The value of the Legal Entity Identifier for the payments industry

Received (in revised form): 25th October, 2019

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ABSTRACT

In November 2011, the G20 initiated the Legal Entity Identifier (LEI) programme for the development of a global system to uniquely identify parties engaged in financial transactions. Since then, over 1.4 million legal entities in over 200 jurisdictions have registered for an LEI. This paper describes the progress made in the implementation of the programme and sets out the potential benefits that LEIs offer as a global means of verifying identity in payments. It describes existing plans to incorporate LEIs into payments through the move to the ISO 20022 messaging standard, and the existing barriers to this adoption. It concludes by laying out a 'call to action' to all market participants (national international, public and private) explaining the steps required to realise the full potential LEIs can bring to the payments industry and the wider economy.

Keywords: FSB, Bank of England, GLEIF, LEI Regulatory Oversight Committee, ISO 17442 LEI, ISO 20022, Legal Entity Identifier

INTRODUCTION

The 2008 global financial crisis highlighted that financial parties often found it difficult to identify quickly the precise legal entity of the counterparties in their financial transactions, particularly for cross-border trades. The need for a standardised identifier was recognised as crucial to improving the quality and accuracy of financial data. To address this, the G20 called on the Financial Stability Board (FSB) to take the lead in developing a framework for a global Legal Entity Identifier (LEI) system. At the G20 2012 Los Cabos Summit,¹ the G20 endorsed the FSB recommendations for the development of a global LEI system for parties to financial transactions.

The LEI is a 20-character alphanumeric code, designed to uniquely identify any legally distinct entity that engages in financial transactions. Its aim is to provide a globally consistent and unique code for each legal entity; separate to any domestic registration. LEI records include reference data, including the domestic business register number, and provide basic information on the legal entity itself, such as its name and address ('who is who'), and its ownership structure ('who owns whom') with respect to direct and ultimate parent or children entities.

The structure and underlying elements and features, which ensures that unique codes are issued to each entity, is defined under the International Organisation for Standardisation (ISO) standard 17442. The standard was first defined in 2012 and then revised in 2019. The structure of the LEI is designed to support automated processing (for example, the code includes two check digits).

The global LEI system is designed to benefit both public and private sector users. It contributes to many financial stability objectives such as improved risk management in firms, better assessment of micro and macroprudential risks and facilitation of orderly resolution, and enables higherquality and more accurate financial data overall.² To realise the G20 objectives, the FSB established two organisations:

- The Global Legal Entity Identifier Foundation (GLEIF) — a Swiss not-for-profit foundation,³ established in June 2014. GLEIF is mandated to support the implementation of the LEI programme on a nonprofit basis. To realise its mandate, GLEIF cooperates with LEI issuers as a partner.
- The LEI Regulatory Oversight Committee (https://www.leiroc.org) — established in January 2013 to oversee the worldwide

framework of identification of legal entities. Its main tasks are oversight of GLEIF (to ensure that GLEIF continues to meet the GLEIF Statutes⁴ as determined by the FSB) and policy making for the global LEI system to ensure that policy is in the broad public interest.

How LEIs are issued and tracked

Any legal entity can obtain an LEI for business or regulatory purposes for a registration fee from a GLEIF-accredited LEI issuer,⁵ also referred to as a local operating unit (LOU). LOUs are responsible for supplying registration and renewal services to firms. An LEI registrant can permit a third party (notary public, bank etc) to perform an LEI registration on its behalf, only if the registrant has provided explicit permission for such a registration to be performed. The GLEIF website explains the registration process and a list of all accredited LOUs in the 14 G20 languages.

LOUs are accredited by GLEIF for each jurisdiction where they wish and are able to deliver services that meet the requirements set out in GLEIF's Master Agreement.⁶ For instance, although there are currently only two LOUs physically based in the UK (Bloomberg and the London Stock Exchange), registrants may choose the services of any of the 18 LOUs that are accredited to issue LEIs for UK entities.

