Driver's license solutions

Moving toward a modern driver's journey

IDEMIA

A rapidly changing market

Increased mobility, expanding cities and digitalization are transforming the world at a rapid pace. Drivers are looking for easy, flexible and fast solutions when it comes to applying, renewing or receiving a license and accessing online services. With these changes, governments have a new challenge ahead of them. While they need to enhance and increase online services in cost-effective ways, they must still ensure road safety by guaranteeing that only authorized drivers take the wheel, and protect their populations against license fraud and forgery.

Today, driver's licenses represent more than just the physical proof of qualification to drive a vehicle. In many countries around the world, driver's licenses are one of the few documents permitted as a means of secure identification alongside a passport or ID card. Driver's licenses are commonly used to open bank accounts and access age-restricted services. Strengthening the security of these documents is a matter of public trust.

IDEMIA creates innovative solutions to protect identities, support governments and ease the minds of drivers around the world.

At IDEMIA, we provide over 90 million driver's licenses every year to governments around the world. Securing identity is at the heart of what we do. As a leader in citizen identity, we have the necessary in-house technologies to provide convenient, trustworthy solutions that meet all regulations.
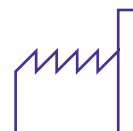
Our customers

Ministry of Interior

Ministry of Transport

Motor Vehicle Agency
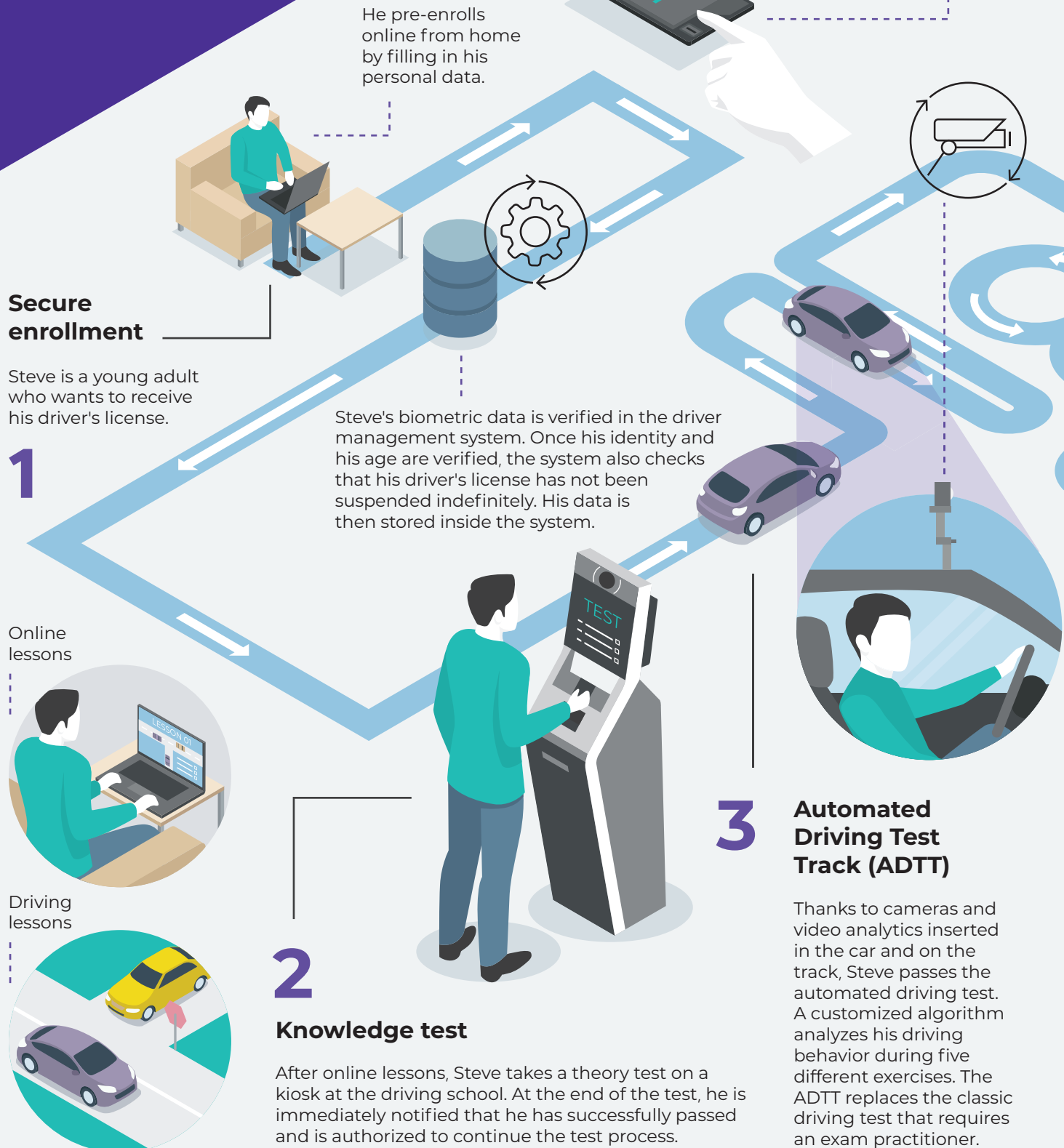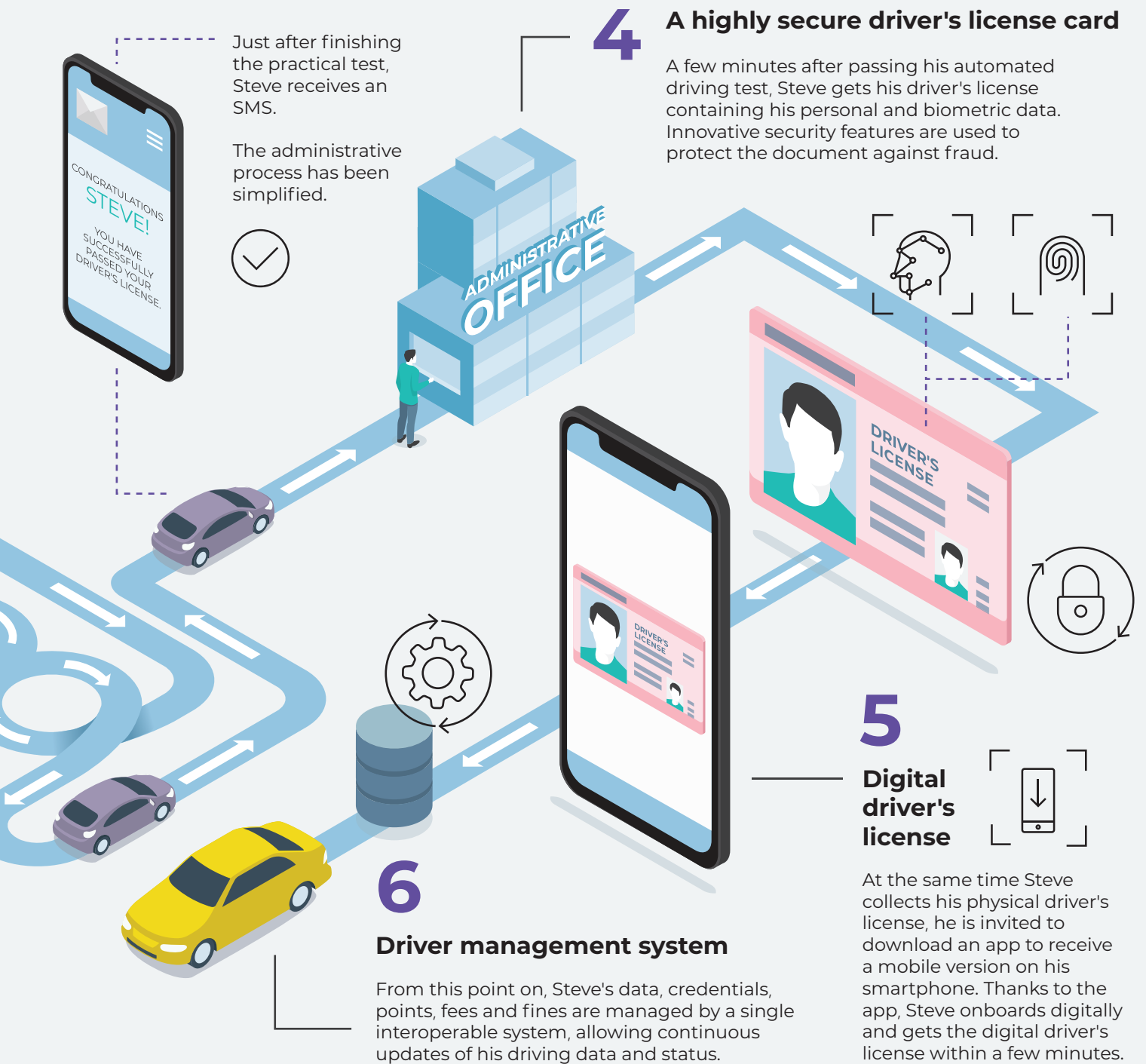

