A hexagon triple is the graph

and a hexagon triple system is an edge disjoint decomposition of $3k_n$ into hexagon triples. Note that a hexagon triple is the union of 3 triangles (= triples). The intersection problem for 3-fold triple systems has been solved for some time now. The purpose of this paper is to give a complete solution of the intersection problem for 3-fold triple systems each of which can be organized into hexagon triple systems.