The global LEI system is designed to encourage competition between LOUs to minimise cost and prevent monopoly profiteering. Fees are paid by legal entities when registering initially and renewing their LEI registration annually, on a cost-recovery basis. There has been a significant reduction in these fees since the early years of operations, with prices having more than halved in many jurisdictions.⁷

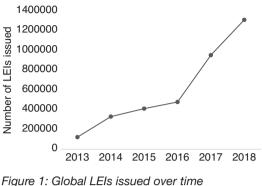
LOUs must verify the reference data with the national registration authority⁸ of the jurisdiction involved. The LEI registrants must notify their LOU of any changes in the LEI reference data. The LOU has to review and revalidate the reference data of the registered legal entity at least once a year to ensure that LEI data are maintained to a high quality.

GLEIF publishes reports on the quality of the data in an LEI Issuer Data Quality Report and validates that the LOUs continue to meet all the requirements set out in the Master Agreement.⁹

Growth in LEI usage in financial market reporting

Since the establishment of GLEIF in June 2014, over 1.4 million legal entities in over 200 jurisdictions¹⁰ have registered for an LEI (see Figure 1). According to the FSB, regulatory requirements have been the main trigger for LEI issuances.¹¹ For the Europe Union, this includes the Markets in Financial Instruments Directive and Regulation (MiFID II and MiFIR) for reporting of financial transactions and issuance of securities, and the European Market Infrastructure Regulation on derivatives trade reporting.

A substantial number of the 48,000 listed companies that have registered for the LEI have done so both for the listed legal entity and many of their subsidiaries. In addition, some listed companies, such as Citigroup Inc (13 direct children and 686 ultimate children), Nestle S.A (61 direct children and 95 ultimate children), Total SA (22 children and 119 ultimate children) and A.P. Moller-Maersk AS (56 children and 56 ultimate children),12 have decided to obtain LEIs because they see the value of the LEI programme for the business processes of their subsidiaries in terms of the automatic delivery of high-quality services (documentation) to their customers or suppliers. Nevertheless to date, the vast majority of companies that have obtained LEIs have been prompted by their activities in financial markets, and take-up for other uses has been low.



Source: GLEIF, Annual Reports, www.gleif.org

Globally LEIs have been issued to 1,469,605 legal entities. About 70 per cent of LEIs have been issued in FSB countries. Table 1 sets out the breakdown by FSB jurisdiction.

BENEFITS OF THE LEI

The LEI offers a unique opportunity to provide a consistent, concise, transparent and verified means to identify/cite any corporate entity involved in any economic transaction. It provides a valuable tool for market participants to be able to realise benefits in a range of areas.

For end users, the benefits include the following:

- *Improved risk management and liquidity management:* The LEI enables risk managers to have a consolidated overview of all the positions they hold with their counterparties and trading partners. This includes being able to readily calculate the overall position against a set of different but related entities within the same corporate group.
- Screening and onboarding of customers: LEIs can make it easier to reliably identify customers across multiple systems and processes.¹³ LEIs are included in the Wolfsberg Group's Correspondent Banking Due Diligence Questionnaire. Analysis from McKinsey & Company and

Table 1: LEI is	suance by FSI	B jurisdiction
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Jurisdiction	LEI issuance
USA	209,590
UK	145,598
Germany	124,745
Italy	111,393
Netherlands	104,269
Spain	103,342
France	80,002
Canada	32,381
India	28,458
Switzerland	17,471
Australia	16,033
Japan	10,470
Hong Kong	7,558
Singapore	6,384
China	6,227
Mexico	3,706
Turkey	2,136
Brazil	2,114
Russian Federation	1,488
South Africa	1,455
Korea	1,273
Indonesia	723
Argentina	666
Saudi Arabia	463
FSB countries	1,017,945
Rest of the world	451,660

Source: GLEIF, 26th August, 2019, www.gleif.org

GLEIF suggests that banks adopting the LEI could save at least 10 per cent of total operations costs for client onboarding and trading processes.¹⁴

• Onboarding of customers and suppliers in the supply chain: LEIs can help businesses to mitigate their business risks and ensure compliance with sanctions regimes by enabling businesses to know exactly who their contract partners are, as well as their direct and ultimate parents. Corporate treasurers as well as other business organisations,

such as GS1 and the International Chamber of Commerce, are very supportive of the LEI programme.