National Printing House

IDEMIA

THE MODERN DRIVER'S JOURNEY BY IDEMIA

IDEMIA's modular suite of products and services helps accompany future drivers securely and conveniently

He pre-enrolls online from home by filling in his personal data.

He finalizes his enrollment at the driving school where his biometrics (face, fingerprints) are captured.

Secure enrollment

Steve is a young adult who wants to receive his driver's license.

1

Steve's biometric data is verified in the driver management system. Once his identity and his age are verified, the system also checks that his driver's license has not been suspended indefinitely. His data is then stored inside the system.

Online lessons

Driving lessons

2

Knowledge test

After online lessons, Steve takes a theory test on a kiosk at the driving school. At the end of the test, he is immediately notified that he has successfully passed and is authorized to continue the test process.

3

Automated Driving Test Track (ADTT)

Thanks to cameras and video analytics inserted in the car and on the track, Steve passes the automated driving test. A customized algorithm analyzes his driving behavior during five different exercises. The ADTT replaces the classic driving test that requires an exam practitioner.

Just after finishing the practical test, Steve receives an SMS.

The administrative process has been simplified.

CONGRATULATIONS
STEVE!
YOU HAVE SUCCESSFULLY PASSED YOUR DRIVER'S LICENSE.

4

A highly secure driver's license card

A few minutes after passing his automated driving test, Steve gets his driver's license containing his personal and biometric data. Innovative security features are used to protect the document against fraud.

DRIVER'S LICENSE

5

Digital driver's license

At the same time Steve collects his physical driver's license, he is invited to download an app to receive a mobile version on his smartphone. Thanks to the app, Steve onboards digitally and gets the digital driver's license within a few minutes.

6

Driver management system

From this point on, Steve's data, credentials, points, fees and fines are managed by a single interoperable system, allowing continuous updates of his driving data and status.

Driver's license use cases

When stopped by a police officer, Steve shows his card and he is easily authenticated.

With his driver's license (physical and mobile versions), Steve can access online services with confidence.

During in-person verifications, Steve can use his mobile driver's license and choose the attributes he wants to share or keep private.

18+

A durable and highly secure driver's license card

DEMIA has proven expertise in designing secure ID documents that integrate the most advanced security features. This guarantees reliable driver's licenses for individuals and hard to reproduce, easy-to-authenticate documents for governments.

