



Giesecke+Devrient

White label solutions for payment schemes

Free your payments



Table of contents

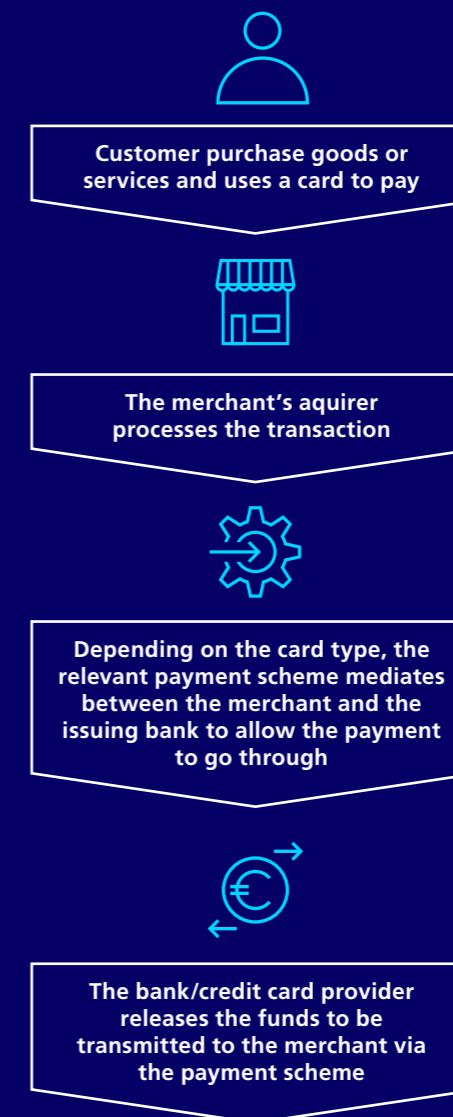
Free your payments	03
Why would someone create a private label or national scheme?	04
What is a white label scheme?	05
Creating a payment scheme in-house: Key challenges	07
The benefits of a good white label approach	08
The EMV standard	10
A new approach to white label schemes:	
The White Label Alliance	11
Evolving payment standards	13
The founding WLA partners	14
G+D's white label solutions	15

Free your payments

Choice and convenience key to the future of digital payments

The digital revolution has transformed the way we pay for goods and services. Wearable technologies, digital wallets and the internet of things enable consumers to have more freedom and choice to pay for things in the way that works for them. According to the US Federal Reserve, the average US consumer uses 3.6 different payment methods every month¹. This consumer requirement for choice, convenience and flexibility has required the payments ecosystem to innovate and focus on providing flexible, scalable solutions. Advances in payment speeds such as instant payments, blockchain-powered cryptographic security and the growth of contactless payments following the COVID-19 crisis have enabled these changes, but in general card payments remain one of the main payment methods of choice, and still generally follow the same process:

The typical payment process



The payment scheme, that acts as the intermediary between the bank and the merchant, is a critical part of the payment ecosystem. A payment scheme not only facilitates the transaction, it also defines the rules and procedures that govern that transaction. Any issuing bank or business that signs up to the scheme gains the ability to process payments through the scheme but must also agree and adhere to the rules of that scheme, such as processing times and payment processing fees. Payment schemes break down into four different categories:

- **International schemes**
These are the schemes that facilitate payments on a global level and are the ones we are all probably the most familiar with: VISA, American Express and Mastercard, for example.
- **Regional schemes**
These facilitate transactions across regions, such as the EU's SEPA system or the East African Payment System (EAPS) – designed for payments across national lines.
- **Domestic schemes**
These are country-specific implementations of payment standards, such as China's Union Pay or Russia's MIR scheme.
- **Private label**
A scheme owned and branded by one business that sets its own business model, services and rules. There are more than 50 private label issuers worldwide.

Why would someone create a private label or national scheme?

