

## **ESMachineAxiom\_wf<sup>11,40</sup>**

$\forall E:\text{Type}\{\text{i}\}, T, V:(\text{Id} \rightarrow \text{Id} \rightarrow \text{Type}\{\text{i}\}), M:(\text{IdLnk} \rightarrow \text{Id} \rightarrow \text{Type}\{\text{i}\}), loc:(E \rightarrow \text{Id}), knd:(E \rightarrow \text{Knd}),$   
 $val:(e:E \rightarrow \text{eventtype}(knd;loc;V;M;e)), when, after:(x:\text{Id} \rightarrow e:E \rightarrow T(loc(e),x)),$   
 $snr:(\{e:E| \uparrow \text{isrcv}(knd(e))\} \rightarrow E),$   
 $Trans:(i:\text{Id} \rightarrow k:\text{Knd} \rightarrow \text{kindcase}(k; a.V(i,a); l,t.M(l,t)) \rightarrow (x:\text{Id} \rightarrow T(i,x)) \rightarrow (x:\text{Id} \rightarrow T(i,x))),$   
 $Send:(i:\text{Id} \rightarrow k:\text{Knd} \rightarrow \text{kindcase}(k; a.V(i,a); l,t.M(l,t)) \rightarrow (x:\text{Id} \rightarrow T(i,x)) \rightarrow (\text{Msg}(M) \text{ List})),$   
 $Choose:(i,a:\text{Id} \rightarrow (x:\text{Id} \rightarrow T(i,x)) \rightarrow (?(\text{V}(i,a)))).$   
ESMachineAxiom( $E;T;V;M;loc;knd;val;when;after;snr;Trans;Send;Choose$ )  $\in \mathbb{P}\{\text{i}'\}$