

# Improving operational efficiency and security with legacy systems

The elements of today's key control and management for critical infrastructure

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## Executive summary

### Keys are as valuable as the resources behind them

It's easy to see keys as commodities that we carry in our pockets with silent satisfaction. However, keys should really be treated as valuables – just like the resources they secure. Unfortunately, the significance of keys and their lack of control is often noticed only when the keys are lost, don't fit in the right locks, or are in the wrong person's hands, in the wrong place, at the wrong time.

In many critical infrastructure organisations, managing mechanical keys still means Excel spreadsheets, post-it notes, and folders. Although some may have systems or software in place, they lack a regular update rhythm or connection to up-to-date data on keyholders, quantity, or even which sites the keys can access.

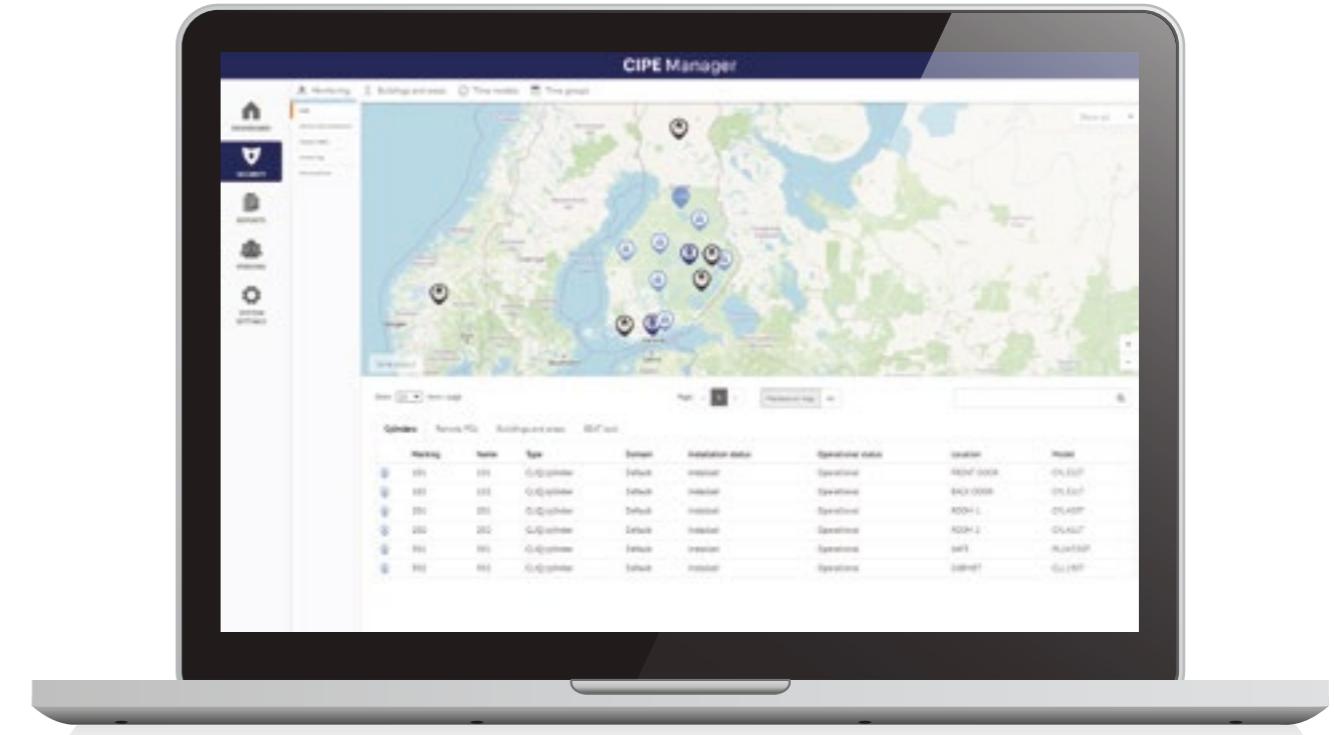
**"The lack of a proper key management system can cost a company a lot of money and unnecessary working hours in maintenance, stolen, or vandalised property, liability lawsuits, and higher insurance costs."**

- Mervi Hiltunen, Business Development and Solutions Director at ABLOY Critical Infrastructure, ASSA ABLOY Global Solutions

### Up-to-date key control policy is an opportunity, not a burden

Many commercially available key management systems are demanding and not necessarily fit for purpose. Setting up keys in the system and maintaining the data require a lot of manual work, for which companies have as few resources as they have for keeping up with keys and their users. Meanwhile, companies are aware that they are lagging behind progress, but the threshold for moving to a completely digital locking and access management system is high.

