

## ECB•S Recommendation for Service-, Repair- and Modification Operations on ECB•S Certified Secure Storage Units, Data Cabinets and Data Rooms

## Content

1		Preamble2									
2		Scope and purpose									
3		Normative references									
4		Terms and definitions6									
5		Execution of service operations									
	5.	1 Analysis of the initial situation									
	5.2	2 Overview of flow of actions									
	5.3	3 Information provided to the user									
	5.4	4 Product knowledge									
	5.	5 Preparation and acceptance of operations at the lock covered by the service order 10									
	5.6	6 Work carried out on data cabinets and rooms11									
	5.	7 Documentation									
6		Expert opinion									
7	Service audit										
8		Confidentiality12									
9		Annexes									

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## 1 Preamble

The following recommendations published by ECB specify the basic preconditions for service operations that need to be carried out on locks, secure storage units as well as data cabinets and rooms certified according to European standards and national regulations. This non-binding recommendation covers repair, retrofitting and maintenance operations.

Compared to the January 2018 version, the following changes have been made:

- the term of the responsible expert has been added (4);
- the requirements regarding necessary cable holes have been specified and a note has been added that the customer shall be instructed in the operation of the installed lock (5.5);
- Addition of the necessary clear and traceable labelling of the product (5.7);
- a new section on confidentiality was added (8);
- the content of the checklist "additional details B2" has been specified more precisely regarding the points of cable holes, function test and change of the master code;
- the confirmation by the service after completion of the work (addition details B5) was supplemented by the information concerning the transferred configuration and the note on changing the master/manager code;
- Normative references have been updated;
- Editorial changes were made.

## 2 Scope and purpose

The original certificate holder marks secure storage units with a certification mark/recognition plate for unambiguous identification of the certification and hence the resistance grade and/or quality class. Locks and bolts (e.g., in secure storage units) and seals (e.g., in data cabinets) are integral components of the certified secure storage unit. Only those components (locks, bolts, seals, etc.) approved within the scope of the certificate may in general be used in secure storage units. The use of locks not listed in the certificate may be regulated separately, e.g., taking into account technical expert opinions.

The purpose of this recommendation is to describe the proper course of action as regards service, repair and retrofitting operations (hereinafter called "service operations" on ECB•S certified secure storage units, deposit systems, data cabinets as well as data rooms. The parties concerned (operators, insurers, manufacturers, certificate holders of security products, service providers, etc.) will be informed about the course of action recommended by ECB. In cases of doubt or cases needing clarification, the following course of action should be applied.

Service operations, for example, include the replacement of high security locks with electronic locks, the retrofitting of electronic locks, the exchange of seals as well as emergency openings and the subsequent repair of secure storage units. After an emergency opening, the measures for the restoration of the security level need to be critically checked.

If necessary, the repairs must be checked by an authorized expert prior to execution.

Service operations should be carried out by the service staff of the certificate holder or by a service company. The certification body ECB recommends that service staff (service technicians of the certificate holder and/or the service company) must be trained and brought up to date at regular intervals. Proof of professional competence may be give e.g. as follows: Training by the certificate holder, many years of practical experience, many years working in a manufacturing company (certificate holder) in the field of technology, service, or similar and participation in various training courses at educational institutes which deal with these topics on a regular basis. Furthermore, ECB offers an additional audit of the service operations performed as part of the annual audit of the company. After successful completion of the audit, the company receives a confirmation to the effect that the services carried out are regularly monitored by ECB.

Note 1: The modification of secure storage units with, e.g., high security locks according to EN 1300, may offer possibilities for increased efficiency in use (e.g. in terms of ease of operation, organization). However, such services (e.g., installation of a mnemonic code entry unit in locks) definitely do not upgrade the security level of older security products (e.g. RAL and VDMA 24992) and such modifications definitely do not make them equivalent to secure storage units certified according to the latest European standards (e.g., EN 1143-1, EN 14450) even after the modification.

Note 2: Secure storage units for which permission for the use of a test label (according to the RAL Guidelines) has been granted are also deemed to be certified products covered by these Guidelines.

## **3** Normative references

These recommendations contain dated and undated references to other regulations. The references in ECB R11 are incorporated in the respective sections; their titles are listed below. For dated regulations, subsequent amendments or supplements only apply if they are published in the form of an amendment of these guidelines. Of undated references, always the latest version is applicable.

