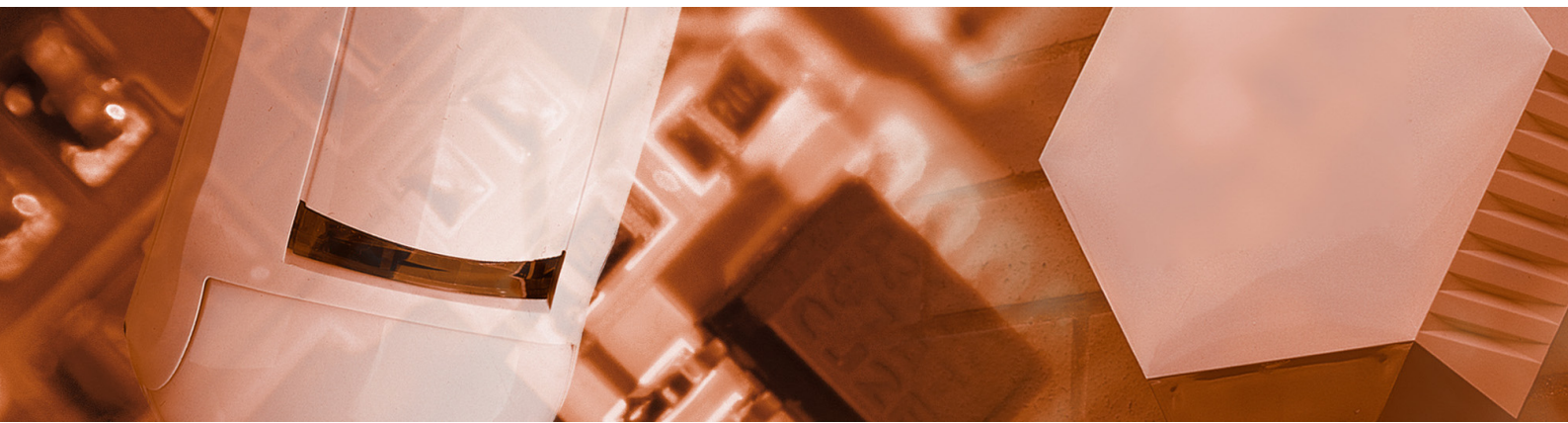


summary of changes between
BS 8243 and DD 243:2004
– a guide



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SUMMARY OF THE CHANGES BETWEEN BS 8243 AND DD 243:2004

Introduction

After many years with a provisional draft for development status DD 243 is being converted to a British Standard, BS 8243. At the same time some changes are being incorporated to include for the first time hold-up (“PA”) alarms. There are also changes to the requirements for sequential confirmation based on the experience obtained from the use of DD 243.

In common with changes in the EN 50131 series the terminology used to describe alarm systems is standardised to “intruder and hold-up alarm system” or “I&HAS”. In some places the recommendations are specific to either intruder alarm systems (IAS) or hold-up alarm systems (HAS) but in many cases the recommendations are common and the abbreviation I&HAS is used.

This change guide does not indicate places where the abbreviation IAS has been changed to I&HAS.

BS 8243: 2010 will replace DD243 when it is published but the use of DD243 will continue for systems installed to PD6662: 2004 scheme. For a two year period (ending in May 2012) systems may be installed under either the 2004 or 2010 version of PD 6662. For systems installed under PD6662: 2010 the BS 8243 standard must be used.

Key to table:

The summary has been undertaken in a clause-by-clause basis where there are changes or additional clauses added to BS 8243. This will give an easy reference to those reading this guideline.

New: Denotes an additional clause in BS 8243.

DD 243 Clause ref	BS 8243 Clause ref	Content change detail
		Title BS8243:2010 Installation and configuration of intruder and hold-up alarm systems designed to generate confirmed alarm conditions – Code of practice.
1	1	Scope The inclusion of hold-up alarm systems has resulted in a change of wording. It is noted that confirmation of hold up systems is only required in accordance with ACPO policy and not in all cases. It may be required in circumstances such as when police have removed response to a system following an excessive number of false hold-up alarms.
2	2	Normative references The list of documents referred to has been updated.

