Italy: Detailed Assessment of Compliance with the Committee for Payment and Settlement Systems (CPSS) Core Principles for Systemically Important Payment Systems

This Detailed Assessment of Compliance with the CPSS Core Principles for Systemically Important Payment Systems for **Italy** was prepared by a staff team of the International Monetary Fund. It is based on consultations with the authorities and other information available at the time it was completed on **June 2003**. The views expressed in this document are those of the staff team and do not necessarily reflect the views of the government of **Italy** or the Executive Board of the IMF.

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ITALY

DETAILED ASSESSMENT OF COMPLIANCE WITH THE CPSS CORE PRINCIPLES FOR SYSTEMICALLY IMPORTANT PAYMENT SYSTEMS

MARCH 2004

INTERNATIONAL MONETARY FUND MONETARY AND FINANCIAL SYSTEMS DEPARTMENT

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GLOSSARY

ABC **Activity-Based Costing** Italian Banking Association ABI ACH **Automated Clearing House**

Basel Core Principles for Effective Banking Supervision **BCP** Banca d'Italia Clearing System for Domestic Retail Payments **BI-COMP** BIREL Banca d'Italia RTGS System for Large-Value Payments

Bank of International Settlements BIS

BL1993 Banking Law Banca d'Italia ΒI

BSD Banking Supervision Department CBT **Interlinking Communication Component**

Clearing House for Derivatives CCG

1998 Consolidated Law on Financial Intermediation CLFI

Continuous Linked Settlement CLS CSD Central Securities Depository

Correspondent Contingency Current Accounts Co.Ca Italian Companies and Stock Exchange Commission Consob

CP Core Principle

CPSIPS Core Principles for Systemically Important Payment Systems

CPSS Committee for Payment and Settlement Systems

Delivery-versus-Payment DvP ECB European Central Bank **Electronic Data Processing EDP EEA** European Economic Area European Monetary Union **EMU**

European System of Central Banks **ESCB**

EU European Union

First-Available First-Out **FAFO**

FIFO First-In First-Out

Central Credit Institution for Cooperative Banks ICCREA

IMF International Monetary Fund LDT Securities Net Settlement Procedure Message Authentication Codes MAC

Monetary and Financial Systems Department MFD Ministry of the Economy and Finance

MoE

Memoranda of Understanding MoUs NCBs National Central Banks PSD Payment System Department PSOO Payment System Oversight Office

Payment and Settlement Systems Committee **PSSC**

National Interbank Network RNI

RRG Automated Matching and Correction System RTGS Real-Time Gross Settlement Payments System

Interbank Company for Automation SIA

Service-Level Agreement SLA STP Straight-Through Processing

TARGET Trans-European Automated Real-time Gross Settlement Express Transfer System TUG CASPER Committees for Cooperation between the BI and the Banking System (TARGET User

Group and ABI's Committee for Payment and Settlement Services)

UAE United Arab Emirates

I. CPSS CORE PRINCIPLES FOR SYSTEMICALLY IMPORTANT PAYMENT SYSTEMS

A. General

- 1. The present document is the detailed assessment of Italy's compliance of the Committee for Payment and Settlement Systems' (CPSS) Core Principles for Systemically Important Payment Systems (CPSIPS). The assessment was conducted during a mission of the International Monetary Fund's (IMF) Monetary and Financial Systems Department (MFD), which visited Rome during June 16–27, 2003. The assessor was Mr. Peter Allsopp, formerly with the Bank of England.
- 2. The assessor had full cooperation from the Italian counterparts and received all information necessary for the assessment. The logistical support and warm hospitality of the authorities and officials of the Banca d'Italia (BI) are greatly appreciated.

Information and methodology used for the assessment

- 3. The information used in the assessment included all relevant laws, rules, and procedures governing the payments system in Italy, and the various publications of the BI, including information available on its website. In addition, extensive discussions were held with staff of the BI's Payment System, Internal Audit, Information Technology, and Legal Departments and the Payment System Oversight Office (PSOO), and representatives of the Italian Association of Banks (Associazione Bancaria Italiana (ABI)), the Committees for Cooperation between the BI and the Banking System (TUG, CASPER), the commercial banks, and the Interbank Company for Automation (SIA).
- 4. In preparing this assessment, the assessor was greatly helped by the availability of a comprehensive self-assessment, which had been prepared by the BI. Much of the material in the BI's self-assessment has been incorporated into this assessment.
- 5. The methodology used for this assessment follows the Guidance Note for Assessing Observance of the CPSIPS, prepared by the IMF and the World Bank in collaboration with the CPSS in August 2001.

Institutional and market structure—overview

6. The BI was created in 1893 through the merger of three of the existing banks of issue as a consequence of a radical reorganization of the banking system. In 1926, coinciding with the exclusive privilege to issue banknotes, the BI was given the task of providing the clearing procedures for settlement of interbank payments and securities transactions. In the late 1940s, the BI extended clearing services to all its branches. A first major step toward a new organizational and operational architecture of the clearing system was taken in 1989–91, after which most interbank transactions were settled in central bank money through the clearing system; previously, most interbank payments had been settled through banks' bilateral correspondent accounts.

- 7. In 1997, the real-time gross settlement system (RTGS) for large-value interbank payments, BIREL, was launched, and since the beginning of 1998 all types of domestic high-value transactions have been settled through BIREL. The shift from net to gross settlement for large-value transactions enhanced the security of payments and significantly reduced systemic risk at a time when volumes and values were increasing rapidly. The BI-COMP clearing (net settlement) system is still in operation for retail transactions.
- 8. With the start of Stage III of the European Monetary Union (EMU) in January 1999, BIREL became the domestic component of the European Union (EU)-wide RTGS system, TARGET. BIREL is accordingly operated and managed as a component of TARGET. The rules, guidelines, and other documents relating to BIREL, and to its operating procedures, have to be drawn up by the BI within the constraints of the TARGET rules that have been issued by the European Central Bank (ECB), under Article 22 of its Statute. Similarly, the BI's policies, on such topics as the charges for BIREL transactions, have to comply with relevant decisions of the ECB Governing Council. TARGET guidelines, which are also issued by the ECB, are not legally binding; they seek to prevent conflicts arising between National Central Banks (NCBs), or between the operating rules and procedures of the individual RTGS systems.
- 9. It is no longer possible to consider credit, liquidity, and other issues in BIREL without appreciating the cross-border aspects that result from its role within TARGET and the EMU Single Currency Area. Links have been created between BIREL participants and banks in other EU countries, including, for some international bank groups, the centralization in one branch of the Euro Treasury functions and daily liquidity management for all their branches across the EU member states. These links can generate daily flows of funds through BIREL, as a component of TARGET, that have no relation to economic transactions within Italy. Similarly, intraday liquidity supplied (against collateral pledged in Monte Titoli, the Italian Central Securities Depository) by the BI to a participant in BIREL may immediately be transferred through TARGET to cover payments to be made by another branch of the same bank in another EU RTGS system. Funds to repay that intraday advance come back into BIREL through TARGET later in the business day.
- 10. At present, the Italian banking system is subject to significant challenges resulting from slowing economic growth, and low and declining interest rates, which have resulted in pressures on margins, and a need to diversify sources of income. These conditions have fostered a process of banking consolidation, actively encouraged by the BI with a view to establishing groups able to compete at the EU level. The changing structure of the banking system poses challenges for the working and development of the payment systems, including BIREL. In turn, the launch of New BIREL represents a significant change in the operation of the payment systems which may have implications for money market conditions.

- 6 -

Payment systems infrastructure

- 11. **BIREL** enables participants to make final and irrevocable transfers between the settlement accounts they hold with the BI. Participants can therefore make payments in central bank money throughout the EU. They can settle a variety of transactions across their settlement accounts: (i) monetary policy operations; (ii) domestic large-value payments including transactions concluded on the screen-based Interbank Deposit Market; (iii) cross-border interbank and customer payments; (iv) the cash leg of the securities settlement systems; (v) multilateral net balances generated by the clearing system for domestic retail payments (BI-COMP), by the Euro 1 system and by the CLS system; and (vi) daily cash margins on derivatives payable to Cassa di Compensazione e Garanzia, the derivatives clearing house.
- 12. There is no minimum amount for a payment to be made through BIREL, so that it can be used for time-critical low-value payments, initiated by individuals as well as corporate customers of the participants. There is a maximum limit on the size of each payment that can be made through BI-COMP to control credit and liquidity risks in that system; the limit is currently being raised, at the urging of the banks, from ϵ 250,000 to ϵ 500,000.
- 13. **The settlement accounts of BIREL participants also serve to hold their compulsory reserves (in a "reserve account").** Under ECB rules, the reserve requirements take the form of a monthly average, with the maintenance period ending on the 23rd day of each month. During the day, reserve balances can therefore be drawn down to zero.
- 14. If a BIREL participant requires additional intraday liquidity, this will be supplied free of charge by the BI, by means of a collateralized overdraft (on an overdraft account) advanced to a participant with whom the necessary legal agreement has been signed. Securities accepted as collateral are those Tier 1 and Tier 2 securities in which the BI undertakes monetary policy operations on behalf of the ECB. The securities have to be held in Monte Titoli, where they can be quickly transferred between a participant's own account and the BI account. Haircuts are imposed on the market value of the securities, at varying levels set by EU rules.
- 15. **BIREL** is used by 660 financial institutions holding an RTGS account with the **BI.** A bank outside Italy currently accesses BIREL, and its RTGS account with the BI, on a remote (i.e., cross-border) basis from its branch in another EU member state. In New BIREL, the number of banks that are direct participants will decline, with other banks accessing New BIREL settlement procedures indirectly through correspondent accounts with direct participants. In addition, banks which do not hold an RTGS account with the BI can hold a special ("centralized") account, through which they can settle some transactions directly with

¹ The e-MID screen-based interbank deposit market is organized and managed by e-MID SpA (a private company owned by banks and financial institutions), and is supervised by the BI.

-

the BI, such as payments for bank notes paid in or withdrawn or in respect of monetary policy operations.

16. The volume and value of payments through the Italian payments system increased considerably during the 1990s, reaching a peak of ϵ 43,000 billion in 1998 (more than 40 times Italy's GDP). There was a decline in the payment traffic from 1999, resulting from the start of Stage III of EMU (which eliminated the need for foreign exchange transactions between the individual EU currencies), and more recently from consolidation in the banking system and the depressed state of the economy and the stock market; but the decline appears to have stabilized in the first four months of 2003 (Figure 1 and Table 1).

Flow/GDP Ratio **EUR Trillion** Clearing System RTGS (BIREL) System Total Clearing System RTGS (BIREL) System Total

Figure 1. Payment System Flows, 1988–2002

Source: BI.

Table 1. BIREL Payment Flows and Sources of Intraday Liquidity (in EUR billion)

		Flows throug	h BIREL—Value	es		liquidity for
Year	Total	of which			participants (daily averages)	
		Domestic	Cross border sent by Italy	Cross border received by	Compulsory monetary	Eligible securities in
			Sent by Italy	Italy	reserves	Monte Titoli ²
2001	37,126	17,181	9,963	9,982	-	-
2001 daily average	145.9	67.4	39.2	39.3	13	81
2002	33,919	16,353	8,794	8,772	-	-
2002 daily average	133.0	64.1	34.5	34.4	13	120
2003 January– April	11,201	5,372	2,916	2,913	-	-
2003 Daily average January– April	135.0	64.7	35.1	35.1	14	86

Source: BI.

17. In terms of the total volume of transactions settled, BIREL ranked 2nd among EU RTGS systems in both 2001 (10.2 million payments) and 2002 (9.6 million payments). In terms of the total value, it ranked 5th in each year. The table above shows that the value of cross-border payments sent by Italy through TARGET is not much more than 50 percent of the value of domestic payments (which include transactions in the securities and other markets). It is also noticeable that the value of cross-border payments sent by Italy in each period is almost exactly matched by the value of payments received by Italy in the same periods—presumably a reflection of the importance of the cross-border liquidity and cash management flows, outwards and inwards, referred to earlier.

- 18. The flows of payments in BIREL, and in particular the flows of cross-border payments, are concentrated in a relatively small number of banks. In 2002, nine banks accounted for 80 percent of the value of cross-border payments, while 27 banks accounted for 80 percent of the volume of such payments.
- 19. Operations on the participants' settlement accounts may be effected through the BIREL electronic message system for the management of central accounts³ or through

² Nominal value of eligible securities deposited (at either their centralized accounts at Monte Titoli or their pledged-out accounts at the BI) by BIREL participants holding a pledged-out account at the BI.

³ RNI/BIREL, which runs on the National Interbank Network, RNI.

the SWIFT FIN service, either by sending payment messages directly to the BI or (in New BIREL) by using the Y-Copy system. The BI provides an automatic conversion service, free of charge, between the domestic format RNI/BIREL and the SWIFT format. Operations on the settlement accounts may also be carried out through the BI's branch network.

- 20. The access criteria for BIREL participants are the same, applying to all EU RTGS systems connected to TARGET. Access is granted on an open and non-discriminatory basis to banks (credit institutions), investments firms, and organizations providing clearing and settlement services and public sector bodies. Remote access is possible within a specific legal and technical framework. Accordingly, institutions referred to above can directly access the Italian settlement system, and their RTGS accounts with the BI, without a branch in Italy, if they are incorporated in a country belonging to the European Economic Area (EEA). One bank is currently in that position.
- 21. **BIREL operates in accordance with the TARGET calendar.** It is closed on Saturdays, Sundays, New Year's day, Good Friday, Easter Monday, May 1st (labor day), Christmas day, and December 26. The operating day begins at 07:00 ECB time and closes ordinarily at 18:00.
- 22. **BIREL is now being replaced by New BIREL, which is being progressively rolled out from June to December 2003.** Only seven banks were operating in New BIREL as direct participants at the time of the IMF mission, together with 414 banks as indirect participants (these banks account for half of the system's volume of payments and over 40 percent of the value). This assessment is accordingly based on BIREL, but comments are, where relevant, made on specific features or aspects of New BIREL.

Transparency of payment system oversight

23. The tasks of the BI in operating and managing BIREL are clearly and publicly set out in Italian legislation, within the context of TARGET rules and guidelines issued by the ECB. The policies, procedures, and practices of the BI in respect of BIREL are open and transparent, through a series of publications and through close and continuing contacts with the system's users. The BI publishes regular reports on the operation of BIREL, and on the volumes and values of payments through the system.

