

TO: T10 Membership
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SUBJECT: T10/03-367r1, ADT Annex: Error detection and recovery action examples

Revision 1:

- Changes to clarify transmission of multiple IUs without receiving Acknowledgement IUs
- Fixed incorrect labels

Revision 0:

- Initial version

Background

In the process of preparing proposals for error detection and recovery, we found that drawings made comprehension easier. This document offers some such as an informative annex for ADT.

Changes

Add the following as an Annex.

Annex A

(Informative)

Error detection and recovery action examples**A.1 Introduction**

This informative annex diagrams various error detection and recovery procedures for ADT devices conforming to this standard. The conventions for the diagrams are shown in table A.1.

Table A.1 – Diagram Drawing Conventions

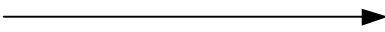
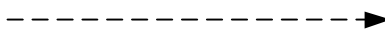
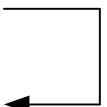
Drawing Convention	Meaning
	Acknowledged or Unacknowledged IU
	Acknowledgement IU
	Time-out value exceeded
	IU received is processed to transmit IU
X	IU lost or dropped
RE	Value of the recovery expected (RECEXP) bit in the NAK IU.
a = b	Counter a is set to the value of expression b
(condition) => action	Because the condition is true, the action is performed

Figure A.1 – Receiver-Detected Error

Note: ACK Offset > 1 allows IU B to be sent immediately after IU A.

