

es-knows-knows^{0,22}

$$\begin{aligned}
& \forall poss: (ES\{i\} \rightarrow Prop_i), R: (possible-event\{i:l\}(poss) \rightarrow possible-event\{i:l\}(poss) \rightarrow Prop_i). \\
& (Trans\ a,b: possible-event\{i:l\}(poss). R(a,b)) \\
& \Rightarrow (\forall P: (possible-event\{i:l\}(poss) \rightarrow Prop_i), e: possible-event\{i:l\}(poss). \\
& \quad es-knows\{i:l\} \\
& \quad \quad (poss; R; P; e) \\
& \Rightarrow es-knows\{i:l\} \\
& \quad \quad (poss; R; (\lambda e. es-knows\{i:l\}(poss; R; P; e)); e))
\end{aligned}$$