30.3.4 Timing Relationships.

The following conventions shall apply.

30.3.4.1 Paging and Cutovers.

Broadcast system of messages is completely arbitrary, but sequenced to provide optimum user performance. Message Types 10 and 11 shall be broadcast at least once every 48 seconds. All other messages shall be broadcast in-between, not exceeding the maximum broadcast interval in Table 30-XII. Message Type 15 will be broadcast as needed, but will not reduce the maximum broadcast interval of the other messages. Type 15 messages that are longer than one page will not necessarily be broadcast consecutively.

Table 30-XII. Message Broadcast Intervals

Message Data	Message Type Number	Maximum Broadcast Intervals †
Ephemeris	10 & 11	48 sec
Clock	Type 30's	48 sec
ISC, IONO	30*	288 sec
Reduced Almanac	31* or 12	20 min**,****
Midi Almanac	37*	120 min**,****
EOP	32*	30 min****
UTC	33*	288 sec
Diff Correction	34* or 13 & 14	30 min***,****
GGTO	35*	288 sec****
Text	36* or 15	As needed****

* Also contains SV clock correction parameters.
** Complete set of SVs in the constellation.
*** When Differential Corrections are available.
**** Optional (interval applies if/when broadcast).

† The intervals specified are maximum. As such, the broadcast intervals may be shorter than the specified value.

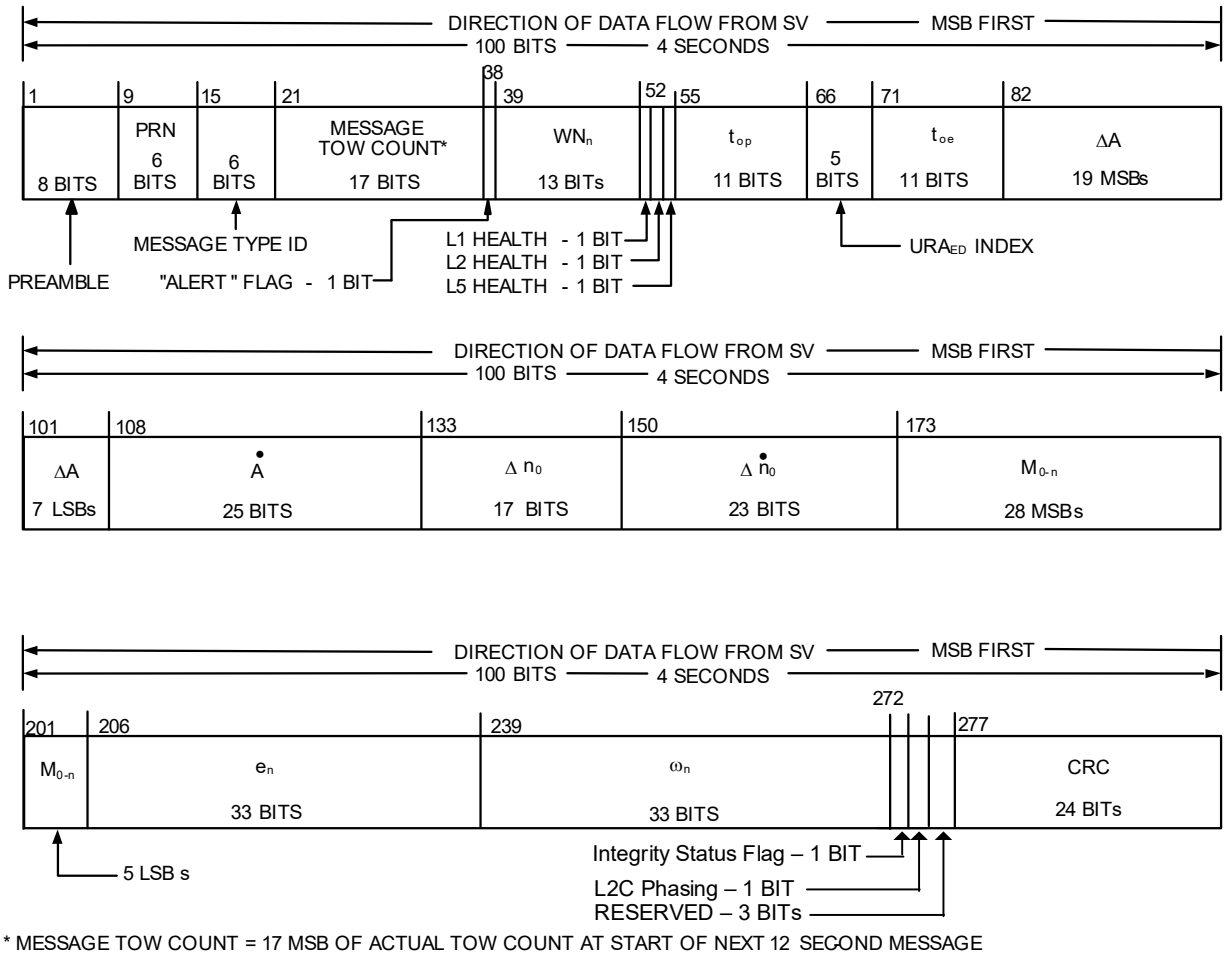
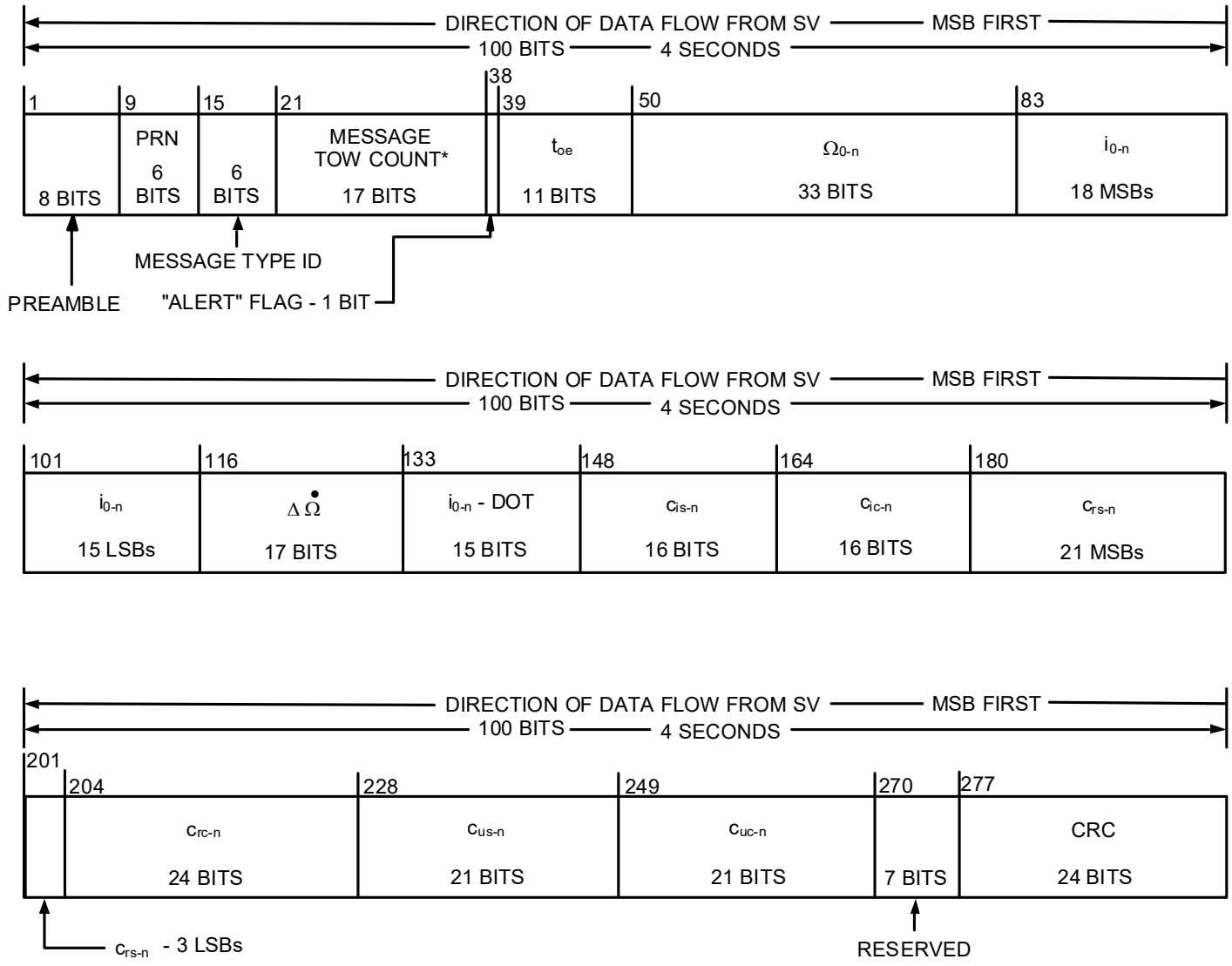
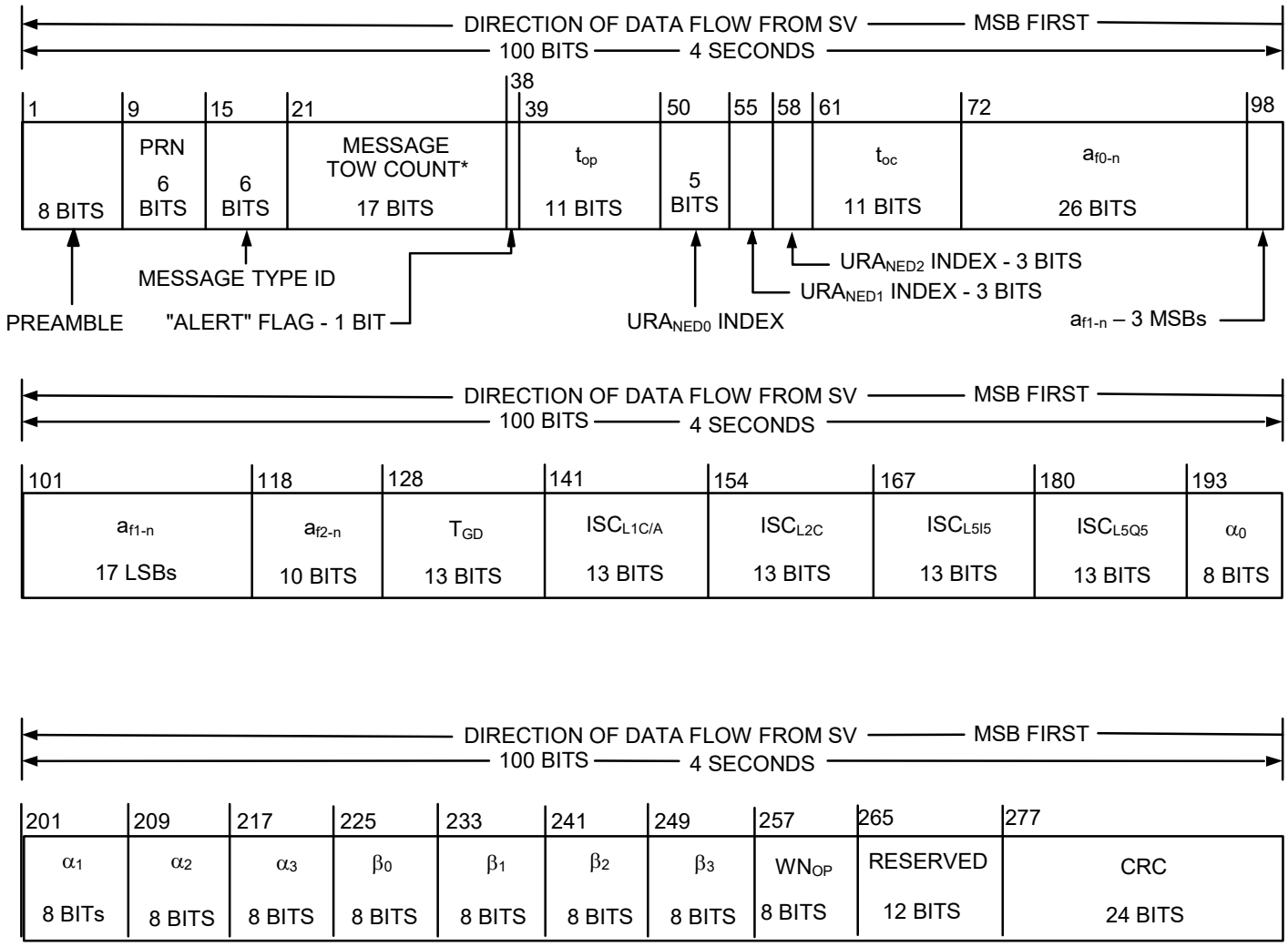


