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|----- MODULE OpSEC -----|
| EXTENDS SEC |
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| VARIABLES buset  buset[r]: the buffer of local updates made by r ∈ Replica since the last broadcast |
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| OpSECInit  $\triangleq$  |
|    $\wedge$  SECInit |
|    $\wedge$  buset = [r ∈ Replica  $\mapsto$  {}] |
| |
| OpSECDo(r)  $\triangleq$  |
|    $\wedge$  SECDo(r) |
|    $\wedge$  buset' = [buset EXCEPT ![r] = @  $\cup$  {[r  $\mapsto$  r, seq  $\mapsto$  seq[r]}]  collect a new update |
| |
| OpSECSend(r)  $\triangleq$  |
|    $\wedge$  SECSend(r) |
|    $\wedge$  uincoming' = [x ∈ Replica  $\mapsto$   broadcast buset[r] |
|       IF x = r THEN uincoming[x] |
|       ELSE uincoming[x]  $\cup$  {[aid  $\mapsto$  [r  $\mapsto$  r, seq  $\mapsto$  seq[r]], update  $\mapsto$  buset[r]}] |
|    $\wedge$  buset' = [buset EXCEPT ![r] = {}]  clear buset[r] |
| |
| OpSECDeliver(r, aid)  $\triangleq$  |
|    $\wedge$  SECDeliver(r, aid) |
|    $\wedge$  UNCHANGED  $\langle$ buset $\rangle$  |
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| \ * Modification History |
| \ * Last modified Wed Jun 26 13:21:02 CST 2019 by xhdn |
| \ * Created Tue Jun 11 17:32:49 CST 2019 by xhdn |

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