UE

$\mathtt{AKA}(PMSI, p'')/\mathtt{FORGETPMSI}$
$\mathtt{AKA}(P_{new}, p'')/\mathtt{FORGETPMSI}$

$PMSI, P_{new}$

Where $p'' \notin \{PMSI, P_{new}\}$

HN

$\mathtt{AVR}/\mathtt{AV}_{p''}$

$1 : i, p, p', \boldsymbol{p''}$

$\mathtt{LU}_{p'}/\mathtt{FORGETP}$
$\mathtt{LU}_{p''}/\mathtt{FORGETP}$
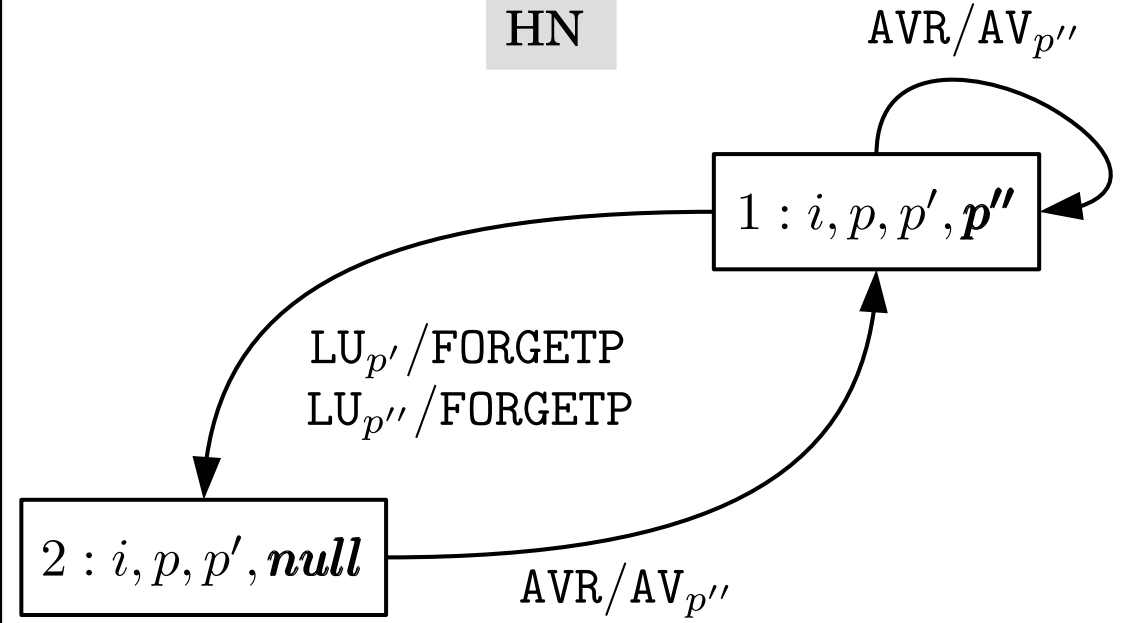
$2 : i, p, p', \boldsymbol{null}$

$\mathtt{AVR}/\mathtt{AV}_{p''}$

$\mathtt{AVR} = AV$ request has arrived using any of the identities i, p, p, p''

$\mathtt{AV}_x = AV$ sent to SN with x in $RAND$

$\mathtt{LU}_x = $ Location update for x has arrived

$\mathtt{AKA}(x, y) = $ UE identified with x, the AKA is successful, y is the next pseudonym

$$\mathtt{FORGETP} = \begin{cases} p \leftarrow p' \\ p' \leftarrow p'' \\ p'' \leftarrow null \end{cases} \qquad \mathtt{FORGETPMSI} = \begin{cases} PMSI \leftarrow P_{new} \\ P_{new} \leftarrow p'' \end{cases}$$