

Paving the way to a
single digital network
for the police



P20 POLICE
20/20



Federal Ministry
of the Interior
and Community

P20 – A programme for the police of the future

P20 optimises police systems and processes. It will thoroughly overhaul and improve the work of the police



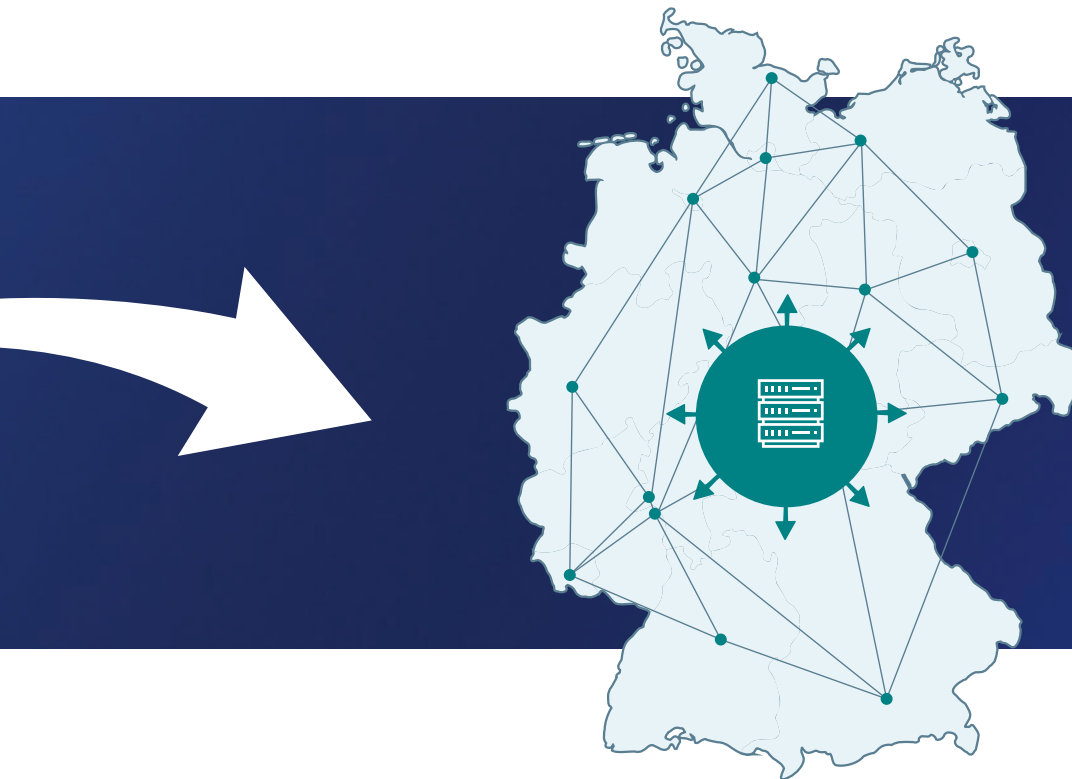
Police IT systems will be interlinked and put on a shared platform.

Up to now, the 20 federal and state police forces in Germany have been using many different IT and information-management systems which are not sufficiently interconnected. Many forces have developed their own software or use specialised solutions, so that information must often be processed manually and multiple times, creating more work for police staff and increasing the likelihood of errors.

P20 is a programme adopted by the Standing Conference of the federal and state interior ministers to optimise police systems and processes.

P20 will create a common basis for law enforcement cooperation in fighting crime. It will replace the fragmented landscape of police information management and harmonise the structure and architecture of IT systems.