B. Detailed Assessment of Observance of the CPSS CPSIPS and Central Bank Responsibilities

Table 2. Detailed Assessment of Observance of CPSS CPSIPS and Central Bank Responsibilities in Applying the CPSIPS—BIREL

CP I - The system should have a well-founded legal basis under all relevant jurisdictions.

Description

The legal soundness of BIREL is addressed through the legislative framework and the agreements and conventions governing both payments as such and payments handled by the system. The relevant legislation in Italy is the following:

- the provisions of the Community and Italian laws that contribute to the definition of the institutional framework for the systems concerned;
- other provisions of the Italian laws governing general and specific aspects of payment systems; and
- the provisions specifically governing BIREL.

1.1 Institutional provisions

Article 105 of the Maastricht Treaty provides that the European System of Central Banks (ESCB) "shall promote the smooth operation of payment systems." To this end, article 22 of the Protocol of the Statute of the ESCB/ECB provides that the ECB and NCBs may provide facilities to ensure efficient and sound payment systems within the Community and with other countries.⁴

In addition, some other provisions of the ESCB/ECB Statute lay down the general framework which TARGET and its domestic components should conform to:

In particular the Statute provides that: (i) the Governing Council of the ECB shall adopt the guidelines and make the decisions necessary to ensure the performance of the tasks entrusted to the ESCB; (ii) to the extent deemed possible and appropriate, the ECB shall have recourse to the NCBs to carry out operations which form part of the tasks of the ESCB; (iii) NCBs are an integral part of the ESCB and shall act in accordance with the guidelines and instructions of the ECB; and (iv) in order to conduct their operation, the ECB and the NCBs may open accounts for credit institutions, public entities and other market participants, accept assets as collateral, and conduct credit operations—according to the general principles laid down by the ECB—with credit institutions and other market participants, with lending being based on adequate collateral.

Council Regulation No. 974 of May 3, 1998, provides for the euro to be the unit of account for the ECB and the NCBs of the Member States which participate in the European Monetary Union. Following the decision of the Council of the European Union of May 3, 1998, the Italian Republic has adopted the euro as its currency.

⁴ Protocol annexed to the Treaty on European Union signed in Maastricht on February 7, 1992 and ratified by the Italian Republic in Law 454/1992. The protocol amends the Treaty of Rome of March 25, 1957.

Legislative Decree No. 43 of March 10, 1998 incorporated the provisions of the Community law concerning the ESCB into the Italian laws. The decree provides that:

- Banca d'Italia (BI), the central bank of the Italian Republic, is an integral part of the ESCB; it shall perform the tasks and functions attributed to it in compliance with the ESCB/ECB Statute; it shall pursue the objectives assigned to the ESCB and act in accordance with the guidelines and instructions issued by the ECB;
- with a view to pursuing the objectives and carrying out the tasks of the ESCB, the BI
 may take all the actions and carry out all the operations permitted by the Statute of
 the ESCB;
- the Governor of the BI shall define the interest rate on interest-bearing accounts held with the BI in accordance with the powers provided for in the Maastricht Treaty and the ESCB/ECB Statute:
- assets eligible to be posted at the BI as collateral against operations carried out in
 performing the tasks entrusted to the ESCB are defined according to the provisions
 adopted in applying the ESCB/ECB Statute; and
- the tasks attributed to the BI's Directorate concerning the definition of the terms and conditions of the BI's operations must be carried out in conformity with the ESCB/ECB Statute and with the implementing provisions adopted by the ECB.

The amendments made to the Statute of the BI (Royal Decree No. 1067 of June 11, 1936), in incorporating the provisions contained in the above-mentioned Decree, did not modify the independence already conferred upon the BI by the Italian laws, including the possibility of performing banking functions and carrying out transactions with market participants.

As far as cross-border credit transfers are concerned, Legislative Decree No. 253 of July 28, 2000, transposing Directive 97/5/CE, governs credit transfers up to €50,000. At present, no further specific legislation governing the electronic processing of payments is in place in Italy.

1.2 Other provisions of the Italian laws

The provisions of the Civil Code are important as general provisions of individual legal institutions concerning the payment system. Examples include the provisions governing contracts and pecuniary obligations and those governing novation and bilateral clearing.

Legislative Decree No. 210 of April 12, 2001, transposing the EU Settlement Finality Directive (98/26/EC), provides for the finality of orders related to both interbank payments and securities transactions entered into or settled through designated settlement systems (including therefore BIREL) on the day on which insolvency procedures are initiated. The same decree also provides for the finality of multilateral clearing balances on the same day. Under this Decree, BIREL, BI-COMP, Express II, LDT and the CCG systems have been designated.

⁵ Legislative Decree No. 210 of April 12, 2001 sets forth the types of insolvency procedures in Italy: (i) compulsory administrative liquidation; (ii) bankruptcy; and (iii) the suspension of payments and the return of assets to third parties (see Articles 74, 77.2 and 107.6 of the 1993 Banking Law, Article 56.3 of the 1998 Consolidated Law on Financial Intermediation, and any other provisions of Italian laws or, if applicable, of the laws of an EU or non-EU country providing for the suspension or cancellation of payments and the return of assets to third parties).

Special importance attaches to this decree because it ends the application to designated payment and settlement systems of the so-called zero-hour rule for transactions or the clearing effected later than 00.00 hours of the day on which insolvency procedures are initiated with respect to a participant in the systems concerned. This decree also protects the collateral pledged by the insolvent institution to the system operator or the central bank, as a system operator or a liquidity provider, from the effects of the insolvency procedure, so that the system operator or the central bank can realize this collateral immediately. This eliminates the credit risk borne by the system operator or by the central bank and, in addition, enormously shortens the time needed for the system operator or the BI to satisfy its claims arising from defaults on intraday credits granted. In addition, provision is made for the use of central bank collateralized credit lines in the event of solvency problems that threaten the participant's ability to "close" the payment chain, thus warding off a domino effect. Finally, the decree provides for the applicable law in the event of insolvency by a system participant to be the law governing the system.

The 1993 Banking Law (BL) and the 1998 Consolidated Law on Financial

Intermediation (CLFI) govern crisis situations involving credit institutions and investment firms and the related suspension of payments. Examples include the suspension of payments by the above mentioned subjects provided for during the extraordinary administration in view of the creditors' protection (article 74 of 1993 BL and article 56 of the 1998 CLFI) or stemming from the compulsory administrative liquidation. In the latter case, pursuant to Articles 83 of the 1993 BL and 57 of the 1998 CLFI, the suspension of payments starts from the day of installation of the liquidator and, in any case, from the third day following the date of issue of the compulsory administrative liquidation decree.

1.3 Provisions specifically governing the BIREL system

The Governing Council of the ECB has drawn up guidelines for the TARGET system to be applied by the NCBs of the Member States which have adopted the euro.

Guideline ECB/2001/3 of April 26, 2001⁶ defines TARGET as the *Trans-European Automated Real-time Gross settlement Express Transfer* system for the euro; it is composed of the domestic RTGS systems, the ECB payment mechanism and the Interlinking system. Annex 1 to the Guideline lists the real-time gross settlement systems which are part of TARGET, including the "Sistema di regolamento lordo BIREL."

The Guideline also contains specific provisions concerning: (i) minimum common features of national RTGS systems; (ii) interlinking, (iii) security provisions; (iv) audit rules; (v) the direction, management and control of TARGET; (vi) central banks' responsibilities in the event of unforeseeable circumstances; and (vii) the settlement of disputes between NCBs and the ECB. The minimum requirements common to all domestic RTGS systems concern: access criteria, the currency unit, pricing rules, the calendar and timetable of operation, the rules governing payments, intraday credit, and the TARGET reimbursement scheme.

Within the framework of the TARGET Guideline, the BI has defined the specific provisions governing the areas left to its discretion. In this respect, a specific BIREL membership agreement, to be signed by market participants complying with access criteria, was drafted by the BI.

This agreement—which is generally brought into force through an exchange of contract-letters

⁶ See Official Journal of the European Community, L. 140 of May 24, 2001 (2001/401/EC).

—consists of an application form, a BIREL membership agreement, and a Guide for participants. Through the application form the applicant confirms, inter alia, its acceptance of the BIREL membership agreement, and any future amendments to that agreement. The agreement lays down the main rules of the system. It consists of a set of provisions and several annexes. The provisions govern in particular the following aspects:

- the irrevocability and finality of payments, reimbursement in the event of malfunctioning, communications between participants and the BI, withdrawal, suspension and exclusion from BIREL, cancellation of the agreement;
- the reserve account and its use in case of co-management; and
- the BI's responsibilities for cross-border transactions as well as for contingency situations; the participants' waiver of the right to resort to legal clearing; the specific law applicable to the agreement and the competent court in the event of disputes.

Annexes to the Agreement include the "General terms of reference for legal opinions for foreign participants in large-value payment systems—Capacity Opinion and Country Opinion," the application form, and the explanation of the TARGET reimbursement scheme. The "Guide for participants" contains BIREL detailed rules and provisions governing the administrative and technical aspects of the system with the aim of providing information to participants.

1.4 Jurisdictional conflicts

The system's well founded legal basis under all relevant jurisdictions is an important requirement, since access to BIREL is also available to foreign participants.

In Italy jurisdictional conflicts are governed by: (i) the "provisions on the general law" contained in the Civil Code; (ii) the "Rome Agreement" (Convenzione di Roma) of June 19, 1980 governing the law applicable to contractual obligations, and Law No. 218 of May 31, 1995 (reform of the Italian legal framework governing the international commercial law).

As regards bankruptcy issues, the following should be pointed out:

- under the **Legislative Decree No. 210/2001** mentioned above, should insolvency procedures be initiated with respect to a BIREL participant, the rights and obligations stemming from, or related to, its participation are governed by the Italian laws;
- the 1993 BL and the 1998 CLFI provide that:
 - o until May 5, 2004—final date within which the EU Directive 2001/24/EC of April 4, 2001 must be transposed into the Italian laws—where the competent authorities have revoked the authorization of EC banks to do business, the Italian branches of the bank may be subject to compulsory administrative liquidation pursuant to the provisions of the Italian laws insofar as they are compatible (article 95 of the 1993 BL). An identical provision applies to EU investment firms (article 58 of the 1998 CLFI);
 - o branches of non-EU banks and of investment firms shall be subject to the provisions of the Italian laws insofar as they are compatible.

⁷ Agreement ratified by Italy in Law No. 975 of December 18, 1984.

Against this background, the contractual provisions mentioned above provide that the laws applicable to each agreement are the laws of Italy, as agreed by both parties, the relevant jurisdiction is Italy and the competent court is Rome.

Such provisions are supplemented by the obligation for those participants that have their legal headquarters abroad to supply to the BI a Capacity Opinion and a Country Opinion, drafted by qualified legal counsel in their home countries. The Capacity Opinion covers the applicant's capacity to enter into and carry out its obligations deriving from participation in BIREL (as laid out in its corporate by-laws, for instance), and the Country Opinion covers relevant aspects of the country's legislation (specifically, bankruptcy law). Such legal opinions are intended to demonstrate that foreign participants' home country legislation (especially the bankruptcy law) does not conflict with the system rules and regulations. The opinions are required to be updated and resubmitted to the BI every two years.

Assessment

Broadly Observed

Comments

BIREL will fully observe Principle 1 when:

- BI has, by agreement with the ECB, obtained satisfactory Capacity Opinions and Country Opinions in respect of the 14 BIREL participants that are incorporated outside the EEA, or has taken steps to exclude from participation in BIREL and in New BIREL any of those banks from whom satisfactory Opinions are not obtained; and
- A Decree has been issued to ensure the legal validity of electronic instructions for payments to be made in BIREL and New BIREL, even in the event of fraudulent activities in the sending participant.

It should be noted that there are some inconsistencies in the application of the requirement for a Capacity Opinion and a Country Opinion from any participant that is incorporated outside Italy. These inconsistencies create some uncertainty about the finality and irrevocability of all payments through BIREL.

Following the incorporation of the EU Settlement Finality Directive into the national laws of every EU member state, the ECB Governing Council decided to "grandfather" from the application of this requirement <u>all</u> the institutions that were participating in the TARGET RTGS systems, including BIREL, on January 1, 2001, no matter in which country they were incorporated. The ECB also decided that <u>all</u> applications received after that date to participate in any TARGET RTGS system on a cross-border basis must comply with the requirement.

As a result of those decisions, a recently-established branch in Italy of a bank incorporated in France – an EU country whose laws incorporate the provisions of the Settlement Finality Directive, and are therefore fully consistent with the application of Italian law to payments through BIREL – is being required to supply these Opinions every 2 years; but 14 longer-established BIREL participants that are branches of institutions incorporated outside the EU will not have to supply such opinions now or, apparently, at any time in the future. Those participants are incorporated in Brazil (1 bank), China (1 bank), Iran (1 bank), Japan (2 banks), Jordan (1 bank), Slovenia (1 bank), the UAE (1 bank) and the U.S. (6 banks). Given the uncertainties arising from the wording, and the application, of the insolvency and other laws in some of those countries, in the absence of authoritative Country Opinions the BI is not at present in a position to judge whether the participation in BIREL or in New BIREL of any of these banks creates a legal risk to the finality and irrevocability of their payments through the system. A potential legal risk creates the potential for a credit risk or even a systemic risk.

It is clear that some of those 14 banks make and receive only a small number of payments through BIREL, and may choose, on cost grounds, to become Indirect Participants in New BIREL, in which case the legal risks, and the consequential credit and liquidity risks, will arise

between the Indirect Participants and their appointed Direct Participants, and will not directly impact New BIREL. It is however likely that because of the size and the pattern of their business others of the 14 banks will wish to become Direct Participants in New BIREL. In that case the legal risks and the associated credit and liquidity risks will remain in the system—including the risk that the BI will, in the event of the insolvency of one of the banks, be unable to realize any collateral it has taken to secure an intraday overdraft granted to the failed bank.