- Identity management in online transactions:
 - The LEI supports online business processes by including the LEI in the certification process of claims. The inclusion of the LEI in digital certificates, based on the ITU X509 standard, increases the legal certainty of computer-to-computer services. GLEIF is working with the CAB Forum to realise this benefit.
 - Digital trust processes can be supported by using the LEI in secure certificates to add an extra layer of verification for online business or for official documents where the tamperproof signature is added to the LEI of the issuer of the document.
- Easier identification and movement around the financial system:
 - Where the LEI can be used to streamline bank processes and improve customer experience, end users can have access to better provision of credit and other financial services.
 - LEIs can support consumer protection by providing an additional/independent means to check the legal name and status of unknown payees, and identify potential errors or cases of fraud; particularly where the payee is based in another jurisdiction.

For policy makers, the benefits include the following:¹⁵

• Better assessment of micro and macro risks: The LEI enables banks, businesses, central banks, regulatory authorities and public policymakers to more easily link datasets that contain business-level data, improving analysis and enabling them to make more effective, informed decisions. For central banks, this can benefit all of the supervisory/oversight, monetary policy, financial stability and payment system policies, including real-time gross settlement (RTGS) operator functions. For example, the LEI is currently being introduced as a 'grouping identifier' in the ECB's Centralised Securities Database (CSDB) to group securities under the same issuing entity. The CSDB supports analysis and policy work of a number of central bank functions.

- *Facilitation of orderly resolution*: Having a unique identifier across entities, products and geographies supports a more comprehensive and faster analysis of contagion risks, and also a more timely analysis of the quality of the assets of the failed institution.
- Improve quality and accuracy of financial data: The LEI can improve data quality and analysis as it can help support the management of large datasets and facilitate aggregation and linking to different data sets.

Importantly, there are positive network externalities from adoption. If adoption of LEIs increased among the non-financial corporate sector, this could enable further innovation, delivering wider economic benefits for the corporate end users of financial services.¹⁶ A potential UK example of this is the concept of a 'portable credit file' to help small and medium enterprises (SMEs) to harness the power of their data to give greater access to more diverse and competitive financing options, including for global trade.¹⁷

By way of illustration, the Bank of England's response to the Huw van Steenis Future of Finance review, noted that because of poor information, many SMEs struggle to access the finance they need. Survey evidence suggests that more than 50 per cent of SMEs consider only one provider when seeking a loan and that six in ten of those who would like to borrow resort to personal funds rather than corporate finance. If adopted widely, the LEI could vastly increase the value of data for companies by enabling the identification of their businesses and verification of their data. The LEI could be linked to a 'portable credit file' for SMEs into which businesses could pull their data and shop around for financial services, giving them greater choice and better access to productive finance. Further, because the LEI is globally recognised, it will help businesses access finance for cross-border trade. In turn, this could help to close the \pounds 22bn funding gap for SMEs in the UK.¹⁸

POTENTIAL USES AND BENEFITS OF THE LEI IN PAYMENTS

Every payment system requires a messaging standard, ie a common set of rules for exchanging relevant payment information in order to enable efficient communication with participants and related infrastructures. When included in payment messages, LEIs can provide clear and efficient identification of the parties in a transaction.

