**Table 2: Notations and their description**

|  |  |
| --- | --- |
| **Notation** | **Description** |
|  | Set of static nodes |
|  | Set of sink stop locations |
|  | Nodes nearest to the sink trajectory |
|  | Nodes farthest from the sink trajectory |
|  | Data rate generated by node i |
|  | Sink sojourn time where |
|  | Energy of node |
|  | Data transmission rate from node  to |
|  | Data reception rate while receiving from node  to node |
|  | Minimum distance from node  to sink at location |
|  | Nodes transmitting data to sink at location |
|  | Time required for one epoch is  s |
|  | Duration required to transmit data from node i to the mobile sink |
|  | Upper bound on the transmission rate between link |