

# National Identity Documents

## Adapting to a changing European market



**R**egulation (EU) 2019/1157 will transform the European national identity market<sup>1</sup> and will be enforced in August 2021. It aims at harmonizing national identity documents within Europe. It also intends to strengthen the security of EU citizens' identity cards, as well as residence permits issued to foreigners. The majority of EU member States already issue national ID cards to their citizens. The provision of polycarbonate cards and the issuance of electronic documents is commonplace in many countries already, with the remaining EU countries expected to follow this trend.



<sup>1</sup>Countries concerned by the regulation:

**EU:** Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain and Sweden.

**EEA:** Norway, Iceland and Liechtenstein

**EFTA:** Switzerland

## Regulation (EU) 2019/1157: Mandatory card and production site requirements

### A quick glance at Regulation (EU) 2019/1157 (Article 3)

The new regulation's main requirements aims at:

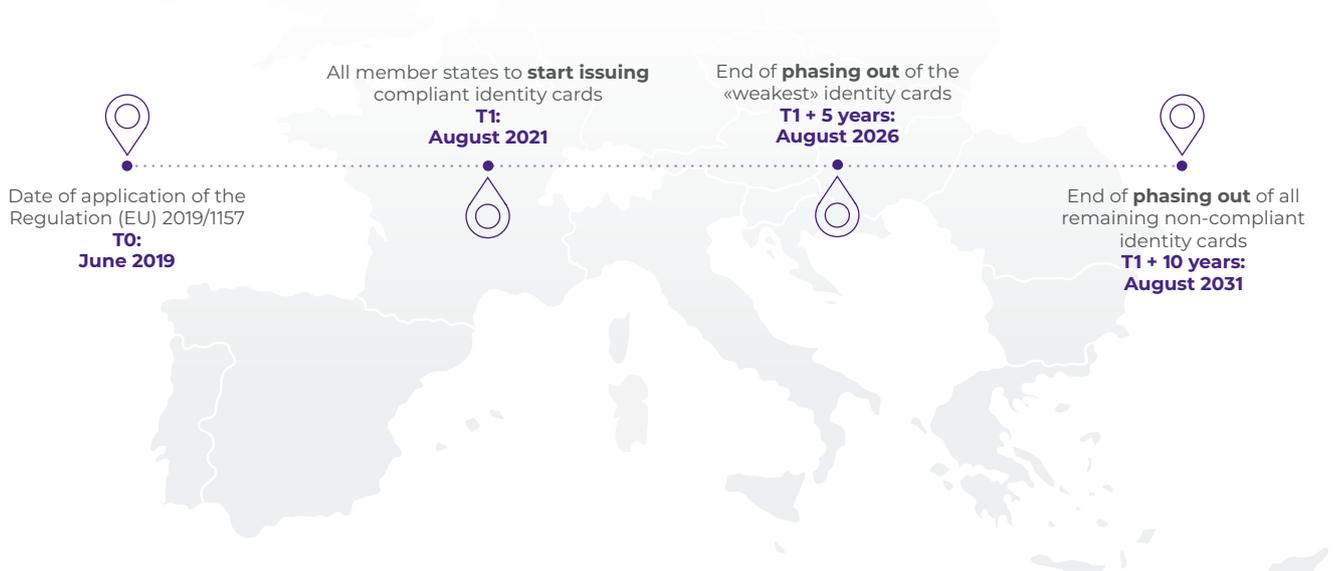
- › **Harmonizing security in a world of mobility** - All national identity documents should be ICAO compliant and contain a Machine-Readable Zone (MRZ). ID cards will also have a contactless chip that stores the facial image and two fingerprints. The chip should contain access control mechanisms protecting the access to the portrait of the holder. These requirements will allow the holder's data to be verified for travel purposes.
- › **Enhancing durability** - The directive includes the mandatory inclusion of polycarbonate, a durable material that has high-impact resistance, or an equivalent synthetic polymeric with a ten-year duration.
- › **Increasing protection against fraud** – All documents should implement highly secure background offset printing and laser-engraved personalization. The inclusion of Diffractive Optically Variable Image Devices (DOVID) will also protect against copying.
- › **Ensuring manufacturing in the EU and Schengen Area** – The regulation states the obligatory production of blank identity cards in the EU or Schengen associated countries.

Besides the new regulation's main objectives, governments will also be able to leverage these secure and smart ID cards to provide safer access to eGovernment or private services and to enroll for digital identity solutions.



## Timeline and planning

The Regulation (EU) 2019/1157 is giving member states until **August 2021** to start issuing compliant identity cards. The regulation also incorporates two periods of phasing out in **2026** and **2031** for identity cards already issued that do not meet the requirements.