The world of payments is changing rapidly. On the demand side, households, companies and financial intermediaries are demanding ever faster, simpler, cheaper and more flexible ways to pay and support a more-digitised and online economy; meanwhile on the supply side, major changes are underway in many domestic and international payments systems. Most major high-value payment system (HVPS) operators have either moved or are in the process of moving to a common international payment messaging standard, ISO 20022. First published in 2004 by ISO, ISO 20022 is a globally-agreed and managed method for creating financial messaging standards. ISO 20022 is capable of carrying a much richer data set than many of the legacy formats that it replaces.

LEIs can play an integral part in the new payment landscape. Names and addresses often lack a single and consistent form or convention — particularly across different jurisdictions with languages with different characters, thus hampering efficient processing. Confusion can arise where entities have similar names — both where the entities are related (within large corporate groups) and where they are not, such as the US commercial bank, 'Bank of England' (LEI: 549300GY4NTTEM7WWB64) and the UK central bank, 'The Governor and Company of the Bank of England' (LEI: YUEDD7W89PH0FV8Q2S28). Domestic organisational identifiers are less efficient forms of identification for cross-border payments as there is no arrangement between the different issuing authorities to ensure uniqueness, consistency of form or redundancy/error-checking between the authorities' identifiers.

Figure 2 provides an illustrative example comparing two scenarios where:

- LEIs are not included in payment messages; and
- LEIs are included in payment messages within designated fields in a structured format. The scenario also assumes that LEIs are widely adopted, readily available and used as a unique legal identifier in the UK across sectors.

Use and benefits of LEI in payments

Including LEIs in payments can bring potential process and system uses and benefits, some of which have been outlined previously, for a range of market participants. For example:

- *Payment system operators* are better able to assess macro and micro risks where they have access to richer aggregate data on the economic activity driving payments and on payment system usage patterns. This can:
 - enable better understanding of the risks to the payment system allowing better decisions to be made based on a fuller identification of systemic risks;
 - protect and enhance financial stability and enable better understanding of the efficiency and effectiveness of financial flows between economic actors (for example, the LEI could help identify

critical links/concentrations to accessing payment systems);

- support more effective policy decisions by public authorities through better data on economic activity (for example, the LEI could help identify trends of different industry sectors);
- inform statistical research central banks, such as the ECB, are already using the LEI data for research purposes.

Currently, a variety of identifiers, including name, addresses and various domestic identifiers, are in non-standard formats, which makes system-wide analysis difficult.

- *Payment service providers* are able to use the automated processing enabled by LEIs to:
 - help to support efficient compliance and fraud screening, onboarding and 'know your customer' (KYC) checks, risk reporting and payments processing this both reduces the need for manual processing, and speeds up average payment times by reducing the number of false positives reported due to uncertainty;
 - facilitate anti-money laundering (AML) checks by helping to connect to shared repositories of data this can help to address the estimated £100bn+ that is laundered in the UK each year;¹⁹
 - _ assist with continued provision of correspondent banking services by facilitating information-sharing in a standardised format, reducing the risk and cost associated with due diligence processes.²⁰ The majority of cross-border payments involve correspondent banks and typically take two to three days to settle. Such payments will be screened at least three times (and sometimes many more). The UK government's Economic Crime Plan for 2019-22 notes that the LEI can help increase transparency around ownership structures across borders.²¹