Payment card schemes such as VISA, Mastercard and American Express are undoubtedly some of the most well-known brands in the world today. However, the private label payment scheme market is extremely valuable and makes up a significant proportion of the overall global payments market. In the United States alone, purchase value through private label cards increased to \$210 billion USD in 2018, a 3% increase year on year, and the rest of the world's markets reflect a similar story². However, these schemes are designed to address the entire world's payment needs and work in particular ways, that are not always suitable for every circumstance. In addition, certain markets may have specific requirements for political and economic purposes that makes relying on global schemes problematic.

A business, government or organization may choose to produce a private label scheme (or national scheme in the case of governments) for many reasons:



Independence

This may be a requirement for organizations that want to use different rules or make different decisions in the payment process. Also, changes in the geo-political landscape may make relying on a global scheme difficult or dangerous. For example, Russian banks were threatened with a cut off from the SWIFT international payment schemes due to the conflict in the Ukraine. This led to Russia developing a competing scheme among sanctioned nations to avoiding reliance on global schemes³.



Additional services

Global schemes such as VISA or Mastercard may not offer other services that private label schemes can provide. For example, national or private label schemes may be able to integrate bill payments for other services into the scheme or enable access to transportation ticketing. As these services are often extremely country or region specific, global schemes often do not wish to provide the specific processes needed.



Local decision-making

As global schemes are privately-run enterprises, decisions taken by these schemes may run counter to the interests of nations or businesses. By creating their own payment schemes, these organizations can operate their scheme in the best way for them, without having to adhere to global decisions that could be detrimental. For example, transaction fees and processing times can be configured to better match the local economy.



Lower costs

Private label or national schemes can be more cost-effective than international schemes. These savings come from more frugal attitudes to cost control and less need for a high profit margin when compared to global schemes which are dependent on the stock market. Higher marketing and sponsorship costs coming from these global schemes are also a considerable factor in calculating this cost-effectiveness.



Political or socio-economic purposes

Sometimes, private label or national schemes are specifically designed to achieve a particular social outcome or cultural change. For example, in 2019 the Central Bank of Egypt, supported by the Egyptian government, created Meeza, a national payment scheme designed to promote the acceptance of non-cash payments throughout the country, to increase social inclusion⁵. The scheme issues physical debit and pre-paid cards, as well as facilitating eCommerce transactions on Egyptian websites.

What is a white label approach?

White labelling is the provision of goods or services under the brand of one company, that have been created or produced by another company. The producer creates their product or service in a brand-free way, and then licenses another company to release the service. This practice happens for both physical hardware, such as phone manufacturers producing devices to be released under the branding of network operators, and software and services, such as loyalty management applications for retailers, where the retailer brands a

third-party solution as their own. From a payment services perspective, white label solution allows governments, banks and businesses to create domestic or private label payment schemes that meet specific needs. These schemes use technologies built by others but are branded by these organizations and are created for specific markets/territories. A white label approach allows rapid deployment of new schemes without the initial upfront investment or ongoing operational requirements of a self-created solution.



² <https://www.packagedfacts.com/Private-Label-Credit-Cards-Edition-12443463/>

³ <https://uk.reuters.com/article/russia-banks-swift/russia-backs-global-use-of-its-alternative-swift-system-idUKL8N2163BU>

⁵ <https://fintech-egypt.com/news/Meeza-E-Payment-Cards-Push-for-Financial-Inclusion-in-Egypt/>

Creating a payment scheme in-house: Key challenges

Although creating a private label or national scheme may offer significant advantages to organizations looking to offer differentiated payment services, the challenges inherent in either upgrading existing payment systems or creating a new scheme in-house from scratch should not be underestimated. The reason that global schemes have become so popular is that their reach, influences and resources can massively outweigh any the capabilities of any country or business looking to implement a scheme:

Cost

Although operational savings can be realized over time, implementing a new scheme can be extremely cost and resource intensive. Product and service development, infrastructure creation and deployment, servicing and maintenance, all need to be created and maintained. Additionally, the entire payment ecosystem will need to be updated to accept a new standard, from merchants to banks.

Expertise

Often, creators of new payment schemes will struggle to acquire the expertise to innovate or create the depths of services that they are looking for. Top technical staff and experienced personnel tend to gravitate towards larger global tech companies, so it can be challenging for smaller businesses creating private label schemes to attract and retain these key personnel. This can impact these businesses' ability to create new innovations or approach new challenges, such as changes to payment regulations or standards.

