

```

┌────────────────── 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 = Gateway  $\wedge$  Nodes[g].NCon = "Connected")  $\Rightarrow$ 
    BaseStation.BsNode.NCon = "Connected"
└──────────────────┘

```