Figure 30-1. Message Type 10 - Ephemeris 1



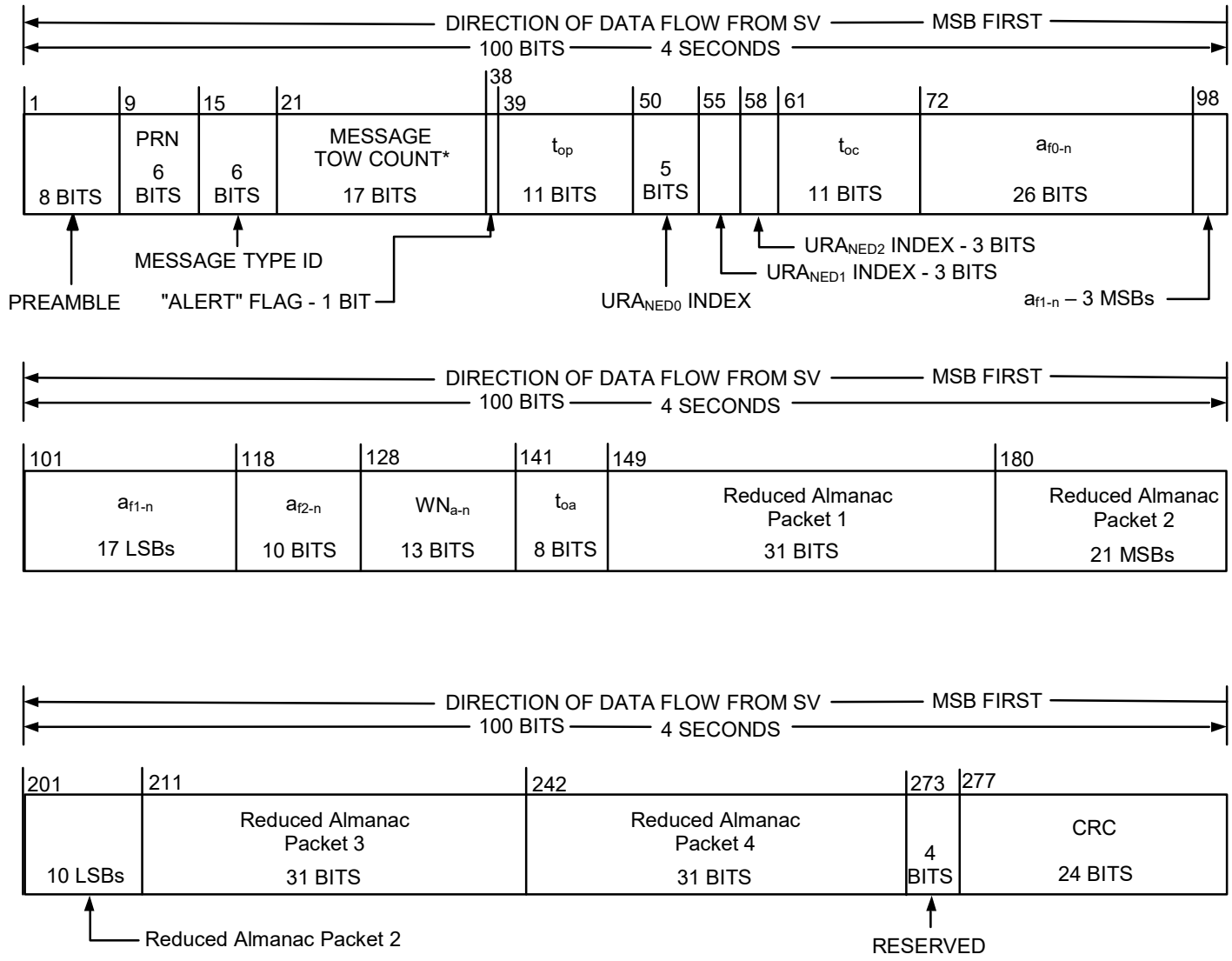
* MESSAGE TOW COUNT = 17 MSB OF ACTUAL TOW COUNT AT START OF NEXT 12-SECOND MESSAGE

Figure 30-2. Message Type 11 - Ephemeris 2



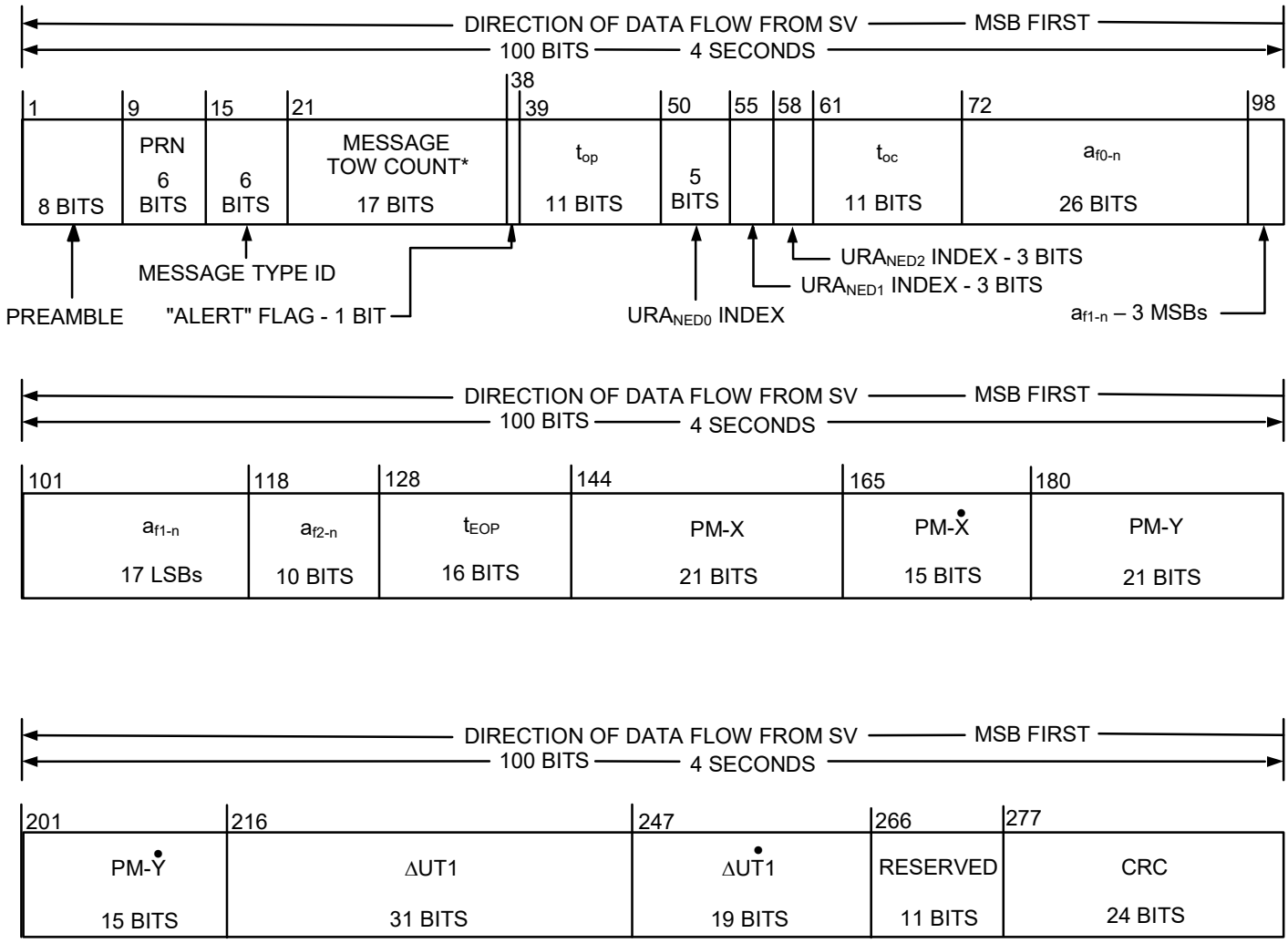
* MESSAGE TOW COUNT = 17 MSB OF ACTUAL TOW COUNT AT START OF NEXT 12-SECOND MESSAGE