Time to market

Another consequence of the reduced resources that private or national scheme creators face is the longer lead time to deliver products or services. With reduced expertise and resources, new products and services can take longer to bring to market.

Interfacing with wider ecosystem

Another challenge that private and national scheme creators face is the requirement for their payment services to interact and interface with other schemes and providers. For example, customers may want to use your scheme to pay for goods and services from abroad or transfer money to non-scheme members. To facilitate these options, scheme creators need to develop relationships and agreements with other scheme providers, which can take a significant amount of time, or require significant investment.

Help is at hand!

These challenges are significant and can potentially inhibit the creation of new schemes. A white label approach, however, could help scheme owners to avoid the pitfalls of new scheme creation and maintenance.

\$210bn

Payment value through private label schemes in the US market alone in 2018.



The benefits of a good white label approach

Deploying a third-party white label payment scheme solution can help scheme creators to enjoy the benefits of a private label scheme whilst avoiding the challenges of setting up such a scheme themselves. There are several white label scheme providers from global players to smaller niche providers for specific market requirements. Ideally, if a scheme owner is choosing a white label provider, that provider should be able to offer the scheme owners the following benefits:



Technology readiness and scalability

The main attraction for a white label service is that all the technology and components that the scheme requires have already been created and developed, and just need configuring to meet the specific needs of the new schemes. The other technological benefit should be that as technology improves and evolves, using a white label scheme means that the scheme owner can access new technologies as soon as they are ready – and support the growth of the scheme as it becomes adopted.



Industry support

Ideally, the white label provider's approach should have endorsement and support from industry bodies, standard creators and other market influencers, to ensure that the scheme adheres to regulations, standards and requirements. The ideal white label partner should also endorse an approach where all suppliers and industry players can openly provide their products and services empowering an open market and economy of scale.



