chain-order-total2[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-antecedent(es;Sys), $chain$:(E(Sys)$\rightarrow$(Id List)).
chain-consistent(f;$chain$)
$\Rightarrow$ ($\forall e$, e':E(Sys).
($\neg$(loc(e) = loc(e') $\in$ Id)) $\Rightarrow$ (loc(e) << loc(e') $\vee$ loc(e') << loc(e))))

http://www.nuprl.org/FDLcontent/p0_963683_/p28_494754_{chain-order-total2}.html