#### Burglary resistance products

**EN 1143-1** Secure storage units – Requirements, classification and methods of test for resistance to burglary – Part 1: Safes, ATM safes, strongroom doors and strongrooms

EN 1143-2	Secure storage units – Requirements, classification and methods of test for resistance to burglary – Part 2: Deposit systems						
EN 14450	Secure storage units – Requirements, classification and methods of test for resistance to burglary – Secure safe cabinets						
EN 1300	Secure storage units – Classification for high security locks according to their resistance to unauthorized opening						
RAL-RG 621	Quality conditions for armoured safes of security grades D2 and E						
RAL-RG 622	Quality conditions for strongroom doors and emergency doors of security grade LTP						
RAL-RG 623	Quality conditions for strongroom doors and emergency doors of security grade T 1						
RAL-RG 624	Quality conditions for strongroom doors and emergency doors of security grade T 2 $$						
RAL-RG 625/5	Test specification for armoured strongroom doors						
RAL-RG 626/1	Quality conditions for armoured safes of security grade D1						
RAL-RG 626/5	Quality conditions for secure storage units I						
RAL-RG 626/6	Quality conditions for secure storage units II						
RAL-RG 626/10	Test specification for armoured safes D 10						
RAL-RG 621/20	Test specification for armoured safes D 20						
RAL-RG 621/10	Test specification for armoured safes E 10						
RAL-RG 622/1	Test specification for strongroom doors of security grade LT 1						
RAL-RG 623/10	Test specification for strongroom doors of security grade T 10						
RAL-RG 624/20	Test specification for strongroom doors of security grade T 20						
RAL-RG 625/4	Test specification for strongroom doors						
RAL-RG 626/2	Test specification for cabinets/safes of security grades C 1 and C 2						
RAL-RG 623/3	Test specification for safe units GE I and GE II of ATMs						
RAL-RG 627	<b>R</b> equirements, classification and methods of test for resistance to burglary – Part 1: Safes, safes and vault systems						
ECB•S R01	Lock Guide						
EN 13306	Maintenance – Terms of Maintenance						

#### Fire resistance products

EN 1047-1	Secure storage units – Classification and methods of test for resistance to fire – Part 1: Data cabinets and diskette inserts
EN 1047-2	Secure storage units – Classification and methods of test for resistance to fire – Part 2: Data rooms and data container
EN 15659	Secure storage units – Classification and methods of test for resistance to fire – Light fire storage units
VDMA 24991-1	Test conditions, for the reaction to fire of steel cabinets and other containers

VDMA 24991-2 Test conditions, for the reaction to fire rooms for the storage of data carriers

#### Quality management system

ISO 9001 Quality management systems - requirements
ISO 9004 Quality management – Quality of an organization – Guidance to achieve sustained success (ISO/DIS 9004:2018)
ISO 17065 Conformity assessment – Requirements for bodies certifying products, processes and services

Note: The ECB•S regulations (e.g., the Lock Guide ECB•S R01) are listed on the Internet at www.ecb-s.com. European standards can be ordered from e.g. Beuth Verlag GmbH, Berlin.

## 4 Terms and definitions

#### ECB•S certification mark:

A mark provided by the ECB•S (e.g., a metal label) showing information about the resistance grade and protection class, respectively, the serial number, the weight and the year of manufacture, thus confirming compliance of the series product with the certified product. Certification marks are consecutively numbered and only available from ECB. As a result, their use can be traced by the ECB•S (identification of the certificate holder).

#### Lock system:

Electronical or mechanical lock system consisting of a lock and/or bolt mechanism for locking secure storage units. The lock system is an integral part of the certification of a secure storage unit. Only the locks listed in the Technical Documentation relating to the certificate may be used.

#### Lock Guide:

List of approved locks that may be integrated in the certification documents and installed in certified secure storage units following assessment by an ECB•S recognized testing laboratory.

#### Certified lock list:

Compilation of locks in accordance with the Lock Guide ECB•S R01 listing locks that have been approved by the European Certification Board for installation in certified secure storage units.

#### Service protocol:

Records in which the service operations are documented and which are signed by the service company and the customer.

#### Technical documentation:

All documents and records showing data and information assigned to the product.

#### RAL:

Deutsches Institut für Gütesicherung und Kennzeichnung e. V. (RAL, the German Institute for Quality Assurance and Certification): Independent organization which defines, e.g., quality and testing conditions, through RAL recognized associations using quality-related requirements as a basis. The RAL recognized "quality assurance associations" (Gütegemeinschaften) are entitled to monitor compliance with the RAL requirements.

