Optimal route selection in CAIR

Procedure 1 : Route Discovery

Inputs : ID of Source node S and destination node D

Outputs : optimal route from source to destination

Begin

if ($ID_D = ID_N$)

forward packet to D;

else

determine the rectangele restricted searching area;

$S_{searching\_area} = [X_{min}, X_{max}, X_{min}, Y_{max}]$;

broadcast RREQ to D in the $S_{searching\_area}$;

Activate (BROADCAST_TIMER);

calulate route probability of connectivity and

packet delay;

if ($p_{max} - p_{other} > \varepsilon$)

return route with the probability of

connectivity p_{max};

else

delete routes with the probability of

conectivity $p_{other} < p_{max} - p_{threshold}$;

return route with packet delay d_{min};

end if

end if

End of Route Discovery