

chain-consistent-order^{13,45}

$\forall es:ES, Cmd:Type, In:AbsInterface(Cmd), isupdate:(Cmd \rightarrow \mathbb{B}), Sys, Out:AbsInterface(Top).$
 $(E(In) \subseteq_r E(Sys))$
 $\Rightarrow (\forall f:sys\text{-antecedent}(es;Sys).$
 $fifo\text{-antecedent}(es;Sys;f)$
 $\Rightarrow (\forall e:E(In). f(e) = e \in E)$
 $\Rightarrow (\forall chain:(E(Sys) \rightarrow (Id\ List)). chain\text{-consistent}(f;chain) \Rightarrow sys\text{-order}(es; Sys; f)))$