

VERIDOS

IDENTITY SOLUTIONS

by Giesecke+Devrient
and Bundesdruckerei



Your trusted identity partner

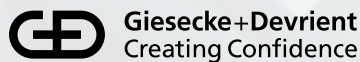
Issuing, managing, verifying legal identities

in the physical and digital space

Your trusted identity partner

Veridos, as a leading identity technology company, puts customer centricity at the heart of its operations. Our comprehensive range of products covers the entire document lifecycle in both the physical and digital realms. Emphasizing security and convenience throughout, we accompany you through every stage, from enrollment to the personalization, issuing, and management of identity documents. With Veridos, as your trusted identity partner, you can expect a seamless and customer-focused experience at every step of the process.

Veridos was formed in 2015 as a joint venture between Giesecke+Devrient (60%) and Bundesdruckerei (40%).



| WHAT MAKES US STAND OUT?

- 1 Over 150 years of experience**
G+D and Bundesdruckerei have worked in the area of sovereign identities for more than 150 years
- 2 More than 300 projects in over 100 countries**
- 3 End-to-end solution provider**
We are a customer-centric company supports in planning, building, and establishing in-country manufacturing facilities
- 4 Physical and digital identity portfolio**
Addressing needs and challenges of today and tomorrow
- 5 Convenient and innovative solutions**
Investing in our portfolio to develop AI technologies, for example



"Our approach is rooted in customer-centricity, optimizing convenience for our customers while securing critical infrastructures. We prioritize the appropriate levels of security for each type of use, safeguarding both trust and functionality in equal measure."

Marc-Julian Siewert, CEO of Veridos

DENMARK | SECURE DOCUMENT WITH QUICK ISSUANCE

Veridos and idpeople collaborated to produce new ePassports for Denmark. Veridos handled design and production, while idpeople managed personalization and distribution from their location near Copenhagen. We provided Denmark's citizens with high-end passports, with a quick issuance process taking three to ten working days.

UGANDA | LOCAL FACILITY AND EPASSPORTS

Through our joint venture, Uganda Security Printing Company, we have equipped the nation with new security printing facility enabling local jobs and knowledge transfer. We have enabled the local government to issue ePassports with a polycarbonate datapage to their citizens.

COSTA RICA | THE COLOR OF INNOVATION

Under an initiative known as Costa Rica's Biometric Passport Project of the Bicentenary, Veridos and the Latin American system integrator GSI Sertracen were contracted to create and deliver ePassports with a polycarbonate data page, the software and hardware for personalization and Veridos' CLIP ID solution for vivid color images.

The biometric passport integrates over 60 security features and state-of-the-art technology, provided by Veridos.

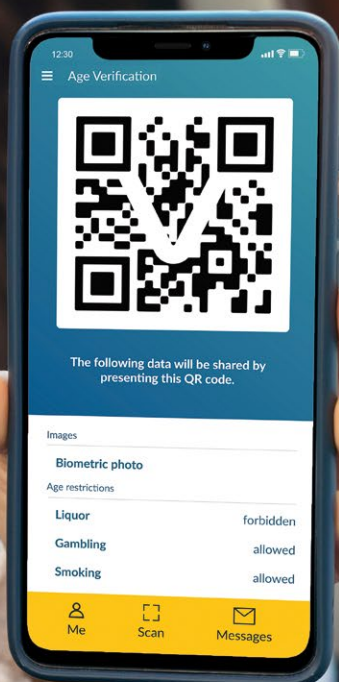


Production

Nearly 1 billion people globally do not have a secure legal identity, blocking their access to government services, education, financial products, and mobility. Veridos produces forgery-proof identity documents at ISO-compliant sites with full EU-level security clearance. We empower governments with the end-to-end support and guidance needed to establish in-country sites – overseeing the project from design to execution, to match customer specifications. We use our own R&D to develop cutting-edge security and technological features, ensuring we stay several steps ahead of forgers.