DD 243 Clause ref	BS 8243 Clause ref	Content change detail
3	3	Terms and definitions
		There have been a number of small phrasing changes (not noted here).
3.1.26	3.1.3	Alarm Receiving Centre – this was “receiving centre”
3.1.4	3.1.4	Alarm Signal – The terminology “signalled” has been updated to “remotely notified”.
3.1.7	3.1.7	Audibly confirmed – The definition has been changed slightly and is no longer limited to intrusion.
3.1.12	3.1.10	Client – This was “customer”
NEW	3.1.12	Confirmed Alarm - This definition has been added.
3.1.24	3.1.14	The defined term has changed from “portable ACE (PACE)” to digital key.
3.1.25	3.1.15	The defined term has changed from “PACE reader” to digital key reader. The two changes above reflect the new terminology defined in EN 50131-3.
3.1.13	3.1.16	The defined term has changed from “dual technology detector” to dual technology movement detector.
NEW	3.1.17	Duress – This definition has been added.
3.1.15	3.1.19 / 3.1.22	False Alarm / Genuine Alarm – the definition of false alarm is now constructed from genuine alarm and the definition changed to match that in BS 8473: 2006 + A1: 2008
NEW	3.1.28	Multi-action hold-up device – This definition has been added.
NEW	3.1.30	Remotely notified alarm condition – This definition has been added.
3.1.39	3.1.42	Visually confirmed – The definition has been changed slightly and is no longer limited to intrusion.
3.2	3.2	Abbreviations have been added for HD (hold-up device) and HUA (hold-up alarm) and the abbreviation PACE has been removed (see above).

DD 243 Clause ref	BS 8243 Clause ref	Content change detail
4	4	Primary Design and Configuration Considerations
4.1	4.1.1	The design objectives have been split into two sections so that IAS and HAS have separate recommendations.
4.1	4.1.2	It is now clarified that the design, installation and configuration should be in accordance with the requirements of BS 8243. Some of the text has been converted to Notes.
NEW	4.1.3	BS 8243 includes design objectives for HAS.
4.2	4.2	The alarm confirmation technology clause has been split into two sections so that IAS and HAS have separate recommendations.
4.2	4.2.1	Much of the text has been converted to commentary and the last two points made into notes.
NEW	4.2.2	BS 8243 includes technology recommendations for HAS. It is recommended that (unlike intruder confirmation) sequential confirmation of hold-up alarms be used in conjunction with telephone confirmation (call-back) unless agreed with the client
4.3	4.3	Reference to transmission fault signals for hold-up alarms is now included. The last two points have been converted to notes.
New	4.5	Design requirements for HAS using confirmed technology – this clause has been added. It is based on the “ACPO 10 point plan”.

DD 243 Clause ref	BS 8243 Clause ref	Content change detail
5	5	Design, Installation and Configuration of I&HASs incorporating alarm confirmation technology
5.1.3	n/a	The “Notification of alarm conditions and other information” clause has been deleted.
5.1.4	5.1.3	The Control and Indicating Equipment (CIE) and Notification Equipment clause has been expanded to include recommendations other than location by referencing Annex H.
5.1.5	n/a	The “Further Recommendations” clause has been deleted.
5.2.2	5.2.2	The clause now includes hold-up alarm recommendations and the paragraph related to positioning of HD and ALD has been modified and expanded. The older terminology “multiple area or group systems” has been changed to the EN 50131 term “sub-systems”. The meaning is unchanged.
5.3.1	5.3.1	When applicable, imaging devices should now view all of an area associated with an HD.
NEW	5.3.4	The clause “Visual confirmation of an HUA” has been added.
5.4.1	5.4.1.1	The criteria for sequentially confirmed alarms have been split into two sections so that IAS and HAS have separate recommendations.
NEW	5.4.1.2	BS 8243 includes sequentially confirmed alarm criteria for HAS.
5.4.2	5.4.2	The old first paragraph about two dual technology movement detectors has been moved and converted to a note. A note about walk testing has been removed.
5.4.3	5.4.3	The paragraph referring to two movement detectors in the same housing has been revised.
5.4.5	5.4.5	The clause takes into account hold-up alarm devices and the time references are removed.
NEW	5.5	A new clause has been added: “Confirmation of HAS using ARC telephone intervention (Call back)”.

