```
\longrightarrow Module xApp –
EXTENDS API
LOCAL INSTANCE Naturals
LOCAL INSTANCE Sequences
CONSTANT Nodes
                                     \longrightarrow module SB \longrightarrow
   SendSubscribeRequest(c) \triangleq
        \land API! E2T! Client! Send(c, [type \mapsto API! E2T! Protocol.SubscribeRequest])
        \land UNCHANGED \langle \rangle
   HandleSubscribeResponse(c, m) \triangleq
        \land API!E2T!Client!Receive(c)
        \land UNCHANGED \langle \rangle
   SendUnsubscribeRequest(c) \stackrel{\Delta}{=}
        \land API! E2T! Client! Send(c, [type \mapsto API! E2T! Protocol. UnsubscribeRequest])
        \land UNCHANGED \langle \rangle
   Handle Unsubscribe Response(c, m) \triangleq
        \land API!E2T!Client!Receive(c)
        \land UNCHANGED \langle \rangle
   HandleMessage(c, m) \stackrel{\triangle}{=}
       \land \lor \land m.type = API!E2T!Protocol.SubscribeResponse
             \land HandleSubscribeResponse(c, m)
          \lor \land m.type = API!E2T!Protocol.UnsubscribeResponse
             \land Handle UnsubscribeResponse (c, m)
       \land UNCHANGED \langle \rangle
   Handle(c) \triangleq API!E2T!Client!Handle(c, HandleMessage)
   Servers \triangleq API!E2T!Servers
   Connections \triangleq API!E2T!Connections
   Connect(s, d) \triangleq API!E2T!Client!Connect(s, d)
   Init \stackrel{\triangle}{=} TRUE
   Next \triangleq
        \forall \exists s \in Nodes, d \in Servers : Connect(s, d)
        \vee \exists c \in Connections : Handle(c)
```

LOCAL $SB \triangleq \text{INSTANCE } SB$

 $Init \triangleq$ $\land SB!Init$ $Next \triangleq$ \vee SB! Next

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