Fortunately, with contemporary modern systems, key management is more of an opportunity than a burden, and management can be improved without expensive system investments and heavy installation work. With automated processes and future-proof key management solutions, day-to-day operations are made more efficient, and the organisation's security is improved when keys, users, and access rights are always up-to-date.



# Introduction

## The elements of a comprehensive key management system

Comprehensive key management consists of various factors that include the defined roles and common operating methods within the organisation.

- What method will be used to track keys that have been issued or assigned?
- Who has the authority to request keys?
- How is that authorisation enforced?
- How is the handing out and handing in of keys organised and controlled?

Answering these questions is facilitated when the three most important elements of key management are in order. A patented master key system design, key distribution, handover process, and proper key management software are the core of strong key management, in which the investment pays for itself in operational efficiency, higher security, and improved trust between all parties.



## Patented master key system

### The foundation of secure key control

Carefully designed master keying is the basis of key control and the system's long-term success. The more expertise that is used for the master keying design, the easier are the use and control of the keys, future extensions and minimisation of potential security risks. Designing the cylinder mechanism and the keying system must have the right balance between security and convenience.

The critical roles in this delicate balance and the future expansion capability consist of:

- the types and number of cross keys
- the use of keyed alike groups
- the number of keying levels.

The availability of additional keys is decided in an organisation's key security policy. A patent provides the manufacturer of the design with the exclusive rights to manufacture and control the distribution of the keys and key blanks, and ensures key duplication is in the hands of the authorised reseller's factory.



### Manufactured according to your specification

Abloy Oy factory-designed master keyed systems' locking data are filed in Abloy Oy Joensuu factory's digital archives. All changes, extensions, and key services are strictly controlled, and they are available only from Abloy's Joensuu factory, or according to an agreement between Abloy Oy and the locking system owner. With a wide range of cylinder systems, products, and services, ABLOY locking systems are always manufactured according to your specification, because we offer different key security levels to allow specified procedures for the obtaining of additional keys.



# Key distribution and handover process

## Keeping keys in the right hands at the right time

Keys are an important asset in critical infrastructure, providing access to highly sensitive areas, machinery, and vehicles. The problem with conventional mechanical keys is that they are difficult to manage and track. They are often kept in a manager's cupboard, left hanging on hooks, or locked in a desk drawer. Who controls access to these keys – and more importantly, the buildings, facilities, equipment, confidential paperwork, and vehicles to which the keys give access?

Key security refers to the proper handling and control of keys and key blanks in different locations and situations, allowing only authorised persons to access them. Tracking and controlling which keys have been handed out and to whom is vital in all circumstances. The smart key distribution and handover process holds staff members accountable for sensitive keys by ensuring that only authorised users are allowed access to the key storage – and only then to designated keys.