DD 243 Clause ref	BS 8243 Clause ref	Content change detail
6	6	Other means of minimizing false alarms for I&HAS
6.1	6.1	Reference to DD245 (which is now BS 8473) has been removed. (BS 8473 is called up under the PD 6662: 2010 scheme)
6.2	6.2	The old 6.2.1 and 6.2.2 have been merged into one clause. The reason for filtering alarms has been converted to a note.
6.3	6.3	<p>The term "PACE" has changed to "digital key". (See 3.1.25, above). A note (below the list of means) and a new paragraph, about initiation and completion of setting, have been added.</p> <p>There is now a recommendation that there should always be a two-stage process of initiating the set procedure followed by completion of setting. This is applicable for all set options except when carried out in conjunction with an ARC.</p>
6.4.1	6.4.1	<p>Unsetting method 6.4.4 is no longer listed amongst the preferred options. It is now advised that methods 6.4.4 and 6.4.5 are now selected only after careful consideration. The text has been moved from 6.4.4.</p> <p>The completion of unsetting shall be indicated for a maximum of 30s as stated in EN 50131-1. It is no longer recommended that the customer be advised in writing to have additional locks fitted to the entry door.</p> <p>The paragraph about externally mounted ACE has been removed but a new recommendation about sub-systems has been added.</p> <p>The paragraph about "a means of voice communication with the ARC" has been removed. The recommendation about degree of security has been removed (but is obviously still a requirement under EN 50131-1).</p>
6.4.2	6.4.2	The paragraph about the initial entry door being opened prior to unsetting has been rephrased.
6.4.2 & 6.4.3	6.4.2 & 6.4.3	The sections about powered locks have been slightly reworded to improve understanding.
6.4.3	6.4.3	The note about sub-systems has been deleted.

DD 243 Clause ref	BS 8243 Clause ref	Content change detail
6.4.4	6.4.4	<p>The note (about no change from the previous version) has been deleted. The caution about use of this method has been moved to clause 6.4.1.</p> <p>A new paragraph has been added to take account of situations where detection of opening of the entry door is not possible.</p>
6.4.5	6.4.5	<p>The term "PACE" has changed to "digital key". (See 3.1.25, above). In option (b) the digital key should be operated "as near as possible" to the entry door instead of just "near".</p> <p>A new recommendation has been added to take account of situations where detection of opening of the entry door is not possible.</p> <p>Reference is now made to the requirements in EN 50131-1 for not transmitting alarms occurring during the entry period to the ARC until after a 30s delay. A confirmed alarm should not occur during the entry period.</p> <p>BS 8243 makes it clear that a "single manual action" is necessary (e.g. use of a token without pressing keys).</p> <p>Of most significance the method of producing a confirmed intrusion alarm has changed so that the number of detectors that need to be activated has reduced. Whereas it was necessary for two detectors off the entry route to be activated after the end of the entry timer now at most only one is needed. Annex G has been added to help with understanding the operation.</p> <p>Annex A of this guide includes example diagrams based on two of those in BS 8243 to demonstrate the operational differences.</p>

