Hierarchical reactive planning (HRP) is a popular method for controlling virtual beings' behaviour. The advantage of HRP is that complex behaviours can be described relatively easily. However, in particular situations problems with biological plausibility arise. This is partially caused by the fact that so called transition behaviours and postponement of behaviour are hard to express in HRP. Transition behaviours are short actions that the simulated beings should engage in between two main behaviours in order to ensure a smooth transition between them. Postponement of behaviour is desirable in case the running behaviour is approaching the end and therefore should not be interrupted. In the present work we incorporate transition behaviours and postponement of behaviour into the model of HRP and describe the implemented prototype.