Assessment of Euroclear Bank against the CPSS-IOSCO Principles for Financial Market Infrastructures

Although the financial market infrastructures (FMIs) have weathered the financial crisis well, the Committee on Payment and Settlement Systems (CPSS) and the Technical Committee of the International Organization of Securities Commissions (IOSCO) decided to update and strengthen the existing international standards for FMIs. This review resulted in the publication of the final version of the CPSS-IOSCO Principles for Financial Market Infrastructures (PFMIs) in April 2012 [1]. These PFMIs introduce new standards (e.g. for general business risk or tiered participation arrangements) while reinforcing existing standards, for example regarding credit and liquidity risk.

Euroclear Bank (EB) was assessed by the NBB against the PFMIs for central securities depositories (CSDs) and securities settlement systems (SSSs) [2] from April to November 2012. From November 2012 to January 2013, the International Monetary Fund (IMF) conducted its own assessment of EB in the framework of an EU FSAP (Financial Sector Assessment Program). The remainder of this article describes the main results and recommendations of the NBB assessment of EB. Such disclosure promoted by CPSS-IOSCO aims at enhancing the transparency of the NBB's oversight role for system participants and at promoting the NBB's accountability as overseer of payment and securities settlement systems. A level playing field is ensured by making the results of the assessment public for all securities settlement institutions [3].

(1) The PFMIs can be downloaded from www.bis.org/publ/cpss101.htm.
(2) Out of the 24 PFMIs, 4 are not applicable to EB (some Principles are addressed only to central counterparties (CCPs) or trade repositories (TRs)).
(3) The most recent assessment of the NBB-SSS and ESES (including Euroclear Belgium) can be found in the FSR of 2011.

Box 1 – The CPSS-IOSCO Principles for Financial Market Infrastructures

PRINCIPLE 1 : LEGAL BASIS

An FMI should have a well-founded, clear, transparent, and enforceable legal basis for each material aspect of its activities in all relevant jurisdictions.

PRINCIPLE 2 : GOVERNANCE

An FMI should have governance arrangements that are clear and transparent, promote the safety and efficiency of the FMI, and support the stability of the broader financial system, other relevant public interest considerations, and the objectives of relevant stakeholders.

PRINCIPLE 3 : FRAMEWORK FOR THE COMPREHENSIVE MANAGEMENT OF RISKS

An FMI should have a sound risk-management framework for comprehensively managing legal, credit, liquidity, operational, and other risks.

PRINCIPLE 4 : CREDIT RISK

An FMI should effectively measure, monitor, and manage its credit exposures to participants and those arising from its payment, clearing, and settlement processes. An FMI should maintain sufficient financial resources to cover its credit exposure to each participant fully with a high degree of confidence. In addition, a CCP that is involved in activities with a more-complex risk profile or that is systemically important in multiple jurisdictions should maintain additional financial resources sufficient to cover a wide range of potential stress scenarios that should include, but not be limited to, the default of the two participants and their affiliates that would potentially cause the largest aggregate credit exposure to the CCP in extreme but plausible market conditions. All other CCPs should maintain additional financial resources sufficient to cover a wide range of potential stress scenarios that should include, but not be limited to, the default of the participant and its affiliates that would potentially cause the largest aggregate credit exposure to the CCP in extreme but plausible market conditions.

PRINCIPLE 5 : COLLATERAL

An FMI that requires collateral to manage its or its participants' credit exposure should accept collateral with low credit, liquidity, and market risks. An FMI should also set and enforce appropriately conservative haircuts and concentration limits.

PRINCIPLE 6 : MARGIN

A CCP should cover its credit exposures to its participants for all products through an effective margin system that is risk-based and regularly reviewed.

PRINCIPLE 7 : LIQUIDITY RISK

An FMI should effectively measure, monitor, and manage its liquidity risk. An FMI should maintain sufficient liquid resources in all relevant currencies to effect same-day and, where appropriate, intraday and multiday settlement of payment obligations with a high degree of confidence under a wide range of potential stress scenarios that should include, but not be limited to, the default of the participant and its affiliates that would generate the largest aggregate liquidity obligation for the FMI in extreme but plausible market conditions.