Your document,
your identity

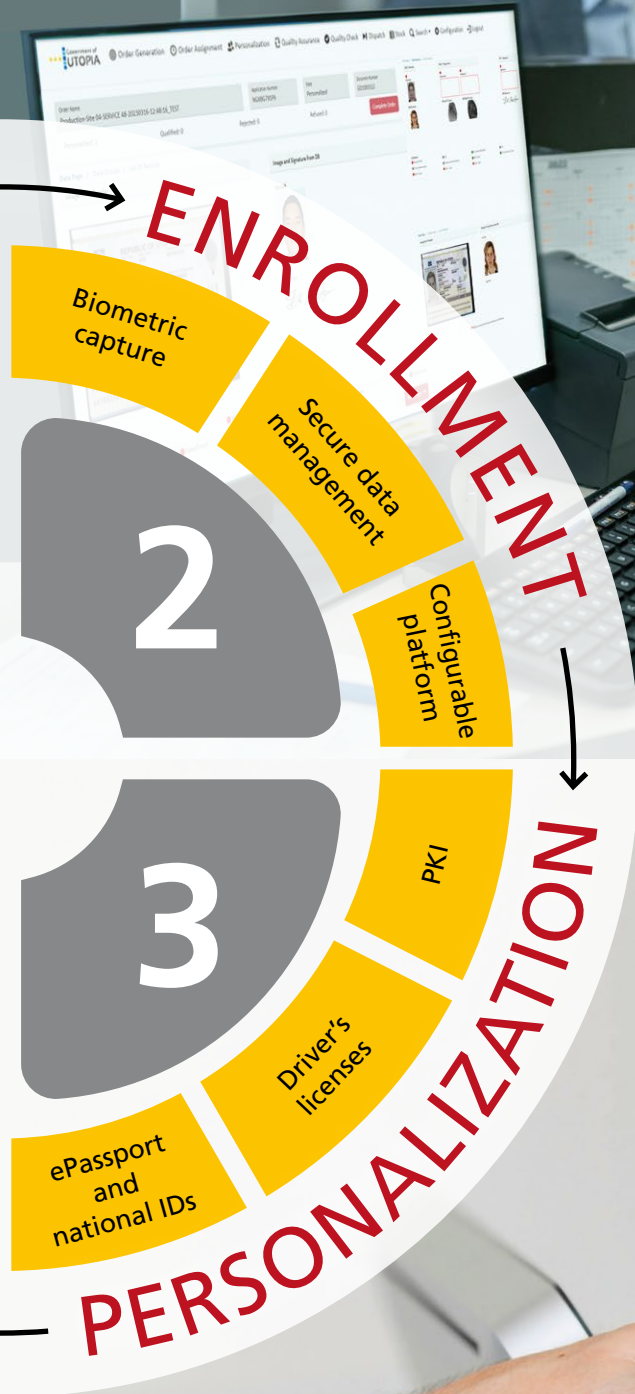
Secure, state-of-the-art physical and digital identification documents open up a world of new possibilities



Verification

Veridos' portfolio covers the entire value chain of verification, ranging from expert-level, automated ID document verification including biometrics, to efficient and secure decision support solutions like our VeriCHECK border control system. Our products are designed to streamline and facilitate the passenger journey while maintaining security and control for authorities. Through our first-of-its-kind VeriDNA solution, we have set benchmarks in deriving a privacy-conserving biometric identifier from a person's DNA to establish tamper-proof identifiers.





Enrollment

Biometric data is unique to each individual, making it one of the most reliable ways to enhance the security of ID documents. Veridos' expertise in harnessing biometric data makes it a global leader in enrollment and document issuance. Our state-of-the-art enrollment solution VERICORE is a highly configurable software framework covering the entire lifecycle of an ID document, from production to issuance. VERICORE comes with the most functional Automated Biometric Identification Systems (ABIS) already integrated into its platform.

Personalization

Veridos ensures the highest levels of document security by employing best-in-class image and text personalization technologies. Our innovations include breakthroughs such as personalized window protection features, for example Spectre ID and Amber ID. CLIP ID feature uses advanced laser engraving in conjunction with color printing, so that the true-to-life image of the ID holder is joined to the document's material itself. As with its enhanced version, CLIP ID Echo, the result is a document that is practically impossible to forge, while presenting a lifelike image of the bearer.



Identity management systems: Secure Data

Enrollment: Biometrics secure IDs

Veridos knows that providing high quality identity documents start with perfect and reliable citizen data. That is why the VeriCORE platform ensures ISO 39794-5 and is compliant with ICAO 9303 Edt 8 for biometric data capturing. VeriCORE enrolls easily face, fingerprints and iris in the governmental office or with self service kiosks. Also with mobile enrollment kits in rural areas VeriCORE ensures highest quality as well as best in class security and privacy. It interfaces with external civil registers or can also be extended to a national civil register.

Personalization: Personalizing your identity

We enable governments to manage and collect citizens' data. VERICORE's personalization software framework can personalize sovereign identity documents, such as birth certificates, passports, and driver's licenses.