# Mechanical key management software

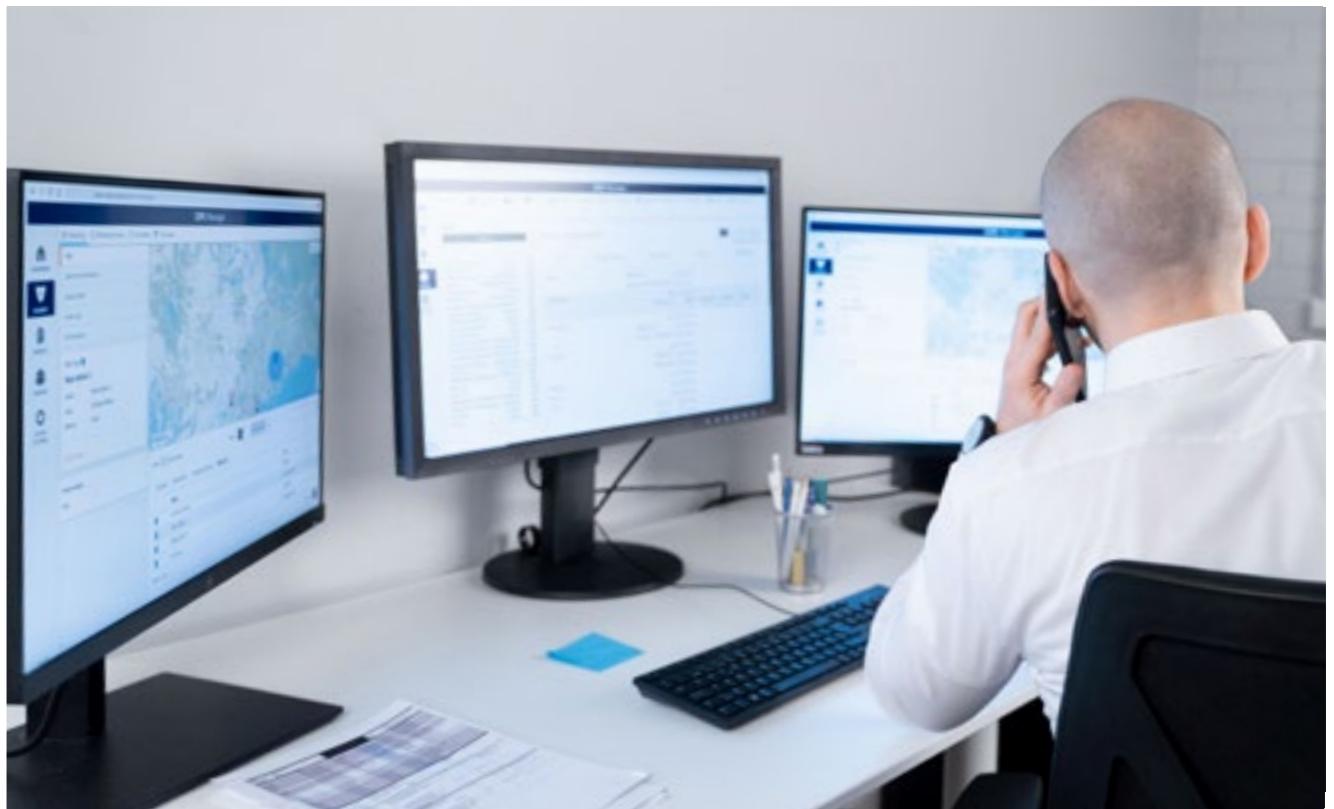
## Digitalising and managing an organisation's existing key system with future-proof software

Today's key control and management systems enable higher-level management to address the security of critical infrastructure workers and assets. Knowing the identity of authorised key holders, and which keys they have in their possession and when, is essential information that helps ensure a better picture of the whole organisation's security and operations. Changes, additions, or removals of keys and their users are synchronised throughout the enterprise, enabling reliable automated control.

CIPE Manager by ASSA ABLOY Global Solutions is a cloud-based access management application designed for day-to-day operational use by security, operations, and facility management that controls and manages access rights to their organisations' critical infrastructure sites and facilities. The management module for mechanical keys allows the management of key distribution and storage at the company's offices and key handover locations. Thanks

to CIPE Manager, the number of keys available for different facilities or handed over to users is always known. The company can also share key management visibility and rights with different people safely and systematically, based on user roles.

The advantage of CIPE Manager is that in addition to mechanical master key systems, it provides an easy path to upgrade locking to ABLOY's modern electromechanical and digital solutions. A single-user interface and CIPE Manager instance allow a smooth transition to digital convenience, control, and security, simplifying daily processes, adding operational efficiency and complete situational awareness. Comprehensive support is provided by a worldwide distribution and service network, as well as regional competence centres.