Figure 30-3. Message Type 30 - Clock, IONO & Group Delay



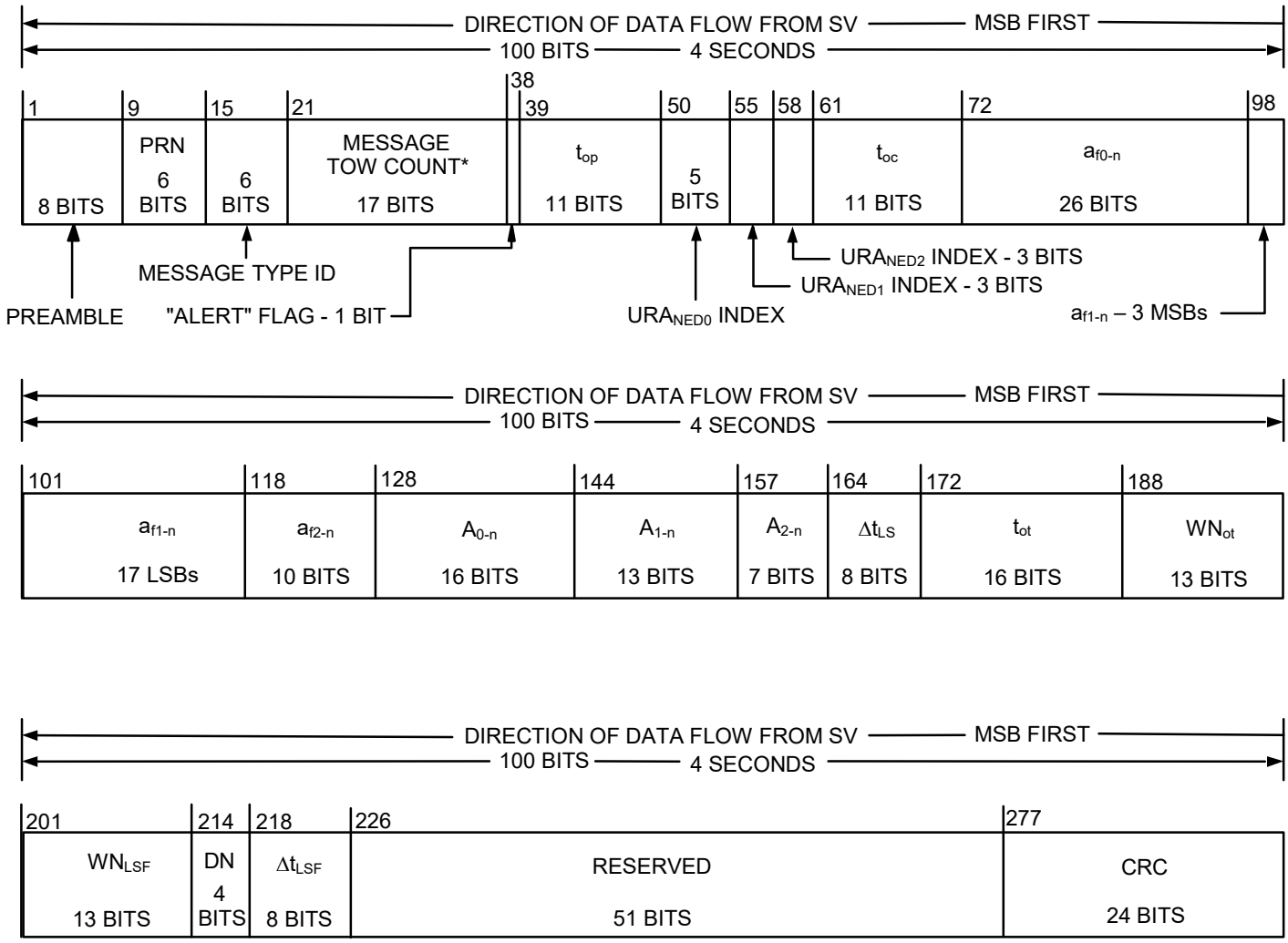
* MESSAGE TOW COUNT = 17 MSB OF ACTUAL TOW COUNT AT START OF NEXT 12-SECOND MESSAGE

Figure 30-4. Message Type 31 - Clock & Reduced Almanac



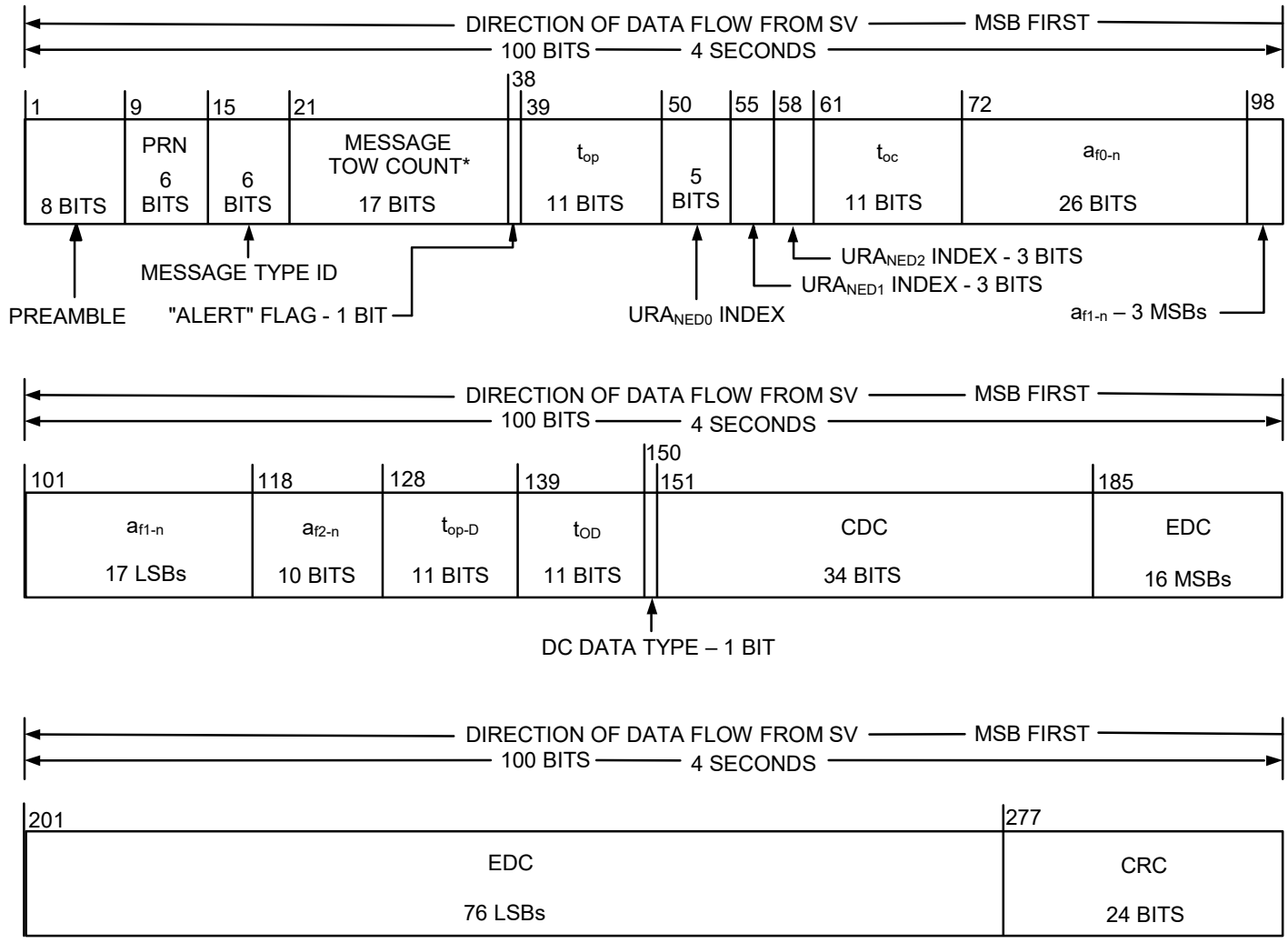
* MESSAGE TOW COUNT = 17 MSB OF ACTUAL TOW COUNT AT START OF NEXT 12-SECOND MESSAGE