The identity documents may be with or without chip, thus, VeriCORE Perso is the best system to personalize identity documents electronic and/or optical personalization. VeriCORE supports all major personalization machine vendors and is suitable for distributed (embassies, consulates) or central personalization with small or huge personalization machines using ink or laser or both.

Issuance: Final checks before issuance

The VeriCORE platform includes different kind of modules e.g. for issuance, approval, quality assurance or stock management. The workflow in VeriCORE can be configured to use one or several of these modules to perfectly fill the gaps of legacy solutions for example, to extend from ordinary to electronic documents. The document issuance can be either handled at an office or dispatched and managed by a lettershop both of which VeriCORE offers appropriate interfaces.

Veridos provides support to ensure that all countries participating in the Public Key Directory Service (PKD) of the International Civil Aviation Organization (ICAO) meet the required standards and data quality.





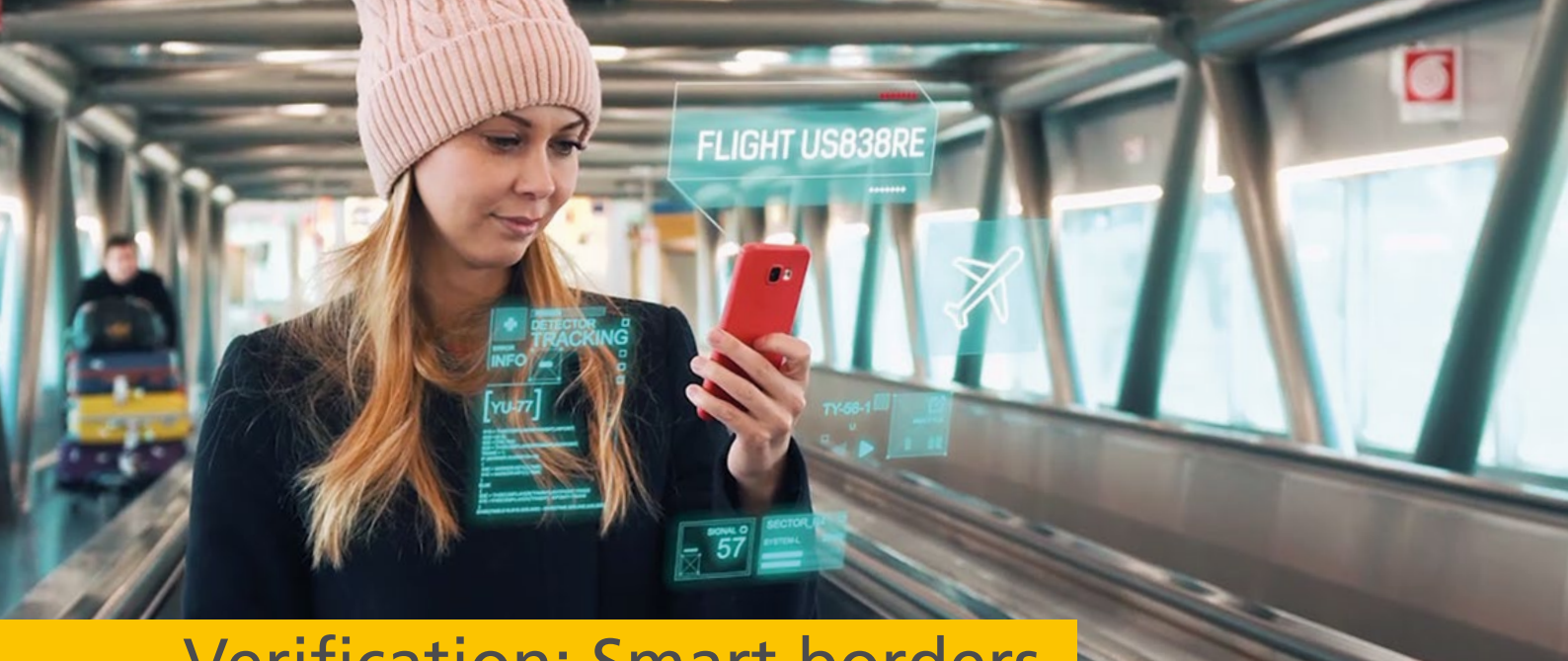
CLIP ID | COLOR PERSONALIZATION TECHNOLOGY ADDING VIBRANCY AND SECURITY

Going well beyond conventional black-and-white images, CLIP ID enables secure, durable color images to be applied to Polycarbonate IDs or Passport Data Pages. It uses the advantages of both laser engraving and ink-jet printing. This results in vibrant color photos with a truly lifelike image of the ID holder for the next generation of polycarbonate IDs.

