Antenna Process Variables

Configuration

degreesToScanX: INT

degreesToScanY : INT

stepSizeX : INT

stepSizeY : INT

arraySizeX : INT = degreesToScanX / STEP_DEGREES_X
arraySizeY : INT = degreesToScanY / STEP_DEGREES_Y

CONSTANTS

STEP_DEGREES_X = ?

STEP_DEGREES_Y = 0,36

Process Variables

stepCountX : INT

stepCountY : INT

dataProcessed : BOOL

Control Variables

startScan : BOOL

==Antenna Finite State Machine==

```
┌─────────────────────┐          ┌─────────────────────────┐
│ idle                │          │ initial Setup           │
├─────────────────────┤          ├─────────────────────────┤
│                     │          │ motor X. turnLeft ( )   │
│                     │          │                         │
│                     │  [startScan == True] │ motor Y. turnLeft ( )   │
│                     │ ───────────────────> │                         │
│                     │  motor X. aligned = False │ array SizeX = ...  │
│                     │  motor Y. aligned = False │ array Size Y = ... │
│                     │          │ stepCount X = 0;        │
│                     │          │ stepCount Y = 0;        │
└─────────────────────┘          └─────────────────────────┘
```

/dataProcessed = False

[motorX.aligned == True
AND motorY.aligned == True]

```
┌─────────────────────────────────┐
│ collect Data                    │
├─────────────────────────────────┤
│ dataAccessor. getData()         │
│ dataSeries. extend NetworkList()│
└─────────────────────────────────┘
```

/motor X. aligned = False
/motor Y. aligned = False

[dataProcessed == True AND
stepCount X < array SizeX AND
stepCount Y < array Size Y]