PRINCIPLE 8 : SETTLEMENT FINALITY

An FMI should provide clear and certain final settlement, at a minimum by the end of the value date. Where necessary or preferable, an FMI should provide final settlement intraday or in real time.

PRINCIPLE 9 : MONEY SETTLEMENTS

An FMI should conduct its money settlements in central bank money where practical and available. If central bank money is not used, an FMI should minimise and strictly control the credit and liquidity risk arising from the use of commercial bank money.

PRINCIPLE 10 : PHYSICAL DELIVERIES

An FMI should clearly state its obligations with respect to the delivery of physical instruments or commodities and should identify, monitor, and manage the risks associated with such physical deliveries.

PRINCIPLE 11 : CENTRAL SECURITIES DEPOSITORIES

A CSD should have appropriate rules and procedures to help ensure the integrity of securities issues and minimise and manage the risks associated with the safekeeping and transfer of securities. A CSD should maintain securities in an immobilised or dematerialised form for their transfer by book entry.

PRINCIPLE 12 : EXCHANGE-OF-VALUE SETTLEMENT SYSTEMS

If an FMI settles transactions that involve the settlement of two linked obligations (for example, securities or foreign exchange transactions), it should eliminate principal risk by conditioning the final settlement of one obligation upon the final settlement of the other.

PRINCIPLE 13 : PARTICIPANT-DEFAULT RULES AND PROCEDURES

An FMI should have effective and clearly defined rules and procedures to manage a participant default. These rules and procedures should be designed to ensure that the FMI can take timely action to contain losses and liquidity pressures and continue to meet its obligations.

PRINCIPLE 14 : SEGREGATION AND PORTABILITY

A CCP should have rules and procedures that enable the segregation and portability of positions of a participant's customers and the collateral provided to the CCP with respect to those positions.

PRINCIPLE 15 : GENERAL BUSINESS RISK

An FMI should identify, monitor, and manage its general business risk and hold sufficient liquid net assets funded by equity to cover potential general business losses so that it can continue operations and services as a going concern if those losses materialise. Further, liquid net assets should at all times be sufficient to ensure a recovery or orderly wind-down of critical operations and services.

PRINCIPLE 16 : CUSTODY AND INVESTMENT RISKS

An FMI should safeguard its own and its participants' assets and minimise the risk of loss on and delay in access to these assets. An FMI's investments should be in instruments with minimal credit, market, and liquidity risks.

PRINCIPLE 17 : OPERATIONAL RISK

An FMI should identify the plausible sources of operational risk, both internal and external, and mitigate their impact through the use of appropriate systems, policies, procedures, and controls. Systems should be designed to ensure a high degree of security and operational reliability and should have adequate, scalable capacity. Business continuity management should aim for timely recovery of operations and fulfilment of the FMI's obligations, including in the event of a wide-scale or major disruption.

PRINCIPLE 18 : ACCESS AND PARTICIPATION REQUIREMENTS

An FMI should have objective, risk-based, and publicly disclosed criteria for participation, which permit fair and open access.

PRINCIPLE 19 : TIERED PARTICIPATION ARRANGEMENTS

An FMI should identify, monitor, and manage the material risks to the FMI arising from tiered participation arrangements.

PRINCIPLE 20 : FMI LINKS

An FMI that establishes a link with one or more FMIs should identify, monitor, and manage link-related risks.

PRINCIPLE 21 : EFFICIENCY AND EFFECTIVENESS

An FMI should be efficient and effective in meeting the requirements of its participants and the markets it serves.

PRINCIPLE 22 : COMMUNICATION PROCEDURES AND STANDARDS

An FMI should use, or at a minimum accommodate, relevant internationally accepted communication procedures and standards in order to facilitate efficient payment, clearing, settlement, and recording.

PRINCIPLE 23 : DISCLOSURE OF RULES, KEY PROCEDURES, AND MARKET DATA

An FMI should have clear and comprehensive rules and procedures and should provide sufficient information to enable participants to have an accurate understanding of the risks, fees, and other material costs they incur by participating in the FMI. All relevant rules and key procedures should be publicly disclosed.

PRINCIPLE 24 : DISCLOSURE OF MARKET DATA BY TRADE REPOSITORIES

A TR should provide timely and accurate data to relevant authorities and the public in line with their respective needs.