Interoperability

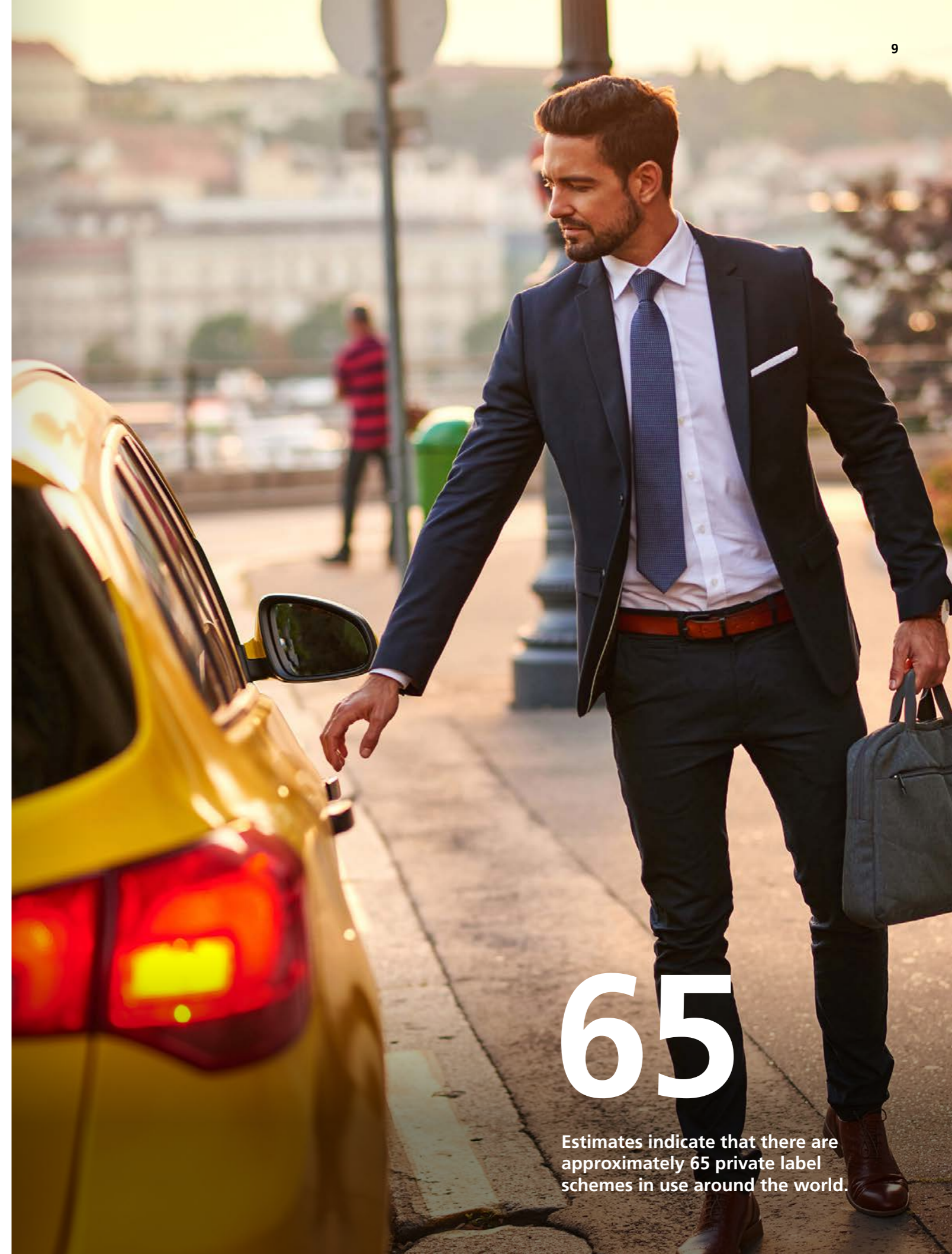
A significant challenge for any scheme owner is negotiating interactions with other providers or schemes to facilitate cross-payments and transfers of funds. A key benefit of working with a white label provider should be that these relationships and processes have all been created already. Additionally, these interactions should be independently guaranteed through a third party, such as a testing lab. Interoperability is one of the key measures that scheme owners should use to evaluate the suitability of any white label partner.



Time to market

Adopting a white label approach should considerably reduce the time to market for any scheme owner. From initial deployment to new and evolving services, the draw of a white label approach should be that their expertise, resources and technology allow rapid deployment of any scheme or components of that scheme.

There are many potential benefits of adopting a white label approach to a national or private label scheme, but not all white label services offer all of these benefits. This is why we, in conjunction with our partners, created the White Label Alliance.



65

Estimates indicate that there are approximately 65 private label schemes in use around the world.

The EMV standard

The EMV standard, a payment method based on the technological standards for smart payment cards, payment terminal and ATMs, is a fundamental part of any payment scheme. EMV, (originally standing for Europay, Mastercard and VISA - the three founding companies that created the standard) cards are chip-based smart cards that transformed the payment industry, offering unprecedented security, reductions in fraud and an increase to the range of services that can be offered to the market. The EMV standard has become so accepted worldwide that it is now fundamental to operating in a global market – EMV is the gatekeeper of interoperability. In Q2 2020, 83.1% of all transactions globally were powered by an EMV chip⁶.



83.1%

of transactions in Q2 2020 were powered by EMV standard technologies.

⁶ <https://www.emvco.com/about/deployment-statistics/>

A new approach to white label schemes: The White Label Alliance

In large part to address the challenges of creating a private label or national payment scheme, in 2019 a partnership between G+D, IDEMIA and NXP Semiconductors N.V was initiated to create an open, comprehensive and standardized set of components that enable ready-to-deploy, interoperable payment schemes which adhere to EMV standards. We call this the White Label Alliance (WLA). The WLA offers specifications, testing and certification for cards, terminals and mobile applications.

The alliance is dedicated to promoting a technology framework that ensures:

- Complete technological independence.
- Scalability for all technologies and devices, including cards, terminals, and mobile devices.
- Open markets with significantly reduced effort and time-to-market for deployments.

