```
1: function BESTNODE(neighbors X, neighbors Y)
 2:
        indx \leftarrow 0, pos \leftarrow 0, indn \leftarrow 0
        for i=0 to neighbors X length do
 3:
            if Nmapping[i] == 0 then
 4:
                for j=0 to xlength do
 5:
 6:
                    m \leftarrow neighborsX[i]
                    n \leftarrow neighborsY[i]
 7:
                    Xc=xclone.indexof(m)
 8:
                    Yc=yclone.indexof(n)
 9:
                    if (Xc) == (Yc) then
10:
                         indx \leftarrow x.indexof[m]
11:
                        if indx==dest then
12:
                             Dest is in the tr region itself
13:
                        end if
14:
                    else
15:
                        XCm=xclone.indexof(m)
16:
17:
                        YCn=yclone.indexof(n)
                        if (XCm) > (YCn) then
18:
                             yclone[YCn] \leftarrow 99
19:
                        else
20:
                             xclone[XCm] \leftarrow 99
21:
                        end if
22:
                    end if
23:
                end for
24:
                Ex=energy[indx]
25:
                Px=pdr[indx]
26:
                if (Ex >= tener) and (Px >= tpdr) then
27:
                    time \leftarrow distance[i]/pdr[indx]
28:
                    if time; min then
29:
                         flag \leftarrow 1, min \leftarrow time
30:
                        pos \leftarrow indx, indn \leftarrow i
31:
                    end if
32:
                end if
33:
            end if
34:
        end for
35:
        if flag==1 then
36:
            Nmapping[indn] \leftarrow 1
37:
            nextnodex \leftarrow x[pos]
38:
            nextnodey \leftarrow y[pos]
39:
40:
            src \leftarrow pos
            presize \leftarrow neighborsXlength
41:
            p \leftarrow 1, flag \leftarrow 0
42:
            Call NeighborsList()
43:
44:
        else
```

No neighbors satisfying the threshold conditions

45:

46:

end if

47: end function