1. Main conclusions of the assessment

The 24 PFMIs are grouped in 9 themes. The main findings are summarised here below. The ratings are summarised in Table 1 at the end.

1.1 General organisation

PRINCIPLE 1 : LEGAL BASIS

In general, EB has a well-founded, clear, transparent, and enforceable legal basis for each material aspect of its activities.

PRINCIPLE 2: GOVERNANCE

EB has governance arrangements ("user-owned, user-governed" model) that are clear and transparent, promote the safety and efficiency of the FMI, and support the stability of the broader financial system, other relevant public interest considerations, and the objectives of relevant stakeholders. EB could, however, consider the exercise of an external assessment of the Board's functioning, complementing the current internal assessment. The NBB also recommends the disclosure of the conflict of interests policies.

PRINCIPLE 3: FRAMEWORK FOR THE COMPREHENSIVE MANAGEMENT OF RISKS

EB has policies, procedures and systems to identify, monitor and manage the range of risks it faces. EB focuses on the risks that it bears from others (both participants and other entities including other FMIs), but by reducing its own credit, liquidity and operational risks, EB is able to reduce the credit, liquidity and operational risk that it poses to others. The effectiveness of these policies and systems is assessed on an ongoing basis by the Business departments (as a first layer) that monitor key performance indicators (KPIs), and by entities such as Risk Management or Compliance (as a second layer). In addition, EB regularly performs back-tests (e.g. liquidity stress tests) based on real-life data to test the effectiveness of the policies.

Besides providing the information (ranging from EB's risk management framework to data on the participant's credit usage) needed to allow participants to manage their risks, EB provides them with incentives to keep the risks they pose to EB at an acceptable level (e.g. EB's overdraft interest rates are above the market rates as a disincentive against participants' over-reliance on credit by EB).

In its recovery plan, EB has identified scenarios that may potentially prevent it from being able to provide its critical services, and has included recovery options that can be used in those scenarios. The international regulatory framework for recovery and resolution plans for FMIs is still evolving (CPSS-IOSCO guidelines are expected by this summer). The NBB will therefore follow up the review of EB's recovery plan after these international guidelines have been finalised.

1.2 Credit and liquidity risk management

PRINCIPLE 4: CREDIT RISK

The policy of EB is to fully collateralise its credit risk exposures. Exceptions where unsecured credit is allowed are covered by EB's own capital. EB has no history of credit losses caused by participant defaults. Although EB's general credit risk management framework is robust, the NBB has identified one weakness regarding the practice of advancing income and redemption payments. Cash payments to the participants relating to redemptions, dividend and interest proceeds may be advanced by EB in the overnight settlement process prior to confirmation of the actual receipt of funds from the issuer. This generates credit exposures on the participants. EB only advances income payments after a credit quality check of both the participants and the issuers. EB has explained that its exposure due to advanced income is secured via a "double claim" (i.e. EB has a claim on the participant to whom the credit was granted and on the issuer as EB is the registered holder of the bonds). However such securing via double claim is not compliant with Principle 5 on collateral, as no haircuts are applied and there may be a heavy concentration on one (or a few) issuer(s). Therefore, the credit extension as a result of advanced income and advanced redemption payments is not considered as fully collateralised.

Some other ICSDs and custodians also adhere to the practice of advancing income and redemption proceeds, potentially using the "double claim" as a substitute for collateral. This may lead to level-playing-field issues, as participants may be tempted to move from an FMI that complies with the PFMI to an institution that does not (as complying would require that payments are advanced only upon full collateralisation, thereby decreasing the participants' available collateral or service level if the client has no collateral). In order to avoid unfair competition among FMIs and custodians in this area, a level-playing-field solution needs to be found. To this end, the NBB will actively cooperate with other relevant overseers and supervisors.

Another recommendation has been made regarding the analysis of credit risk drivers. One of the main drivers of intraday credit exposures relates to the trading and settlement pattern of triparty repo activity, and in particular the mismatch between overnight repo reimbursements and intraday renewals. EB has implemented a project to synchronise settlement of triparty overnight repos in order to eliminate the gap between the settlement of repo reimbursements and renewals, hence reducing the resulting large intraday credit risks – and consequently liquidity risks – for EB.