L 1 Level 1 security feature	L 2 Level 2 security feature	L 3 Level 3 security feature
Visible to the naked eye	Visible with simple tools (magnifying glass or UV lamp)	Detectable at forensic level only

Micro print with deliberate error

Grayscale picture

ISO 18013 compliant design

Chip with IDmove
- a large memory size: over 100kB
- the best reading time: < 2 seconds
- double source OS with ICAO Essential

ABROADIA

Driving Licence Permis de conduire

1. BAKER
2. JANE EVA
3. 24.01.1971
4a. 11.12.2017   4b. 10.12.2022
4c. IDEMIA Oy
4d. 20150917000003
5. 240171-0000
7. Signature

7. A B C

SLI™, a 3D secondary portrait that protects the main image

DocSeal, a secure and customizable seal of the holder's data

Complex background design

Diffractive Optically Variable Image Device (DOVID)

1D Barcode

Hard to reproduce, easy to inspect

Portrait protection

› DOVID

› Also available:

  LASINK™ color portrait

Data interlinking

› Portrait reproduced with two different techniques (Grayscale + SLI™)

› Drivers' data encrypted in DocSeal

Optical Machine Authentication (OMA)

› DocSeal

Personalization operation

We ensure the utmost security at the personalization stage to guarantee the highest level of protection against fraud. IDEMIA adapts to the client's requirements:

› Supply of blank documents
› Supply of personalized documents
› Customer support in the implementation of personalization infrastructures and systems including hiring, training and managing operators

An international driver's license

IDEMIA's driver's license solutions are compliant with all international regulations:

› ISO/IEC 18013 series
› ISO/IEC TR 19446 (European Union specifications)

The physical card and its mobile version adhere to data qualification, restrictions, encoding and storage specifications.

Expand your driver's license to digital:
IDEMIA's mobile driver's license

Smartphones are at the core of our daily lives. Drawing upon our extensive experience and background in providing trustworthy identity documents, we have upgraded the traditional driver's license into a secure digital version, enabling new services to drivers. This mobile driver's license (mDL) is simply integrated into a smartphone app. It can be provided at the same time as a physical driver's license or remotely at a later date so drivers can use their physical card as well as their mobile driver's license.

Convenient authentication

An mDL ensures drivers have a trusted credential that can quickly be authenticated online or in-person. Online, the mDL can be used to access remote services such as bank accounts and welfare services.

In-person, the mDL can also be used to share verified attributes with retailers, bank officials or law enforcement officers via a secure Bluetooth low-energy communication channel.

Privacy by design

As the mDL is stored on a driver's smartphone, they are in full control of their own data.

Our solution guarantees personal privacy protection: drivers can share the data they want, whenever they want, keeping their Personally Identifiable Information (PII) safe.

New communication channel

With an mDL, renewing a driver's license or updating it with a name change or new address can be done in real-time and initiated directly from the app on a smartphone.

The app also allows a new communication channel between drivers and administrations for a better experience. For example, the app could be used to support government awareness campaigns.

An end-to-end solution for governments

IDEMIA manages the whole value chain and provides a broad range of services for your convenience. Our solutions do not only combat security threats, they are also cost-effective and meet your administrative needs. Flexibility is at the heart of our services and depending on our client's requirements, we can provide a complete solution or part of the solution.

1.

A wide range of solutions for secure enrollment

The driver's license issuance journey starts with enrollment. This is one of the first and most critical steps when creating a driver's license. Applicants must provide a portrait image with personal data and in some cases other biometrics such as fingerprint or iris data.

At IDEMIA, we propose multiple solutions to streamline the enrollment process. Future drivers can be enrolled at a desktop station, through a self-service kiosk and even from the comfort of their own home via a smartphone app. Pre-enrollment is also possible, saving the applicant's time.

Enrollment is the first and most critical step in the driver's journey.

2.

A modular and interoperable driver management system

Once biographical and biometric data of a future driver has been captured, it is verified in IDway, IDEMIA's identity management system. IDway is a robust and modular software suite that ensures data integrity and security. A single interoperable system manages the driver's credentials (both physical and digital), points, fees and fines. This simplifies the administrative procedure and allows continuous data and status updates.

3.