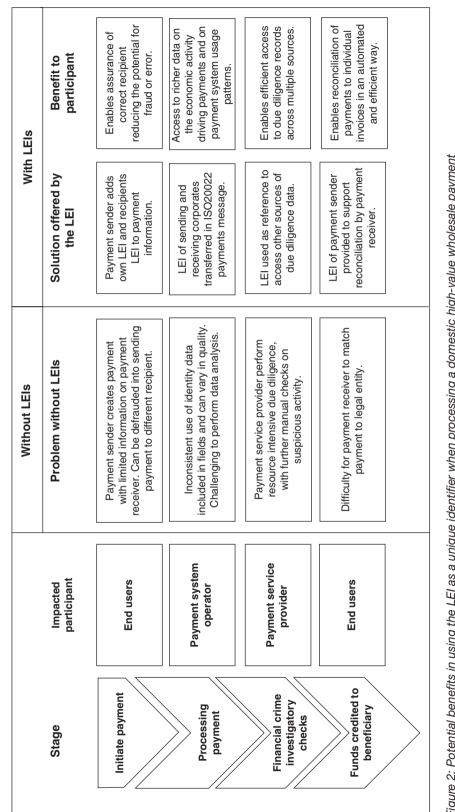


Figure 2: Potential benefits in using the LEI as a unique identifier when processing a domestic high-value wholesale payment

Distinct databases, even within the same organisation, can have different identifiers for the same counterparty. Where names (in character sets of different languages) are used instead of identifiers, minor variations can arise across different databases throughout the payment process chain. According to a report by McKinsey & Company and GLEIF, a bank's database contained on average five slightly different names for the same organisation. This makes verification across separate systems difficult and requires manual intervention.²²

- *End users* (such as importers and exporters) can use LEIs to:
 - assist with faster and simpler reconciliation and risk and liquidity management processes;
 - facilitate the onboarding of suppliers and ensure payments are made to the correct counterparty and to the correct legal entity within a large corporate group.

PAYMENT MESSAGING AND THE LEI Initial work on LEIs in payments^{23,24}

As early as 2016, the Bank for International Settlements (BIS) Committee on Payments and Market Infrastructures (CPMI) acknowledged that the inclusion of LEI in payment messages can ensure unambiguous identification of parties to payment transactions. The CPMI recommended relevant stakeholders define a common market practice for how to include the LEI in the payment messages without changing the existing message structure. Additionally, as part of the migration to the future global messaging standard ISO 20022, relevant stakeholders were encouraged to consider developing dedicated codes or data items for the inclusion of the LEI in these payment messages.25

In 2017, the SWIFT Payments Market Practice Group (PMPG), an independent body of payments subject matter experts from Asia-Pacific, Europe, the Middle East and Africa, and North America, responded to the CPMI recommendations and set out common market practice for the inclusion of LEI in payment messages without changing the structure of these messages for the optional usage of LEIs in payments. The PMPG also stated that 'Going forward, the LEI can become a substitute for the address field'.²⁶

The LEI was introduced as an optional field in ISO 20022 payment messages by PMPG in 2018. In May 2019, the FSB stated that the upcoming completion of options to insert the LEI into payment messages may be an opportunity to propose an international timeline for the effective use of the LEI in payment messages.²⁷

In response to the FSB recommendation, in September 2019, the PMPG announced that it believes now is the appropriate time for the payment industry to begin its adoption of the LEI. Coupled with the other changes happening around the LEI to make it cheaper and easier to obtain, the migration to ISO 20022 provides the right opportunity for the industry to move to adding the LEI into payments messages, infrastructures and processes in a low-cost, efficient manner.²⁸

While not mandated globally, there is a growing industry view that LEIs should be incorporated in payment messages in ISO 20022 in a coordinated way, but that the full benefits can only be realised through wider adoption and usage of LEIs, through a mixture of regulation and self-regulation.²⁹

International proposals to incorporate LEIs into major ISO 20022 implementations³⁰

International working groups, including the High Value Payments Plus (HVPS+) and Cross-Border Payments and Reporting Plus (CBPR+) have been set up by payment system operators to develop a harmonised international standard for implementation of ISO 20022:

- *HVPS*+: This group is formed of highvalue payment system operators (including the Bank of England, Federal Reserve and ECB) along with global banks and SWIFT. The group has developed guidelines for the international implementation of ISO 20022 for HVPS which allow LEIs to be included on an optional basis in payment messages. These guidelines will be adopted by many major global high-value payment systems, such as the CHAPS (sterling), Fedwire (US dollar) and Target 2 (euro).³¹
- *CBPR+:* SWIFT has created this group, formed of international payments firms, to define usage guidelines for the consistent use of ISO 20022 in cross-border payments across the SWIFT network. These market guidelines align with the HVPS+ guidelines on all similar fields, ensuring interoperability with domestic high-value payment processing. These guidelines also allow LEIs to be included on an optional basis in payment messages.³²

By 2025, as part of the migration to ISO 20022, LEIs will be included on an optional basis in payment messages for cross-border payments and by high-value payment systems for the US dollar, euro and sterling at a minimum.

