

## **vartype-es-state-sub**<sup>11,40</sup>

$\forall es:\text{event\_system}\{i:l\}, i:\text{Id}, ds_1, ds_2:\text{fpf}(\text{Id}; x.\text{Type}).$   
 $\text{fpf-sub}(\text{Id}; x.\text{Type}; \text{id-deq}; ds_2; ds_1)$   
 $\Rightarrow (\forall x:\text{Id}. \text{subtype\_rel}(\text{es-vartype}(es; i; x); \text{fpf-cap}(ds_1; \text{id-deq}; x; \text{top})))$   
 $\Rightarrow \text{subtype\_rel}(\text{es-state}(es; i); \text{decl-state}(ds_2))$