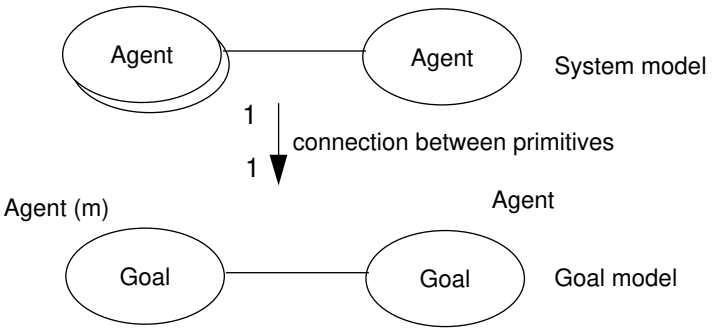

Fig. 7.8 System Model to Goal Model Mappings

7.8.2 Goals and State

The states depicted as goals are achieved through the carrying-out of activities within a pattern of interactive behaviour in a system. To help to express this clearly a convention is to use the past transitive form of the verb (e.g. Company Z's decision *obtained*). It is useful to maintain this so as to make the mapping between the *why* model and the state-based *how* model transparent. This mitigates the fact that this form of the verb makes the expression of goals a little less natural to users.

7.8.3 Failure to Achieve Goals

It is taken as a default position that an agent in an interactive behaviour can fail to achieve a goal. This means that if an Underwriter possesses a goal, 'PEF team's decision given' he or she can fail to achieve this. This means that we accept that in the normal case an agent is able to exit from the undertaking of a role at any point within it. There will be exceptions but these need to be stated explicitly. Therefore, if it is imperative that the underwriter gives a decision on a risk proposal come what may, this will have to be appended to the goal description.

7.8.4 Non-Functional Goals

The goals of the interactions are given in functional terms. It can also be necessary to express non-functional goals through business rules (e.g. success criteria). For example, in Figure 7.9 it can be seen that there is a non-functional goal that the decision of the underwriter be given 'within 10 days'.

7.8.5 The Resolution of Goals

Consider agents *X* and Y which interact. The goal of the interaction for *X* is *x* which is fulfilled by *Y* achieving its goal *y*. For example, *X* might be a broker who seeks to obtain the decision of PEF insurance on a submission. He or she may wish to know on what terms the PEF team would be willing to underwrite the property risks of a major high street store chain. Therefore the