UK plans to incorporate LEI into the ISO 20022 Common Credit Message

The Bank of England (the Bank) provides sterling settlement services for payment systems in the UK through the RTGS service. An average of over $\pounds 650$ bn is settled through the system each working day and the Bank is currently undertaking a multi-year programme to renew RTGS to enhance resilience and promote innovation. The Bank is also the operator of the CHAPS system, which is one of the largest high-value payment systems in the world, providing efficient, settlement risk-free and irrevocable payments.

As CHAPS operator, the Bank will implement ISO 20022 through the introduction of the Common Credit Message (CCM), which is central to message harmonisation across the UK's main interbank payment systems and compatible with the emerging international consensus. Other payment systems (BACS and Faster Payments) are also committed to using this CCM. As part of its 2018 public consultation on ISO 20022 implementation, the Bank asked for views on including LEIs in payments messages in designated fields in the CCM. The majority of respondents supported making LEIs mandatory for transactions between financial institutions in CHAPS due to the widespread benefits this can provide. In the November 2018 consultation paper response, the Bank became the first central bank to announce its intention to start to mandate LEIs into payment messages for transactions between financial institutions, as part of the migration to the CCM.³³

While many respondents supported extending mandatory LEI usage to a wider range of payments, the feedback suggested that the full benefits of including LEI in all sterling payment messages would only be realised with major increases in the uptake of LEIs by UK businesses.³⁴ The Bank sees LEI usage as an important tool in a future data-driven economy as outlined in the Bank's response to the Huw van Steenis Review on the Future of Finance and is minded to extend the mandatory use of LEIs to a wider range of transactions in the future. The Bank recognises that more work needs to be done to provide the infrastructure to support such wider adoption and use of LEIs in payments. The Bank is therefore working with key stakeholders in the UK and internationally to address the challenges and seeks to support initiatives to improve the accessibility of LEIs, to ensure the benefits can be achieved. The Bank has committed to 'champion the Legal Entity Identifier (LEI) as a globally recognised and unique identifier for all businesses in the UK, including integrating the LEI in the

Bank's new RTGS service and mandating its use in payment messages'.³⁵

BARRIERS TO THE ADOPTION OF THE LEI IN PAYMENTS

As outlined in the previous section, to enable LEIs to be included in a wider range of payments there needs to be wider LEI usage among global businesses. As the FSB concluded in its 2019 thematic review, despite progress to date, the LEI still has far to go to meet the G20's objective.³⁶ The FSB summarised that to capture the positive externalities and maximise the network effects for the market, more efforts should be made at national and international level to promote LEI adoption and enhance the benefits to authorities and market participants from its use. There needs to be wider adoption of LEIs by SMEs (and their service providers) and other legal entities - as also acknowledged in the Wolfsberg Group Payment Transparency Standards.³⁷ GLEIF and industry experts estimate that for use of the LEI to achieve a critical mass, more than 40 million LEIs need to be issued³⁸ globally to cover all exporters and importers, a more than 20-fold increase on today's uptake.