Figure 30-5. Message Type 32 - Clock & EOP



* MESSAGE TOW COUNT = 17 MSB OF ACTUAL TOW COUNT AT START OF NEXT 12-SECOND MESSAGE

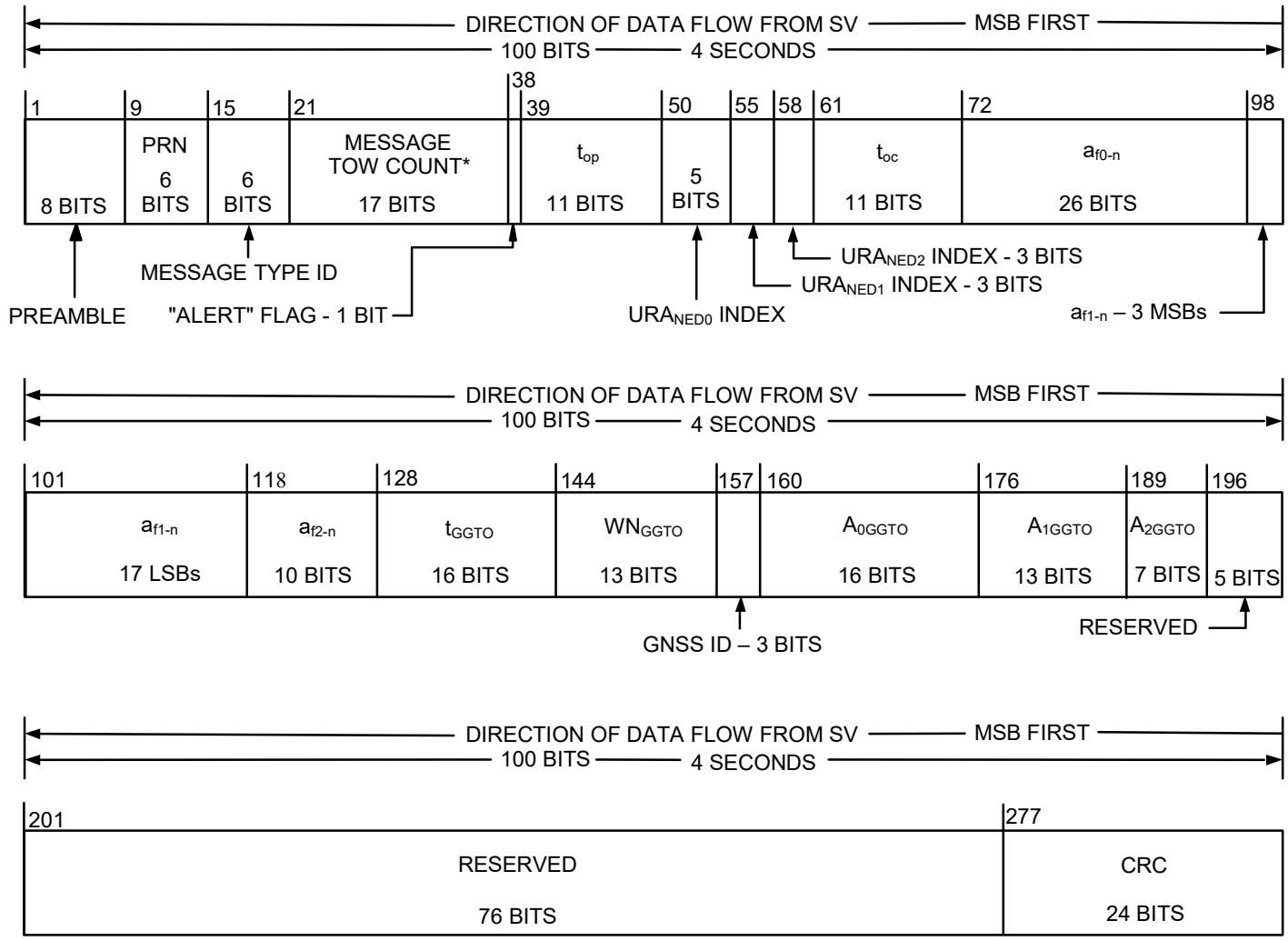
Figure 30-6. Message Type 33 - Clock & UTC



* MESSAGE TOW COUNT = 17 MSB OF ACTUAL TOW COUNT AT START OF NEXT 12-SECOND MESSAGE

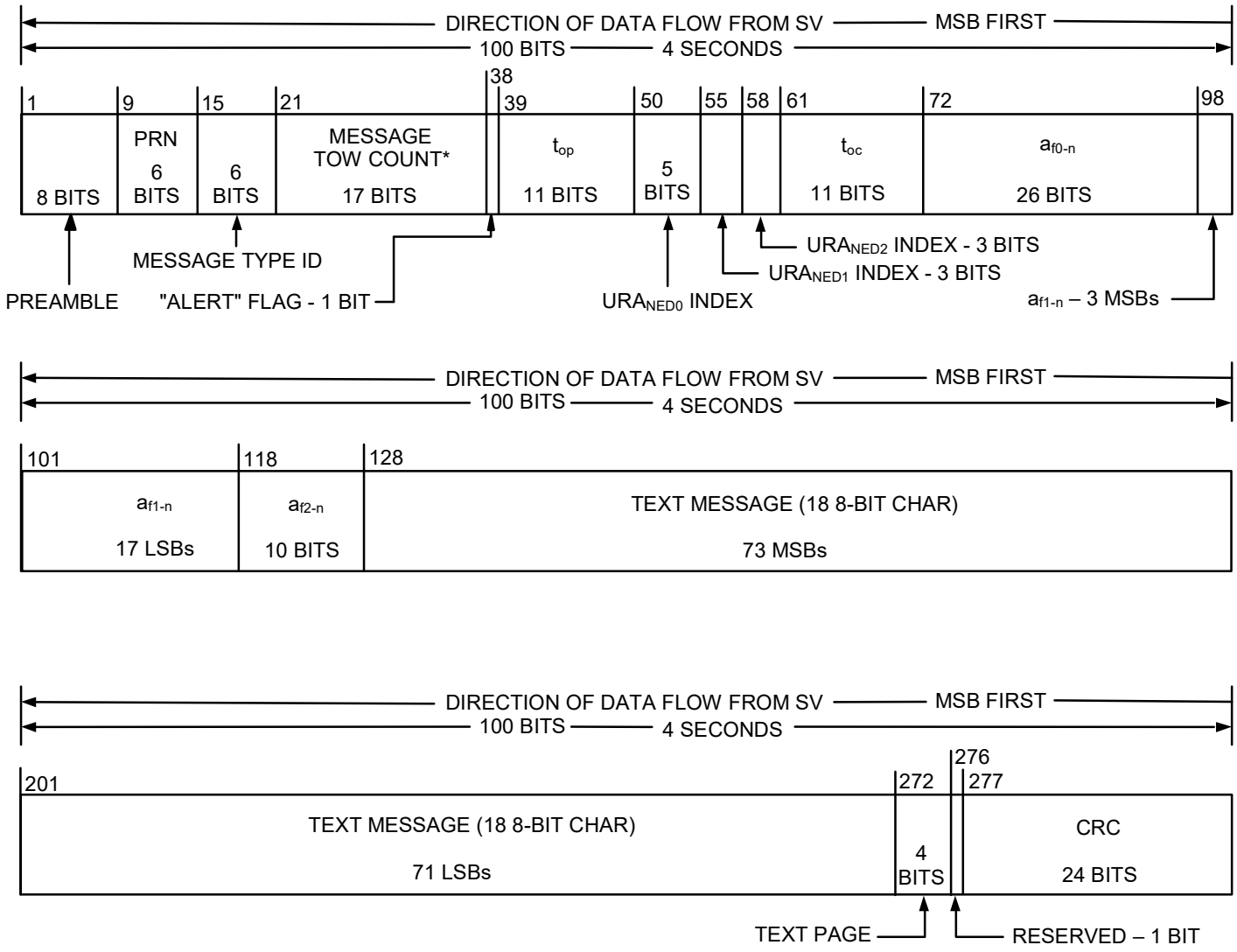
CDC = Clock Differential Correction
EDC = Ephemeris Differential Correction