This risk may appear more theoretical than real, on the argument that the BI will always be able to move very fast to realize the collateral (which will be on its account in Monte Titoli); but the credit risk to the BI will remain that a liquidator in the failed bank's country of origin will be able to go to court, in its home country or in Italy, to require restitution of the collateral. Although under Italian law the BI and the rules of BIREL appear to be in an impregnable position, in the absence of the Capacity Opinions and Country Opinions it is not possible to reach any conclusion as to how the liquidator would fare under the law of the failed bank's country of origin; what is likely is that the BI would be involved in a protracted and costly legal battle, with a possibly uncertain outcome. The outcome may be more uncertain in the absence of the relevant Capacity Opinions. Moreover, since all payments made through BIREL by a bank are, under Italian law, final and irrevocable, any eventual requirement for restitution of collateral would impose a direct loss on the BI.

In the course of any discussions with the ECB on the topic of Country Opinions, the BI might wish to consider whether it could require a formal application from each institution that wishes to become a Direct Participant in New BIREL; a condition of such a formal application, from an institution incorporated outside the EU, could be the submission of a Country Opinion. If it were to do so, the BI would of course need to be prepared to reject an application from any institution which was unable or unwilling, to supply a satisfactory Opinion.

The BI should seek, if appropriate through discussions with the ECB, a means to avoid the need for any participants in New BIREL that are incorporated in other EU countries and that joined BIREL after January 1, 2001 to obtain fresh Opinions every two years. There would be no need for such Opinions to be submitted (at considerable expense) if each EU NCB could supply to the ECB a Counsel's Opinion on the implementation in its country of the Settlement Finality Directive, and could undertake to supply in the future information on any relevant case law or amendments to their national laws.

Looking to the future, no immediate changes are envisaged in the legal framework of the Italian payment system. In the long-run the implementation in Italian law of some EU legislation (i.e., Collateral Directive, Winding-up Directive, and Insolvency Regulation) may bring changes to the provisions governing both payments and the operation of the system.

The BIREL Membership agreement and the Guide for users have been modified to be consistent with New BIREL which was launched, with a progressive roll-out, in June 2003. The necessary changes will basically concern the administrative and technical aspects and will have no impact on the provisions governing the minimum common features of national RTGS systems which are fully consistent with the TARGET Guideline.

In respect of the electronic processing of payments, Article 12 of the Presidential Decree No. 445 of December 28, 2000 (Consolidated Law on Administrative Documentation) provides for the electronic transfer of payments between private citizens and/or public administrations to be carried out according to the technical rules which are to be defined by a Decree of the President of the Council of Ministers. Such a decree has not yet been issued, though a draft is apparently being circulated for discussion; it will cover the technical rules that specify standards aimed at ensuring a uniform level of security, authenticity and integrity for the electronic processing of payments. In the absence of that decree, and of the relevant

technical rules, there may be scope for the authenticity, and thus the validity, of a payment instruction sent by a BIREL participant to be challenged—for instance on the grounds that it was originated fraudulently, and as such cannot represent a binding obligation of the sending participant. To defeat such a challenge, the BI would hope to be able to rely on case law and on guidance that has been issued by the Supreme Court, but the outcome would apparently not be certain. Since all payments made by a bank through BIREL are final and irrevocable under Italian law, any court decision upholding that challenge would impose a direct loss on the BI.

This issue is potentially important in the context of increasing use of straight-through-processing (STP) of payments in the BI and in the BIREL participants, and the use of DvP mechanisms for the settlement of transactions in the financial markets.

It should also be noted that:

- the laws and regulations relating to BIREL have not yet been tested in any courts; and
- the BIREL membership agreement and related documents were drafted by the BI.
 They have not been submitted to outside legal scrutiny regarding the enforceability of the legal framework of the system.

CP II - The system's rules and procedures should enable participants to have a clear understanding of the system's impact on each of the financial risks they incur through participation in it.

Description

2.1 Disclosure of rules and procedures

The BI uses a variety of channels to ensure that participants understand the characteristics of BIREL, the ways in which they are required to handle their payments through the system and the risks they incur in so doing. The BIREL Membership Agreement, which prospective participants have to sign before they can obtain access to the system, clearly sets out the access criteria, the responsibilities of participants and the sharing of responsibilities among participants and between them and the BI. The Agreement also prescribes the operating procedures of the system and its specific features, including the definitions of irrevocability and of finality, the ability to make use of compulsory monetary reserves during the day, the provision by the BI of intraday liquidity against collateral, and the queue management facilities, such as the twice-daily optimization process to release end-of-day blocked payments and the mechanism to resolve imminent gridlock situations. The Membership Agreement is supplemented by the Guide for Participants, which is available on the BI's website and is regularly updated.

The Membership Agreement and Guide also describe the degree of discretion available to the BI to take any necessary decisions for the operation of BIREL and for amending its rules and procedures. In particular, the Guide and article 18 of the Membership Agreement clearly state that the BI may modify, at any time and without prior notice, the operating hours and procedures for the queues, as well as the automatic resubmission mechanism, and take any other action made necessary by exceptional circumstances. Furthermore, article 32 of the Membership Agreement provides that the BI reserves the right to amend the rules of the Agreement, subsequently providing participants with information in writing. The rationale behind this latter provision is to permit the BI to amend the system rules and procedures outside the banking cooperation fora, in which these changes are usually decided, when deemed urgent.

The Payment System Department (PSD) of the BI monitors the daily flow of transactions in BIREL by means of comprehensive screen-based displays, and is thus in a position to observe any problems, whether system-wide or at one participant. Both the PSD and the Electronic Data Processing (EDP) Department (which operates the primary and back-up processing sites

for BIREL) provide support to banks to solve those problems or to discuss any other issues concerning the use of and access to BIREL procedures. The PSD can also monitor and warn participants about any problems in the TARGET interlinking component or in any other national RTGS system in TARGET.

High-level strategic discussions about BIREL as the Italian component of TARGET take place between the BI and the banking community in the Committee for Payment and Settlement Services (CASPER), which is chaired by the Director-General of the Italian Bankers' Association (ABI). More detailed discussions on technical and operational issues, including changes to the rules and procedures of BIREL, are held in the TARGET User Group (TUG) and in specialized working groups.

The BI uses several channels for prompt communication of full information on the characteristics of BIREL and TARGET. These include speeches by members of the Directorate and other BI spokespersons and a range of publications (the *Economic Bulletin*, the *Annual Report* and other material).⁸ Both the system rules and its operational features are published on the BI's website, as well as through written communications to BIREL participants.⁹

2.2 The impact of rules and procedures on financial risks in BIREL

Participants in BIREL are clearly in a position to understand that the payments they enter into the system will be immediately settled (and therefore will become final) when funds are available in either their reserve sub-account or their overdraft sub-account. If funds are not available to make a payment, they are queued in a waiting list. Queued payments may generate credit and liquidity risks to be borne by the beneficiary participant if it releases the funds to a third party before the payment has been settled in BIREL. For that reason under BIREL rules participants are not allowed to have detailed information on their queued incoming payments.

In addition, again for prudential reasons and to avoid offering incentives for opportunistic behavior, the BI does not provide BIREL intermediaries with exact information concerning the optimization mechanisms that are available to be activated on an exceptional basis in the case of gridlock. However, the availability of this facility in the system is known to participants. The Guide and the contract clauses governing banks' reserve accounts provide that the BI may "modify, at any time and without notice, the operating hours and procedures for the queues and the automatic resubmission mechanism and [may] take any other action made necessary by exceptional circumstances." In such an event, the BI advises the system participants either through SWIFT or the National Interbank Network (RNI) or through its branch network.

Assessment

Comments

Observed

The existing BIREL system is currently undergoing far-reaching changes that have been defined in close cooperation with the banking community. In relation to the implementation of New BIREL, which is now being progressively rolled out for full implementation by the end

⁸ BI and ABI, *Pagamenti interbancari: una riforma per la sicurezza e l'efficienza*, Bancaria Editrice, Rome, 1994; Banca d'Italia, *I pagamenti interbancari in Italia: linee di riforma - il progetto dopo la consultazione con il sistema bancario*, Rome, 1995; *Notiziario BIREL* (5 issues) published periodically during the implementation of BIREL and its adaptation to TARGET (English version, *BIREL Newsletter*).

⁹ BI, Sistema di regolamento lordo BIREL e operazioni su iniziativa delle controparti, November 1998; Banca d'Italia, La Guida all'accesso remoto ai Servizi di regolamento in contante e in titoli della Banca d'Italia, 2001 edition; the paper is also available on www.bancaditalia.it; Banca d'Italia, Sistema di regolamento lordo BIREL/TARGET - Guida per gli aderenti.

of 2003, new system rules have been drafted and issued.

The features of New BIREL include changes designed to assist the participants in achieving a more efficient and economical management of their intraday liquidity. A "liquidity reserve" will permit participants to set aside funds from the system opening to ensure that they can meet their net debit positions arising from the cash leg of securities transactions handled by the new securities net settlement system (Express II) and can make other urgent payments, including any arising in the daily Continuous Linked Settlement (CLS). New interactive functions will permit participants to modify the priority of a queued payment and/or to cancel it from the queue; and a new optimization mechanism will facilitate the simultaneous bilateral settlement of individual payments in participants' queues, after verifying settlement account balances. The "Interact" function in SWIFTNet will enable participants to monitor movements on their accounts in real time throughout the day.

An important change in the functionality of New BIREL will enable every direct and every indirect active participant to obtain more information than is currently available about all payments addressed to it that are awaiting funds in the queues of every other participant. In BIREL a participant can only know the aggregate of all queued payments addressed to itself, but cannot identify the sending participant nor (if it is a third-party payment) the intended beneficiary. In New BIREL the participant will in addition be able to see the value of each queued payment that is addressed to itself, the priority, the type of payment and the counterparty. The "business information"—i.e., the beneficiary customer in the case of a customer credit transfer and the beneficiary indirect bank, if any, in the case of an interbank transfer—will be available only after the actual settlement on the RTGS account. If this—albeit limited—information is misused by the prospective recipients to justify their making out—payments, or giving their customers access to the funds, before the payments have been settled in New BIREL, a series of credit and liquidity exposures can be created, but they are outside the scope of this assessment.

Indirect Participants in New BIREL (of which there may be as many as 600) will incur a credit risk and a liquidity risk in respect of payments received for their account by their appointed Direct Participants. These risks will arise between the Indirect and Direct Participants under their bilateral contractual relationships (which are essentially those arising in any domestic correspondent banking arrangement). The risks are in practice likely to be negligible since most indirect participants will use their parent bank as their settlement bank; in addition they will probably hold centralized accounts at the BI which will permit them to settle a limited number of payments without the interposition of their direct participants. Since however the BI is implicitly discouraging many smaller banks from taking up Direct Participant status in New BIREL, it should ensure that those banks are fully aware of and fully understand the risks they will incur through the use of another bank in handling their New BIREL receipts. (This is discussed further under Principle IX below.)

CP III - The system should have clearly defined procedures for the management of credit risks and liquidity risks, which specify the respective responsibilities of the system operator and the participants and which provide appropriate incentives to manage and contain those risks.

Description

3.1 Management of credit risk

Credit risk between the participants in BIREL arises only when one participant makes irrevocable out-payments on the basis of payments intended for its account that are blocked in the queues of other participants. Although this risk falls initially on the bilateral relationship, it could have a systemic impact if it was still in the sending participant's queue at the end of the day, and had to be cancelled, leaving the prospective beneficiary with a liquidity shortfall. In

practice, so far such cancellations in BIREL have been very few in number and virtually negligible in amount. ¹⁰ Finally, with a view to discouraging the use of funds still in the queues, the beneficiaries of such payments are not provided with detailed information (either on their own individual incoming payments or on their counterparties) but only on the aggregate amount of incoming payments.

The BI grants intraday credit to BIREL participants only against collateral. After the incorporation of the Settlement Finality Directive into Italian law, by Legislative Decree No. 210 of April 12, 2001, should a participant fail or be closed before repaying the daylight overdraft, the BI has the right immediately to realize the collateral. Whether the BI would feel politically in a position to do so, especially if the failed participant was incorporated in Italy with the BI as its home country supervisor, is a matter for judgment at the time.

The question of whether, in respect of collateral pledged by a failed participant that is incorporated in a country outside the EU, there could be a conflict between the BI's right under Italian law to the collateral and the right of the home country liquidator to seize the collateral for the benefit of all creditors is discussed under CP I above. Any possibility that the home country law would prevail would represent a credit risk for the BI.

3.2 Management of liquidity risk

BIREL minimizes the risk that a shortage of intraday liquidity will cause payments to be blocked in the queues of one or more participants, with the possibility of ensuing gridlock, through a number of mechanisms and instruments. These are designed to make the use of the system more flexible and to increase the smoothness of the flow of funds during the day. These features of BIREL include:

- intraday liquidity provided by the BI free of charge, and limited only by the amount of suitable securities the borrowing participant is prepared to hold in Monte Titoli available as collateral (which is subject to a haircut on the market value);
- the ability for participants to mobilize 100 percent of their compulsory monetary reserves over the reserve maintenance period, in line with the ECB regulation;¹¹
- a queuing mechanism, whereby any payment temporarily without cover is automatically resubmitted, according to a predetermined order of priority,¹²

¹⁰ A queued payment in BIREL is irrevocable from the moment that it is added to the sending participant's queue. It can thereafter be revoked during the day only if a mistake has been made, and then only with the agreement of the intended beneficiary participant: both participants have to send a fax to the BI requesting the withdrawal of the instruction from the queue. If the payment is still in the queue at the end of the day, and cannot be settled through the use of the optimization mechanism, it is cancelled by the system.

¹¹ ECB Regulation 2818/98 of December 1, 1998 on the application of compulsory reserve requirements as subsequently amended.

¹² In particular, *high priority* for the balances stemming from ancillary systems (such as BI-COMP) or the transactions carried out with the Eurosystem (such as monetary policy operations); *medium priority* for the transactions executed on the Italian screen-based market for interbank deposits (e-MID) and *ordinary priority* for all the other transactions. Within this order of priorities, payments are automatically submitted for settlement on a First-In First-Out (FIFO) basis.

- the optimization of queued transactions, which is if necessary performed twice daily, in order to permit settlement of the greatest possible number of queued transactions before cancellation;¹³
- the gridlock resolution mechanism; and
- the provision of real-time information to participants on payments settled and queued and on account balances.