# Conclusion

## Proper key management is a small step towards improving workflow and security

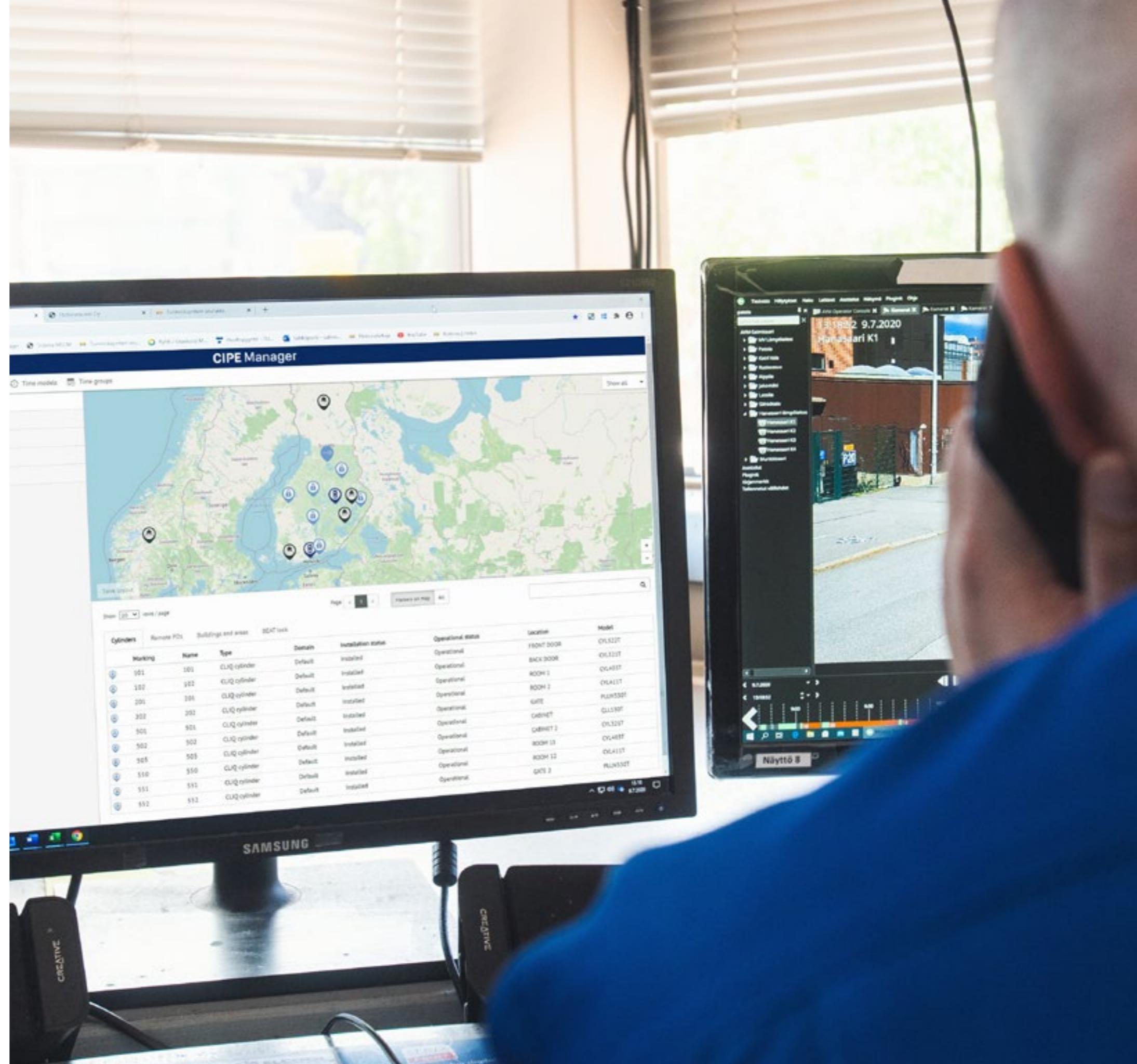
It is likely that many critical infrastructure operators will continue using conventional key and locking systems, thanks to their cost-effectiveness and robustness. It is therefore reasonable to increase the security level of these systems, for which an up-to-date key management system is the perfect solution.

A proper key management system is a reliable and cost-effective way to improve building and site security by ensuring that keys are properly managed with regard to their access, storage, and tracking. It provides an immediate improvement to security, is accessible in terms of managing costs, and is easy to implement. A reliable key control policy delivers a new layer of security, but it also reinforces access control policies that are already in place, while helping to reduce the costs of lost keys or unmanaged access.

Whether you're building a new system or updating your existing one, your local ASSA ABLOY Global Solutions representative will help you design a secure key management system, develop and implement control policies, select the right product for different applications, and understand the latest trends and future demands in critical infrastructure security.

## Learn more about CIPE Manager

If you would like to know more about our solution, click the button below and we will put you in touch with one of our local experts.



The ASSA ABLOY Group is the global leader in access solutions. Every day, we help billions of people experience a more open world.

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