There are a number of challenges to achieving this ambition:

- *Awareness*: There is a lack of awareness of the LEI and of the benefits that the LEI can bring throughout the business cycle and supply chain, particularly outside financial institutions.³⁹ This has to date limited the voluntary uptake of LEIs. In April 2018, the LEI ROC published a progress report with a comprehensive overview of use cases and stated that a few hundred million entities could be eligible for an LEI.⁴⁰
- Accessibility:
 - Acquiring and maintaining an LEI entails both fees and an administrative burden. As of 2019, the flat portion of fees going to GLEIF is US\$11 (reduced

from US\$17 as of 2018). Fees charged by LOUs for new LEI issuance range between US\$55–US\$220 and those for LEI renewals between US\$35–125.⁴¹

- Approaching LOUs for the issuance and renewal of LEIs is a separate process that entities need to remember to undertake as it is not currently linked to other processes involving similar tasks, such as obtaining domestic identifiers. This may be a particular barrier for SMEs.
- Interoperability:
 - LEIs will be used alongside other identifiers and businesses need clear understanding of the mapping between these identifiers. This can help with KYC and AML processes.
 - The additional cost and time of migrating to a new identification system while maintaining existing identification systems.
- *Data*: Where LEI reference data are not updated or expired by entities, the reliability, usability and quality of LEI data will be compromised.⁴²
- *Infrastructure:* So far only a limited number of domestic business registers have decided to become LOUs. If more domestic business registers became LOUs then the LEI system infrastructure would benefit.
- Usage:
 - To date, LEIs are not well integrated into business processes and systems. Use cases have been identified but need to be worked through to address any potential barriers.
 - Governments are at the early stages of engaging on the LEI and on understanding the benefits and operational efficiencies that widespread LEI adoption can offer. LEIs have the potential to align with national data strategy initiatives by facilitating cross-linking and consolidation of a diverse range of datasets, streamlining identification and data-quality checks and improving the end-user experience by alleviating administrative burden.

ACTIONS MARKET PARTICIPANTS CAN TAKE TO REALISE THE POTENTIAL OF LEI TO IMPROVE PAYMENTS

Major payment system operators have harmonised plans to incorporate LEIs in payment messages. There is an opportunity to build on this so that LEIs become embedded in industry and government systems and processes as a key identifier and are used innovatively to bring better services for end users. This environment will enable the use of LEIs for a wider range of payment transactions. The benefits can touch on each of the participants in payments, and beyond to the real economy. To realise this vision there needs to be:

- widespread awareness of the LEI and its benefits;
- *infrastructure* to facilitate LEI adoption and usage;
- *accessibility* efficient costs and processes for LEI adoption and maintenance;

- *interoperability* comprehensive mapping of LEIs to other identifiers that are easy to access and use;
- *data* availability of and access to rich data on the LEI;
- *usage* LEIs integrated in business and government systems and processes.

The Bank of England and GLEIF believe a critical juncture has been reached where real progress can be achieved through collaboration between the public and private sector at both the national and international level to:

- promote broader uptake of the LEI among businesses; and
- incorporate the LEI in a wider range of payment messages.

Table 2 summarises the actions payment system operators, payment service providers, GLEIF, government and national data authorities, industry standard setters, regulators and end users could take to benefit fully

Actions	Benefits
Payment system operators	
 Incorporate LEIs into payment messaging standards. Extend data fields captured and processed by system to include LEIs. HVPS operators can follow HVPS+ guidelines for ISO 20022 implementation which allow for LEIs to be included in payment messages. The European Payments Council has four Rulebooks and Implementation Guidelines based on the ISO 20022 standards. The LEI is being reviewed as an option to be included in these rulebooks. 	 Have better assessment of micro and macro risks. This can: enable better understanding of the risks to the payment system; protect and enhance financial stability; support more effective policy decisions by public authorities; be used in statistical research data; support businesses and public administrations in the reconciliation of payments data.
 Payment service providers Develop capability to add LEI to outgoing payment messages, and to process and pass on from incoming messages. Incorporate LEI into compliance and fraud screening. 	 Support efficient compliance and fraud screening, onboarding, KYC checks, risk reporting and payments processing. Facilitate AML, combating the funding of terrorism finance and sanctions checks. Assist with the continued provision of correspondent banking services.

