)}(l, n_p) = y_p^{(i)}(n_p + l)/P$ . However, the authors should carefully handle and examine these equations.
3. The most serious problem is also in equation (12). The authors derive (12) by omitted the presence of the noise terms, i.e.,  $w_p^{(i)}(n_p)$  in (11). The performance and the accuracy of most of the known channel estimations substantially depend on how the noise is processed. I suggest that the authors reconsider the derivation of  $h_p^{(i)}(l, n_p)$  with presences of  $w_p^{(i)}(n_p), w_p^{(i)}(n_p + 1), w_p^{(i)}(n_p + 2), \dots, w_p^{(i)}(n_p + G - 1)$ .