

2.2.4.5.4.12 “CAPABILITY CODES” Field Encoding

The “CAPABILITY CODES” field is a 2-bit (bits 1 and 2 of byte 27) field used to indicate the capability of a participant to support engagement in various operations. The “CAPABILITY CODES” field **shall** be encoded as indicated in [Table 2-48](#).

Note: *The Target State (TS) Report Capability flag, the TC Report capability level and the ARV Report Capability flag can be derived from the UAT transmissions of A1, A2 and A3 system participants. Reference RTCA Document DO-242A, Table 3.4(d) and 3.4(e).*

Table 2-48: “CAPABILITY CODES” Encoding

Byte #	Bit #	Encoding
Byte 27	Bit 1	CDTI Traffic Display Capability. 0 = NO 1 = YES
	Bit 2	TCAS/ACAS Installed and Operational. 0 = NO 1 = YES

2.2.4.5.4.12.1 “CDTI Traffic Display Capability” Subfield

The Capability Code for “Cockpit Display of Traffic Information (CDTI) traffic display capability” **shall** be set to ONE if the transmitting aircraft has the capability of displaying nearby traffic on a CDTI. Otherwise, this code **shall** be ZERO.

If the “CDTI Traffic Display Capability” field is “unavailable” for the “Data Lifetime” value listed for this input in [Table 2-64](#), then the “CDTI Traffic Display Capability” field **shall** default to a value of ZERO.

2.2.4.5.4.12.2 “TCAS/ACAS Installed and Operational” Subfield

The Capability Code for “TCAS/ACAS installed and operational” **shall** be set to ONE if the transmitting aircraft is fitted with a TCAS (ACAS) computer and that computer is turned on and operating in a mode that can generate Resolution Advisory (RA) alerts. Likewise, this Capability Code shall be set to ONE if the transmitting ADS-B equipment cannot ascertain whether or not a TCAS II or ACAS computer is installed, or cannot ascertain whether that computer, if installed, is operating in a mode that can generate RA alerts. Otherwise, this Capability Code **shall** be ZERO.

If the “TCAS/ACAS installed and operational” field is “unavailable” for the “Data Lifetime” value listed for this input in [Table 2-64](#), then the “TCAS/ACAS installed and operational” field **shall** default to a value of ZEROONE.

Note: A value of ONE is intended to signal a receiving application that if it is necessary to avoid the transmitting aircraft, this should be done by horizontal rather than vertical maneuvers, because an RA from TCAS II or ACAS will advise the pilot to maneuver vertically. If it is unknown whether or not the transmitting aircraft has TCAS, it should set this Capability Code to ONE so that receiving aircraft will be more likely to use horizontal than vertical maneuvers if necessary to avoid transmitting aircraft.