Note on the term: In the safe and strongroom manufacturing sector, it was initially the task of "Forschungs- und Prüfgemeinschaft Geldschränke und Tresoranlagen e.V." to prepare the RAL guidelines and to monitor quality. Many RAL requirements are no longer accessible now.

#### FuP:

Forschungs- und Prüfgemeinschaft Geldschränke und Tresoranlagen e.V.: A body that prepared requirements for construction, testing and quality conditions by means of Technical Committees, supervised the quality of products of the safe and strongroom industry and granted test labels through a "Test Committee". The successor body is European Certification Body GmbH ("ECB•S").

#### Log book:

The log book is a document in which all measures that ensure the operational conditions of the product are recorded in writing. The entries are made by the certificate holder or the service company. The log book must be available at all times and is property of the user.

#### Responsible expert:

Technically qualified person who is responsible for the compliant performance of service, repair and modification operations on ECB-S-certified secure storage units, data cabinets and rooms. The responsible expert shall sign the service protocol!

(Note: For further definitions, please see the relevant European standards.)

## 5 Execution of service operations

## 5.1 Analysis of the initial situation

Before the service is performed, the user shall be asked to provide the following information about the secure storage unit:

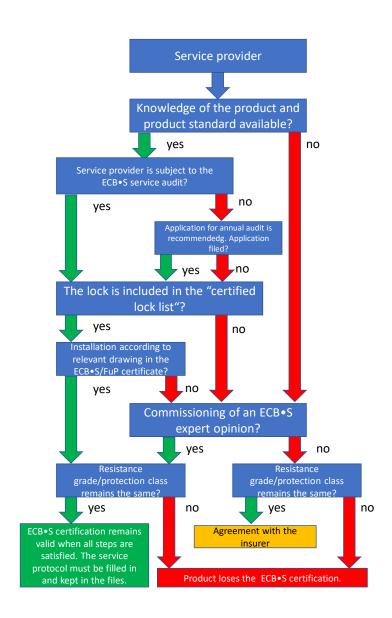
- Place of installation (including address)
- Manufacturer or supplier
- Product (e.g. safe, strongroom door, data cabinet)
- Model name
- Resistance grade and protection class, respectively
- Number of certification mark / approval label
- Year of manufacture (if given)
- Information about the state of the product (if applicable, description of visible, previous modifications)
- Date of most recently performed service, if applicable.

In case of a modification of a secure storage unit, in addition the following information shall be requested from the user:

- Present lock assembly
- Requested / intended lock assembly.

#### 5.2 Overview of flow of actions

The service provider is recommended to carry out his work in accordance with the following procedure. At designated places, consult with the insurance company. The insurance will decide if the product will continue to be insured.



## 5.3 Information provided to the user

If in the context of corporate due diligence, it is found that

- previously performed services were carried out improperly without any possibilities for rectification,
- previously performed services were carried out by third parties that do not have the necessary qualifications,
- a service cannot be carried out without the security level being affected,

the user shall be informed about these facts immediately after discovery.

The user shall be made aware that

- the security properties of the unit are restricted,
- in this case, an existing certification mark/approval label of the secure storage unit will lose its validity.
- Furthermore, the user shall be made aware that insurance cover is jeopardised and that the insurer needs to be informed.

These notes must be documented in a suitable manner.

## 5.4 Product knowledge

The service technician and/or the service company must have general knowledge of the secure storage and fire protection products sector as well as specific knowledge of the service product and must provide proof of that for example towards the Certification Body within the service audit or the insurance company (see also paragraph 2).

Note: Usually, the relevant expertise in the execution of service operations according to the above, is given by the original certificate holder.

In addition, proof of state-of-the-art general knowledge of different locks (mechanical and electronic) as well as their installation and bolt mechanisms shall be available. A solution for unknown products should be searched and found by means of the standard. Where there are any doubts, it is recommended obtaining an expert opinion. The currently applicable standards listed in this Recommendation are required as basic knowledge.

# 5.5 Preparation and acceptance of operations at the lock covered by the service order

For the modification of a lock, it shall be examined as a matter of principle whether the lock class and the lock certification are permitted and suitable for use in the secure storage unit. In this connection, the following aspects shall be considered:

The lock

- has been certified according to EN 1300 as a high security lock for secure storage units and is listed in the Lock Guide ECB•S R01;
- is, as far as its external dimensions are concerned, consistent with the previously used lock (that shall be replaced) to such an extent that it can be installed without causing changes in the security related properties of the bolt mechanism or the secure storage unit;
- satisfies, if installed as planned, the installation requirements, the specifications required by the lock manufacturer of the original lock and the new lock, whilst it does not have any negative influence on the security related functions and the locking action of the bolt mechanism and its total concept does not reduce the security related properties of the secure storage unit.

