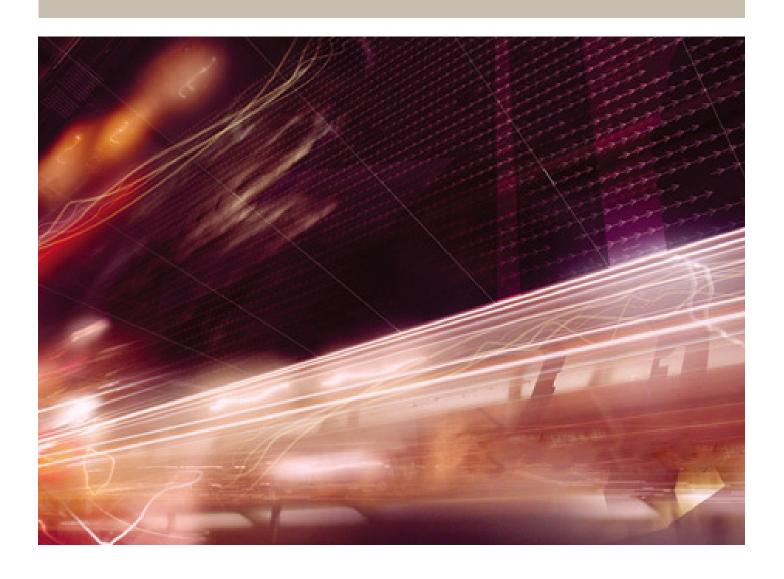
The European Pre-Issuance Messaging Service (EPIM)

The ISIN Allocation Standard for European Money Market Instruments



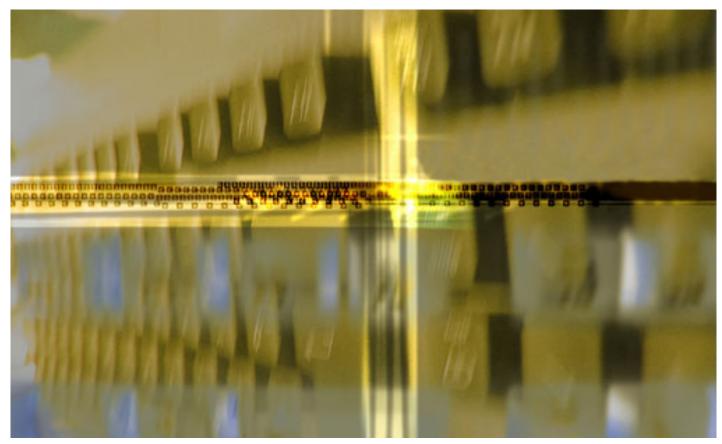
The European Pre-Issuance Messaging Service (EPIM)

EPIM is a joint service offering of The Depository Trust & Clearing Corporation (DTCC), Clearstream Banking and Euroclear Bank.

The European Pre-Issuance Messaging service (EPIM) is an automated ISIN and common code request and allocation system that automates and improves the process of issuing designated European Money Market Instruments, such as Euro Commercial Paper (ECP), Certificates of Deposit (ECDs) and Medium-Term Notes (EMTNs).

As a central messaging hub, EPIM links the various parties involved in numbering and issuing these securities, including the dealers, the Issuing and Paying Agents' (IPAs) banks, and the relevant numbering agencies — Clearstream Banking and Euroclear Bank — that also act as primary place of deposit for the issued securities.

Through EPIM, these players can exchange standardized and secured issuance information in real-time thus improving the issuance and ISIN/Common Code allocation functionalities.



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The Evolution of EPIM

The Depository Trust & Clearing Corporation (DTCC), Clearstream Banking and Euroclear Bank joined forces in 2001 to develop EPIM. Based on DTCC's Pre-Issuance Messaging (PIM) system in use in the U.S, but adapted to the specific requirements of the European money markets, EPIM was conceived to automate and increase the efficiency of the issuance of ECPs and ECDs.

Officially launched in May 2002, the service has attracted significant volumes of pre-issuance communication and has now established itself as a central component of the ECP market infrastructure. The technology and productivity of the EPIM service was further expanded in July 2008 to support pre-issuance communication and ISIN/Common Code allocation for the EMTN market. More recently, the EPIM product was also upgraded to support issuance of money market instruments in registered form under the ICSDs' New Safekeeping Structure¹.

June 2010 saw another important milestone for the development of the EPIM service, with the launch of the EPIM Workstation, a secured internet-based user interface, providing an alternative direct service connection to all dealers and IPAs active in the international securities market.

Why Use EPIM?

