Abstract. Asynchronous Partial Overlay (APO) is a search algorithm that uses cooperative mediation to solve Distributed Constraint Satisfaction Problems (DisCSPs). The algorithm partitions the search into different subproblems of the DisCSP. The proof of completeness of the APO algorithm is based on the growth of the size of the subproblems. The present paper presents an example DisCSP and a detailed run of APO on the example. In the resulting scenario, the run of the algorithm enters an infinite loop. The presented example and scenario contradict the termination and consequently the completeness of the APO algorithm. A correction to the problem that prevents the infinite loop in our example is proposed. A reference to the problematic part in the proof of APO’s completeness is also given.