In addition, the BIREL operational day is marked by six cut-off times in order to avoid any concentration of payments towards the end of the day. The times are as follows:

- 07:00 (opening of the system): settlement of CLS payments and the balances stemming from the net securities settlement system Express II (which will be operational by the end of 2003);
- 12:00 noon: settlement of the multilateral balances stemming from the domestic retail clearing system (BI-COMP);
- 12:30: settlement of the cash leg originated by the securities net settlement procedure (Liquidazione dei titoli, which will be superceded by Express II from the end of 2003);
- 17:00: time limit for entering customer payments;
- 18:00: time limit for carrying out interbank transactions; and
- 18:30: time limit for repaying intraday liquidity.

The effectiveness of these features is shown by the fact that in 2002 the intraday liquidity obtained by BIREL participants from the BI, by way of collateralized overdrafts, amounted on average to only some 3 percent of the value of payments through the system and 19.6 percent of securities deposited at the BI as collateral, ¹⁴ while payments were blocked in the pending queues of the sending participants for an average of only 30 to 40 seconds. Payments in the queues of some small banks do, however, on occasions remain blocked for up to 3 hours.

If the BIREL participants required additional intraday liquidity, they should in general have no difficulties. Although the Italian banking system is currently relatively liquid, the participants held on average in the first 4 months of 2003 eligible securities in Monte Titoli to a nominal value equivalent to 86 percent of the average of their daily out-payments through BIREL in the same period, on top of their compulsory monetary reserves equivalent to 14 percent of out-payments (see Table 1 above). Thus although the risk of gridlock remains a theoretical possibility, it is currently unlikely, and in fact has never been experienced since BIREL went live in 1997.

If however gridlock were to threaten, or to occur, the BI can activate a multilateral netting procedure for queued payments, after verifying that net debtors have sufficient balances on

¹³ At the cut-off times of 17:00 and 18:00 a First-Available First-Out (FAFO) mechanism is automatically activated, if that is necessary to minimize the volume of still unsettled payments. In practice this mechanism has been used very infrequently since 1997.

¹⁴ See Figure 2 in Appendix

their settlement accounts. Should one or more intermediaries lack sufficient funds to cover their netting balances, the BI can also: (i) ask them to cancel some of their queued payments; (ii) cancel some payments at its own initiative, as provided for in Article 18 of the membership agreement; and/or (iii) refinance the illiquid participants.

In terms of the liquidity risk to the BI and of the potential impact on the ECB's monetary policy, under the TARGET Guideline if a credit institution fails to reimburse a daylight overdraft at the end of the operating day, overnight credit is automatically granted through the marginal lending facility. The fact that this is charged at the highest rate within the interest rate corridor serves to dissuade banks from failing to repay the intraday credit.

Intraday credit may also be granted to a nonbanking financial institution on condition that the advance is formally guaranteed by a credit institution. A nonbanking financial institution can also have access to intraday credit even if not guaranteed by a credit institution. In this event, the BI may define operational limits to the credit to be granted to a nonbanking financial institution or ask it for an earlier reimbursement (before the end of the operating day). If the intraday credit is not repaid, the nonbanking financial institution is charged with a penalty which varies according to the number of times such an institution failed to reimburse in the last 12 months.

Assessment

Observed

Comments

Substantial additional functionality will be available in New BIREL, to enable each participant to manage its liquidity more effectively. A "liquidity reserve" will permit participants to set aside funds to meet their net debit positions arising from the cash leg of securities transactions handled by the new securities settlement system (Express II) and for other urgent payments, including any arising in the daily CLS settlement. Each participant will be able to set the priority of its queued payments waiting to settle, and can modify that priority at any time, and can cancel queued payments. In addition, at the start of 2004 a new intraday liquidity optimization mechanism will be introduced. It will operate on a "one-to-many" bilateral basis, matching the payment entered by a single bank with its incoming payments pending in the queue of its settlement counterparty.

In order to facilitate the settlement of Express II transactions at 07:00 each morning, any BIREL participant that is in a net debit position and wishes to obtain intraday liquidity from the BI to cover that payment will be able to pledge the securities it is acquiring in Express II as collateral, under a new "self-collateralization" procedure. This may however be legally impossible for those participants which act as securities custodians for clients such as collective investment institutions, including clients that are established outside the EU. In the absence of legislation on this point those participants will require the explicit consent of their clients before securities in their beneficial ownership can be pledged by the custodian to the BI

Participants in New BIREL will be able to use the new SWIFT Net Interact service to get realtime information on the state of their BI accounts, and will no longer be advised by the BI automatically of every account movement. The only exception concerns payment instructions not directly entered by participants (such as payments stemming from monetary policy operations and the multilateral balances of ancillary systems); in this event a notification message will be automatically sent to the debited/credited account holder.

Participants in New BIREL will also be able to obtain information on individual incoming

payments pending in the queues of other participants, although queued payments may be revoked by the sending participant. 15 There is therefore a potential credit and liquidity risk if the intended participant anticipates the final receipt of its queued incoming payments.

It is expected that the number of Direct Participants in New BIREL will fall sharply from the 660 participants in BIREL to only around 120. The remaining credit institutions in Italy will have to effect their BIREL payments and receipts through "Banking Group Settlement Agents" or large "Direct Participants," with the associated credit and liquidity risks. A large number of transactions (albeit of probably low aggregate value) will then be settled in commercial bank money rather than central bank money. This represents a reversal of the trends in recent years, and of the explicit aims of the BI in implementing BIREL in 1997, in response to changes in the market and to developments in the economy. The outcome could be one or more private sector "quasi-payment systems," of potential systemic importance in the future. (This is discussed further under Principle IX below).

CP IV - The system should provide prompt final settlement on the day of value, preferably during the day

and at a minimum at the end of the day. Description As a real-time gross settlement system, BIREL provides real-time, immediate finality. Under the provisions of Legislative Decree No 210 of April 12, 2001, which implemented the EU Settlement Finality Directive, and under the rules of the system, a payment order from a participant which meets the necessary authentication and other requirements and has therefore been accepted by the system is irrevocable from the moment that it is added to the queue of that participant's pending payments. 16 The payment is <u>final</u>, as between the sending participant and a third party such as a liquidator, and binding on third parties once it has been debited to the sending participant's account. A domestic payment in BIREL is final for the beneficiary participant at virtually the same moment, since the funds are immediately credited to its account with the BI. For a cross-border payment in TARGET the payment will be final for the beneficiary bank only when the funds are credited to its account with its NCB. Assessment Observed In New BIREL a payment from one participant to another that is waiting in a pending queue Comments

will be revocable up until the moment that it is debited to the account of the sending participant; from that moment it will be both final and irrevocable; the only exceptions are those payments stemming from the ancillary systems which will be final and irrevocable from the moment that they are accepted by the RTGS queuing mechanism. ¹⁷ This scenario is consistent with one of the basic objectives of the new system, which is designed to give the participants greater control over the management of their own liquidity, and to permit them to prioritize or to re-order, or even to cancel, the payments waiting in their own out-going queues. In addition, in the new system participants will no longer be notified automatically of each individual payment that has been settled; the participants will be able to monitor transactions across their BI accounts in real time through the SWIFT Interact functionality.

¹⁵ A payment in a participant's queue that represents a net obligation arising from one of the ancillary systems settling through New BIREL (BI-COMP, Express II, and CGA) may not be revoked by that participant.

¹⁶ A payment can thereafter be revoked only if a mistake has been made, and then only with the agreement of the intended beneficiary participant: both participants have to send a fax to the BI requesting the withdrawal of the instruction from the sending participant's queue. If the payment is still in the queue at the end of the day, and cannot be settled through the use of the optimization mechanism, it is cancelled by the system.

¹⁷ See footnote 15.

CP V - A system in which multilateral netting takes place should, at a minimum, be capable of ensuring
the timely completion of daily settlements in the event of an inability to settle by the participant with the
largest single settlement obligation.

Description	
Assessment	This Principle is not applicable to an RTGS system.
Comments	

CP VI – Assets used for settlement should preferably be a claim on the central bank; where other assets are used, they should carry little or no credit risk and little or no liquidity risk.

	Settlement within BIREL is in central bank money, by debiting the sending participant's
Description	settlement account with the BI and crediting the beneficiary participant's settlement account.
Assessment	Observed
Comments	The application of this Principle to a payment made by or made to an Indirect Participant in
	New BIREL is discussed under Principle IX below.

CP VII - The system should ensure a high degree of security and operational reliability and should have contingency arrangements for timely completion of daily processing.

Description

Security and reliability requirements applicable to BIREL are set by the BI within the framework of the TARGET Security Requirements set by the ECB for BIREL and for every other national component of TARGET. To assess compliance with the TARGET security requirements, an annual risk assessment is performed based on the ECB guidelines. The results of the risk analysis exercise are also reviewed and taken into consideration during the periodic auditing on behalf of the ECB which is carried out through the Internal Audit Department of the BI, which reports directly to the BI's Directorate. However, in carrying out this work the BI's Internal Audit Department has no statutory authority to go outside the BI; it has therefore to rely on what it is told by SIA and other key service providers for BIREL.

7.1 Operational reliability

The TARGET security requirements define the maximum interruption times and outage frequency in the various TARGET components. Each component should not have a service interruption in excess of one hour per "normal failure" (maximum one per month) and four hours per "disaster failure" (maximum one per year). A minimum availability of 99.4 percent has been set by the ECB level for all the TARGET components.

The average monthly availability of BIREL for 2001 was 99.87 percent; in 2002 it was 99.92 percent. The availability level fell back slightly in 2003, with component failures in January and February and a software problem in March associated with the installation of New BIREL, but still remained above the 99.4 percent ESCB requirement. This compares favorably with other national RTGS systems in TARGET.¹⁸

The operational service level in BIREL is regularly checked. The relevant criteria are publicly disclosed in the Guide for users and in the Contingency arrangements documentation available on the BI's website. With reference to the security policies, at present the BI has not set compulsory rules for participants. In practice, the checking activity is carried out by means of close and continuous monitoring of the operation of the system, and of the involvement of any participant in a system problem. Through that monitoring process the BI is in a position to intervene promptly in any critical situations (for example, an excessive delay in the settlement of payments, domestic or cross-border), and also to assist in any contingency procedures. If necessary, the operational Division informs the Division of the Payment System Department in charge of the control of TARGET that, in turn, can notify critical problems to the Banking

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¹⁸ See Figure 3 in Appendix.

Supervision Departments (BSD).

The capacity of BIREL is around 120,000 payments per day, compared to the current average use of 50,000 transactions a day.

System changes are tested and documented against a rigorous checking list, which has to be signed off by the responsible IT department and the test participants. Tests are planned and carried out together with experts from private sector data processing consultants.

7.2 Business Continuity

From the outset BIREL has operated in a high availability processing environment. The technological infrastructure consists of a primary site at the BI's facility in Vermicino near Rome (Centro Donato Menichella) and a secondary site located at the Largo Bastia facility in Rome, where the data are updated on a synchronous basis to guarantee perfect alignment between the two facilities. A dual technical infrastructure is also in place for the link to SWIFT. In both cases, the resumption of activity will involve no loss of data. The two data processing sites are about 20 km apart, which mitigates the effects of natural disasters. ¹⁹ The data centers have been designed with recovery features including redundant power supply and communication facilities (back-up facilities). The PSD and the EDP Departments have entered into a formal Service Level Agreement to define the communication protocol in case of emergency situations and the allocation of responsibilities for incident management. The EDP Department has accepted responsibility for "technical availability." There are two arrangements in place: a local recovery procedure, when technical problems only affect an individual computer at the primary site, and a disaster recovery procedure, when technical problems affect either the network or all the computers at the primary site. In the latter case additional system capacity is obtained by activating extra CPU power.

From November 2000 participants have been able to use the SWIFT message transmission mechanism as an alternative to the domestic network (RNI). The BI has provided, free of charge, an automatic RNI/SWIFT conversion service to help the banks. This service will be withdrawn when New BIREL has been fully implemented, although the RNI network will remain available for some time thereafter as an emergency communication system.

Recovery tests concerning the various components of the local system (although an exception was made for the RNI–RTGS communication component) are carried out each year with the participation of staff members belonging to both the business area and IT Department. The results of such tests have been satisfactory in terms of timely resumption of operations. The substantial exhaustiveness and completeness of the tests carried out have also been verified. As to the frequency, it has to be noted that: (i) the recovery of the High Availability mainframe environment (RTGS and Interlinking components) is tested on an yearly basis, given the fact that it encompasses the involvement of external TARGET participants and the processing of payments; (ii) the CBT (Interlinking Communication Component) recovery is half-yearly performed; and (iii) the SWIFT "fall-back connectivity" is tested quarterly. Every month an operational test of the back-up facilities, provided to the business area managing the TARGET system and located in the secondary site, is also carried out. The procedures covering the recourse to the Business Continuity Plan are described: (i) at a high level, in an ad hoc Service Agreement—updated in November 2001 to take into account organizational and procedural changes that had occurred since March 1999—signed by the Heads of the relevant

¹⁹ The implications of a large-scale disaster having a wide-spread impact on the entire region of Rome are being considered in the BCP discussions.

Departments; and (ii) at a lower and more detailed level, in special documents defining the sequence and contents of the actions to be taken. Such documents are updated whenever necessary and refined when performing the tests. The technical documentation, needed for the activation of the mainframe and CBT disaster recovery plans, is available at both the workstations of the staff involved and the disaster recovery site. The list of the IT and operational areas (4 sub-units of the IT Center, operating systems support, application programmers, telecommunication, IT security, special unit charged with monitoring European procedures, in addition to the business unit responsible for the TARGET operational management) needed to perform the activities related to the Business Continuity Plan scenarios is complete and appropriate with respect to the tasks assigned.

As to the mainframe, on the primary and disaster recovery sites the system software and the application programs are continuously kept aligned and compatible, via the "synchronous remote copy" mechanism activated on the storage media, although the secondary CBT is used for short periods of time to complete the tests (in a "cluster" configuration) of the new application and system software versions/releases. At the BI a periodic rotation of the operations between the primary and secondary sites is not currently carried out but the possibility that staff from one of the three shifts at the primary site may work from the secondary site under normal circumstances is currently under study.