Figure 30-7. Message Type 34 - Clock & Differential Correction



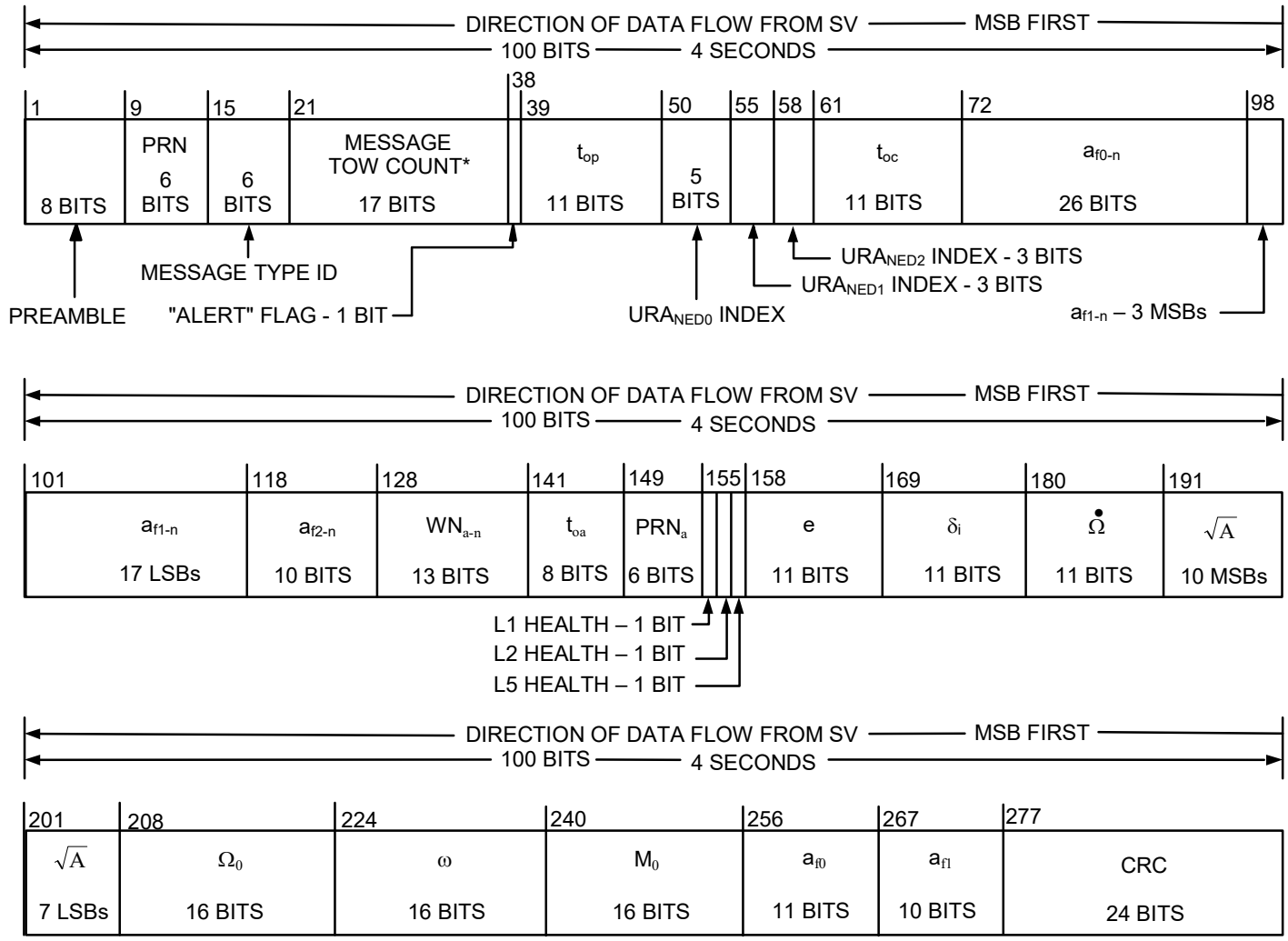
* MESSAGE TOW COUNT = 17 MSB OF ACTUAL TOW COUNT AT START OF NEXT 12-SECOND MESSAGE

Figure 30-8. Message Type 35 - Clock & GGTO



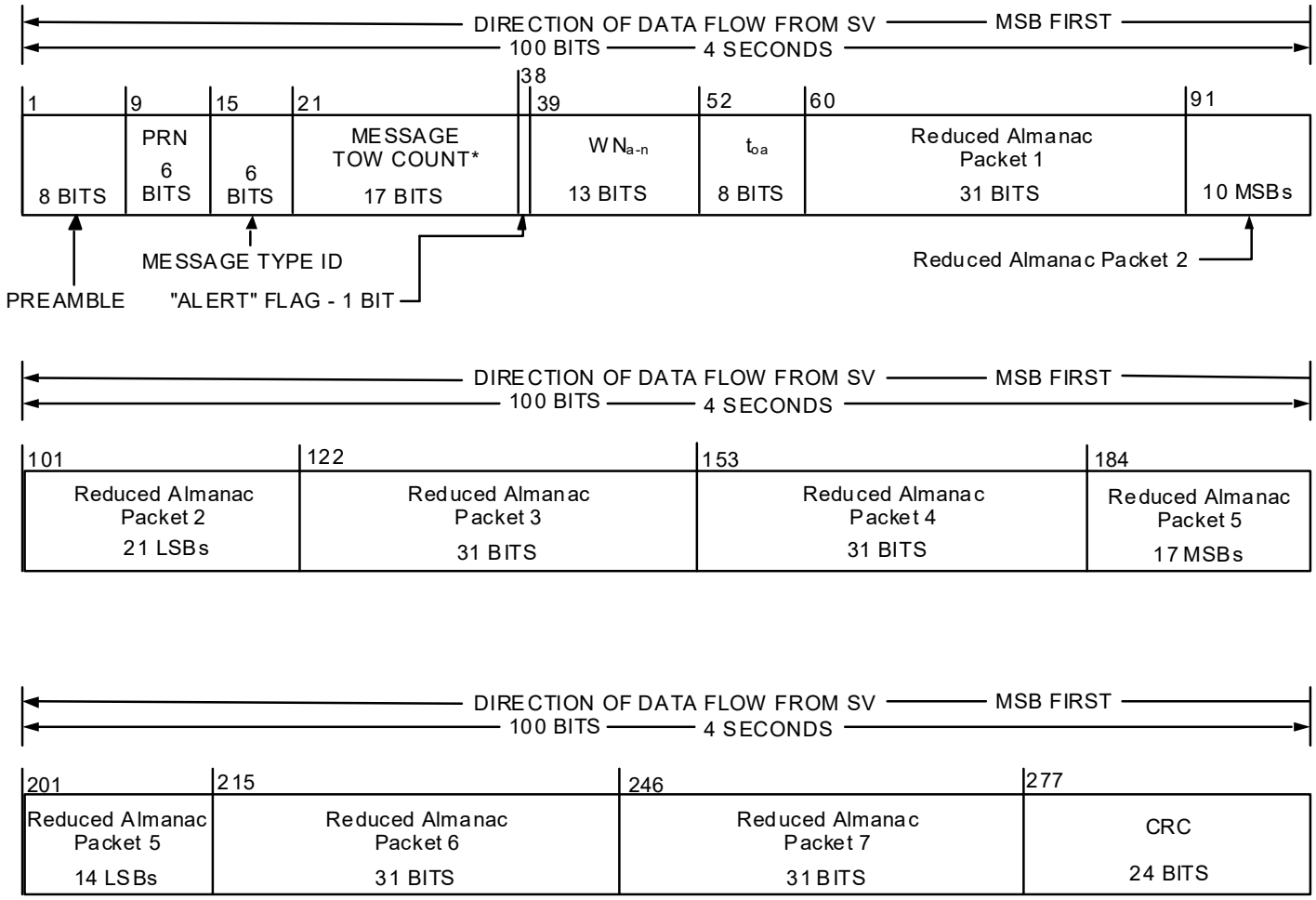
* MESSAGE TOW COUNT = 17 MSB OF ACTUAL TOW COUNT AT START OF NEXT 12-SECOND MESSAGE

