We study a principal-agent problem with one principal and multiple agents. The principal provides an exit contract which is identical to all agents, then each agent chooses her/his optimal exit time with the given contract. The principal looks for an optimal contract in order to maximize her/his reward value which depends on the agents' choices. Under a technical monotone condition, and by using Bank-El Karoui's representation of stochastic process, we are able to decouple the two optimization problems, and to reformulate the principal's problem into an optimal control problem. The latter is also equivalent to an optimal multiple stopping problem and the existence of the optimal contract is obtained. We then show that the continuous time problem can be approximated by a sequence of discrete time ones, which would induce a natural numerical approximation method. We finally discuss the principal-agent problem if one restricts to the class of all Markovian and/or continuous contracts.