

```

----- MODULE BaseStation -----
EXTENDS Node, Sequences, Natural
BsID  $\triangleq$  10 Identifier for base station

BNode  $\triangleq$  [
  BsNode            $\mapsto$  Node(BsID),
  BsReceivedDData  $\mapsto$  BOOLEAN ,
  BsBroadCastDInfo  $\mapsto$  BOOLEAN ,
  BsIssueOrders     $\mapsto$  BOOLEAN
]
VARIABLE BaseStation

NodeIDs  $\triangleq$  1 .. 15
Nodes  $\triangleq$  [n  $\in$  NodeIDs  $\mapsto$  Node(n)]

BsAlwaysConInvariant  $\triangleq$ 
   $\forall g \in \text{DOMAIN } Nodes :$ 
  ( $Nodes[g].NodeType = \text{Gateway} \wedge Nodes[g].NCon = \text{"Connected"}$ )  $\Rightarrow$ 
   $BaseStation.BsNode.NCon = \text{"Connected"}$ 

```