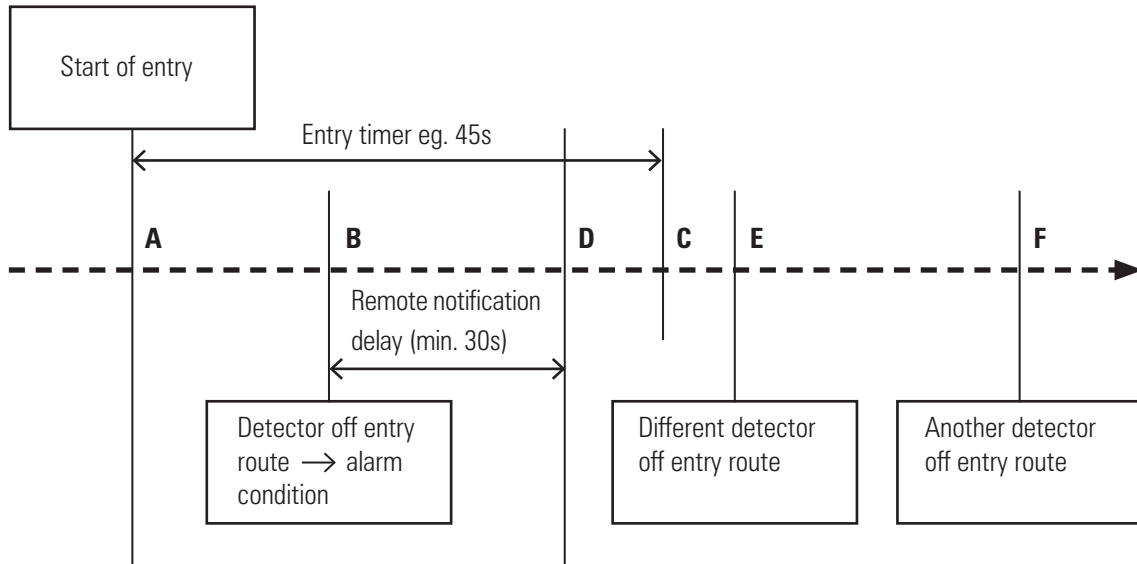
DD 243 Clause ref	BS 8243 Clause ref	Content change detail
7	7	Handling of information by ARCs
		General: recommendations now include details related to hold-up alarms.
7.1.1 & 7.2.1	7.1.1 & 7.2.1	References to BS 5979 are now undated (meaning the latest published version should be applied). Two paragraphs from each clause have been converted to notes.
7.1.2, 7.2.2 & 7.2.3	7.1.2, 7.2.2 & 7.2.3	A note has been added suggesting the ARC may use telephone (call-back) confirmation if hold-up alarm sounds are inconclusive.
7.3	7.3.1 7.3.2	<p>The clause covering designation of signals has been split into two to allow separate coverage of IAS and HAS.</p> <p>DD 243 previously stated the signals to be used in some formats (e.g. Fast Format channel 7), BS 8243 does not.</p> <p>Alarm signals from two or more HD are to be considered as a confirmed hold-up alarm signals.</p>
NEW	7.3.3	Some of the old clause 7.3 is now in 7.3.3, which also adds that the presentation of a sequentially confirmed alarm should be because of processing by the CIE or ARC equipment and not the decision of the operator.
NEW	7.4	This is a new clause "Telephone Confirmation of Hold-up alarm". This describes the procedure colloquially known as "call back"
7.4.1	7.5.1	The second paragraph has been rephrased to improve clarity and converted to a note.
7.4.2	7.5.2	The phrase "signalled alarm condition" has been reworded to "remotely notified alarm condition". This simply reflects the terminology of EN 50131.
7.4.3	7.5.3	<p>A new note has been added explaining the ability to designate received alarms as false alerts during the now mandatory (in most cases) 120s delay period. This mandatory delay starts from the first alarm received unless one of the four listed conditions are satisfied.</p> <p>The phrase "signalled alarm condition" has been reworded to "remotely notified alarm condition". This simply reflects the terminology of EN 50131.</p> <p>A large portion of the last paragraph has been converted to a note.</p>

DD 243 Clause ref	BS 8243 Clause ref	Content change detail
Annex A	Annex A	Annex A (normative) Further recommendations for design, installation and configuration of IASs incorporating alarm confirmation technology
A.1	n/a	The clauses about "PACE" are no longer necessary as the requirements are now included in EN 50131-3. They have therefore been removed.
A.3.1	A.2.1	The fourth paragraph has been converted to a note and the final paragraph changed to reflect alterations in EN 50131-1: 2006 compared to prEN 50131-1: 2004.
NEW	A.2.3	A new clause has been added "Hold-up alarm systems incorporating sequential confirmation technology".
A.4.2	A.3	The old reference to DD 245 is now to BS 8473. This is the new standard that replaced DD 245.
Annex B	Annex B	Annex B (Informative) ARC alarm handling procedure for alarm signals associated with transmission fault signals
		The diagrams have been modified to reflect the changes in the main body of the standard.
Annex C	Annex C	Annex C (Informative) ARC procedures for handling two transmission fault signals
		No changes
Annex D	Annex D	Annex D (Informative) Operational requirements for an IAS equipped with sequential confirmation technology
		Updated to include recommendations for hold-up
Annex E	Annex E	Annex E (Informative) ARC procedures for alarm systems capable of providing confirmation
		No changes
Annex F	Annex F	Annex F (Informative) Information to be included in the System Design Proposal and As-Fitted Documents
		The recommendations for the "as-fitted document" have been merged with those for the "system design proposal" (which are otherwise unchanged).
NEW	Annex G	Annex G Timing Diagrams
		This is a new annex to assist with understanding of clause 6.4.5
NEW	Annex H	Annex H Specifications for CIE
		This is a new annex that gives the requirements additional to EN 50131-3 to enable manufacturers to produce equipment capable of meeting the needs of BS 8243. Also included are the methods by which the equipment can be tested.

