```
s-pre-init-rule  THM

⊢  ∀i,a:Id, T:Type, ds:a:Id fp-> Type, P:(State(ds)→T→Prop),
    init:x:Id fp-> ds(x)?Void.
   (∀x:Id. x ∈ dom(ds) ⇒ x ∈ dom(init))
   ⇒
   @i: (with ds: ds
    init: init
   action a:T
    precondition a(v) is
    P)
   ∈ Dsys
   & (∀D:Dsys.
      @i: (with ds: ds
       init: init
      action a:T
       precondition a(v) is
       P) ⊆ D
      ⇒
      D
      realizes es.(∃v:T. P((λx.init(x)?·),v)) ⇒ (∃e:E. loc(e) = i))
  by NewSpecializeEsLemmaOn Thm: pre_DASH_init_DASH_rule
     (with ds: ds
      init: init
     action a:T
      precondition a(v) is
      P)
END
```