Following the September 11, 2001 terrorist attacks, the BI (like other central banks) has been working with the BIREL participants and key service providers to develop and refine its Business Continuity Plan and contingency planning. It has set up a new Working Group on Business Continuity Plan Scenarios, with a view to seeing what would be required for the 6 largest banks to be able to guarantee their business continuity in any of their functions (the objectives for the remainder of the banks would be less demanding). The BI is looking for the resulting projects to be defined and completed by the end of 2004. One possibility, at least for some banks, might be a shared back-up processing facility.

7.3 Contingency

In addition to secondary site requirements, specific procedures—the responsibility of the PSD—have been defined for the processing of cross-border critical payments should BIREL, the network or other components suffer a failure that cannot be quickly resolved through the back-up facilities (e.g., software error). For the contingency procedures to be activated, it is necessary to have visibility of banks' account balances, access to the SWIFT network or (for TARGET payments) to a pre-arranged correspondent NCB in the EU.

There are two different service levels of solutions for cross-border payments, in accordance with the TARGET Guidelines requirements. The Interlinking Contingency Plan is aimed at ensuring the settlement of up to 100 incoming and outgoing payments per hour, when access to SWIFT is possible. The Co.Ca. (Correspondent Current Accounts) Contingency allows for the settlement of 20 payment instructions per hour (within Co.Ca. a special procedure is envisaged for the quick settlement of CLS payments) when the Interlinking System is unavailable. These service levels are seen as adequate for the prompt settlement of Italian time-critical payments, even in the event of simultaneous failure of both BI's processing sites. The selection criteria for the payments to be processed in contingency situations are based on contacts with the counterparts and decisions to be taken by the Settlement Manager. An agreement on the emergency handling of TARGET cross-border payments is in place between the BI and the ABI, under which the systemically important ("critical" and "time-critical") payments should be processed through the most appropriate contingency procedure. Priority is given therefore to payments of systemic relevance: Euro 1 balances, monetary policy operations, large-value funds transfers and CLS payments. Moreover, under TARGET emergency procedures, eleven EU countries have chosen the BI (and, therefore, BIREL) as

correspondent NCB in the event of default of their TARGET component. (For its part, the BI has selected the Deutsche Bundesbank and the Oestereichische Nationalbank as its default correspondents.)

Emergency procedures to provide the same level of service for domestic payments as for cross-border payments are available through the BI's branch network.

Finally, all manual duties related to the contingency activities are tested with all the people involved in daily operations, in order to have them trained and to verify the correctness of the procedures. All the relevant documentation in this respect is approved by, and regularly tested with, credit institutions.

7.4 Information security

The BIREL system is fully compliant with the TARGET security requirements for data security. The BI's Organization Department is responsible for the BI's security policy, including IT security. The Department has drawn up the Risk Evaluation Criteria for BIREL, in the context of the TARGET security requirements. These criteria are then applied by the PSD, as the responsible operating department, in classifying the various risks that relate to or arise from the system. The final decision on all IT projects is taken by the BI's EDP Steering Committee, which can decide to accept a specific risk rather than devote resources to attempting to control it or eliminate it.

In order to satisfy the requirements of the BI's security policy in respect of data integrity, authorization and authentication, BIREL applies logical access controls, message authentication codes (MAC), line encryption, and end-of-day balancing. For authorization and authentication of transactions entered by internal users, the use of user id/workstation match and technically enforced dual verification are planned. Physical access to sensitive areas is also controlled by card access. Finally, all the critical events occurring in the system are logged for auditing purposes.

In order to provide accountability for the messages sent to BIREL by participants, whenever a payment instruction is initiated the date, the sending institution code, the transaction type and the transaction reference number are used to calculate a unique key which flags with the message throughout the entire processing chain. Any transaction that generates a duplicate key is automatically rejected by the system. After the processing, the application provides credit institutions with real-time notification of the payment execution with all the relevant information.

As regards the non repudiation of the payment messages, the system relies on the message logging and retrieval functionalities provided by the domestic network and SWIFT.

Assessment

Observed

Comments

Although we have concluded that BIREL observes this Principle, and that New BIREL is likely to do so also, we consider the BI should seek to clarify and to respond to the following comments (in the context of the work that it has in hand with banks and other intermediaries, with settlement service providers and with service providers, in response to the events of September 11, 2001):

Regarding operational reliability, around 100 of the 120 active participants in BIREL
have out-sourced to one of a very limited set of service providers' extensive elements
of their payment system functionality. Though the mission was not able to examine
this issue in depth, it would appear to create a concentration risk, and therefore an
operational risk, for BIREL should any significant volume of business be dependent

on the robustness and reliability of one of these providers, or of their telecommunication links. The same issue will arise for New BIREL, although it is perhaps unlikely that any of the largest Direct Participants will out-source substantial elements of their payment system functionality.

- A similar concentration risk, and therefore operational risk, may be created for BIREL and New BIREL through the consolidation of the Italian banking system, which leads to a relatively small number of participants acting as "Group Settlement Agents" in the RTGS system for all the banks in their corporate group, or for banks in the same category (such as mutual banks and co-operative banks). Similarly the design of New BIREL envisages that only 100 to 150 institutions will be Direct Participants in the system, with some of them providing settlement services to a total of up to 650 Indirect Participants. In both instances the arrangements will be based on a specialized form of domestic correspondent banking relationships; but again there could be problems for BIREL and for New BIREL should any significant volume of business be dependent on the robustness and reliability of one of these "settlement agents" or Direct Participants, or of their telecommunication links.
- On business continuity, there appears to have been a consistent effort to reach formal and monitorable Service Level Agreements (SLAs) between the BI and certain service providers critical to BIREL, defining both the normal levels of service that they are required to deliver and the contingency arrangements that can be implemented in case of need. It is not clear to us, however, whether either the BI or each individual participant in BIREL (and, prospectively, in New BIREL) has signed such SLAs with every single service provider, including Telecom Italia and other communication providers as well as SWIFT, SIA, the electricity companies and all the other entities on whom the end-to-end performance of the RTGS system depends.
- In New BIREL, the transmission of payment messages between the BI and the
 participants will be effected through SWIFT's Y-Copy system; in addition, the new
 SWIFT Interact and Browse functions provide different management and information
 services. The RNI, the original carrier for domestic payment messages in BIREL, will
 remain as an additional fall-back system.

The simultaneous implementation of several major IT projects, including SWIFTNet, New BIREL, Express II (for securities settlement) and Step 2 (the new EU-wide Automated Clearing House), has clearly had resource implications for many participants. However the timetable, and much of the work, has been dictated by the introduction of SWIFTNet, which is mandatory for all members of SWIFT; the marginal resource load of New BIREL and of Express II (both of them largely under the control of BI) has been relatively slight.

CP VIII - The system should provide a means of making payments, which is practical for its users and efficient for the economy.

Description

In considering the extent to which BIREL observes this Principle, it is helpful to start by considering what can, in the context of the Italian banking and payment systems, be understood to be "efficient for the economy." Perhaps the most relevant definition, contained in the draft BI Regulation on Payment Systems, of May 2003, is that efficiency means "the property of systems that provide services that are rapid, economical and practical for users and advantageous for the financial markets and the economy." That definition brings together the key requirements, for any RTGS system, of speed, cost, practicality and user relevance; all of these, but in particular user relevance, are dynamic rather than static concepts. The trade-off between efficiency and risk reduction, that is inherent in the design of any RTGS system, is implicit in the concept of user relevance.

Speed

BIREL is clearly efficient in terms of speed – taken to mean end-to-end processing times – within Italy, for a domestic payment, or from the sending participant, for a cross-border payment, until the point where the payment message is accepted by the TARGET Interlinking Component (the time taken for the message to be carried from that point to the crediting of the beneficiary credit institution's account in another NCB is completely outside the control of BIREL). The average time spent by a payment in the pending queue of the sending BIREL participant was, in 2002, some 40 seconds, and the normal time between NCBs for a cross-border payment sent through BIREL was about 2 minutes, against the maximum time of 30 minutes set by the TARGET guidelines. Ample additional liquidity is currently available, in the form of un-pledged securities in the participants' accounts in Monte Titoli should queue times or end-to-end times begin to lengthen unacceptably.

Cost

In the early 1990s the pricing policy followed by the BI for its settlement systems was directed at encouraging settlement of interbank payments in central bank money. After the successful launch of BIREL, the BI's pricing policy turned more stringent with a view to meeting, in the long run, the objective of full cost recovery. This objective, which is set out in the TARGET Guideline, is aimed at avoiding competitive pressures both between the national components within TARGET and between the system and the private sector.

The current BIREL fee structure, introduced in 1999 with the start of Stage III of EMU, is based on: (i) an annual membership fee of \in 1,500; and (ii) a transaction fee for each domestic payment amounting to \in 0.50 for electronic payments. The fees for cross-border payments are those established at the European level for TARGET and decrease with the volume of transactions entered by each participant (\in 1.75 for the first 100 transactions per month, \in 1.00 for the next 900 and \in 0.80 for subsequent ones). In 2002 the average fee for cross-border payments was \in 0.94.

The annual membership fee creates an incentive for banks to open RTGS accounts with the BI only if there is a real need to make full use of the services provided through these accounts. The transaction fee for both domestic and cross-border payments is paid by the sender. In setting the fees for domestic transactions, and for the domestic leg of cross-border transactions, the BI initially used the Activity Based Costing (ABC) methodology to measure the operational costs of BIREL; its income from BIREL charges covered 90 percent to 95 percent of its operating costs. The BI has now revised its cost methodology to comply with the principles established in the Common Cost Methodology for TARGET, adopted by the ECB Governing Council in November 2001. This seeks to measure the full cost of the system, i.e., the operational, development and overhead costs. The aim thereafter is to recover from fees and charges 80 percent to 85 percent of these costs, with the balance being regarded as a positive externality in terms of the public good contribution provided for the economy by an extremely safe, secure and reliable payment system.

A new fee structure has been introduced for New BIREL. The new pricing scheme, which is intended to benefit the most active participants, is based on forecasts of the number of Direct Participants, and assumes that they will handle the same volume of traffic in New BIREL as they do in BIREL. The scale of fees will be reviewed after 12 months' experience of the new

²⁰ A special NCB study group of academics and central bankers is now looking in more detail at this public good concept.

system. The key features are: (i) a "digressive fee" for domestic payments, in line with that already applied to cross-border transactions; (ii) an ad-hoc fee for the additional services offered through the Internet technology (SWIFTNet); and (iii) an ad-hoc fee for services outside the RTGS system, which do not need participation in New BIREL. (The latter services, such as cash withdrawals and deposits, and payments on behalf of the State Treasury are settled through banks' concentration accounts outside BIREL.) An annual fee will be charged, related to the type of participation chosen by the users (direct or indirect).

The "digressive fee" is reduced as the number of payments sent by a participant increases. For up to 1,000 payments a month the fee is 0.75 per payment, falling to only 0.15 per payment when the participant sends more than 50,000 a month. The annual fee for a Direct Participant is 0.00, and for an Indirect Participant 0.00. Participants can also settle transactions through the BI branch network, paying a fee of 0.00 for each payment. The lower fee level for electronic payments compared with that for paper-based transactions is aimed at maximizing straight-through-processing in the end-to-end transmission of payment messages in New BIREL. Some large and active banks find the cost of putting all their cross-border payments through TARGET too high, and therefore prefer (particularly for payments that are not time-critical) to make use of their established bilateral correspondent relationships with commercial banks in other EU countries. Smaller banks, on the other hand, find that use of TARGET helps to avoid excessive—and expensive—use of correspondent banks. The reduction in New BIREL costs, reflecting in part the mandatory use of SWIFTNet as the primary transmission mechanism, is likely to be welcomed by all banks. BI's New BIREL charges are claimed to be lower than the average fees applied in the EU.

Practicality

BIREL shows a good level of "practicality for the users" thanks to the facilities provided: the queuing mechanism for payments temporarily without cover, the possibility of extending the management of their accounts to another participant (co-management of accounts), 21 the real-time transfer of the securities held in the participants' own centralized accounts (Monte Titoli) to the pledged-out accounts at the BI.

BIREL messages are carried on the RNI and (since November 2000) SWIFT, with a SWIFT-RNI conversion service provided free of charge by the BI. The availability of an extra, alternative transmission channel provides additional flexibility and functionality, especially for the largest banks.

New BIREL will enhance the practicality of the system by: (i) providing users with a wider range of facilities (the possibility of setting up a liquidity reserve for urgent payments, of changing the priority and canceling payments in the queue, and the use of the optimization mechanism for the settlement of payments); and (ii) allowing a broader interactivity through the use of SWIFTNet.

User Relevance

Since the mid-eighties, the strategy followed by the BI has been aimed at encouraging the settlement of payments in central bank money, thereby reducing the use of reciprocal banks' correspondent accounts. The policy objectives have been to increase both the security and efficiency of the payment system and the effectiveness of monetary policy, with a view to

²¹ In effect one participant out-sources to another the management of the flow of its payments through its RTGS account with BI.

financial stability and the efficiency of the real economy, through improving the security of the system against systemic risk; increasing the technical reliability of the system; and enhancing its efficiency and the level of service for users. The achievement of these objectives requires that the benefits of BIREL—including in terms of execution times, certainty as to the date funds become available to the beneficiary, irrevocability of transfers and costs—are passed on by the system participants to their customers and to the whole economy.

To achieve this, the design of BIREL and, more recently, of New BIREL has been based on a "bottom-up" approach, involving extensive consultation with the banks and other prospective participants in the system so as to ensure that, within the necessary resource constraints, both systems meet the needs of their users. In this process, the role of the BI has been to act as a catalyst, helping to clarify the requirements of the system's users.

The BI's payment system objectives are disclosed to the users and the public in specific documents (including the BIREL Newsletters, and speeches by the BI's managers), at ad-hoc meetings with the banking community and through the BI website. The charges levied by banks on their customers for the full range of their payment services and channels are required by law to be displayed in every bank branch.

As regards dynamic efficiency, i.e., the system adaptability, BIREL appears to have demonstrated its flexibility. Since its start-up, the system has undergone a number of changes mainly directed at adapting it to the launch of Stage III of EMU (and more in particular to the modified operational framework for the conduct of the single monetary policy), to the century date change in 2000, and to the annual TARGET releases. These changes were implemented without major impacts in terms of costs and operational functionality.