This is, inter alia, the case where

- the lock is and/or was permitted for use in the secure storage unit to be modified.
- the installation of the lock was carried out according to the specific installation requirements of the lock manufacturer.

The following security related technical conditions need to be satisfied in any case – in particular if the lock is not shown in the certificate of the secure storage unit (the following specifics are in the singular form; where there are several locks, the specifics shall be applied to all locks/lock areas):

- After the retrofitting, the armouring of the lock continues to be equivalent to the previous one and is still sufficient.
- Where applicable, newly created penetration openings/other openings are closed securely and adequately and according the specifications of the lock manufacturer.
- The number of locking points in accordance with the certification of the secure storage unit is maintained or increased.
- Existing security equipment (glass plates, emergency locks, etc.) remain fully functional (any existing penetration openings in the armouring, glass plates, etc. shall be examined and assessed individually).
- After the retrofitting, the engagement of the bolt lock in the locking point is still sufficient and the cover on the indirect locking point is at least equivalent to the certified secure storage unit.
- The installation conditions of the lock comply with the requirements set out in the assembly instructions of the lock manufacturer.
- The installation instructions of the lock manufacturer are followed.

- Now unused security related guide openings or breakthroughs for key and/or combination locks are closed properly and permanently.
- Necessary cable fairleads for locks (with a maximum diameter specified in the official installation instructions) and for other installation parts (with a maximum diameter of 11 mm and/or 100 mm<sup>2</sup>) are positioned in such a way that manipulation of the bolt mechanism or the lock through these openings is not possible.
- Where there are carriages or breakthroughs that are no longer used, they are blocked and closed in a suitable and permanent way.
- The customer shall be instructed in the operation of the new installed lock.

Where security relevant components (drilling protection plates, glass plates, seals, etc.) shall be replaced, e.g., in the case of repair work after an emergency opening, special care shall be taken that the components used are equivalent to the components of the certified secure storage unit. Equivalence shall be confirmed or accepted by the certifying body.

#### 5.6 Work carried out on data cabinets and rooms

In connection with work on data cabinets and rooms, special attention shall be paid to the following criteria:

- Replacement of seals in data cabinets and rooms
- Closing of cable and pipe bulkheads in data rooms
- Retrofitting of cable and pipe bulkheads in data rooms
- Retrofitting of climate and overpressure control dampers in data rooms
- Reuse/reconstruction of components, if and where appropriate, of a strongroom and data room (of modular design)
- Modifications of the locking mechanism of doors and dampers (e.g., replacement of the door closer)
- Implementation and/or retrofitting of components in data rooms like very early fire detection systems, air conditioners, cable runs, etc. with due consideration to the preservation of the room properties (compliance with the installation guidelines for fixings, etc.).

#### 5.7 Documentation

The service operations shall be documented by the service technician in a comprehensible way (e.g., released service order, installation protocol, photo documentation giving the substantial technical security details, e.g., before and after the installation of high security locks, activity report). The installation protocol shall be countersigned by the customer and archived by the certificate holder or service company. On request, the documentation shall be made available for examination by the insurer or ECB at any time. It is recommended that the documents are being archived by the operator / owner for a period of ten years.

After completion of the service operations, it is recommended that the product be marked clear and traceable with a seal label clearly documenting the proper execution of the services.

## 6 Expert opinion

As certifying body, ECB recommends having an expert opinion prepared by ECB or an affidavit expert, if security relevant components that are not equivalent to the previous ones or if a lock that is not included in the certified lock list shall be used. If it is required to resort to the technical documentation, it is necessary to obtain the consent of the certificate holder or the legal successor.

## 7 Service audit

As proof of the quality of the service performed on ECB•S certified products, ECB may, on request of the service company or the service department of the certificate holder, carry out a so-called "service audit" once per year. If audits have been repeatedly successful, the interval can be increased to two years. In the main, this audit covers the procedure applied in the service operations and its documentation based on this ECB Recommendation. If external quality surveillance audits are already carried out at the manufacturing company at regular intervals, they may be combined with a service audit. After a successful audit, the company will receive a confirmation to the effect that the service centre is monitored by ECB at regular intervals.

## 8 Confidentiality

The service company shall ensure that customer and object data is treated confidentially and does not reach unauthorised third parties.

