International Telecommunication Union

ITU-R
Radiocommunication Sector of ITU

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Technical characteristics for an automatic identification system using time division multiple access in the VHF maritime mobile frequency band

M Series
Mobile, radiodetermination, amateur and related satellite services

International Telecommunication Union

ITU-R M.1371-5, § 3.13 - Message 15: Interrogation

This message should be used for interrogations via the TDMA (not DSC) VHF data link except for requests for UTC and date. The response should be transmitted on the channel where the interrogation was received.

TABLE 65

Interrogator / Interrogated	Class A	Class B "SO"	Class B "CS"	SAR aircraft	AtoN	Base station
Class A	3, 5, 24[(1)]	N	N	3, 5, 24[(1)]	N	3, 5, 24[(1)]
Class B "SO"	18, 24[(1)]	N	N	18, 24[(1)]	N	18, 24[(1)]
Class B "CS"	18, 24[(1)]	N	N	18, 24[(1)]	N	18, 24[(1)]
SAR-aircraft	9, 24[(1)]	N	N	9	N	9, 24[(1)]
AtoN	21[(2)]	N	N	N	N	21[(2)]
Base Station	4, 24[(1)]	N	N	4, 24[(1)]	N	4, 24[(1)]

[(1)] An Interrogation for Message 24 shall be answered either with a Part A or a Part B or with both Part A and Part B depending on the capability of the unit. Some mobile stations may be configured for scheduled broadcast of Message 24A or Message 24B or both.

[(2)] Some AtoN stations are not able to respond due to their operational behaviour.

– The parameter slot offset should be set to zero, if slot should autonomously be allocated by the responding station. An interrogating mobile station should always set the parameter "slot offset" to zero. Slot assignments for the reply to an interrogation should only be used by a base station. If a slot offset is given, it should be relative to the start slot of this transmission. A mobile station should be able to process a minimum slot offset of 10 slots. There should be the following four (4) possibilities to use this message:

– One (1) station is interrogated one (1) message: The parameters destination ID1, message ID1.1 and slot offset 1.1 should be defined. All other parameters should be omitted.

– One (1) station is interrogated two (2) messages: The parameters destination ID1, message ID1.1, slot offset 1.1, message ID1.2, and slot offset 1.2 should be defined. The parameters destination ID2, message ID2.1, and slot offset 2.1 should be omitted. See § 3.3.7, Annex 2 for byte boundaries.

– The first station and the second station are interrogated one (1) message each: The parameters destination ID1, message ID1.1, slot offset 1.1, destination ID2, message ID2.1, and slot offset 2.1 should be defined. The parameters message ID1.2 and slot offset 1.2 should be set to zero (0).

– The first station is interrogated two (2) messages, and the second station is interrogated one (1) message: All parameters should be defined.

TABLE 66

Parameter	Number of bits	Description
Message ID	6	Identifier for Message 15; always set to 15
Repeat indicator	2	Used by the repeater to indicate how many times a message has been repeated. See § 4.6.1, Annex 2; 0-3; 0 = default; 3 = do not repeat any more
Source ID	30	MMSI number of interrogating station
Spare	2	Not used. Should be set to zero. Reserved for future use
Destination ID1	30	MMSI number of first interrogated station
Message ID1.1	6	First requested message type from first interrogated station
Slot offset 1.1	12	Response slot offset for first requested message from first interrogated station
Spare	2	Not used. Should be set to zero. Reserved for future use
Message ID1.2	6	Second requested message type from first interrogated station
Slot offset 1.2	12	Response slot offset for second requested message from first interrogated station
Spare	2	Not used. Should be set to zero. Reserved for future use
Destination ID 2	30	MMSI number of second interrogated station
Message ID 2.1	6	Requested message type from second interrogated station
Slot offset 2.1	12	Response slot offset for requested message from second interrogated station
Spare	2	Not used. Should be set to zero. Reserved for future use
Number of bits	88-160	Total number of bits depends upon number of messages requested