PRINCIPLE 5: COLLATERAL

To cover settlement-related credit exposures, EB relies on pledged securities and cash collateral. For a very limited number of participants and for very small amounts, EB relies in specific cases on a letter of credit (L/C) or guarantees. The collateral valuation model of EB ("SVE") is regularly back- and stress tested. Whenever potential weaknesses are identified by the regular validation process, an action plan is put in place. EB monitors its participants' collateral portfolio composition, including concentration, on a regular basis. In the framework of its credit and liquidity risk management, EB will launch in Q3 2013 a project that will improve the ex-ante monitoring of a participant's collateral portfolio by defining system-embedded criteria for collateral parameters at participant level in terms of securities (in)eligibility and collateral concentrations.

PRINCIPLE 6 : MARGIN

(Not applicable to CSDs or SSSs)

PRINCIPLE 7 : LIQUIDITY RISK

– *Adequacy of liquid resources* : EB's qualifying liquid resources include its "committed liquidity sources" (investment book, standby facilities, guarantee structure, back-stop facility and committed swap facility), APS [(1)] collateral and "highly reliable liquidity sources" (i.e. the "core part" of participants' long cash balances which is less than 30 % of its actual long cash balances). EB decided in June 2012 to adopt as a basic requirement for its contingency liquidity risk management the ability to withstand the default of the two participants with the largest payment obligations (stemming from their settlement activities, or from any other role they play for the ICSD, such as treasury counterparty) under stressed conditions.
– *Multicurrency liquidity needs* : EB settles transactions in more than 50 settlement currencies. The most relevant currencies in EB in terms of liquidity needs are EUR, USD, GBP and JPY, representing 95 % of settlement turnover. On a quarterly basis, EB performs a liquidity back-test to verify whether it would have had sufficient liquid resources to cope with the default of the top two participants with the largest exposures (at family level) for one of the relevant currencies (EUR, USD, GBP, JPY) or across currencies.
– *Liquidity back- and stress testing* : EB developed a Liquidity Datawarehouse which has significantly improved its liquidity back- and stress-testing capacity. The liquidity back-testing framework considers the default of the top two clients in line with the framework decided in June 2012.

(1) Appropriation of Pledged Securities, a contractual arrangement that allows EB to immediately appropriate a participant's collateral if the participant defaults. This arrangement has been included in EB's contractual framework and will therefore apply to all new clients. EB has been negotiating with its largest clients, most of which have signed the APS agreement by now (more than 75 % of EB's credit exposures are covered by APS). The credit line of non-APS clients will be capped at 50 % of EB's qualifying liquid sources excluding APS (in order to withstand the default of the two largest participants). Participants that need higher credit lines will need to sign the APS agreement.

1.3 Settlement

PRINCIPLE 8 : SETTLEMENT FINALITY

The point of settlement finality is clearly defined in EB's Operating Procedures. Transactions that are entered in the system before the settlement date are settled (provided participants have sufficient cash and securities) during the night batch processing in the night before the settlement date. Transactions that failed to settle during the night batch and transactions that are entered on the same day as the intended settlement date can settle in the Real-time Processing cycle on settlement date. Therefore, most transactions are settled with finality well before the end of the value date. Section 6.6.2 of EB's Operating Procedures defines which instructions can be cancelled by participants. Cancellation instructions must be sent before the input deadline of the settlement process for which instructions are eligible for settlement. After this input deadline, instructions become irrevocable for participants.

PRINCIPLE 9 : MONEY SETTLEMENTS

For EB participants, DVP settlement of securities against cash in all eligible settlement currencies is carried out in the books of EB (commercial bank money credited on client's accounts in the books of EB). Settlement in central bank money is not feasible and practical as Euroclear is a multicurrency system, and as it has an international client base, which does not have access to central bank accounts (or credit) in all (or even the most important) settlement currencies. Participants can pay in their cash to EB through TARGET 2 or through correspondent banks.

PRINCIPLE 10 : PHYSICAL DELIVERIES

No physical settlement takes place in EB.