## 9 Annexes

Annex A – Service protocol											
User	User Protocol No.										
Institute	Institute / Company (with address)										
Branch	/ Place (with address)										
Branon											
Туре о	f secure storage unit (Ple	ease give	basis of approval	of the	secure storaç	ge unit)					
	Safe		ATM safe		Strongroom	n door		Strongr	oom		
	Deposit system		Data cabinet		Data room			Secure Safe Ca			
								_			
	Fire Protection Products		Others								
	FIOLECTION FIOLUCIS										
Origina	al certificate holder / Man	ufacture	r								
Model	name										
Model	name										
Certific	ation body		Resistance grad	de / Se	curity level		Protect	tion clas	S		
Certific	ation mark and/or appro	val num	ber				Year of	<sup>i</sup> manufa	cture		
Type o	f service order		Emergency								
	Lock modification/ lock replacement		opening with		Change	of seals			Other		
Please	give addition information E	1 B2 P	repair 3 B4 and B5 resr	ectively	N .			ļ			
1 10430	B1, B2, B4, B5	,, 02, 0	B3, B4, B5		B3, B4,	B5			B4, B5		

Additional details B1: L	Protocol No.										
Present lock assembly											
	Lock 1	Lock 2	Lock 3								
Manufacturer											
Lock class											
	🛛 Кеу	🛛 Кеу	🛛 Кеу								
Lock type	Combination	Combination	Combination								
		Electronic									
Requested / planned lock as	sembly										
	Lock 1	Lock 2	Lock 3								
Manufacturer											
Model name											
Approval number											
Lock class											
	🗆 Кеу	🗆 Кеу	🛛 Кеу								
Lock type	Combination	Combination	Combination								
		Electronic									

Additional details B2: Measures for lock modification / lock Protocol No.							
		Figure be-	No. after	Description of measures			
		fore					
	Connection to alarm system					Alarm system	
	Installer is involved in the functional test of the alarm system					stem	
	Change of factory code (with the assistance of the supervisor)						
	Opening for key lock according to the installation instruction					Check of	
	Opening for mechanical combination lock according to the installation instruction					Check of manipulation possible	
	Cable opening for the lock according to the installation instruction					on possib	
	Others Cable opening (ø11 mm / 100 mm² at maximum)					ē	
	Lock function test						
	Change of the standard codes (master, manager, others) or explicit indication to customers that and which ones shall be changed						
	Operation near to previous/ at the same position					Others	
	Emergency locking function/hasp fully functional						
	Carriages blocked						
	Security of bolt mechanism not influenced						
	Locking points / same number of locking points						
	Armouring of the locks sufficient						

ECB•S Recommendation for Service, Repair and Modification Operations on ECB•S Certified Secure Storage Units, Data Cabinets and Data Rooms

	Installation according to installation instructions			
	Now unused penetrations are sufficiently closed			
	Sealing of boreholes			
	Area protection of the door has been checked			
	Security equipment is unimpaired			
	Re: wall bore holes: Filling material in the borehole of equivalent quality			
Present seal			New seal	

Ad	lditional details B3: Cha	ange of	seals		Protocol No.	
		Figure I	No.	Description of measures		
		before	after			
	Use of original spare parts (material and material thickness)					
	or					
	Use of permitted sealing material					
	Seal closely fitting on both sides (body and door)					
	Seal durably fixed					
Proper disposal of sealing material						
Present seal				New seal		

Additional details B4: Other measures*							
		Figure No.					
		be- fore	after	Description of measures			
	Seal				Sealing of the bolt mechanism cover		
	Кеу				of the bolt		
	Position of bolt mechanism				mechan		
	Other				ism		
	Assembly of time locking interruption (accessible from the inside)						
* SI	* Simple maintenance jobs (e.g. lubricating) are not part of these Guidelines						

Additional detail	s B5: Confirmation of services p	erformed	Protocol No.						
The service technician on site confirms proper and professional installation, the labelling of the system and instruction of the customer (please strike out as appropriate). The Secure Storage Units was handed over to the customer with the requested configuration (e.g. 4-eye principle, silent alarm, etc.). The customer was informed that the master code / manager code and other standard passwords of the lock shall be changed (please delete if not applicable parts).									
Date	Name of service technician	Signature of ser	vice technician / Com	pany stamp					
The instructed person	confirms receipt of proper instructions by t	he service technic	ian.						
Date	Name of instructed person	Signature of inst	ructed person						
The customer confirm	is the performance of the order.								
Date	Name of customer	Signature of cus	tomer						
The responsible expert confirms the proper processing of the service order and the technical correctness of the service work.									
Date	Name of responsible expert	Signature of res	ponsible expert						