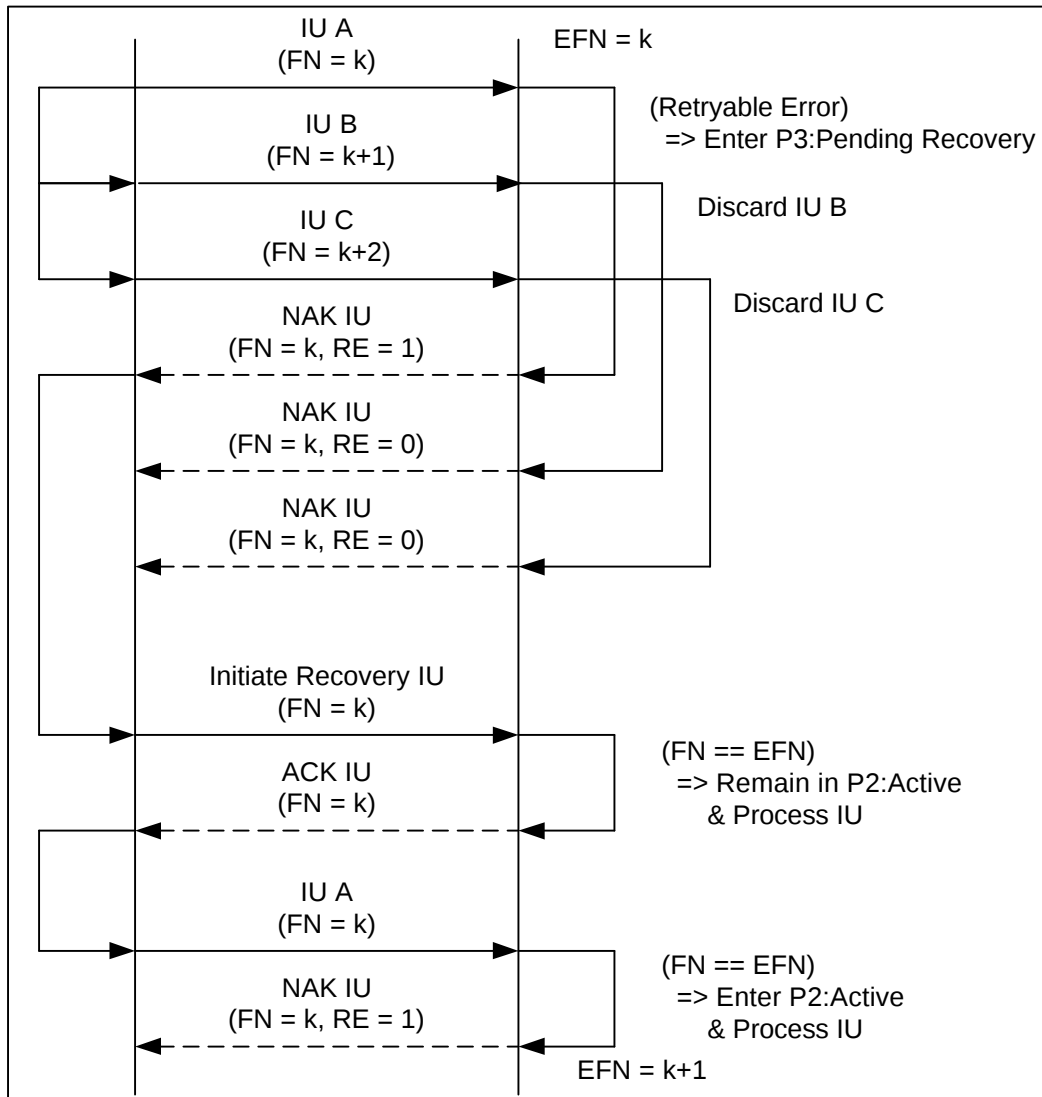


Figure A.2 – Lost ACK IU

Note: ACK Offset > 1 allows IU B to be sent immediately after IU A.

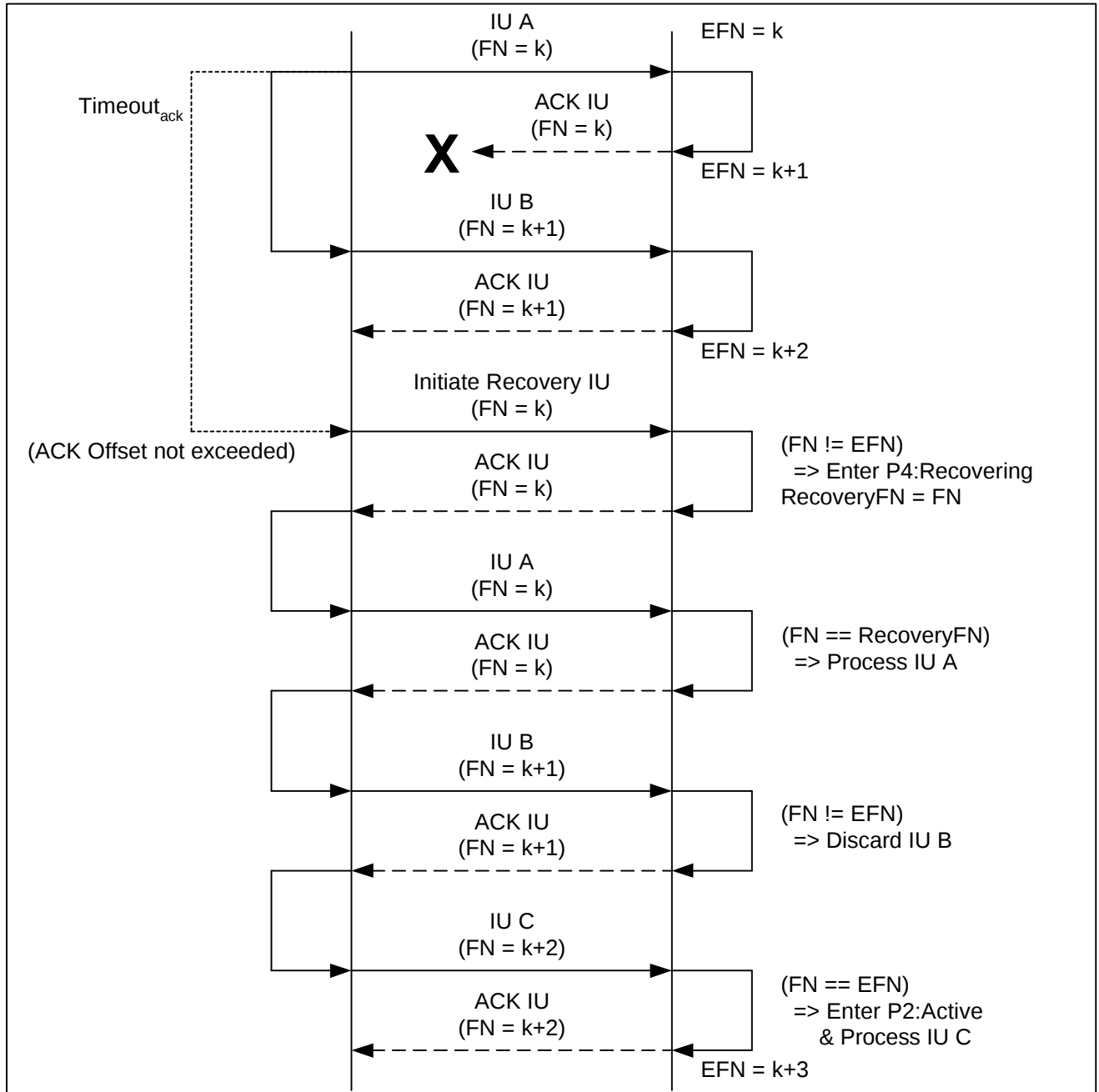


Figure A.3 – Lost IU

Note: After retransmission of IU A, ACK Offset > 1 allows IU B to be sent immediately.