# IDEMIA's National ID offer for the European market

IDEMIA proposes a **tailor-made travel and eServices offer** that is compliant with the regulation and answers the latest trends in the market.

✓ Compliance with the new regulation

+ IDEMIA's complementary proposition

Mandatory requirements		IDEMIA's proposition
<b>Applications</b>	ICAO-compliant	<ul style="list-style-type: none"> <li>✓ Standardized ICAO applet</li> <li>+ eServices applications for secure access to eGovernment solutions</li> </ul>
<b>Chip and OS</b>	Contactless chip Biometrics (face and fingerprints)	<ul style="list-style-type: none"> <li>✓ Contactless or dual chip</li> <li>✓ Compliant with the latest ICAO standards to secure access to the holder's information</li> <li>✓ Extensive memory for biometric data storage</li> <li>+ Interoperable, open Java Card platform</li> <li>+ Flexible and ready to host third-party applications (certification up to EAL 5+)</li> <li>+ High-speed reading performance</li> <li>+ State-of-the-art cryptography</li> <li>+ Advanced PKI for secure data transfers</li> </ul>
<b>Material and Format</b>	ID-1 format MRZ Polycarbonate Duration over ten years Laser-engraved personalization	<ul style="list-style-type: none"> <li>✓ Polycarbonate, highly resistant material that is impossible to delaminate. It resists high temperatures and pressure, ensuring an over ten-year durability</li> <li>✓ ID-1 format containing a Machine Readable Zone (MRZ)</li> <li>✓ Advanced laser-engraved personalization techniques (including color portrait or 3D effects)</li> <li>+ Personalization software and equipment to support new security features including portrait</li> </ul>
<b>Physical security</b>	DOVID Highly secure background offset printing UV-Fluorescent printing Rainbow printing	<ul style="list-style-type: none"> <li>✓ All mandatory requirements (DOVID, UV-Fluorescent printing...)</li> <li>+ LASINK™, a laser engraving technology that generates secure high-quality color portraits embedded in polycarbonate identity documents</li> <li>+ Stereo Laser Image (SLI™), a reproduction of an ID card's primary photo in 3D, protecting against photo substitution</li> <li>+ Photo and data interlinking (QR codes, seals)</li> <li>+ Other advanced security printing techniques and special inks</li> </ul>
<b>Manufacturing</b>	In the EU and the Schengen associated countries	<ul style="list-style-type: none"> <li>✓ Manufacturing sites in the Netherlands and the Czech Republic</li> </ul>

## The new Estonian eID card to be released in August 2021 (T1)

Conform to all mandatory requirements

LASINK™ laser engraved colour image generated by secret algorithms

Personal code integrated in LASINK™ picture



Applications for public and private eServices

Interoperable open Java Card platform

Back side: Machine Readable Zone

End-to-end solutions are part of our services. From enrollment to systems, and from cards to digital, IDEMIA has all the necessary technical and operational capabilities. We also provide parts of the whole solution such as inlays, blank documents, personalization systems and personalization services to accompany clients depending on their needs.

## Personalization

IDEMIA is ready to accompany clients and National Printing Houses (NPH) with a complete personalization offer.

IDEMIA customizes solutions that completely match their needs. Our personalization solutions include:

- › A Software Development Kit (SDK) which can be integrated with an existing customer system
- › Installation and configuration of both hardware (e.g. machines, servers, HSMs, card readers) and software (systems, databases)
- › Services and operations (e.g. defining the customer's needs, graphical and electrical profile design, site configuration and preparation)



## Digital ID

Governments can leverage eID documents to allow a secure onboarding process for digital identity. Thanks to the contactless or dual interface in eID cards, citizens can easily create their own mobile identity from their government-issued app, using the NFC functionality in their smartphone.

With their digital ID, citizens will have secure access to online eServices through multifactor authentication and usage of biometric recognition (e.g. face matching). They will also be able to use it for in-person verification.

Building a trusted national digital ID ecosystem to engage the private sector and citizens is essential. IDEMIA accompanies governments at every step of the journey towards successful digitalization.



## Why IDEMIA?

IDEMIA can provide components as well as hardware, software solutions and services to support National Printing House (NPHs) with their document migration. With technology and know-how transfers, we help NPHs keep their autonomy while supporting them in their transformation. IDEMIA also supplies documents (blank and personalized) and end-to-end identity solutions in the European Union.

### Key references for NPHs:

- › France 
- › Portugal 
- › Italy 
- › Spain 

### Key references for identity solutions:

- › Estonia 
- › Latvia 
- › Slovakia 
- › The Netherlands (including services and operations) 