

The operation at tag side in k -TAS

/* Respond to the reader's query */

```
1  Receive a message  $p$  which should be a Start
2      command, a Terminate command or a Query
3      command with prefix value  $n$ .
4
5  while  $p$  is valid &&  $p \neq$  Terminate command do
6      if ( $p$  is a Start command) then
7          retrieve the first  $i$  bits from identity as  $B_j$ 
8      else if ( $p$  is a Query command with prefix  $n$  &&
9          the first successive bits of identity  $D_j = n$ ) then
10         retrieve  $i$  continuous bits behind the prefix  $D_j$ 
11         in its identity as  $B_j$ 
12     else
13         go to line 18
14     end if
15     Calculate the decimal value  $M_j$  of  $B_j$ 
16     Generate  $CRS_j$  and  $RS_j = CRS_j \parallel PID_j$ 
17     Transmit  $RS_j$ 
18     Wait for a message  $p$  from the reader
19 end while
```