There are multiple operators in the market that offer white label payment services, but their solutions tend to be based on a license agreement with one company, which introduces unwanted dependencies. The WLA aims to provide an alternative approach. The aims of the alliance are to provide services that enable:

- **Wide acceptance**
Banks, retailers, and payment-scheme providers will have a quick, cost-effective way to deploy an advanced payment method that can be tailored to their particular situation. Brand owners will have full control over the ecosystem and its functionality.
- **Independence**
Unlike other payment standards, which are issued by international financial service providers or use proprietary third-party protocols, the WLA Payment Standard is owned by the members of the WLA.
- **Open and interoperable**
The certification program associated with the WLA Payment Standard ensures interoperability of devices from different service providers, so deployments can choose from a variety of solutions without being tied to a single provider.
- **Future growth**
Because member companies define the future of the standard, it remains both easy to scale and easy to evolve. Member companies can address their specific customer expectations more directly, with each new iteration of the standard.

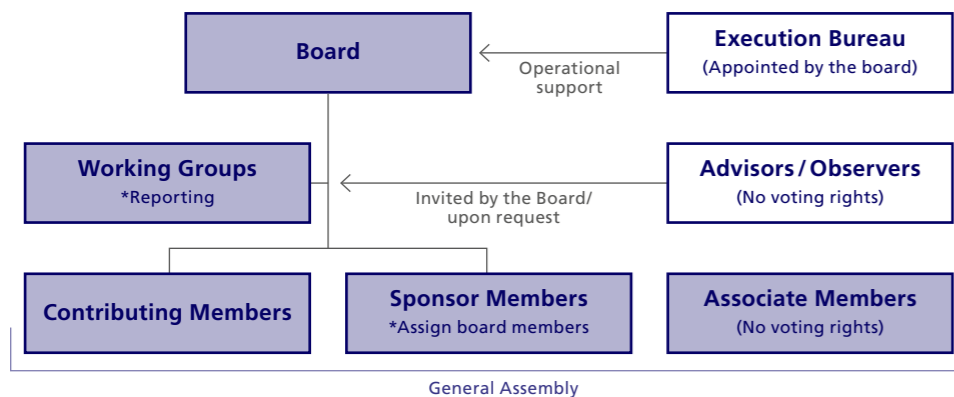
continued...

The WLA was founded to serve the payment scheme market, and will be of particular interest to:

- **Decision-makers** at organizations that will potentially use the WLA standard, including banks, local and regional brands, regional and national payment schemes, and merchants using private implementations.
- **Industry influencers**, including consulting groups and payment infrastructure organizations, such as payment processors.
- **Suppliers** and other industry participants, including card and terminal manufacturers, system integrators, and service providers who process payments.

The structure of the White Label Alliance

The White Label Alliance is specifically organized to encourage member involvement:



Evolving payments standards initiatives

There are several key organizations that oversee the standards that govern the processes that make up the payment ecosystem. Any successful payment scheme should ensure that they adhere to these standards to make their scheme a success. Here is an overview of a few of these essential players:

- **EMVCo.** This organization oversees the chip card standard and technology requirements to interface with the majority of POS terminals, ATMs and similar services. They also maintain standards for secure payments across digital payment services, contactless standards and Internet of Things-enabled payments.
- **ECPC:** The European Card Payment Cooperation (ECPC) is an organization founded to promote and support the deployment of CPACE ecosystems. (CSPACE is a payment specification.) The specification is EMV compliant and designed to be a multi-use specification to enable transactions across multiple payment technologies and in different markets.
- **European Payments Initiative:** Launched by a consortium of 16 European banks to create a pan-European payment scheme. This scheme consists of unified payment card and a digital wallet and covering in-store, online and person-to-person payments as well as cash withdrawals.

The founding WLA members



Giesecke+Devrient (G+D) is an international Group providing security technology and headquartered in Munich, Germany. Innovations by G+D make the lives of billions of people in the digital and physical world more secure. With its products and solutions, G+D is one of the market and technology leaders in payments, connectivity, identities, and digital infrastructures.