Automated tests

Automated Knowledge Tests

In most countries, driver's license applicants will need to prove their theoretical knowledge of how to drive and follow road regulations. Applicants will take a test with a dedicated private or public institution that will then provide a pass/fail notification to the applicant and to the central driver's license database management to authorize the continuation of the exam process. At IDEMIA, we help testing institutions speed up the process and decrease the time spent on administrative tasks with Automated Knowledge Testing. Our solution makes test-taking more convenient for driver's license applicants. We also produce a randomized unique test for each applicant, which helps reduce the risk of fraudulent behavior.

Driving test institutions conduct tests on PCs or kiosks via user-friendly interfaces with advanced multimedia. This process also automatically ties the test to the applicant's record and front office workflow to increase speed and efficiency.

Driver benefits
› Better user experience
› Increases the speed and efficiency of applicant processing

License-issuing authority benefits
› Reduces fraud
› Eliminates errors
› Compliant with regulations
› Highly scalable with web-hosting

Automated Driver Test Tracks

After the knowledge test has been validated, an applicant needs to demonstrate their driving capability via a practical test organized by a private or public institution. At IDEMIA, we propose Automated Driving Test Tracks (ADTT).

ADTT is based on the latest technology of video motion analytics and cameras inserted into the track and vehicle. It fully automates the process of assessing whether or not a driver is eligible to receive their license. Drivers are simply required to drive a vehicle on the test-track and are assessed on their driving speed and other safety characteristics. The result is based on a customized algorithm that analyzes the driver's conduct during the test.

ADTT ensures transparency and objectivity during the entire process. Data recorded along the track is error-free and has complete accuracy. ADTT allows the applicants to receive a time-bound service without any bias. The implementation allows driver's licenses to be issued on the spot, without the need to visit any other district transport official.

Driver benefits	License-issuing authority benefits
› Eliminates manual bias	› Real-time tracking
› Complete assessment	› No human intervention
› Instant pass or fail notification	› Automated evaluation

Why IDEMIA?

IDEMIA is a recognized, trusted partner for driver's license programs around the world. We have over 50 references, with whom we produce 90 million cards a year. IDEMIA has long-term experience in providing driver's license solutions to the following countries:

- Azerbaijan
- Botswana
- Burkina Faso
- Colombia
- Denmark
- India (over 10 states)
- Kazakhstan

- Lebanon
- Mauritania
- Morocco
- Norway
- Slovakia
- United States (over 30 states)

IDEMIA supports over 50 driver's license programs around the world and produces 90 million cards a year.

For governments that are looking to buy a full document designed for their specific needs, we can provide a complete document with or without personalization. Build-Own-Operate-Transfer (BOOTs) are available to governments that want a high-end driver's license without financial risks. We also offer technology transfers to help clients enhance their product portfolio with innovative security features. Our operating systems are robust, secure and reliable and are constantly upgraded. As a leader in Augmented Identity, we combine the best of our expertise from across all our markets to provide safer and more convenient driver's license solutions.

Service Level Agreement (SLA)

For personalization services and BOOTs, IDEMIA can offer quick delivery services according to the service level agreement. For example, a driver's license can be delivered in less than 12 hours for fast track processes and in less than three hours under emergency circumstances.

# Securing and digitalizing driver's licenses in the US

As there is no official identity card in the US, stated-issued driver's licenses are used as the default proof of identity. IDEMIA is supplying physical driver's licenses to over 30 American states.

In 2018, IDEMIA was chosen to launch a digital driver's license system in the US. IDEMIA has been working in collaboration with multiple departments of public safety across the country to develop an app. This app creates a mobile version of the physical driver's license on the individual's smartphone. Designed to interface with the different states databases, mDLs allow businesses and other organizations to quickly and reliably verify the identities of drivers electronically. IDEMIA's solution is protected by cutting-edge biometric technology.