Annex A – Changes in system operation resulting from changes to clause 6.4.5

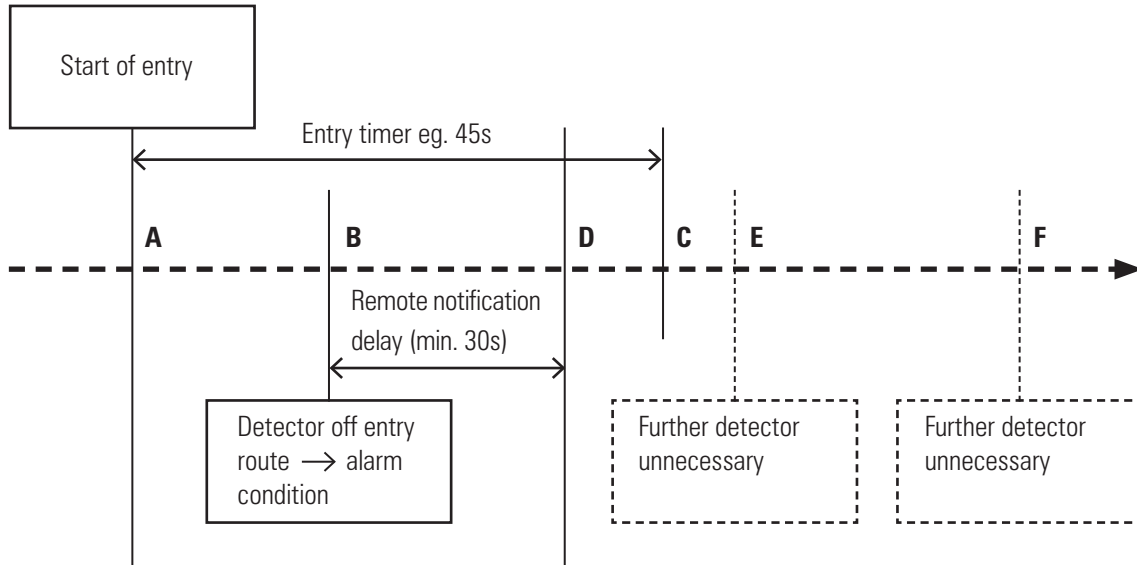
A.1 Entry timeout after expiry of minimum 30 seconds operation indicator or WD

A.1.1 DD 243:2004 current Operation



Key	Action
A	Entry timer starts
B	Alarm notified locally by WD or indicated Minimum 30s delay starts
D	No action as entry timer in A above still active
C	Unconfirmed alarm condition notified remotely
E	No further action
F	Confirmed alarm condition notified remotely

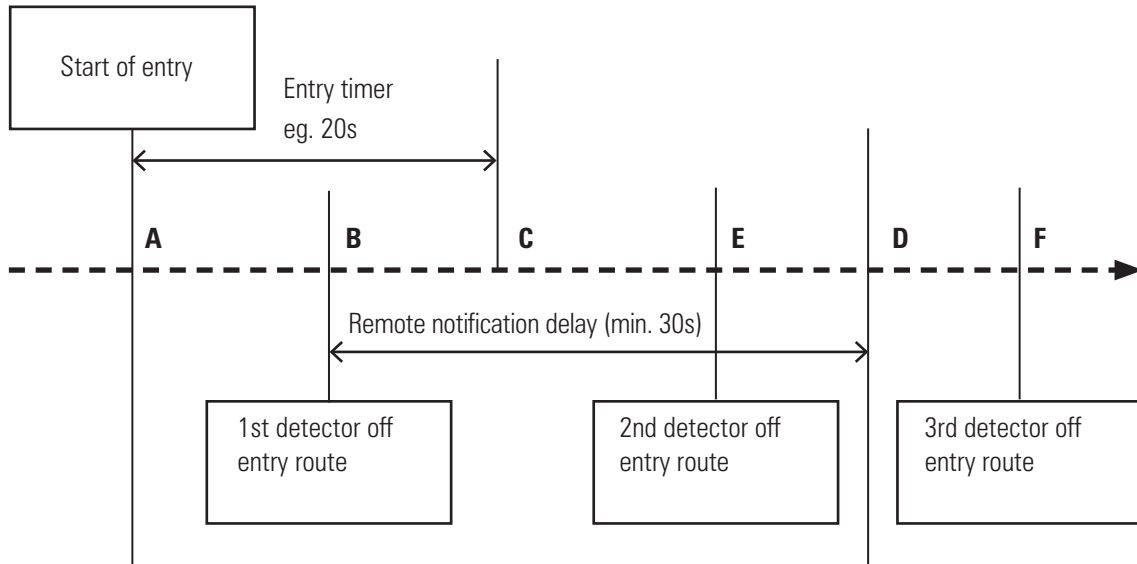
A.1.2 BS 8243 Operation (refer to BS8243 fig. G.2)