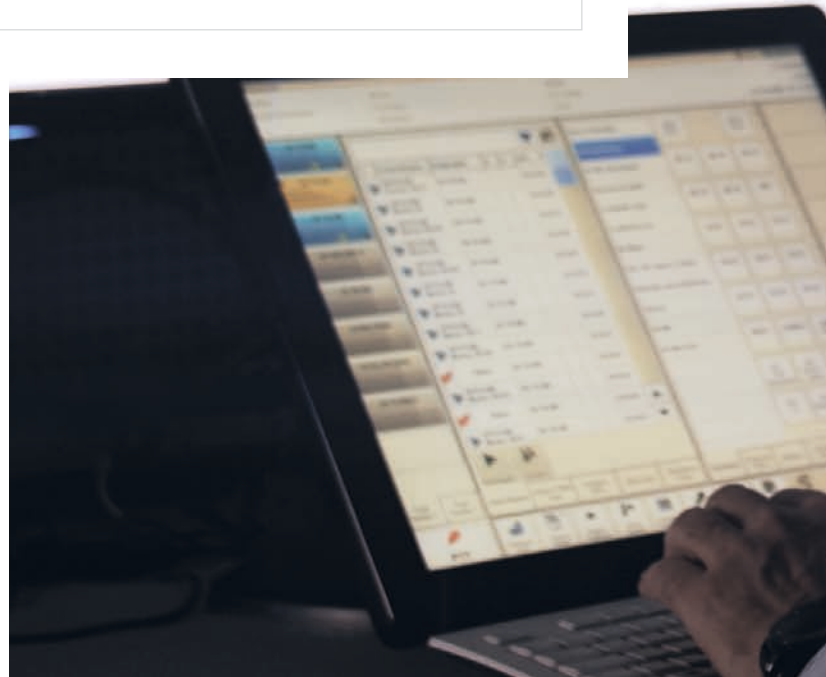
Because the police forces use different systems, the P20 programme will be carried out in a series of steps. Some police forces are already using suitable systems. These will be rolled out nationwide. New software applications will be developed wherever necessary.



P20 – Digital transformation for the German police forces

Digital technology has transformed almost every area of life – including police work

Up to now, Germany's police forces have organised their tasks in very different ways using a variety of IT systems. The police forces throughout Germany are now working together to change that. **P20 will create a modern, digital network for the police which is ready to deal with the latest challenges.** The P20 programme provides innovative, agile methods for managing organisational development and the attendant processes of change.





Facts and figures

1

shared vision in a single programme

20

programme participants:
16 state police forces, the Federal Police, Federal Criminal Police Office, Customs Criminological Office and the police of the German Bundestag

> 45

projects running in parallel

Three major goals

Making information available

1

In future, all **police staff will have access at all times** to all the information they need for their work, **no matter where they are.**

Using technology to strengthen data protection

2

Innovative technologies will ensure **comprehensive data protection** without hindering police work.

Enhancing efficiency

3

Police will be able to work more efficiently. Harmonising the information systems of Germany's police forces will significantly improve their work processes and practices.



Innovative projects require innovative processes

P20 will radically change the way Germany's police organise their work:



Police case handling will be **standardised**



Data management will be **consolidated**



Police will be able to use **specialised applications anywhere** and **with any terminal device**



Improved data quality will lead to **better intelligence** and **faster response times** by the police



Police staff in different federal states will use **standardised IT applications**



Digital networking will **speed up information-sharing** with national and international agencies

The P20 data house ecosystem





Intelligent networking



Secure and smart data protection



Intuitive user interface



Data available at all times



Lean data management



High-quality data



Centralised, standardised functions



The data house ecosystem is part of the P20 target vision. It is a complex combination of all the services and functions needed for processing law enforcement information. It complies with data protection law and ensures that only the necessary personal data are collected and stored. The heart of this ecosystem is the data house, a fail-safe network which will serve as a **hub, bringing together standardised, specialised, organisational and technical processes** in the coming years. In this way, the various stand-alone solutions developed so far will be harmonised nationwide, laying the groundwork for a seamless digital network among the German police forces and their national and international partners.

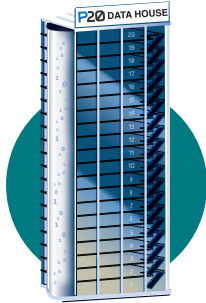


To ensure that the police forces remain able to function during this process, the data house will be established in a series of steps over several years. In a transitional phase, systems already in use will be upgraded to remain functional until they can be replaced. Modules and functions will be connected to the data house and integrated step by step. New applications will only be developed as needed.



A new kind of information management for the police

This is how police information management will look in future:



Data house

The data house will be the **central repository** for police information, **the heart of the information processing system used by all the federal and state police forces**. Here, data will be stored centrally and securely in separate areas, so that each police force has control at all times over the data it has collected. At the same time, access to relevant data can be made available to other police forces. The data house will ensure a uniform level of information for all while preventing duplicate entry of the same information. This will enable the police to “connect the dots” between data already entered in the system and analyse it.