1.4 Central securities depositories and exchange-of-value settlement systems

PRINCIPLE 11 : CENTRAL SECURITIES DEPOSITORIES

EB applies Belgian/European accounting practices, which are regularly audited by its Internal Audit and external auditor. EB performs monthly reconciliations of its balances with the balances held at its depositories and daily reconciliation of movements for most securities ; for some securities a daily reconciliation of balances is performed. Overdrafts or debit balances in securities accounts are prohibited in the system. All securities that are settled in the system are immobilised or dematerialised. EB's own

securities are segregated from those of its participants, which are in turn segregated from securities of other participants. In EB, participants are also able to segregate their own securities from those of their underlying customers. Participants' securities are protected against claims from EB's creditors. EB and its depositories have insurance against securities losses due to physical loss or damage, fraud or cyber risks, for example. EB offers services that are related to custody and settlement of assets, including the provision of credit to participants in order to facilitate the efficient settlement of their transactions. New services go through an approval process and risk assessment before they can be offered to clients. The ongoing monitoring and managing of the risks related to those services is in line with Euroclear's risk framework.
EB has already improved its reconciliation procedures by reconciling balances for some securities on a daily basis, but the NBB nevertheless recommends EB to perform a daily reconciliation of all securities balances where possible. Balances for all international securities, where EB acts as issuer CSD, should be reconciled daily. All balances for which EB receives daily account statements from its depository should be reconciled daily. EB should encourage its depositories from which it does not receive daily account statements, but where it holds a significant part of its total depot, to send daily statements. The sending of daily account statements by the depository should be taken into account in EB's selection and evaluation process of its depositories.

PRINCIPLE 12 : EXCHANGE-OF-VALUE SETTLEMENT SYSTEMS

EB employs a Model 1 DVP system : instructions are settled between participants on a trade-by-trade (gross) basis, with finality of the transfer of securities from the seller to the buyer occurring at the same time as the finality of transfer of funds from the buyer to the seller.

1.5 Default management

PRINCIPLE 13 : PARTICIPANT-DEFAULT RULES AND PROCEDURES

EB has rules and procedures in place to cope with a participant default. These rules have been tested in several bankruptcy/insolvency cases concerning EB participants. Key aspects of the default rules and procedures are publicly disclosed.

PRINCIPLE 14 : SEGREGATION AND PORTABILITY

(Not applicable to CSDs or SSSs)

1.6 General business and operational risk management

PRINCIPLE 15 : GENERAL BUSINESS RISK

EB has robust management and control systems to identify, monitor and manage general business risks. General business risk is one of the key risks identified by Euroclear in its Risk Register. As such, it is included in Euroclear's Enterprise Risk Management (ERM) Framework for identifying, monitoring, controlling and reporting all risk types. On the revenue side, it is the Commercial and Product Management divisions that identify potential business risks and manage them (e.g. client retention efforts). On the cost side, it is Corporate Spend Management that identifies potential risks (e.g. assessments of business needs, suppliers) and manages them accordingly (e.g. renegotiation with suppliers). The Financial Division monitors overall business risks via a monthly review of the actual financial results versus the plan. In addition to these four divisions that act as first lines of defence, the Risk Management Division assists them (e.g. identifies risks that could affect the Euroclear group or EB) and acts as the second line of defence.

EB has developed a recovery plan.

EB has € 1 485 million equity (and liquid net assets, as its equity is invested in liquid assets), which is more than sufficient to cover six months of current operating expenses (€ 379 million based on 2011 figures) and to cover the time needed to implement the recovery plan (the main solutions of which can be implemented within six months).