CIVIL REGISTRY | ACCURATELY RECORDING BIRTHS AND OTHER OFFICIAL DATA

A civil registry places a crucial role of an identity system. This includes a trusted Civil Registration and Vital Statistics (CRVS) system, as offered by Veridos. This reliable registration system offers a range of solutions, including correctly recording births and analyzing population trends.





Verification: Smart borders

Increasingly, passengers recognize and welcome the efficiency and ease of use offered by self-service, digitalization and automation at border control. Veridos provides a range of automated products that enable smart borders, document verification devices, border control software, and eGates.

Kiosks as a facilitator for seamless travel

Veridos' VeriCHECK SelfKiosk features self-service pre-registration, enabling passengers to retrieve data stored in an identity document's chip. Incoming travelers can answer questions about their stay, while the data is compared to information on databases. It is also EES compliant.



eGates ease passenger flows

eGates make travel even more straightforward for passengers. The simple process is practically contactless – travelers just need to place their passport on the eGate screen. After they step into the eGate, a passenger's face is scanned to verify if the biometric information matches the image stored in the chip of the electronic document. The check only takes about 14 seconds.





Ultra-modern border control system in Morocco

Veridos has successfully introduced many automated border control solutions, including projects in Morocco and Botswana. For example, Veridos designed and implemented a national border control system in Morocco, covering all relevant land border posts, airports and seaports and the related IT infrastructure.

The system is designed to support an expected 20% growth in passenger numbers to Morocco, which is becoming more popular as a tourist destination while enhancing border security measures.

Veridos worked closely with Moroccan authorities to find an efficient solution for the country's border control processes. As a result faster border controls have eased passenger flows, while biometric scanning technology has enhanced border security.

M600 makes document verification fast and simple

The document reader is multifunctional, automatically detecting the credentials being shown and verifying all types of identity documents.

Small, hard-wearing and compact, the device doesn't have any moving parts inside, nor a hood. Hands-free operation and a crisp graphical user interface (GUI) add up to an easy to use, intuitive device that is ready to go.



A convenient and secure DTA process

SmartTravel simplifies and safeguards the entire digital travel authorization (DTA) application process for both travelers and authorities alike, making the whole application process more secure, efficient and convenient.





Custom factory concepts: from start to finish

Building upon centuries of experience through our joint heritage, Veridos operates numerous factories around the world.

The ideal solution may involve planning assistance, installing the right hardware and logistics, extensive maintenance and operational support, managing entire operations or building local ca-

capacity and strengthening regional talent. Veridos then secures all relevant certifications for the manufacturing facility to ensure they meet the highest international security and quality standards.

BANGLADESH | LOCAL JOBS CREATED AT PRODUCTION FACILITY


The People's Republic of Bangladesh is enjoying strong economic growth. To fuel further growth and to create production and service jobs, Veridos was awarded a major contract to set up local passport production sites with high-tech equipment and training.

The 12-year contract, with a volume of around €340 million, covers the supply, installation, and implementation of next generation electronic passports and border control systems.

IRAQ | CREATES NATIONAL REGISTER AT LOCAL SITE

The factory employs over 50 Iraqi citizens and Veridos has provided extensive knowledge transfer on all the necessary technical aspects of production, making it possible to implement all the latest security features in the identity documents produced there.

The passport line is capable of producing 20,000 passports per day and to date more than 5 million passports have been produced and delivered locally.



A virtual world: Trusted and secure digital identities

As your trusted identity partner, Veridos provides a range of innovative digital ID solutions to help governments and their citizens secure, present and share digital identities.

Verification on-the-go

VeriGO DriveID combines a smartphone-based driver's license solution with a powerful backend system, providing encrypted access to data contained in the driver's license issuing database. This is then made available through the driver's license app on the holder's smartphone.

Mobile wallet to carry multiple documents

VeriGO DriveID supports a wallet functionality, allowing additional identity documents to be carried on the same mobile device, thereby providing a digital framework for a modern identity management system that is compliant with the ISO 18013-5 standard.

Full compliance

Veridos solutions are also compliant with the latest EU eIDAS regulations, which create a standard framework for the cross-border use of electronic means of identification.