Information-sharing

Information available in the data house may also be relevant for the judicial authorities, foreigners authorities or, in the case of cross-border offences, for authorities in other countries. Following the **necessary examination**, the data house will enable **information-sharing** among these authorities **as needed and as allowed by law**.



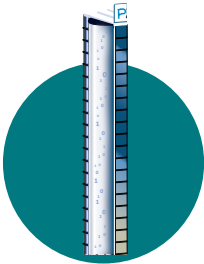
Hypothetical new collection of data

As soon as a query is submitted to the data house, the steps taken to carry out the hypothetical new collection of data will be able to determine, **according to a nationwide standard, whether and to what extent** users may view personal data. This will ensure compliance with the Federal Constitutional Court rulings on data protection by the police.



P20 Service landscape

The data house is located within the P20 service landscape, where digital applications for all essential policing activities are provided. These standardised processes will significantly optimise police work. The services in the P20 service landscape are directly linked to the data house, where data needed for the services is stored and retrieved. The services are divided into **basic services**, which provide background and usually unseen technical functions (such as logging all access to data); **police case handling services** (such as writing up incident reports); **evaluation and analysis**; **operational support** (such as dealing with emergency calls); and **citizen interaction** (such as managing police websites where individuals can report crimes).



Access to data

Information can be shared with other police forces as needed and as allowed by law (network data). **The protection of personal data is a priority of the data house.** All access to data is logged according to a nationwide standard and can be audited by supervisory authorities.

Digital transformation



To **reach its ultimate goal**, the P20 programme follows a path of clearly defined targets. By 2030, different police information systems, software applications and processes will be gradually combined to **enable all participants to use them easily and efficiently**. Local, stand-alone elements will be merged into a **closely interconnected, overarching system under a single roof in the data house ecosystem**. When this transformation has been achieved in 2030, it will be followed by a continuing process of further development.

Key concepts

Network systems: Joint databases of the German police forces

Police case handling systems : Systems to manage and process cases and exhibits

Basic services: Services on which other specialised services can build

now

Police case handling

- Connect police case handling systems to the data house

2025

- Begin transferring police case handling systems to the data house ecosystem

2028

- Further develop the evaluation and analysis solutions

2030+

Complete connection to the **data house ecosystem**. Local, stand-alone systems and applications will be replaced by **central functions and services**.

Evaluation & analysis

- Link and harmonise evaluation and analysis solutions

- Implement the architecture
- Build network-ready services

Data house, basic services, information network & central agency

- Plan and build the data house
- Prepare the transformation

Target architecture of the P20 programme

From a variety of independent systems to one system for all

Now

Individual solutions

Today, the **same functions** are often **designed differently in the different federal states**. For example, a system to search for persons may look and operate differently from one federal state to another.



In future

Standard solutions for all

In future, the **existing functions** will be offered **within a single system** in the same form for all participants. A user-friendly interface designed to meet individual needs and efficient data management in the data house will **harmonise and optimise police case handling**.



Multifaceted challenges demand structured solutions

Extent

- Transformation of processes and IT systems in parallel
- Complete digitisation of police work processes
- Complex regulations, in particular for data protection

Structure

- Joint federal and state programme with 20 participants having many and sometimes differing interests
- Different starting points due to different equipment and systems
- Extensive involvement of various technical and subject-area specialists

Time

- Some P20 projects are subject to implementation deadlines set by law
- Results must be achieved soon so that the police can carry out their duties better

Guidelines for implementation



Guiding and managing change

The P20 programme aims to address all police staff and guide them through the change process. Staff will therefore be kept informed of upcoming changes and have a say in shaping them.

Coordination based on a common timeline


Significant personnel and financial resources will be needed to effect the changes within the police forces. For this reason in particular, all of the P20 programme staff are working to the same timeline.

Room for structural differences

Germany's federal structure means there are differences between the various federal and state police forces. The P20 programme is designed to take into account political, legal and technical specificities, for example.

Close cooperation among programme participants

To ensure that all the programme activities running in parallel stay on target, all the project staff regularly work together in various formats for sharing information.

A close-up photograph of a person's hands typing on a laptop keyboard. The laptop screen displays the 'P20' logo in a large, white, sans-serif font against a dark blue background. The background of the image is slightly blurred, showing a person in a brown shirt sitting at a desk in an office setting. The overall composition is modern and professional, emphasizing digital technology and data.