Figure 30-9. Message Type 36 - Clock & Text



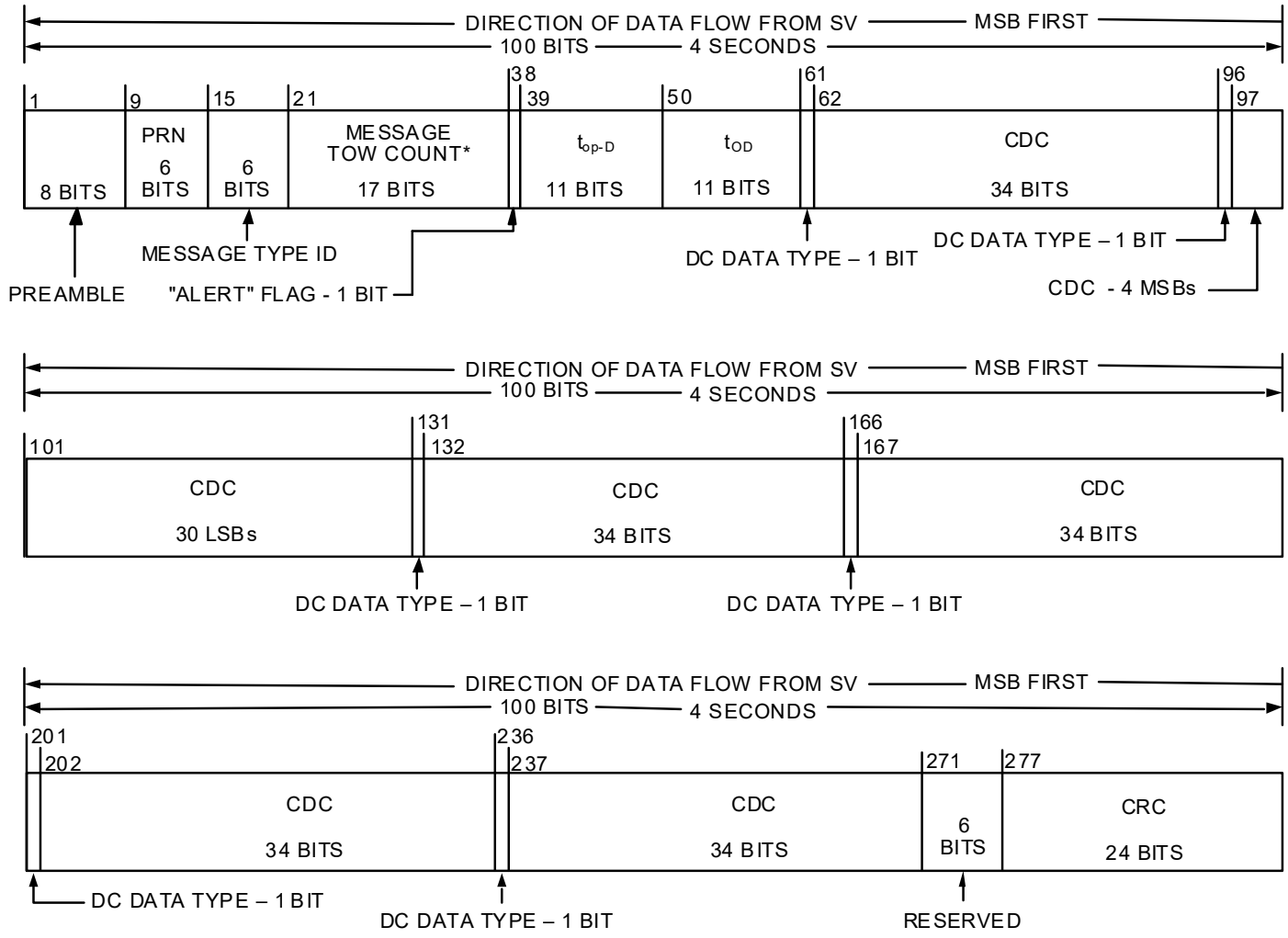
* MESSAGE TOW COUNT = 17 MSB OF ACTUAL TOW COUNT AT START OF NEXT 12-SECOND MESSAGE