PRINCIPLE 16 : CUSTODY AND INVESTMENT RISKS

EB's capital is invested in debt securities (EU government, supranational and European Financial Stability Facility bonds only) with a rating of at least AA+, or held in cash at the central bank. These AAA or AA+ government bonds are of very high quality and liquidity. Even in extreme scenarios, where EB would not be able to convert AAA or AA+ rated EU government bonds into cash, it can use them as collateral for obtaining liquidity via the NBB, as these bonds are ESCB eligible and EB has routine access to central bank standing facilities. EB holds its assets and its participants' assets at supervised and regulated entities (in practice big international or local banks or CSDs) on which it contractually imposes minimum requirements for accounting practices and safekeeping procedures. EB has the contractual right to inspect and audit records at depositories. EB ensures via a legal opinion that the ownership rights for its participants' and its own assets are adequately protected. The total stock of securities that EB holds is diversified over several "common depositories" (for Eurobonds) and more than 40 local depositories. For 14 currencies, EB has several cash correspondents, which allows it to diversify credit and liquidity risk. Where only one cash correspondent is available, credit risk exposures can be mitigated via other techniques such as reverse repos with other counterparties. EB's (prudent) investment strategy is consistent with its overall risk-management policy of keeping a low risk profile. Key elements of its investment strategy are disclosed in its Pillar 3 disclosure report (in the sections related to market, credit and liquidity risk).

PRINCIPLE 17 : OPERATIONAL RISK

EB has policies and processes in place for identifying and addressing the full range of operational risks on an ongoing basis. Through its operational risk management framework EB ensures that both internal as well as external sources of operational risks are identified, assessed, monitored and managed. EB's risk management practices are aligned with major recommendations from various regulatory and industry bodies, and international standards.

EB has defined operational reliability objectives, both qualitative and quantitative, ensuring a high degree of security and operational reliability.

Capacity planning and monitoring are part of the control environment of EB.

The Euroclear group-wide Operational Risk Board Policy comprises policy goals for both physical and information security.

EB's business continuity management and plans allow it to resume operations within two hours following disruptive events, and to complete settlement by the end of the day even in the case of extreme circumstances. Data on core systems is mirrored between three geographically dispersed data centres. Regular switching between the two main data centres and tests of the third data centre ensure operations can be switched between data centres. To mitigate the very low probability scenario of data loss of less than one minute, data loss response plans have been developed. The risk of losing staff is mitigated by operating dual offices. EB's business continuity and contingency arrangements are annually reviewed and tested, including with respect to scenarios related to wide-scale and major disruptions.

EB has policies and processes in place for identifying and addressing the full range of operational risks, including direct and indirect effects on its ability to process and settle transactions caused by risks that stem from an external operational failure of participants, other FMIs, and service and utility providers. When EB has outsourced some of its operations to an external service provider, EB ensures that those operations meet the same reliability and contingency requirements they would need to meet if they were provided internally.

1.7 Access

PRINCIPLE 18 : ACCESS AND PARTICIPATION REQUIREMENTS

EB's admission criteria are risk-based and allow for fair and open access. The admission criteria are :

1. Financial resources.
2. Technology capability.
3. Need for EB Services.
4. Reputation in the market.
5. Anti-Money Laundering Programme.

These criteria aim to minimise financial and other risks (e.g. reputational risk) to EB and its participants. These criteria apply to all applicants to EB regardless of type and location of the applicant. EB accepts a heterogeneous range of participants from more than 90 different countries. EB participants include major international banks and smaller firms, and various types of institutions (investment banks, central banks, other FMIs, investment funds). EB has set up a sponsorship process to ensure – among other things – that participants continue to fulfil these requirements. If a participant no longer meets the admission criteria, Section 14 of the Terms & Conditions explains the procedure for the termination of its participation.

PRINCIPLE 19 : TIERED PARTICIPATION ARRANGEMENTS

EB does not organise tiered participation arrangements in its system. Contractual relationships exist only with direct participants. EB allows its participants to open additional individual accounts for their underlying clients whenever participants decide to do so. Where omnibus accounts are held, there is no information available in the system at individual client level. Risks related to dependencies between participants and their underlying clients (credit and liquidity risks) are managed by EB at an aggregate level. Potential risk that might result from dependencies between participants and their underlying clients include operational risks (when clients' activity is significant). Currently, EB has no formal process in place for analysing the impact of underlying clients' accounts, nor for the monitoring of settlement activity generated by those underlying client accounts. The adoption of such formal processes should be envisaged by EB in order to enhance its understanding of client activity flows and the related risks.