Established in 1852, the company achieved sales of €2.45 billion in the fiscal year 2019 and employs 11,500 people. G+D has a presence in 33 countries. Its customer base includes central and commercial banks, mobile network providers, automotive manufacturers, health insurance companies, and governments and public authorities. Further information can be found at www.gi-de.com/en/



The global leader in Augmented Identity, IDEMIA provides a trusted environment enabling citizens and consumers alike to perform their daily critical activities (such as pay, connect, travel and vote), in the physical as well as digital space. Securing our identity has become mission critical in the world we live in today. By standing for Augmented Identity, an identity that ensures privacy and trust and guarantees secure, authenticated and verifiable transactions, IDEMIA reinvents the way we think, produce, use and protect one of our greatest assets – our identity – whether for individuals or for objects, whenever and wherever security matters. IDEMIA provides Augmented Identity for international clients from the Financial, Telecom, Identity, Public Security and IoT sectors. With 13,000 employees around the world, IDEMIA serves clients in 180 countries. Learn more at www.idemia.com



NXP Semiconductors N.V. (NASDAQ: NXPI) enables secure connections for a smarter world, advancing solutions that make lives easier, better, and safer. As the world leader in secure connectivity solutions for embedded applications, NXP is driving innovation in the automotive, industrial & IoT, mobile, and communication infrastructure markets. Built on more than 60 years of combined experience and expertise, the company has approximately 30,000 employees in more than 30 countries and posted revenue of \$8.88 billion in 2019. Find out more at www.nxp.com



G+D's white label solutions

G+D offers a range of flexible, scalable white label solutions that more than meet the needs of any payment scheme owner, no matter how complex their requirements. Our solutions are based on the standards established by the White Label Alliance, and as a founding member, G+D is committed to upholding the aims of the WLA – open, standardized solutions designed for interoperability and growth.

As experts in the mobile security and payments ecosystem, with over 150 years of payment experience, uniquely covering both the central bank and the commercial banking markets, we are well placed to offer solutions to the most sophisticated and demanding of applications. We take an open, standardized approach to development, and our solutions take the standards of the WLA and provide scalable, flexible technologies that can support your scheme. We have a range of card issuance and mobile payment services that can be white labeled and quickly deployed for issuing banks – ensuring support and adoption of your private label scheme.

Why choose G+D for white label payment schemes

As a founding member of the White Label Alliance, and a global leader in payment technologies, G+D is well placed to support the creation of any white label payment scheme:

- **Expertise:** We have years of experience and knowledge that we can apply to the whole chain of payment.
- **Implementation:** We can support and consult with any brand, helping them to build their own roadmap towards a scheme.
- **Products and services:** We offer a complete range of products and services that can support the entire payment journey.
 - Cards
 - Issuance solutions
 - Mobile solutions

G+D white label schemes in Action: Convego® Pearl

The award-winning Convego® Pearl solution, from G+D, is a closed-loop payment and loyalty program management solution designed to enable retailers to own and control both the transaction and the customer relationship. Created with a white label approach in mind, Convego® Pearl powers the payment solutions for some of the world's largest retail organizations. For example, Convego® Pearl has enabled one of Asia's largest energy company to manage their retail payments ecosystem from end-to-end, and as a result to achieve a dramatic increase in both efficiency and revenue.

Creating confidence

Giesecke+Devrient (G+D) is an international Group providing security technology and headquartered in Munich, Germany. Innovations by G+D make the lives of billions of people in the digital and physical world more secure. With its products and solutions, G+D is one of the market and technology leaders in payments, connectivity, identities, and digital infrastructures.

Established in 1852, the company achieved sales of €2.45 billion in the fiscal year 2019 and employs 11,500 people. G+D has a presence in 33 countries. Its customer base includes central and commercial banks, mobile network providers, automotive manufacturers, health insurance companies, and governments and public authorities.



Giesecke+Devrient

Giesecke+Devrient Mobile Security GmbH
Prinzregentenstrasse 159
81677 Munich
Germany

www.gi-de.com/en/mobile-security
mobilesecurity@gi-de.com

Follow us on:



© Giesecke+Devrient Mobile Security GmbH, 2020