One programme,
many components

> 45

Within the framework of the P20 programme, work is being done to improve all areas of police work using digital technology. The overall P20 programme is made up of more than 45 individual projects. Some of these projects are described on the following pages.

Using artificial intelligence to track down criminals responsible for sexualised violence against children and young people

An important part of police work involves **protecting children**, for example with the help of a project using artificial intelligence to identify online images of sexualised violence against children and young people.

In 2022, the police in Germany registered 42,075 cases of distributing, purchasing, possessing or producing child sexual abuse material. That was an increase of 7.5 per cent (2,904 cases) in comparison to 2021. The number of offences registered in this area had already risen significantly in previous years, due at least in part to more intensive police investigations. But the large quantities of data seized often create enormous challenges for the police.

Such data can be handled more efficiently and effectively **with the help of artificial intelligence**, which is able to rapidly analyse large quantities of data and flag suspected criminal content. Staff then carefully check and assess the suspicious content manually.



Does a person commit another crime?

This is a question police officers often have to ask themselves. If the answer is yes, officers will have to take additional action, such as creating an electronic criminal record and taking fingerprints and photographs for the file.

These measures represent a significant infringement of individual rights and are therefore only allowed in justified cases. The law sets high standards for justifying such measures using a **prediction of recidivism**. This prediction must be made individually for each suspect by assessing the facts in the specific case – not an easy task, and one that takes time and careful attention to detail.

A **software application** has been developed to help police case officers formulate recidivism predictions. It offers useful suggestions for wording and saves valuable time in typing – time that can be used for other important policing tasks.

Software that can recognize fake persons by their voice

Acoustic evidence can often provide useful clues to clear up crimes or can help to prevent them from being committed. For example, different speakers can be identified based on probability values. In this context, software makes it possible to **identify individuals using biometric voice profiles**; by comparing these profiles, it can offer **information related to the crime**. This is useful especially in cases in which the human voice plays a key role. The data mainly come from **acoustic recordings**, such as those resulting from telecommunications surveillance, recordings made covertly, or emergency calls, or from devices seized as evidence, such as telephone answering machines or dictation machines.

Further analysis may be able to determine the circumstances in which the recording was made or to investigate sounds (shots or blows) to recreate the sequence of events.



Central information management platform

Gathering and utilising information are crucial tasks for the police. However, **the amount of data available to the police is continually growing**, and police staff must use many, sometimes very different, channels to access this information.

The central information management platform ZIMP is intended to bring together **national non-police and international searches and requests for information** in one central location for police end users, i.e. the more than 320,000 staff employed by the police in Germany. It will **intensify information-sharing among authorities across national borders** and expand the search for offender data beyond the jurisdiction of Germany's police forces – because crime and criminal networks don't stop at national borders.

Operations management helps different agencies work together better

Operations management software helps the police in special operational situations, such as major sporting events, demonstrations, accidents or disasters.

Here the focus is on preparing, organising, conducting and documenting such operations. Using the software to **document relevant incidents gives the staff involved rapid access to the necessary information.**

For operations involving more than one agency and/or federal state, operations management software offers the participating agencies the ability to share intelligence. That is why the federal and state-level civil protection and disaster management agencies also have access to the system for documenting operations.





Crime-scene documentation goes digital

The INSITU project is developing a mobile software application which all police organisations in Germany will be able to use to document crime scene **traces and information at the locus**. The data collected will automatically be saved to other systems (such as police case management systems). Staff will be able to work together to document crime scenes on site. This will reduce the need for time-consuming and labour-intensive processes, avoid duplicate entry of information, improve communication and optimise crime-scene work.

Another advantage of digital crime-scene documentation: photographs, notes, sketches, audio recordings, laser scans and images from 360-degree cameras can be linked to produce a single crime-scene information model. The crime scene can then be analysed at the police station using the web application. The **software system** for digital crime-scene documentation is to be available as a mobile app for recording crime-scene data and as a web application for analysing the data.



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The P20 programme for digital transformation

The projects described here are only a few examples of the many projects that make up the P20 programme. Together, they will optimise the work of more than 320,000 police staff in Germany and make their daily tasks much easier. Germany's federal and state police forces are working together to make this digital transformation a success.

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