As a first-class solution for all parties involved in the primary issuance of ECPs, ECDs, and now EMTNs, EPIM has enabled the Euro CP and CD markets to grow and achieve same-day settlement. EPIM has notably reduced associated manual processing costs and shortened the settlement cycles (e.g. T+0) while preserving the flexibility that characterizes these markets.

Large Global Community of Users:

Over 20 major financial institutions that service European Money Markets — including IPAs and dealers — already harness the productivity and efficiency offered through EPIM.

Last year, more than 60% of ECPs (over 41,000 trades) were transmitted via the EPIM platform. The goal is 90% or more.

¹ The New Safekeeping structure is mandatory for newly issued international debt security in registered form to be recognised as potentially eligible collateral for Eurosystem monetary policy and intra-day credit operations as of 1 October 2010.

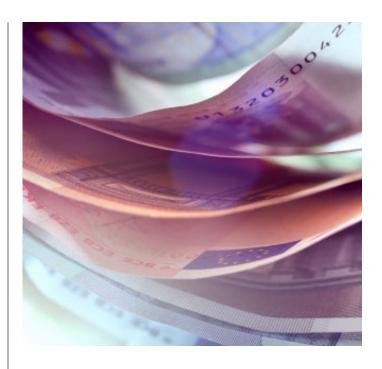
With EPIM, ISINs are assigned in less than 5 minutes.

Customer-Centric: The EPIM solution was developed in close collaboration with various dealers, IPAs and trade associations (ICMA and ICMSA) that have in-depth knowledge of the market needs.

Cost Effective: EPIM users have benefited from consistent, cost-effective messaging pricing. In fact, the pricing has remained the same since 2001 and has not been impacted by the extension of its coverage to support Euro MTNs, NGNs or the New Safekeeping Structure. The tariff is based on a sliding scale taking into account the consolidated activity across the different markets covered by EPIM (ECPs, ECDs, and EMTNs).

In addition, the access to the new EPIM Workstation will be not result in any additional charges to users. New users connecting to EPIM via the Workstation may, within certain timeframes and under certain circumstances, benefit from a messaging fee-holiday for the related activity.

Operational Efficiency: EPIM delivers greater operational efficiency by eliminating the labor-intensive and error-prone phone, fax and email-based communications generated during the ISIN request and allocation processes between dealers, IPAs and Clearstream Banking and Euroclear Bank. Through



this streamlined, industry-standard messaging and automated workflow, EPIM has increased accuracy and reduced processing errors, discrepancies and delays — while at the same time, significantly lowering users' operational costs.

Connectivity Options: To minimize users' costs, the EPIM service can be accessed via different channels:

- using existing DTCC MQ connections;
- using SWIFTNet TDA access; and,
- using the web-based EPIM Workstation (since June 2010).

Trusted Service Providers: Euroclear Bank,

Clearstream Banking and DTCC have an outstanding reputation for reliability, certainty, trust and experience in providing the financial services with operational efficiency.

Benefits of EPIM

As a cost-effective solution, EPIM features:

- Standardized messaging types;
- Formatted fields for mandatory information;
- Straight-through processing;
- A quick, reliable and efficient system;
- Improved ISIN and Common Code allocation and availability;
- Secure infrastructure:
- Various connectivity channels

With EPIM, ISINs and common codes are assigned in less than 5 minutes.

How the service works

EPIM serves as an integrated gateway, leveraging the IBM MQSeries commercial messaging software.

On behalf of Clearstream Banking and Euroclear Bank, DTCC is the licensed service provider that operates and manages the EPIM messaging hub.

The following processing rules apply:

- The dealer and the IPA must obtain an EPIM user ID for EPIM and, if applicable for the use of the Workstation;
- Each user has its own connection with the EPIM hub, either directly or via the EPIM Workstation;
- The dealer-initiated ISIN request (DIR) message initiates the EPIM process;
- All communication with Clearstream Banking and Euroclear Bank is via the IPA;
- Messages are sent and received via standard protocol and record layouts through a central messaging hub located at DTCC;

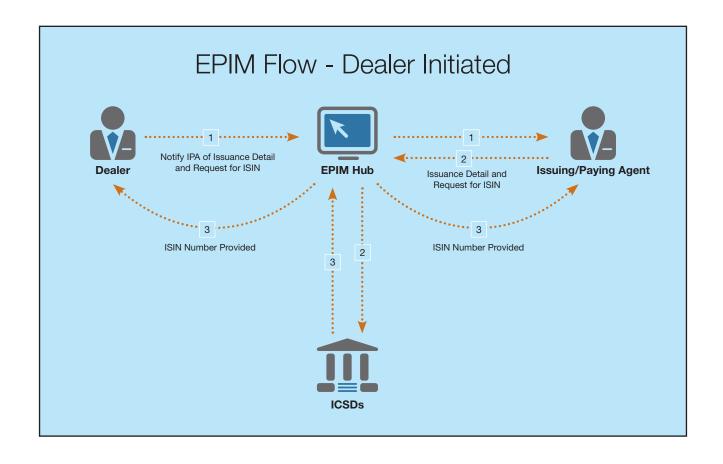
EPIM supports pre-issuance communication and ISIN/Common Code allocation for the Euro CP, CD and MTN market.

