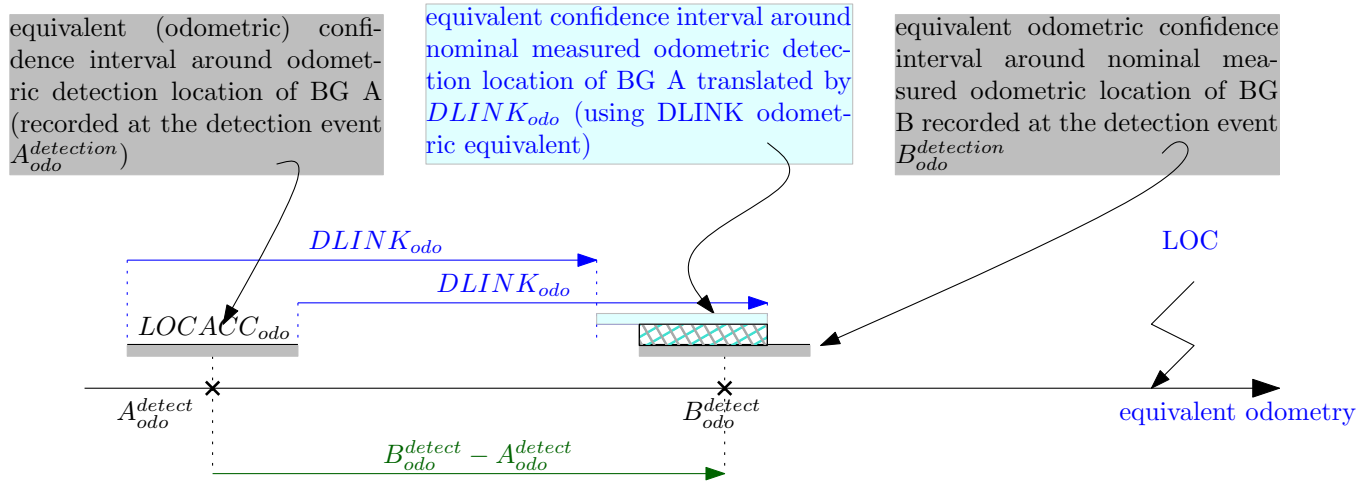


All the quantities are in odometric units, either as nominal measure of a train ride (e.g.  $A_{odo}^{detect}$ ) or by ideal odometric conversion of nominal quantities. (called odometric equivalents as e.g.  $DLINK_{odo}$  is the odometric equivalent of the linking distance). The equivalent confidence interval is the projection of the confidence interval from the world coordinates to an ideal equivalent odometric representation. (The specific odometric realisation which applies for the considered train ride will differ from the ideal conversion model.)



BG B has to be found within the equivalent confidence interval around the detection event  $B_{odo}^{detect}$  and has also to be found within the equivalent confidence interval around the detection event  $A_{odo}^{detect}$  shifted by  $DLINK_{odo}$ . If  $DLINK_{odo}$  and  $B_{odo}^{detect} - A_{odo}^{detect}$  differ could give supplementary constraint to restrict the equivalent confidence interval around BG B. (Within the intersection of the current and shifted preceding interval)