

## System Type: *atis* **GeneralSystem**

(*System type* is part of the metatheory and describes configurations and properties that characterize a specific system.)

**General system,  $\mathcal{G}$ ,** =<sub>df</sub> a set of partitioned components, affect relations, transition functions, linearly-ordered time set, qualifiers, and a system state-transition function.

**A set of affect-relations which determine a set of partitioned components defined by component-qualifiers, transition functions, a time sequence, and a state-transition function.**

$$\mathcal{G} =_{df} [\mathcal{A} \vdash (\mathcal{P} (\mathcal{Q}, \mathcal{T}, \mathcal{F}, \sigma)]$$

**General system** is defined as a set of partitioned components on which are defined relations that are sequenced by a time-set, controlled by a qualifier-set, and mapped by a system state-transition function. This definition has been refined from that given in Report #2-1, '*General System*' *Defined for predictive Technologies of ATIS*. Whereas that report has a *transition functions set* as a parameter of General System, which has now been replaced with the *qualifier set*. This revision results in a more refined definition of *General System* since qualifiers in fact determine all of the properties defined by the transition functions set.