

upon event *<Init>* **do**

forall $P_i \in \Pi$ **do**

 delivered[P_i] := 0;

missing[P_i] := 0;

 lsn := 0; stored := 0;

procedure gossip (msg) **is**

forall $t \in$ pick-targets (fanout) **do**

trigger <flp2pSend | t , msg>;

upon event <pbBroadcast | m > **do**

 lsn := lsn+1; **trigger** <unBroadcast | [Data, self, m , lsn]>;

upon event <unDeliver | P_i , [DATA, S_m , m , SN_m]> **do**

if (random() > store-threshold) **then**

 stored := stored \cup { [DATA, S_m , m , SN_m] };

if ($SN_m \geq$ delivered[S_m] + 1) **then**

trigger <pbDeliver | S_m , m >;

//deliver immediately

forall seqnb \in [delivered[S_m] + 1, $SN_m - 1$] **do**

//usually you use [n, n + 1ml] notation

 gossip ([REQUEST, self, S_m , seqnb, maxrounds - 1]);

 missing[P_i] := missing[P_i] \cup seqnb;

 delivered[S_m] := SN_m ;

 startTimer (TimeDelay, P_i , SN_m);

else if ($SN_m \in$ missing[S_m]) **then**

trigger <pbDeliver | S_m , m >;

upon event <flp2pDeliver | P_j , [REQUEST, P_i , S_m , SN_m , r] > **do**

if ([DATA, S_m , m , SN_m] \in stored) **then**

trigger <flp2pSend | P_i , [DATA, S_m , m , SN_m] >;

else if ($r > 0$) **then**

 gossip ([REQUEST, P_i , S_m , SN_m , $r - 1$]);

upon event <flp2pDeliver | P_j , [DATA, S_m , m , SN_m]> \cup

if ($SN_m \in$ missing[S_m]) **then**

trigger <pbDeliver | S_m , m >;

missing[S_m] := missing[S_m] $\setminus SN_m$;