

es-rcv-from^{0,22}

rcvs from e on $l = L$

$$\begin{aligned} \equiv_{\text{def}} & (\forall e':\mathbf{E}. (e' \in L) \Leftrightarrow \text{isrcv}(e') \ \& \ \text{lnk}(e') = l \ \& \ \text{sender}(e') = e) \\ & \ \& \ (\forall e_1, e_2:\mathbf{E}. e_1 \text{ before } e_2 \in L \Rightarrow (e_1 <_{\text{loc}} e_2)) \end{aligned}$$

clarification:

es-rcv-from($es; e; l; L$)

$$\begin{aligned} \equiv_{\text{def}} & (\forall e':\text{es-}\mathbf{E}(es). \\ & (e' \in L \in \text{es-}\mathbf{E}(es)) \\ & \Leftrightarrow \\ & \text{es-isrcv}(es; e') \ \& \ \text{es-lnk}(es; e') = l \in \text{IdLnk} \ \& \ \text{es-sender}(es; e') = e \in \text{es-}\mathbf{E}(es)) \\ & \ \& \ (\forall e_1:\text{es-}\mathbf{E}(es), e_2:\text{es-}\mathbf{E}(es). e_1 \text{ before } e_2 \in L \in \text{es-}\mathbf{E}(es) \Rightarrow \text{es-locl}(es; e_1; e_2)) \end{aligned}$$