Assessment

Comments

Observed

A key objective of the New BIREL design and functionality is to enable participants to take on direct responsibility for managing their own payment flows, making full use of the SWIFTNet interact services; this will help them to manage more efficiently their own intraday liquidity needs, so minimizing the stock of securities that they will need to hold to pledge to the BI.

CP IX - The system should have objective and publicly disclosed criteria for participation, which permit fair and open access.

Description

9.1 Access to BIREL

The criteria for participation in BIREL are those laid down by the ECB for access to TARGET. Adopted in all fifteen national components and designed for broad participation, these criteria distinguish between access to the settlement procedures and access to the intraday credit necessary to guarantee the smooth operation of the gross settlement system. Settlement procedures are open, in substance, to credit institutions, investment firms, the Post Office, and organizations providing clearing or settlement services. Also eligible for TARGET access are Treasury ministries or equivalent bodies of EU governments if they are active in the money markets and public sector agencies authorized to hold accounts for customers.

Access to intraday credit is unconditional for banks (subject to the provision of acceptable securities as collateral). For all the other participants it is subject to specific requirements. In particular, nonbanking financial intermediaries may obtain collateralized intraday liquidity either against a guarantee from a credit institution or subject to operational limits or other requirements set by the BI.

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²² European Central Bank, TARGET Guideline.

The criteria for access to the BIREL settlement procedures are published in the guide for participants, and they are specified in the membership agreement. They are designed to permit access to all intermediaries whose payment system activities give them an interest in participation.

No minimum payment volume criterion is imposed to restrict participation in BIREL, nor does the BI impose any "financial soundness" or similar requirements as to the quality of an applicant. The underlying presumption appears to be that any institution that is authorized or licensed by the BI's BSD or by a banking supervisor in another EU member state is by definition financially sound. In fact, the PSD relies on the timely flow of information from the BSD as to any changes in the existing situation concerning a BIREL participant, including suspension or exclusion from activity (voluntary or because of the opening of an insolvency proceeding).

It should however be noted that any application (received after January 1, 2001) to participate in BIREL from any bank or other institution that is incorporated outside Italy is required to provide two satisfactory legal documents – a Capacity Opinion and a Country Opinion – to demonstrate that the applicant's home country legislation (especially the bankruptcy law) does not conflict with the system rules and regulations. The Capacity Opinion covers the applicant's capacity to enter into and carry out its obligations deriving from participation in BIREL (as laid out in its corporate by-laws, for instance), and the Country Opinion covers relevant aspects of the country's legislation (specifically, bankruptcy law). The opinions are required to be updated and resubmitted to the BI every two years. (This topic is further discussed under CP I above.)

Banks incorporated and established in other EU member states can access BIREL, and maintain an RTGS account with the BI, on a remote (cross-border) basis without an actual branch in Italy. There are currently 4 such banks.

9.2 Exclusion and suspension

Comparable criteria govern withdrawal, exclusion and suspension from BIREL. These events are explicitly contemplated in the contracts between the BI and participants (the membership agreement and related documents), and the provisions are consistent with the criteria laid down by the TARGET Guideline. Suspension or exclusion may be decided in the event of failure to maintain membership requirements, infringement of the BI rules or conduct that hinders the smooth operation of the system. Withdrawal from the membership agreement is possible for participants and for the BI with advance notice of at least ten days. The membership agreement is terminated, finally, in the event that the participant is subject to compulsory administrative liquidation or any other procedure producing similar effects.

The BI retains the right to exclude a participant from BIREL and/or from access to intraday liquidity for prudential reasons, without specifying in advance the various circumstances under which this may occur and without disclosing to the market the reasons behind the actual exclusion.

Assessment

Observed.

Comments

The participation structure

It is expected that the number of Direct Participants in New BIREL will fall sharply from the current 660 participants in BIREL to only around 150. There are expected to be around 20 "Indirect Active Participants," which will be able to send their payment instructions into the system, and to manage their own queues, but their liquidity will be controlled by their appointed Direct Participants, which will also set caps on their bilateral credit and liquidity exposures. "Indirect Passive Participants," of which there may be 600 or more, will be

effectively ordinary corporate customers of their appointed Direct Participants, distinguished only by the fact that if they are above the de minimis exemption level they have to maintain compulsory monetary reserves with the BI, either through a "concentration" account that is outside New BIREL or indirectly via another bank without opening an account with the BI.

Many of the Direct/Indirect Participant relationships will be based on arms-length commercial contracts, with a small number of Direct Participants actively competing for the business. There are however already in BIREL, and will continue to be in New BIREL, a small set of "Group Settlement Agents", which act on behalf of a sectoral or a corporate group—for instance mutual banks, cooperative banks or banks linked through a shareholding structure as a result of the consolidation within the banking system in recent years. These agents handle treasury and liquidity operations for the banks in their groups, as well as making and receiving RTGS payments on their behalf through BIREL. All the banks in these groups (again subject to their size) have to maintain their monetary reserves with the BI.

It is expected that Direct Participants will settle 80 percent to 90 percent by volume of payments in New BIREL. Any BIREL participant that wishes to be a Direct Participant in New BIREL will have to be a member or user of SWIFT: only about 200 banks in Italy are now in SWIFT.

The result of this two-tiered structure in New BIREL is likely to be that a large number of transactions (albeit of probably low aggregate value) will then be settled in commercial bank money rather than central bank money—such as payments between 2 mutual banks in a sectoral group, or between 2 Indirect Participant customers of the same Direct Participant. This represents a reversal of the trends in recent years, and of the explicit aims of the BI in implementing BIREL in 1997, in response to changes in the market and to developments in the economy. The outcome could be one or more private sector "quasi-payment systems," of potential systemic importance in the future. The credit and liquidity risks arising between the tiers are effectively the same as in any conventional bilateral correspondent banking relationship, though there are uncertainties about the timing of the finality and irrevocability of payments initiated by an Indirect Participant but input into New BIREL by its Direct Participant. The concentration risks created by the tiered structure, and the potential consequential operational risks and vulnerabilities for BIREL and New BIREL, are discussed in CP VII above.

It is important that the BI, through its PSD and Payment System Oversight Office (PSOO), keeps a close watch on developments in the 2-tier system, as a part of the infrastructure of BIREL and New BIREL, so as to be alert to any changes which might adversely impact the integrity or the efficiency of BIREL and of the payment system as a whole.

Access to intraday credit

The BI may wish to clarify that its lending to nonbanking financial intermediaries is always secured against adequate collateral, provided by a credit institution or otherwise.

CP X – The system's governance arrangements should be effective, accountable and transparent.

Description

BIREL's governance falls within the overall governance structure of the BI. The BI has broad policy-making powers, including the definition of rules and policies concerning the Italian payment system.

In order to exercise its overall responsibilities, the BI is structured around functional areas. The control of BIREL falls within the overall responsibility of the Area for Payment Systems and Treasury Operations. This Area is composed, inter alia, of the PSD and the PSOO. The PSD manages BIREL (as well as the net settlement system BI-COMP). It is responsible for ensuring that those systems comply with international standards and best practices, and for reviewing their features and functioning. The management of systems and their control are assigned to different divisions within the PSD and, therefore, to different staff members.

The PSD prepares for the BI's Board a daily report on the main events/data of BIREL, including statistics on the overall domestic and cross-border payment flows, in terms of both value and volume. With particular regard to cross-border transactions it includes data on the balances broken down according to the domestic TARGET components, Euro1 and CLS. As to domestic payments, it reports on transactions broken down according to state treasury operations, interbank transactions and balances stemming from ancillary systems such as BI-COMP. The daily report also contains details of incidents occurring in the TARGET component in each EU country, together with a brief description of any operational problems and stops occurred in the course of the last 30 days.

The PSOO is responsible for overseeing private-sector payment systems, should they be established, and quasi-systems set up within the mutual banks or co-operative banks movements where there is a central institution acting on behalf of all its members. The PSOO also oversees matters relating to payment instruments, and to elements of the national payment infrastructure such as the ATM networks.

The PSD monitors the activities and functioning of each Direct Participant in BIREL, and the quality of the services it supplies to its customers, including other banks. The PSOO monitors developments in domestic correspondent banking arrangements, such as between Direct and Indirect Participants, to see their impact on BIREL and on the payment systems as a whole. It is also looking closely at the Group Settlement Agents, and has for instance required the restructuring of ICCREA, the settlement agent for 450 cooperative banks.

The BIREL-TARGET control function in PSD is subject to internal audit from a double perspective that is in line with the policy on the TARGET oversight agreed by the ECB Governing Council. Thus BI's Internal Audit Department reports on the activities and the management of BIREL to the BI's Directorate, while at the same time it is part of the monitoring framework created at ESCB level for TARGET. A requirement of that framework is that the periodic controls on all the TARGET components, and subsequent reports to the top management of the ECB and the relevant NCBs, must be carried out by an entity external to the function responsible for managing the procedures. To this end, the TARGET Internal Auditors Committee, which includes members of the BI Audit Department, has been entrusted with: (i) conducting periodic tests of the efficiency and security of the system, and of the functionality and reliability of the technological infrastructure; (ii) monitoring the risk-control procedures that the EU central banks are required to adopt in managing the national systems; and (iii) monitoring the actual conduct of the responsible structures.

The BI's approach to ensuring transparency and accountability in its management of BIREL is consistent with its general policy of publishing material to its customers, including banks and the BIREL participants, and to the community at large. The BI's publications, including

the Annual Report and its monthly and quarterly reports and statistical bulletins, together with speeches and press releases, provide information on legislative and regulatory changes, the BI's institutional activity and the activities of the international financial institutions. Within this framework, the BI also reports on the structures and performance of the systems it manages and on the organizational configuration of the different activities it carries out in the payment system.

Publicly disclosed information on BIREL relates to different aspects of the system. First of all, the rules and provisions governing the administrative, operational and technical aspects of BIREL are contained in the Guide for users as well as in the Membership agreement. Data related to the system operation—such as the number of participants, payment flows, queued payments and average queuing times—are published in the BI's Annual Report and in the sixmonthly Supplement to the Payment System Statistical Bulletin. This latter information is also available on the BI website. Information on specific topics, such as planned changes or reforms, is published in a variety of fora.

Much of the statistical material available to the BI on the activities and transactions in BIREL (the bulk of which is published by the BI) is also available directly to the participants, since the banks send to ABI copies (duly anonymized) of the statistical returns they submit to the BI; the ABI then collate and circulate these to their members.

In designing and implementing BIREL and New BIREL, the BI has worked in close coordination with the banking community, drawing on a variety of working groups, specialized meetings and questionnaires. Its principal interlocutor in this regard is ABI, which has set up two key committees. The ABI's Committee for Payment and Settlement Services (CASPER) is responsible, at strategic level, for policy issues relating to BIREL, and therefore New BIREL, as the current and future national RTGS systems and as the Italian components of TARGET. The Committee is chaired by the Director General of ABI, and consists of the financial managers of a number of banks chosen to be representative of the whole system. The BI is represented in this group by the Central Manager for Payment Systems, the Head of the PSD and the Head of the PSOO. The Committee meetings are usually held four or five times per year, and whenever necessary.

The TARGET User Group (TUG) deals with technical, operational and information issues relating to BIREL and to the plans for New BIREL. In each EU country there is a national TARGET User Group, in which banks and NCBs discuss proposals on business needs and specific operational features to develop. The main issues are discussed at the EU level within the European TARGET User Group, which is composed of the representatives of each national TUG. This Group meets with the relevant ESCB committee (PSSC) which, in turn, can also submit proposals for the development of new functions which are then discussed within the TUG, both at the EU and national level. The TUG is composed of managers and officials of the BI and delegates (e.g., cash-flow managers, IT experts) of a number of banks representatives of the whole banking community. Participation in the group meetings is also open, on a case-by-case basis, to representatives of SIA (Interbank Company for Automation), SWIFT, Monte Titoli (the Italian central securities depository) and e-Mid (the Italian screenbased Interbank Deposit Market).

Assessment

Observed.

Comments

The management of BIREL by the BI, through its PSD and EDP Department, the monitoring of the daily flows through the system, and the management of any operational problems or liquidity blockages, are highly professional.

The BI may however wish to consider whether, in light of potential technological and structural developments in banking and financial sectors and systems, there could in the future be a case for establishing a clearer and visible separation between its functions relating

Central Bank l	to the supply of the systemically important payment system in Italy and its oversight functions in respect of that system. Both these functions are at present located in the Area for Payment Systems and Treasury Operations; in particular all aspects of BIREL are concentrated in the PSD, including its daily operation, its development and its compliance with international standards and best practice, while the PSOO has no responsibility for any aspects of BIREL. A clear separation of functions, in which the PSOO takes on responsibilities for the policy oversight of BIREL, and reports separately to the appropriate senior management level of the BI, would be consistent with the practice in other central banks, and would ensure an open and transparent environment in which public sector and private sector payment systems can compete within the euro area. Responsibilities in applying the CPSIPS
	A – The central bank should define clearly its payment system objectives and should disclose and major policies with respect to systemically important payment systems.
Description	The payment system objectives of the BI are to promote security and efficiency of the payment mechanism and to ensure the provision of payment services to all banks on a non-discriminatory basis, so as to safeguard competition in the payment services market. Since the first major reform of the payment system in the mid-eighties, the BI has regularly disclosed the objectives pursued, the policies followed, and the instruments used for the transformation (and continual adaptation) of the Italian payment system in the direction of greater efficiency and security by publishing ad-hoc documents. More recently, in two documents the BI has explained the approaches and instruments with which it acts in the payment system, defining the guiding principles, methods and areas of interest in the payment system. In this context, the BI seeks to act as a catalyst, helping to clarify the requirements of the system's users and their consistency with its own policy objectives. The actions taken and specific policies concerning the services managed by the BI have been disclosed in the publications mentioned in the previous sections.
Assessment	Observed
Comments	
Responsibility principles.	B – The central bank should ensure that the systems it operates comply with the core
Description	Compliance of the systemically important payment systems managed by the BI with the Core Principles was analyzed in the previous sections of this report.
Assessment	Observed
Comments	

Description

not operate and it should have the ability to carry out this oversight.

