For each positive integer $n$, let $g_Z(n)$ be the smallest integer such that if an integral quadratic form in $n$ variables can be written as a sum of squares of integral linear forms, then it can be written as a sum of $g_Z(n)$ squares of integral linear forms. We show that as $n$ goes to infinity, the growth of $g_Z(n)$ is at most an exponential of $\sqrt{n}$. Our result improves the best known upper bound on $g_Z(n)$ which is in the order of an exponential of $n$. We also define an analogous number $g_O(n)$ for writing hermitian forms over the ring of integers $O$ of an imaginary quadratic field as sums of norms of integral linear forms, and when the class number of the imaginary quadratic field is 1, we show that the growth of $g_O(n)$ is at most an exponential of $\sqrt{n}$. (Received September 23, 2017)