Embedded security

In the future, ID card data will be stored and managed on the highly secure chip of an embedded SIM, supported by the OPTIMOS 2.0 platform for secure identities provided by Veridos' parent Giesecke+Devrient and Bundesdruckerei.

Embedded secure elements (eSEs) and embedded SIM cards (eSIMs) support derived credentials and can quickly become an extension of existing smartcard eID programs.

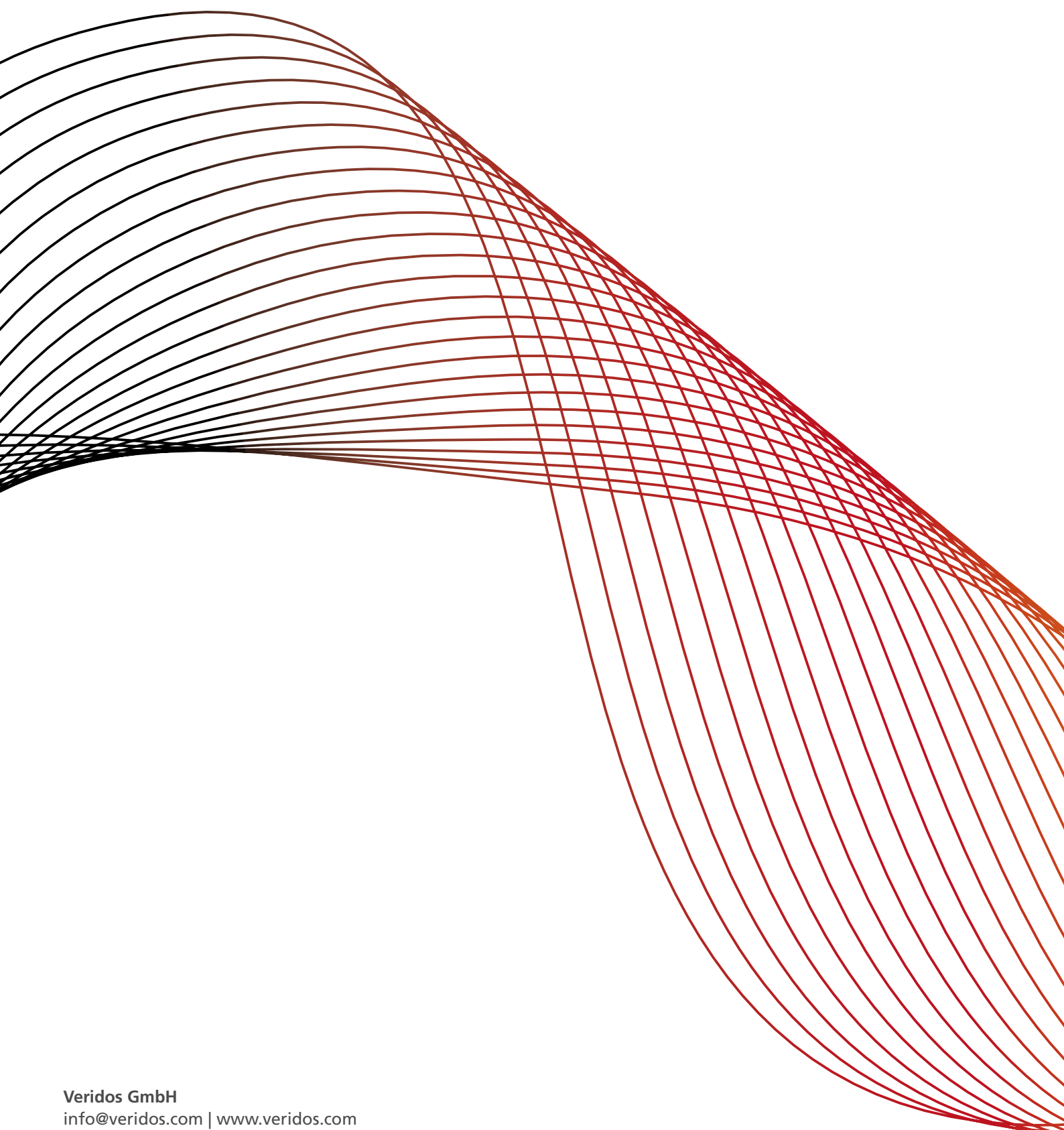
VeriGO MobileTravel Assist: ePassport data goes mobile

VeriGO MobileTravel Assist to enroll, protect, manage and use the data that has been retrieved from an electronic passport within a mobile app. Using this application, citizens can securely provide their personal information to government authorities and other trusted relying parties.



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