Responsibility C – The central bank should oversee observance with the core principles by systems it does

Since there are currently no privately operated systemically important payment systems in

²³ In addition to the publications mentioned in footnote 8, see Banca d'Italia, White Paper on the Payment System in Italy, Rome, 1988; Banca d'Italia, Libro bianco sui pagamenti interbancari - Linee strategiche, motivazione e implicazioni della riforma dei sistemi di compensazione e di regolamento interbancari, Roma, 1994; Banca d'Italia, Institutional Issues, Interbank payments in Italy: lines of reform, Rome, April 1995.

²⁴ Banca d'Italia, White Paper on Payment System Oversight. Guiding principles for performance of the function, Rome, May 1997; Banca d'Italia, White Paper on Payment System Oversight. Objectives, Methods, Areas of Interest, Rome, November 1999. The latter White Paper is also available on www.bancaditalia.it.

	Italy, there is no need for the BI to carry out such oversight. If the BI's legal monopoly to manage the clearing and settlement systems were to cease and intermediaries' opinion turned in favor of the implementation of private large-value payment systems, the BI would be able to exercise the oversight function thanks to the powers conferred on it by Article 146 of the 1993 BL.
Assessment	Not applicable
Comments	It is suggested in the discussion of Principle IX above that there are certain quasi-correspondent banking arrangements through which smaller credit institutions, and specialized institutions such as mutual banks or co-operative banks, can obtain access to BIREL and New BIREL in order to be able to make and receive payments in the RTGS system. If and when the flows through these arrangements increase substantially, they may begin to take on the character (if not the legal form) of privately operated payment systems handling transfers of central bank money; in that case they would justify close attention from the BI, in terms of this Responsibility. In the meantime it is important that the BI's PSD and PSOO carefully monitor developments in the 2-tier structure, and in particular in the activities and the functioning of the Group Settlement Agents and of the active Direct Participants, as part of the infrastructure that could cause operational problems for BIREL, and potential credit and liquidity problems for its participants.
	D – The central bank, in promoting payment system safety and efficiency through the core uld cooperate with other central banks and with any other relevant domestic or foreign

Description

The BI is a member of two key international fora—the BIS Committee on Payment and Settlement Systems (CPSS) at the G-10 level and the ECB Payment and Settlement Systems Committee (PSSC) at the EU level. The CPSS is charged with the analysis of issues relating to payment systems and the definition of general policies in the form of minimum requirements and best practices. The PSSC is the forum where the central banks of the European Union and the ECB draft the ESCB policy for intervention in the EU-wide payment system.

In respect of BIREL (and, prospectively, New BIREL) cooperation by the BI with other control authorities divides into cooperation with those in other countries, mainly banking supervisors and that with other Italian authorities.

For more effective exchange of information among central banks and supervisors, the ECB Governing Council has recently approved a Memorandum of Understanding (MoU) laying down principles for the exchange of information of mutual concern between central banks and supervisory authorities. Information exchange concerns three critical phases in the operation of a payment system: the moment of access, current operations, and management of a crisis involving an intermediary participating in one or more systems. The MoU has replaced that of 1994, which was narrower in scope and in commitment.

In Italy, cooperation with domestic control authorities is mainly a problem of internal coordination within the BI, which combines the functions of banking and financial supervision, payment system oversight, market surveillance and antitrust authority for the credit sector. The performance of this complex of duties, which involves a number of different functions of the BI, is facilitated by the sharing of a common data base, the BI's lengthy experience in this sector, and ease of liaison between the various control areas, which is useful both at the time of access by an intermediary to the BI services and in the event of crisis of a participant. In case of difficulties, it is standard operating procedure for the Supervision Department responsible for Competition, Regulation and General Affairs to inform the PSD immediately of the possibility of liquidation, suspension of payments, or any other measures or events affecting the state of one or more intermediaries participating in the payment system. For its part the PSD periodically reports to the Supervisory Departments on the operations of intermediaries within the payment system and before any on-site inspections. In addition, the

supervisory authority for the stock exchange (Companies and Stock Exchange Commission -CONSOB) provides the BI with information on failures by stock exchange intermediaries. It should, however, be noted that the BI appears to have no structure for formal or informal cooperation, or for the exchange of confidential information, between the PSD and the central banks or the banking supervisors in the home countries of the 14 participants in BIREL that are incorporated in countries outside the EEA. The PSD may be able to make use for this purpose of links between the Banking Supervision Departments and the relevant home country authorities, providing that the applicable confidentiality rules provide gateways permitting information to be shared between the BI departments. Moreover, the flow of information with the overseas authorities may need to be two-way; observations of liquidity problems or poor treasury management by the Italian branch of a foreign bank may be useful to its home country supervisor. Broadly observed Assessment This responsibility will be fully observed when the BI has put in place arrangements for Comments cooperation and exchanges of information with the 7 central banks and banking supervisors in the non-EU countries concerned. This is all the more important given the legal questions, discussed under CP I, and in the absence of any Country Opinions relating to the assets and liabilities in Italy of the 14 banks concerned.

II. RECOMMENDED ACTIONS AND AUTHORITIES' RESPONSE TO THE ASSESSMENT

A. Recommended Actions

Table 3. Recommended Actions to Improve Observance of CPSS Core Principles and Central Bank Responsibilities in Applying the CPSIPS—BIREL

Reference principle	Recommended action
Legal foundation	The BI should, by agreement with the ECB, obtain satisfactory Capacity Opinions and Country Opinions in respect of the 14 BIREL participants that are incorporated outside the EEA, or should take steps to exclude from participation in BIREL and in New BIREL any of those banks from whom satisfactory Opinions are not obtained.
	In the course of any discussions with the ECB on this subject, the BI might wish to consider whether it could require a formal application from each institution that wishes to become a Direct Participant in New BIREL; a condition of such a formal application, from an institution incorporated outside the EU, could be the submission of a Country Opinion. If it were to do so, the BI would of course need to be prepared to reject an application from any institution which was unable or unwilling to supply a satisfactory Opinion.
	The BI should seek, if appropriate through discussions with the ECB, a means to avoid the need for any participants in New BIREL that are incorporated in other EU countries and that joined BIREL after January 1, 2001 to obtain fresh Opinions every 2 years. There would be no need for such Opinions to be submitted (at considerable expense) if each EU National Central Bank (NCB) could supply to the ECB a Counsel's Opinion on the implementation in its country of the Settlement Finality Directive, and could undertake to supply in the future information on any relevant case law or amendments to their national laws.
	The BI should seek to arrange that a Decree is issued covering the technical rules on the standards of security, authenticity and integrity for the electronic processing of instructions for payments to be made in BIREL and New BIREL.
Understanding and management of risks	The BI should seek to ensure that every bank that will become an Indirect Participant in New BIREL is fully aware of and fully understands the risks it will incur through the appointment of another bank as its Direct Participant in handling its New BIREL receipts.

Reference principle	Recommended action
Security and operational reliability, and contingency arrangements	The BI should (in the context of its work with the banking industry following the events of September 11, 2001) consider carefully the concentration risks, and the consequential operational risks and vulnerabilities that may be created for BIREL and New BIREL as a result of the out-sourcing of extensive elements of the payment system functionality of a large number of active participants to a very limited set of service providers. Similar risks arise, and need to be considered carefully, in respect of the use of "Group Settlement Agents," acting on behalf of members of a sectoral or corporate group of banks. The BI should clarify whether formal and monitorable Service Level Agreements have been signed between each participant in BIREL (and, prospectively, in New BIREL) and every single service provider on whom the end-to-end performance of the RTGS system depends.
Criteria for participation (CP IX) Central Bank Responsibility C	The BI, through its PSD and PSOO, should keep a close watch on developments in the 2-tier system for access, as a part of the infrastructure of BIREL and New BIREL, so as to be alert to any changes which might adversely impact the integrity or the efficiency of the system and of the payment systems as a whole.
Central Bank Responsibility D	The BI should put in place arrangements for cooperation and exchanges of information with the 7 central banks and banking supervisors of the BIREL participants that are incorporated in non-EU countries.

Table 4. Summary Observance of CPSS Core Principles and Central Bank Responsibilities in Applying the CPSIPS—BIREL

According to the second of	Principles grouped by assessment grade			
Assessment grade	Count	List		
Observed	8 + 2	CP 2, 3, 4, 6, 7, 8, 9, 10; Responsibilities A, B		
Broadly observed	1 + 1	CP 1; Responsibility D		
Partly observed	-			
Non-observed	-			
Not applicable	1 + 1	CP 5; Responsibility C		

B. Authorities' Response

24. The IMF visit was a valuable opportunity to have the design and the management of the Italy's main payment system reviewed by authoritative external experts; Banca d'Italia welcomed the constructive and cooperative approach taken by the IMF team throughout the mission. The review process highlighted the strengths of the Italian payment system BIREL and, at the same time, pointed out the areas where New BIREL is expected to have higher level of legal soundness, operational reliability, efficiency and practicality. However, Banca d'Italia does not fully agree with some arguments especially of a legal nature, that are behind the observations concerning Core Principle I and recommendation D. In any case, considering that these observations concern access to BIREL of branches of foreign banks located outside the European Economic Area (EEA), Banca d'Italia would like to inform that in New BIREL (fully in operation at the beginning of 2004) such intermediaries (except for the Italian branches of American banks) will gain access to the system as indirect participants, thus removing the potential legal risks currently detected. As a result, New BIREL will be fully compliant with both Core Principle I and recommendation D. Please find below the Bank's responses as to the individual recommendations.

Legal foundation

- 25. The first part of the recommendation concerns the need for foreign participants (from non-EEA country) to be assessed as to the potential risk of conflict of jurisdiction that their participation could introduce in the system in case of opening of an insolvency proceeding against those intermediaries.
- 26. The 14 participants mentioned in the recommendation have not been requested to provide legal opinions. In fact, following the decision made by the ECB Governing Council in March 2000 and the common interpretation given to the TARGET Guideline in force since January 2001, Banca d'Italia has grandfathered from the submission of the legal opinions all the institutions already participating in BIREL at that time, among which the 14 banks concerned.
- The Bank's decision is to be ascribed to the provisions set forth by the TARGET Guideline which refer to the requirement for any "applicants" to submit legal opinions. However, Banca d'Italia has assessed the likelihood that conflicts of jurisdiction may arise from such participation. It is worth mentioning that foreign institutions participating in BIREL gain access to the system as Italian branches. According to Article 95 of the 1993 Italian Banking Law these branches are subject to the "Administrative compulsory liquidation", i.e., the special bankruptcy proceeding applicable to banks according to the Italian Law. This measure is adopted by the Minister of the Treasury, acting on a proposal from Banca d'Italia, where exceptionally serious administrative irregularities or violations of laws, regulations or bylaws governing the bank's activity are found or exceptional serious capital losses are expected. On the basis of such a provision, following the opening of a bankruptcy proceeding on the failed bank in its home country, the Italian branch shall be subject to a parallel bankruptcy proceeding according to the Italian Law.

- 28. In addition, the transposition of the European Settlement Finality Directive into the Italian Law (Legislative Decree no. 210 of 12 April 2001) has contributed to the legal certainty associated with foreign participation in BIREL. In fact, according to Legislative Decree no. 210, in case of a participant's insolvency the rights and obligations arising from, or in connection with, the participation of that intermediary are determined by the law governing the system concerned.
- 29. Against this background, and on the basis of the analysis carried out by the Bank's Legal Department, the risk stemming from possible conflicts of jurisdictions borne by Banca d'Italia in relation to the participation in BIREL by foreign banks is more theoretical than real
- 30. In fact, the home country proceeding's liquidator in theory might go to the Italian court and claim the return of the collateral assuming that the intraday credit were granted following the opening of the home country proceeding; the same holds true for the payments assumed to be settled after the opening of the proceeding. The Italian court, however, would plausibly reject the claim on the basis of the Legislative Decree no. 210, according to which, as regards banks subject to compulsory administrative liquidation, the validity of transactions within BIREL must be assessed having regard to the timing of the opening of the bankruptcy proceeding in Italy.
- 31. The home country proceeding's liquidator might go to the home country court and obtain a favorable decision if the home country jurisdiction does not recognize the protection of finality within foreign payment systems and/or the legal effects of the foreign bankruptcy proceeding. However, this decision would be hardly enforceable in Italy since according to the Legislative Act no. 218 of May 31, 1995, foreign sentences are effective in Italy, among other things: (i) if the issuing court is competent according to the principles on jurisdiction in force in Italy and (ii) if such sentences are not against the "Italian public order."
- 32. In practice, these conditions would not probably be met. As regards the former, the jurisdiction—according to the Italian Law—would belong to Italian courts since the Italian Banking Law expressly provides for the opening of a compulsory administrative liquidation. As to the latter condition, the effectiveness of the sentence of the home country court would impair the protection of payment systems from the effect of insolvency proceedings, which is an objective pursued by the Italian legislator on the basis of Community Law. Such a legislation specifies, among other things, that in case of insolvency by a participant the rights and obligations relating to its participation in the system are regulated by the law governing the system; the payment orders entered into the system are valid and enforceable even after the opening of the insolvency proceeding, provided that the system is not or should not have been aware of the opening of the proceeding. The collateral provided by the failed participant to the system/central bank can be realized exclusively to the benefit of the collateral taker. With this in mind, the effectiveness of the sentence would most likely be against the "economic public order" which is included in the notion of "public order."

