Algorithm 1: Handover prediction

HP←List();
for $i \leftarrow 1$ **to** $length(handover) - 1$ **do** *Handover loop*
    curr=handover[i]; next=handover[i+1];
    /*overlapping handover*/
    if *Intersects(curr,next)* **then**
        centroid=Centroid(Intersects(curr,next));
        Add(HP,NearestPoint(route,centroid));
    else
        line=LineBetweenNearestPoint(curr,next);
        /*line crossing route*/
        if *Intersects(line,route)* **then**
            Add(HP,Intersects(line,route));
        else
            midPoint=MidPoint(line);
            Add(HP,NearestPoint(route,midPoint));
        end
    end
end