IDEMIA PROVIDES OVER 80% OF US DRIVER'S LICENSES (70 MILLION PER YEAR) WITH MULTIPLE SOLUTIONS INCLUDING:

› Physical cards, with or without chips
› Enrollment solutions
› Card management systems

› Automated-knowledge exam solutions
› mDLs
› Personalization services

■ DL program with IDEMIA
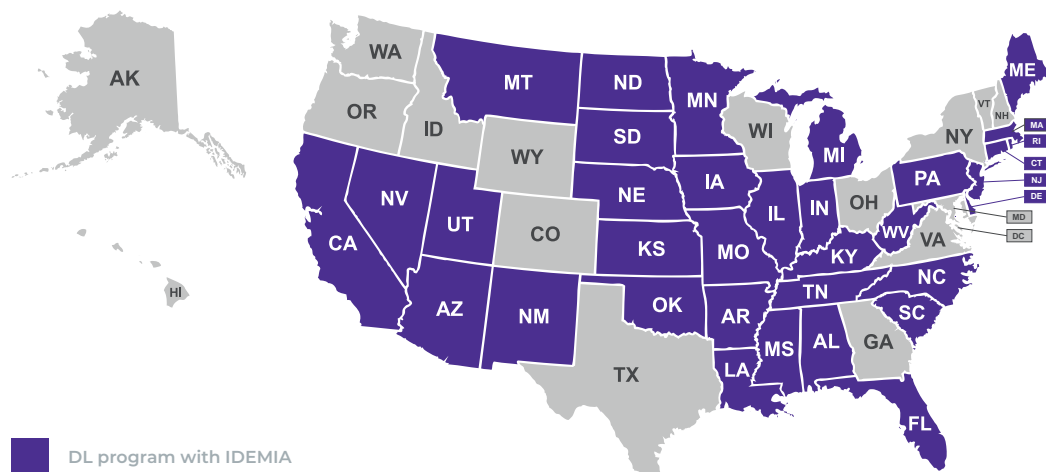
India: leading the evolution toward a modern system and deploying the world's first ADTT

For over twenty years, IDEMIA has been involved with transport departments in multiple states in India.

IDEMIA's solution consists of:

› the creation of a global infrastructure

› enrollment

› the production of smart cards (driver's licenses and vehicle registration cards)

› web-based services for fee payments

› software applications

› the creation of ADTTs

Over 59% of the Indian population enjoy these services, representing 50,000 individuals on a daily basis. 15 million smart cards are issued per year which means 50 cards every minute.

One notable aspect of IDEMIA's footprint in India is the launch of a fully automated ADTT in Regional Transport Offices (RTOS) across the country. The ADTT consists of a highly intense test track with advanced video motor tracking sensors and real-time video capturing cameras. The ADTT also enables biometric fingerprint recognition for driver identification and a video analysis application for assessing tests, as well as an online portal for booking time slots for tests. The project aims at improving road safety by ensuring licenses are only granted to drivers with adequate skills. It also helps implement a more objective and transparent testing process.

IDEMIA's footprint in India:

Operating in over
10 states

60%
of the indian population enjoy IDEMIA's services

15 million
smart cards are issued per year

Providing Morocco with new driver's licenses and vehicle registration certificates via a technology transfer

In 2018, IDEMIA was chosen to work hand-in-hand with the Printing Works of the Central Bank of Morocco, Dar-As-Sikkah (DAS), to offer modern and highly secure polycarbonate driver's licenses and vehicle registration cards to Moroccan citizens. The driver's license includes the most secure technologies on the market – the patented LASINK™, tactile effects and Multiple Laser Image (MLI).

IDEMIA's support of DAS consisted of a two-step technology transfer. The first step was the implementation of a polycarbonate personalization system in the existing DAS environment. DAS was able to personalize the LASINK™ blank documents supplied by IDEMIA. The second step was supporting the manufacturing of a polycarbonate production unit, allowing DAS to produce their own polycarbonate documents including the LASINK™ matrix provided by IDEMIA. In the frame of this project, over 500,000 cards will be produced every year over a five-year period and DAS will be fully autonomous after the project is complete.

LASINK™, a laser engraved color portrait

Multiple Laser Image (MLI), a security feature that shows either the portrait or other personalized data when you tilt it

Making citizens' lives
safer and easier

IDEMIA

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