Figure 30-10. Message Type 37 - Clock & Midi Almanac



* MESSAGE TOW COUNT = 17 MSB OF ACTUAL TOW COUNT AT START OF NEXT 12-SECOND MESSAGE

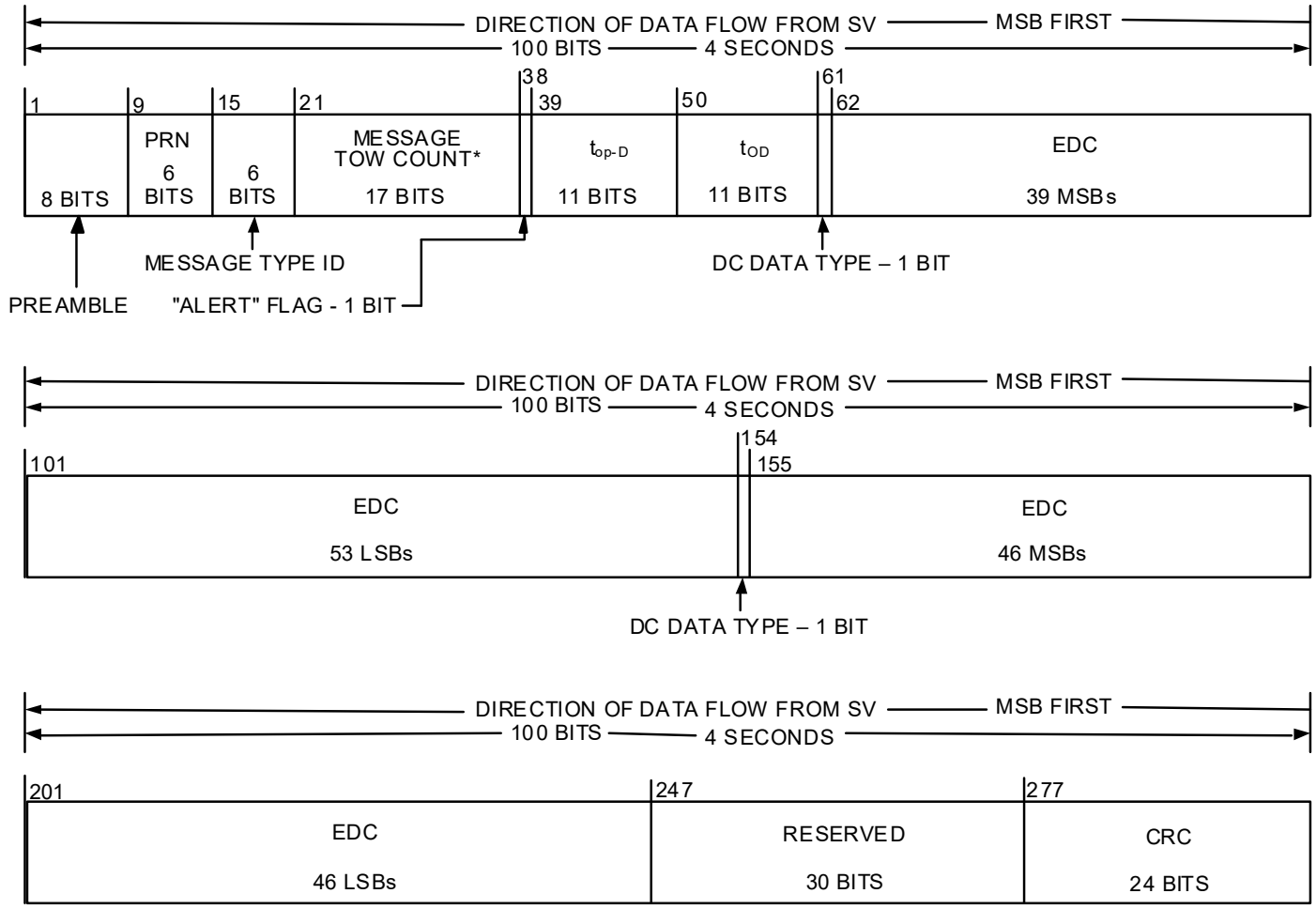
Figure 30-11. Message Type 12 - Reduced Almanac



* MESSAGE TOW COUNT = 17 MSB OF ACTUAL TOW COUNT AT START OF NEXT 12-SECOND MESSAGE

CDC = Clock Differential Correction

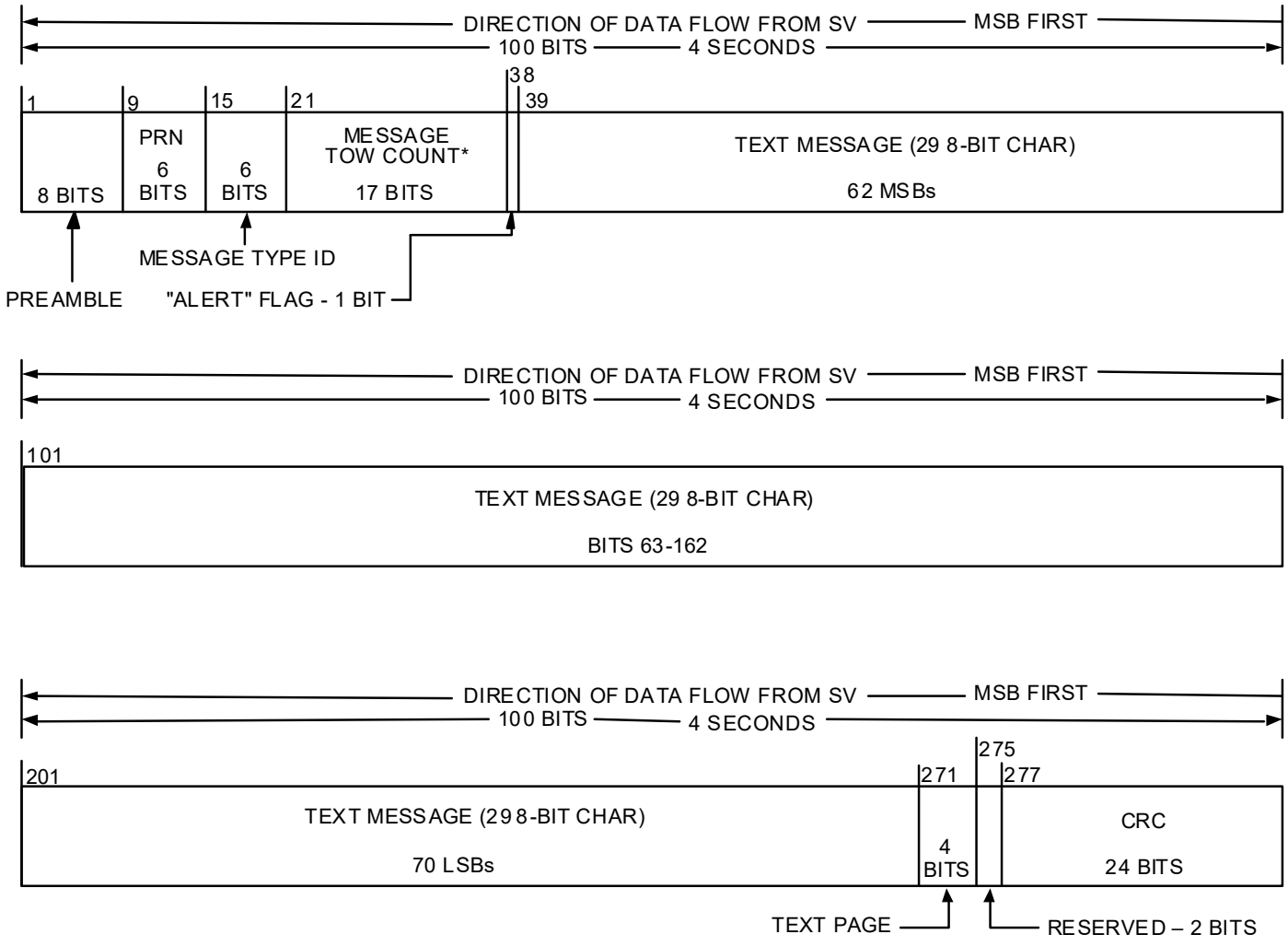
Figure 30-12. Message Type 13 - Clock Differential Correction



* MESSAGE TOW COUNT = 17 MSB OF ACTUAL TOW COUNT AT START OF NEXT 12-SECOND MESSAGE

EDC = Ephemeris Differential Correction

Figure 30-13. Message Type 14 - Ephemeris Differential Correction



* MESSAGE TOW COUNT = 17 MSB OF ACTUAL TOW COUNT AT START OF NEXT 12-SECOND MESSAGE

Figure 30-14. Message Type 15 - Text