- The dealer and the IPA are connected in EPIM by way of reference to their relevant account in Clearstream Banking and Euroclear Bank. The dealers must also input the programme number provided by the IPAs; and
- All errors are notified to the concerned party (dealer or IPA) using the relevant error code fields in the reply records.

The EPIM hub is open for processing from 21:00 (Central European Time) on Sunday until 21:00 (Central European Time) on the following Saturday. All messages sent during closing time are queued until the system reopens. The ICSDs, Clearstream Banking and Euroclear Bank are open for processing EPIM messages during normal European office hours.

The EPIM Workstation

Launched in June 2010, the internet-based EPIM Workstation offers to both dealers and IPAs a secure and easy access to the EPIM hub. It is an attractive alternative for those market players whose issuance volumes do not necessitate the set up of a direct MQ series connection to the EPIM hub. Dealers can use the Workstation to send and receive EPIM messages and to introduce, update, amend, mark up/ down, and cancel ISIN requests. IPAs can receive messages sent by dealers in relation to such actions, process them after associated validations and send the appropriate messages either back to the dealer or onward to the ICSD. The Workstation also provides functionalities to upload data, track message the status on a real-time basis and to access archived records.



The EPIM Workstation is intended to always reflect the latest version of EPIM allowing all possible message types and for all eligible instruments. In developing the Workstation, the EPIM partners paid particular attention to user-friendliness: mandatory fields are clearly identified and many fields are preformatted, e.g. drop down menu and calendars.

Getting Started

To use EPIM, dealers and IPAs must take the following steps:

 Contact Clearstream Banking or Euroclear Bank to request a Getting Started Pack. This package contains the necessary information and documentation to use EPIM.

Further information on EPIM can also be found at:

www.euroclear.com/epim www.clearstream.com/epim

- Complete the EPIM Subscription forms.
- Establish a communication line connection to EPIM, if one does not already exist, and program the
 messages and data fields; or alternatively, subscribe to the EPIM Workstation service.
- Successfully test the application, and be granted access to the EPIM production environment.

For More Information:

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Clearing Corporation





About DTCC

The Depository Trust & Clearing Corporation (DTCC), through its subsidiaries, provides clearance, settlement and information services for equities, corporate and municipal bonds, government and mortgage-backed securities, money market instruments and over-the-counter derivatives. In addition, DTCC is a leading processor of mutual funds and insurance transactions, linking funds and carriers with financial firms and third parties who market these products. DTCC's depository provides custody and asset servicing for more than 3.5 million securities issues from the United States and 117 other countries and territories, valued at \$27.6 trillion. Last year, DTCC settled more than \$1.88 quadrillion in securities transactions. DTCC has operating facilities in multiple locations in the United States and overseas. For more information on DTCC, visit www.dtcc.com.

About Clearstream

Clearstream is a leading European supplier of post-trading services. The wholly owned subsidiary of Deutsche Börse ensures that cash and securities are promptly and effectively delivered between trading parties. It also manages, safekeeps and administers the securities that it holds on behalf of its customers. Over 300,000 domestic and internationally traded bonds, equities and investment funds are currently deposited with Clearstream. Clearstream maintains relationships with around 2,500 customers in over 100 countries. Its global network extends across 50 markets. Backed by flexible securities lending and collateral management services, Clearstream offers one of the most comprehensive international securities services available, settling more than 250,000 transactions daily.

About Euroclear Bank

Euroclear Bank provides settlement and related securities services for cross-border transactions involving domestic and international bonds, equities, derivatives and investment funds. Serving major financial institutions located in more than 80 countries, Euroclear Bank, based in Brussels, is part of the Euroclear group. Euroclear Bank is rated AA+ by Standard & Poor's and Fitch Ratings. The Euroclear group also includes Euroclear Belgium, Euroclear Finland, Euroclear France, Euroclear Nederland, Euroclear Sweden and Euroclear UK & Ireland. Euroclear also owns EMXCo, the UK's leading provider of investment-fund order routing, and is awaiting regulatory approvals to acquire Xtrakter, owner of the TRAX trade matching system. For additional information, please visit www.euroclear.com.