Table 2: Actions market participants can take to realise the benefits of the LEI

Table 2: Actions market participants can take to realise the benefits of the LEI (continued)

Actions	Benefits
GLEIF	
 Enable cost and process efficiencies in LEI adoption and renewal to improve accessibility. Enhance data quality and data maintenance processes of the LOUs with their registrants. Enhance the scope and usability of the relationship data (such as beneficial owners). Raise awareness of the benefits of the LEI to expand coverage in the non-financial sector.⁴⁴ GLEIF is currently undertaking a research project to substantially increase the number of issued LEIs (from current 1.4 million to 40 million). Improve interoperability of LEI with other identifiers. GLEIF has established a free-of-charge certification process for a mapping programme to ensure that organisations are able to map their own identifiers for their customers and/ or suppliers accurately with the LEI or with the owners of object identifier(s). At the end of June 2019, approximately 21,000 mapped identifier pairs were available for users.^{45,46} 	 Help meet the G20 objectives for the LEI. Deliver the global LEI system as a broad public good for the users of the public and private sector.
Government and national data authorities	
 Provide infrastructure to promote LEI adoption, awareness and use. This can include: incorporating LEIs into national business registers; and making national business registers an LEI issuance authority, or developing processes to facilitate the generation of LEIs when companies are incorporated.⁴⁷ This action would greatly facilitate wider LEI adoption. Lead by example and use LEIs for the issuing of public debt. 	 Effective cross-linking and consolidation of a diverse range of datasets including business registers. Helping to streamline identification and data quality checks. For end users, it could also improve the user experience and alleviate administrative burden of reporting requirements based on an 'only once' principle.*
Policy and industry standard setters and regulators	
 Consider whether LEI can be used (or enhance references to LEIs where already used) to achieve policy objectives. This could include guidance on the inclusion of data on entities as well as promoting LEI use in cross-border payments. Consider requiring the LEI in reporting and disclosure frameworks. For the oversight of financial market infrastructures consider the use of LEIs in Principle 22 of the Principles for Financial Market Infrastructures. Work with industry to help realise usage cases for LEIs and address barriers and limitations. 	 Help meet the G20 objectives of the LEI and individual policy objectives.

(continued)

Actions	Benefits
End users	
 Have well-maintained LEIs for all active entities. Incorporate LEIs in business processes including invoicing and accounting systems. 	 Improve risk and liquidity management. Ensure payments are made to the correct counterparty. Assist with screening and onboarding of customers and suppliers. Assist with consumer protection. Innovation can lead to easier identification and movement around the financial system.

Table 2: Actions market participants can take to realise the benefits of the LEI (continued)

*The 'only once' principle is a concept to ensure that certain information only has to be reported to authorities once and this is then shared across government departments. In the UK, this principle is used to notify of deaths, while in the EU, this principle is used in a single digital gateway.

from the potential of the LEI to transform payment processes. (The actions reflect the FSB's recommendations where relevant to the payments industry as set out in the FSB's 2019 Thematic Review on Implementation of the LEI.⁴³) all be carrying LEIs in their payment messages, as will cross-border payments across the SWIFT network.

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CONCLUSION

The incorporation of LEIs into payment messages could bring significant benefits to the users and operators of domestic and international payment systems. This paper sets out the actions required from operators, users and authorities to unlock these benefits. The Bank of England and GLEIF are committed to working collaboratively with all market participants (national, international, public and private) to promote the actions required to realise the full potential of LEIs for the payments industry and beyond to the wider economy.

The HVPS+ and CBPR+ market practice groups have developed concrete proposals for the inclusion in ISO 200022 payment messages of LEIs as identifiers of parties to a payment. By 2025, the high-value payment systems in the UK, US and euro area will www.fsb.org/wp-content/uploads/P280519-2.pdf (accessed 11th September, 2019).

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