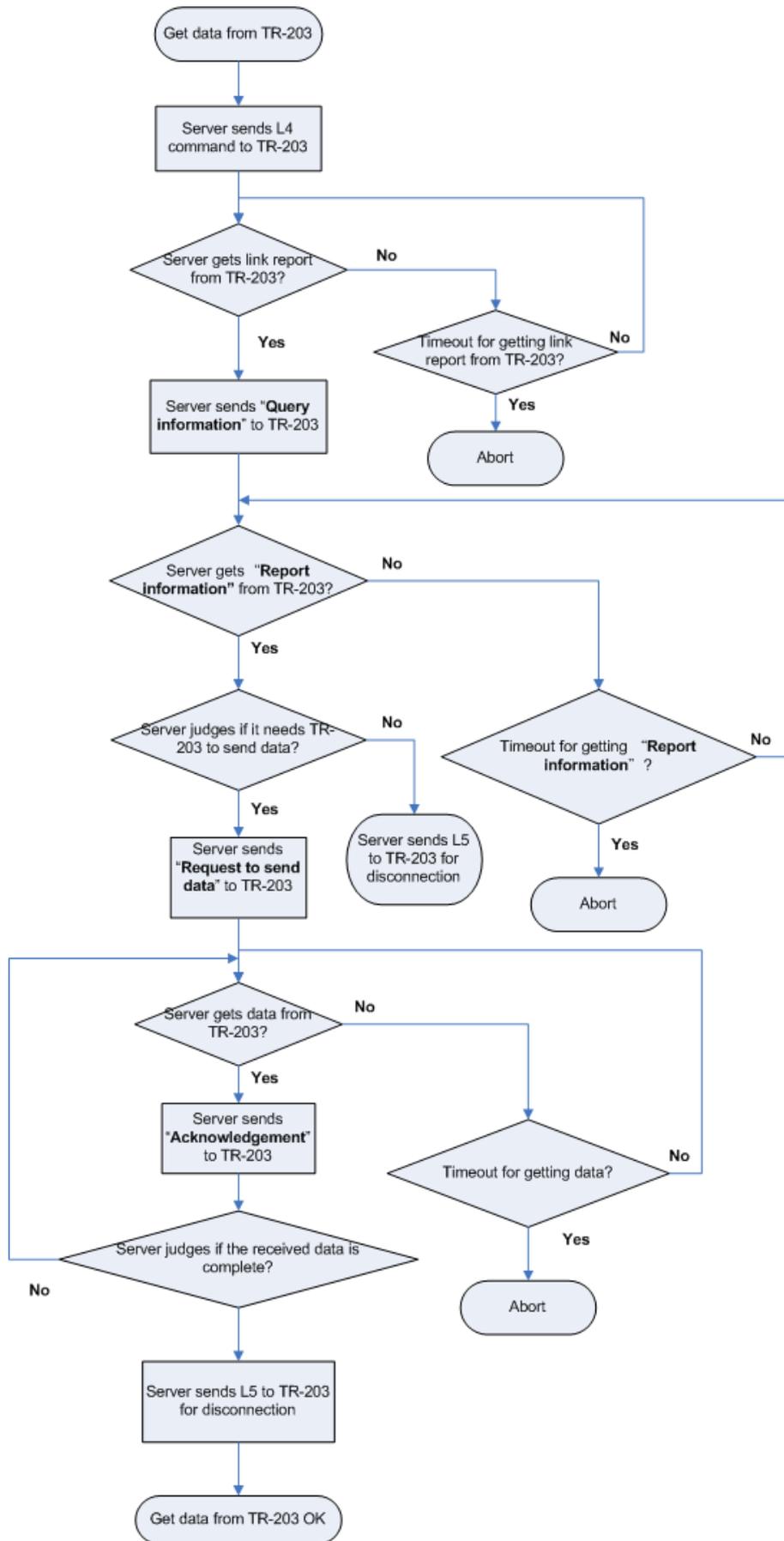


Get Data of TR-203 over GPRS

Server can check the data in the TR-203 by sending "**Query Information**" to TR-203. TR-203 will send "**Report information**" to server. After confirming the data of the TR-203, server can judge if it requires TR-203 to send the data to server. Server can send "**Request to send data**" to TR-203 for asking TR-203 to send data to server. TR-203 will send "**Data of data logger**" to server. After getting the data of TR-203, server can also send "**Delete all data**" to TR-203 for deleting the data.



Note:

You have to set timeout for TR-203 to disconnect from server when there is no command from server. The parameter is E7. The unit is second. Default is 30.

Binary Message

The general binary format is

Preamble		Length	Message ID	Data	Checksum	End word
0x02	0x24					0x21
2 bytes		1 byte	1 byte	Variable length	1 byte	1 byte

Length: Total bytes of each packet are from Preamble to End Word. The maximum message length is 200 bytes.

Message ID:

Bit field of Message ID			
Bit 7~5	Bit 4	Bit 3	Bit 2~0
Activity	Start flag	Stop Flag	Category
001: Query information	1/0	1/0	001: data logger
010: Send information			010: data buffer
011: Acknowledgement			011: debug message
100: Request to send data			100: firmware
101: Sending data			101: EPO
111: Delete data			

Start and stop flags are used for sending data. For the other activities, these fields are filled with 0.

Checksum: The 8-bit exclusive OR of all bytes in the packet starting from but excluding Preamble to last byte of Data.

All data fields with multiple bytes are transmitted with LSB first.

1. Query Information (Host to device)

Message ID	Data	
0x21	Start time	End time
1 byte	4 bytes	4 bytes

2. Report information (Device to host)

Message ID	Data		
0x41	Start time	End time	Number of data record

1 byte	4 bytes	4 bytes	4 bytes
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3. Request to send data (Host to device)

Message ID	Data	
0x81	Start time	End time
1 byte	4 bytes	4 bytes

4. Data of data logger (Device to host)

Message ID	Data			
0xB1 & (start, stop)	Sequence number	Record 0	...	Record N-1
1 byte	2 bytes	N x (size of Record)		

5. Delete all data (Host to device)

Message ID	Data
0xE1	0x1E
1 byte	1 byte

Time format

All the fields of time are represented by seconds counting from 00:00:00, Jan 1st, 2000.