Key	Action
A	Entry timer starts
B	Alarm notified locally by WD or indicated. Minimum 30 seconds delay starts
D	No action as entry timer is still active
C	Unconfirmed and confirmed alarm conditions notified remotely
E, F	Confirmed alarm already notified – further detections can optionally be notified

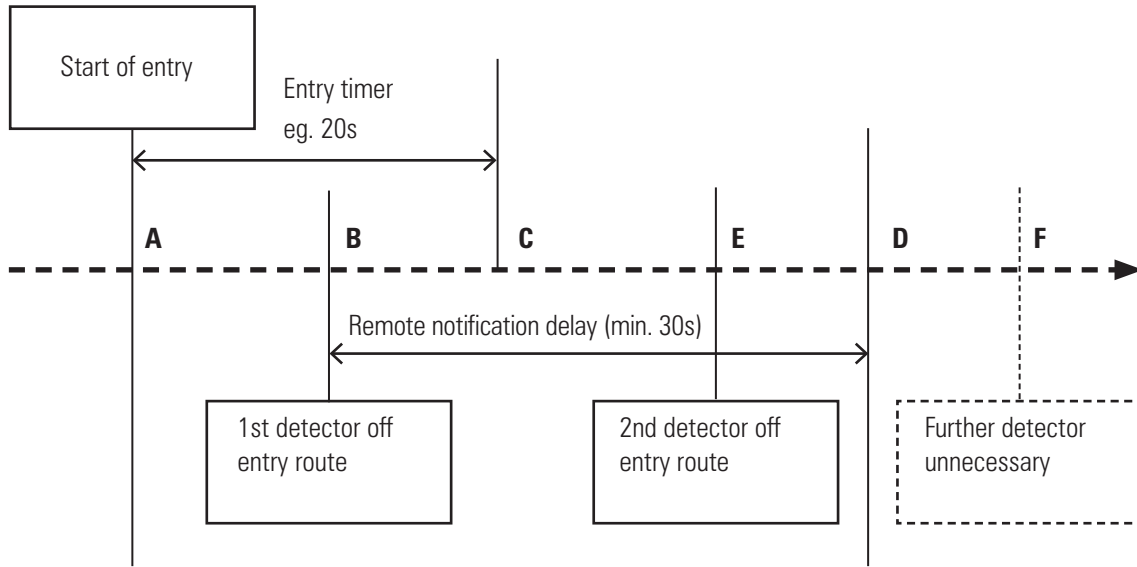
A.2 Entry timeout before expiry of minimum 30 seconds operation of indicator or WD (Second detector before end of 30 seconds delay)

A.2.1 DD243 Operation



Key	Action
A	Entry timer starts
B	Alarm notified locally by WD or indicated Minimum 30s delay starts
C	No action due to notification period in B above still active
E	2nd alarm off entry route overrides notification timer; unconfirmed alarm condition notified remotely
D	No further action
F	3rd alarm off entry route. Confirmed alarm notified remotely.

A.2.2 BS8243 Operation (refer to BS8243 fig G.3)



Key	Action
A	Entry timer starts
B	Alarm notified locally by WD or indicated Minimum 30s delay starts
C	No action due to remote notification delay period still active
E	2nd alarm off entry route overrides notification timer; unconfirmed and confirmed alarm condition notified remotely
D	Unconfirmed and confirmed alarm conditions already notified. No further action necessary
F	Confirmed alarm already notified – further detections can optionally be notified