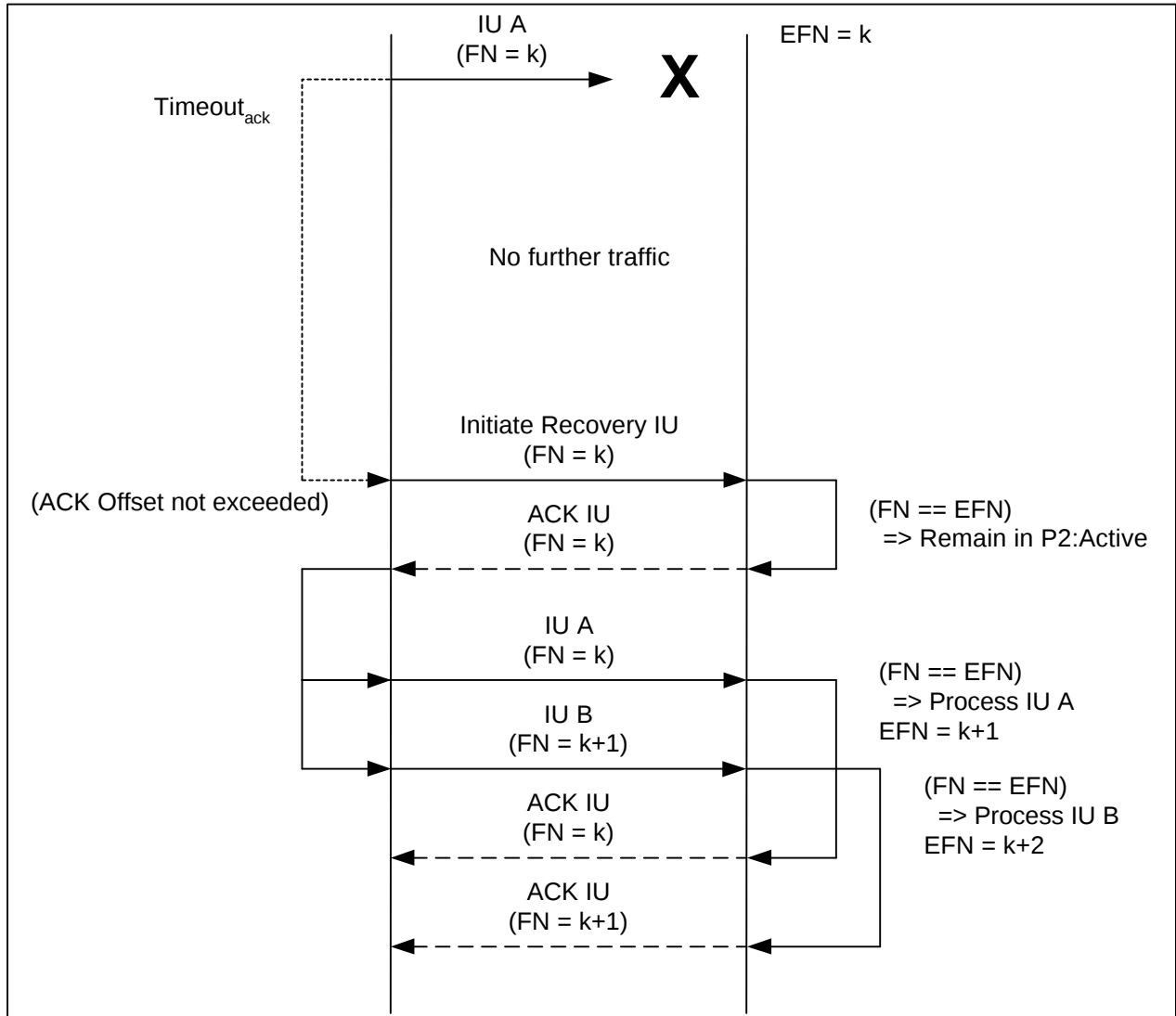


Figure A.4 – Non-Retryable Error

Note: ACK Offset > 1 allows IU B to be sent immediately after IU A.