- 33. In conclusion, the legal risks stemming from foreign participation in BIREL seem theoretical. It is to be pointed out, however, that such a conclusion has never been so far tested in any courts.
- 34. Having said that, as Banca d'Italia's approach to the request of legal opinions to foreign participants has been determined by the rules governing TARGET, the Bank itself, with a letter of August 12, 2003, has requested the ECB to analyze the issue concerning the legal opinions and the grandfathering clause. As a follow up, the ECB has started an investigation among all national central banks to know (i) the way each national TARGET component has applied the TARGET Guideline and the inherent 'grandfathering clause,' and (ii) how frequently updates of Country and Capacity Opinions of foreign TARGET participants have been sought. Such stocktaking is aimed at ensuring a consistent approach within the Eurosystem and at assessing the need to amend the present TARGET Guideline, also taking into account that the Settlement Finality Directive has been transposed in all European legislations.
- 35. In any case, only three out of 14 foreign banks, namely Italian branches of American banks, are direct participants in New BIREL; the remaining non-EEA banks communicated their intention to participate indirectly through an Italian bank. As to the request of legal opinions to American banks, Banca d'Italia intends to wait for the finalization of the TARGET Guideline review, which is currently under examination at the ECB level. On the basis of the above considerations, it can be stated that the recommendations concerning BIREL are no longer applicable to New BIREL.
- 36. As regards the second part of the recommendation (issue of a Decree on the electronic processing of payment instructions), Article 12 of the Presidential Decree No. 445 of December 28, 2000 (*Consolidated Law on Administrative Documentation*) provides for the electronic transfer of payments between private citizens and/or public administrations to be carried out according to the technical rules which are to be defined by a Decree of the Prime Minister. The Decree will set out standards aiming at ensuring a uniform high level of security, authenticity, integrity for the electronic processing of payments.
- 37. Indeed, such a Decree has not yet been enacted. Banca d'Italia will draw the attention of the Ministry of the Economy to the need of proceeding with the issuance of the Act.
- 38. However, Banca d'Italia notes that: (i) the absence of the technical rules to be adopted by the Italian Prime Minister does not affect the validity of payment instructions within BIREL; and (ii) the technical rules already adopted in both BIREL and New BIREL are stringent enough to ensure high levels of security, authenticity and integrity in the processing of payment instructions within the system.
- 39. With regard to (i) Banca d'Italia notes that the above technical rules are not intended to specify the legal requirements for the validity of payment instructions. They will define standards. The legal requirements for the validity of electronic payment instructions have been already defined in the recent legislation which has considered the electronic document

signed by electronic signature as equivalent to written documents in giving evidence of the origin of the payment instruction. Before the introduction of such legislation case laws of the Italian Supreme Court reached the same conclusions.

- 40. The legal regime of evidence does not exclude that the assumed originator of a payment instruction may challenge the authenticity or the integrity of the instruction, for instance on the ground of fraud. However, the claimant would have to prove that the payment order was not authorized by him and that a fraud outside his own control was executed. On the contrary, if the fraud were executed within his own organization or made easier by negligence of the claimant and the payment order were sent according to the security and authenticity standards in place within the system, the payment order would be considered as valid and legally attributable to the claimant.
- 41. A liability of Banca d'Italia as settlement agent of the system might be invoked on valid grounds only if the fraud were executed outside the control of the claimant and the efficiency and adequacy of the security measures of the information system and its ability to ensure authenticity, integrity, traceability and confidentiality were challenged. Only if the information system were considered by a court as inadequate or a negligence of the Bank's staff were found and actions of recovery against the beneficiary of the invalid payment order were not successful Banca d'Italia might be sentenced to refund losses borne by the claimant. However, since an adequate level of security protection is in place (see item (ii) below), the liability of the Bank may be excluded on the basis of lack of negligence in setting up the information system for BIREL even if the fraud is executed outside the control of the claimant.
- 42. With regard to (ii), as recognized by the same assessment, New BIREL is based upon an adequate level of security, which is fully compliant with the TARGET security requirements for data security. As regards the security requirements for the electronic processing of payments already adopted by both BIREL and New BIREL, the following has to be noted. With a view to meeting the data integrity, authorization and authenticity requirements, all payment orders received from system participants or submitted by Banca d'Italia are processed in "close" networks (RNI-SWIFT, the Bank's internal network) which envisage specific security measures: logical access control, message authentication codes (MAC) and line encryption. With the launch of New BIREL and the following adoption of the SWIFNet network based on the TCP/IP transmission protocol, such measures have been enhanced. The new transmission mechanism has been built up attaching particular attention to integrated security aspects, notably: (a) the network devices are physically separate from the Bank's internal network; (b) an ad-hoc "managing network" is dedicated to the security control system; and (c) links with the "central processing systems" are realized through mainframe environments. An Intrusion Detection System controls links to the SWIFTNet and access points to the Bank's internal network detecting possible abnormal situations in the data processing flows. All security measures are redundant and duplicated in the Bank's two processing sites to allow for a comprehensive security control under both normal and exceptional (e.g., disaster recovery) circumstances.

43. The adequate level of security reached by New BIREL is confirmed by the fact that the technical rules to be issued by the Italian Prime Minister are not expected to introduce more stringent technical standards than those currently in place within the system.

Understanding and management of risks

- 44. According to the New BIREL Membership agreement, active indirect participants, in addition to direct ones, are requested to sign contract-letters governing participants' rights and obligations with regard to the system. The Membership agreement mentions the risks vis-à-vis the system incurred by indirect participants. The risks stemming from the bilateral relationships between direct participants and indirect participants (both active and passive) are not mentioned in the rules of the system. This is because Banca d'Italia considers these kinds of risk the responsibility only of the parties involved, as is the case with any correspondent banking relationships.
- 45. Banca d'Italia will be, in any case, available to supplement the Membership agreement with appropriate references to make indirect participants aware as to the risks they incur through the appointment of other banks (direct participants) to handle their New BIREL receipts.

Security and operational reliability, and contingency arrangements

- 46. At present in Italy the number of providers of both public utilities and software is very limited. Recently there has emerged an ever-increasing need to monitor also the concentration of the supply of the utilities and technological services.
- 47. With specific regard to the operational risks and the potential vulnerabilities associated with the use of a limited number of service providers by the major participants in New BIREL, Banca d'Italia is going to amend the rules of the system in order to provide for the intermediaries wishing to gain access to the system to indicate (i) any service provider to which elements of the payment system functionality are outsourced, and (ii) their belonging to a banking group. In this latter respect, the information requested will make it possible to assess the evolution of the two-tier participation as well as the possible concentration of risks, also of an operational nature.
- 48. Participants will be also required to declare whether they have signed formal Service Level Agreements with their service providers and how often they monitor such service levels. This information will support Banca d'Italia in its monitoring and control of operational risks in New BIREL.
- 49. Having replied to the IMF specific recommendations on Core Principle VII, Banca d'Italia would also like to take this opportunity to disclose the initiatives it has adopted since the last year—in line with the actions undertaken at the European level—with a view to strengthening the security and the operational reliability of the system.

- 50. Banca d'Italia, in the exercise of its institutional functions, has been carrying out a far-reaching project involving intermediaries, settlement system operators and service providers with a view to assessing the ability of the domestic financial marketplace to cope with possible regional disasters, in line with the action plans laid down at both the EU and the international levels. This project consists in a number of initiatives pertaining to the infrastructure of payment systems and financial markets as well as to the leading banking groups. These initiatives are directed at: (i) increasing the business continuity, *inter alia*, through mutual back-up procedures; (ii) raising the availability of key (business and technical) staff to face unforeseeable events; (iii) carrying out periodical tests involving a large number of intermediaries; (iv) enhancing communication channels; and (v) promoting higher reliability of service providers.
- 51. A working group (so-called CO.DI.SE)—consisting of Banca d'Italia, which has the chair, representatives of market infrastructures, banks and financial markets—was set up. Its main concern is to coordinate the business continuity activities carried out by different bodies.
- 52. A further coordination forum—consisting of institutions external to the financial sector such as public utilities—has been set up at the Presidency of the Council of Ministers. Within such a forum, Banca d'Italia is responsible for coordinating the initiatives pertaining to the financial system.
- 53. A regulation governing the minimum requirements for business continuity is currently being issued. For its implementation a gradual approach based on three levels will be followed: the first level concerns the first 6 banking groups in terms of size; the second level refers to the 20 medium/large sized banks; the third level concerns the remaining banks. The business continuity requirements for the first 6 systemically important banking groups will be in line with those envisaged for the other financial infrastructures.
- With specific reference to financial markets, some provisions concerning business continuity (already in force as of February 2002) have been included in the official Banca d'Italia Market surveillance instructions concerning financial markets and the centralized management of securities. In line with these provisions, each supervised institution is requested to draft an annual report on the management of operational risks.
- 55. With specific reference to providers of infrastructures relevant for the payment system (Interbank Company for Automation SIA and the Italian service providers) a specific regulation is being drafted.
- 56. Following the above legal interventions, the resulting framework will be in line with the initiatives taken at the domestic and international levels.
- 57. In this context, a crucial role will be played by the CO.DI.SE. with reference to: (i) the assessment of interdependencies among systems and (ii) the provision of indications as to the integration of the Business Continuity Plans (BCP) and Service Level Agreements

- (SLA) drafted by each supervised institution with a view to ensuring their consistency with the global BCP.
- 58. This framework will contain guidelines concerning the business continuity criteria to be followed by payment infrastructures. Such a framework will be structured around the definition of operations plans (crises scenarios, secondary sites, time for the resumption of activities) and their management and control.
- 59. In this respect, it should be noted that a methodology for the management of risks associated with TARGET 2 (expected to go live as from 2007) is currently being drafted at the European level. The ESCB has already defined three major crises scenarios: (i) the destruction of the primary site (approach followed for the current system TARGET); (ii) a regional disaster causing the destruction of both primary and secondary sites (e.g., events of September 11, 2001); and (iii) cyber terrorism, through unauthorized network access.
- 60. Works are underway to define the business continuity perimeter, i.e., the systems and infrastructures to be involved. In addition to TARGET domestic components, the involvement of structures and ancillary systems that need to settle their operations within the operational day is currently being considered.

Criteria for participation (CP IX)

Central Bank Responsibility C

- 61. Generally speaking, it should be observed that the choice of a two-tier participation in New BIREL is consistent with the process of financial consolidation which is increasingly leading to the concentration of liquidity management in the parent bank. This, in turn, has affected the functioning of the system which, over time, experienced an increasing concentration of payments in a limited number of large participants. Also, a two-tier participation approach in RTGS systems was followed by other major countries.
- 62. In the new context, a two-tier participation structure is able to pursue the following two objectives: (i) to enhance efficiency in the management of banks' liquidity, and (ii) to increase the central bank operational efficiency, by virtue of the reduction in the number of accounts to be handled. Given the high payment concentration in the former system, the new forms of participation in New BIREL will not change the risk profile of the Italian RTGS system: around 120 participants (including all Italian parent banks), which will likely gain access to New BIREL as direct participants, will keep acting as they did in the old system by settling approximately the same payments in terms of number and value. More precisely, in 2002 in BIREL the 10 most active banks settled some 50 and 53 percent of total payments in terms of number and value respectively; the first 50 most active banks settled around 85 and 87 percent of total payments in terms of number and value respectively. The 120 banks which will likely gain access to New BIREL as direct participants settled around 84 and 86 percent of total payments in terms of number and value respectively in 2002.

- 63. As regards the reference made in the Detailed Assessment to a possible incentive to the setting up of new "quasi-payment systems", it is worth highlighting that at present the participation in BIREL by a parent bank, settling also on behalf of the banks of its own group, substantially differs from the direct participation by a bank that operates a quasipayment system. The former is the outcome of the rationalization process in the liquidity management within banking groups which featured, as already pointed out, the evolution of participation in BIREL in recent years. The role played by parent banks, as the cash-flow managers for the whole group, will most likely influence the form of access to New BIREL by the parent bank (as direct participant) and by the other banks of the group (as possible indirect participants). Direct participation by a bank that operates a quasi-payment system, instead, represents the provision of settlement services by a bank (the settlement agent in the quasi-system) to its correspondent banks/partners (possible New BIREL indirect participants). The latter will remain liable for all the liquidity and credit risks arising from the bilateral relationships with the direct participant in its capacity as settlement agent. At present, in Italy the existing quasi-payment systems relate to groups of cooperative banks, the most important of which is that managed by ICCREA – the central credit institution for cooperative banks.
- 64. In addition, should new quasi-payment systems emerge following the adoption of a two-tier participation structure, a distinction should be made between the impact of the operation of quasi-systems on New BIREL and that on the payment system as a whole. As to the former, the PSD, in performing the control over New BIREL, would be able to assess the evolution of the system risks and to adopt appropriate measures, if need be. As regards the impact of quasi-systems on the Italian payment system as a whole, the PSOO, in its capacity as overseer of privately-run payment systems, would be able to control the activity of such quasi-payment systems through the use of its instruments and regulatory powers. The integration of extensive information, which will be at the PSD and PSOO disposal, would allow in any circumstances to make prompt and consistent policy decisions with respect to New BIREL and the payment system as a whole.
- 65. It is worth specifying that at present the functioning of the Italian payment system relies upon settlement systems for interbank transactions owned and managed by Banca d'Italia: New BIREL processes large-value transactions and BI-COMP is the clearing system devoted to the handling of retail payments.

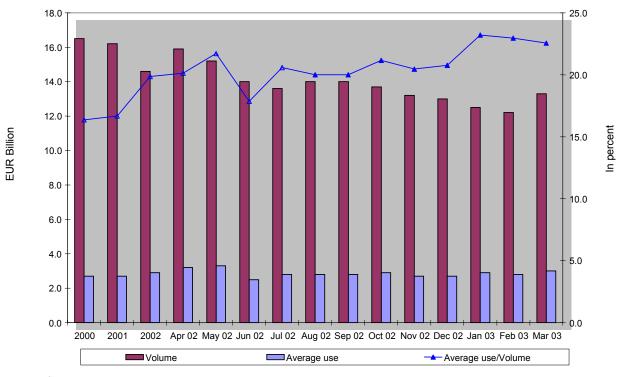
Central bank responsibility D

- 66. As already stated, considering that almost all branches of foreign banks (except for some American banks) located outside the EEA previously participating to BIREL directly intend to gain access to New BIREL only as indirect participants, it does not appear to be a pressing need for coordination between Banca d'Italia and foreign domestic supervisory authorities.
- 67. In any case, the Payment System Department—following the recommendation—intends to seek, in liaison with the Supervision Department, the most appropriate ways to

reach an agreement for the mutual exchange of information with the American authorities and, should additional non-EU intermediaries wish to gain access to New BIREL as direct participants, a similar approach will be followed with the respective central banks and supervisory authorities.

- 49 - APPENDIX

Figure 2. BIREL Credit Line Available to Participants



Source: BI

- 50 - APPENDIX

100.2 100 99.8 99.4 99.2 99.9 98.8 98.6 98.4 98.2 Jan 02 "Feb 02 Mar 02 Apr 02 May 02 Jun 02 July 02 Aug 02 Sep 02 Oct 02 Nov 02 Dec 02 Jan 03 Feb 03 Mar 03

→ Italy — EU Overall → EU Weighted → ESCB Requirement

Figure 3. Target Performance: Average Overall Availability

Source: BI