PRINCIPLE 20 : FMI LINKS

EB has processes in place to identify potential sources of risk arising from market links. Before opening a link, EB conducts a risk assessment. EB's Management Committee has to approve all agents (such as CSDs, depositories or cash correspondents) involved in the link. Once the link is in operation, a market link review is performed every three years. The risk assessment covers several aspects (ranging from operational and financial to legal and asset protection criteria). The only link where EB has a credit exposure on an (I)CSD is the Bridge with Clearstream Banking Luxembourg (CBL). EB has a toolbox of credit risk mitigation measures to ensure that EB's credit exposures on CBL are secured. There is only one case where EB receives provisional securities : newly-issued money market instruments received from DTC in the US market. EB blocks such securities in the participants' accounts until they are final in the local market, thereby prohibiting their re-transfer (making it compliant with the PFMIs).

1.8 Efficiency

PRINCIPLE 21 : EFFICIENCY AND EFFECTIVENESS

The Euroclear group is user-owned and user-governed and operates in a competitive environment. EB monitors market developments and conducts an annual client survey. Furthermore, EB monitors its efficiency and effectiveness via a Balanced Scorecard (including financial, business, operational, risk and other objectives) and various Key Performance Indicators and Key Risk Indicators on an ongoing basis.

PRINCIPLE 22 : COMMUNICATION PROCEDURES AND STANDARDS

EB uses internationally accepted communications standards : ISO message formats and ISIN as identifier. EB is not yet fully ISO compliant in the area of corporate actions (ISO15022) standards, but it has invested in recent years to become more compliant with SMPG (Securities Market Practice Group) recommendations. EB is encouraged to continue these efforts and achieve full compliance with the internationally accepted standards that are relevant for EB's activities, as full compliance reduces (by eliminating manual intervention) both risks and costs for EB and its participants.

1.9 Transparency

PRINCIPLE 23 : DISCLOSURE OF RULES, KEY PROCEDURES, AND MARKET DATA

EB discloses information on the company itself, on the services it provides, etc. – from high-level overviews to detailed descriptions of the services and rights and obligations. Most of this information is publicly availably on the Internet. EB is currently conducting a complete review of its Operating Procedures (to be finalised in 2013) in order to increase the ease of understanding of the rules and risks that clients need to manage. In a first phase, which was completed in September 2012, the "Rights and Responsibilities" were summarised after each relevant Section to make it easier for clients to identify the main risks from participating in the FMI.

PRINCIPLE 24 : DISCLOSURE OF MARKET DATA BY TRADE REPOSITORIES

(Not applicable to CSDs or SSSs)

TABLE 1 RATINGS SUMMARY

Assessment category	Principle
Observed	1, 2, 3 [(1)], 5, 7, 8, 9, 12, 13, 15, 16, 17, 18, 20, 21, 22, 23
Broadly observed	4, 11, 19
Partly observed	–
Not observed	–
Not applicable	6, 10, 14, 24

(1) The IMF has rated this principle as "broadly observed" because EB's recovery plan is not yet fully operationally ready. The NBB is however of the opinion that an "observed" rating is justified for the Principle on risk management frameworks (of which the recovery plan is only one part), because the international regulatory guidelines are still being developed (a consultative report by CPSS-IOSCO on Recovery of FMIs is not expected before summer 2013).

2. Recommendations

The NBB's recommendations are sorted by rating. No serious issues warranting immediate action (linked to rating "not observed") or issues to be addressed in a timely manner (for "partly observed" Principles) have been identified. The NBB has issued three recommendations to be addressed in a defined timeline for the three Principles that have been assessed as "broadly observed". In addition, the NBB has issued some additional recommendations that could be useful to further reduce risks for Principles which are "observed".

TABLE 2 RECOMMENDATIONS

Principles	Issues of concern	Recommended action	Relevant parties	Comments
		Serious and warranting immediate action		
–	–	–	–	–
		To be addressed in a timely manner		
–	–	–	–	–
		To be addressed in a defined timeline		
4	Credit allocations derived from the advanced income and advanced redemption payment process should be adequately measured and mitigated	EB should finalise its action plan that will make income and redemption payments to its participants compliant with the PFMI. The process for advanced income payments to CBL is under review and necessitates a review of the Bridge Agreement with CBL.	EB (+ CBL)	Cooperation by CBL needed
11	Daily reconciliation of balances	Implement daily reconciliation of securities balances where possible	EB	See details in text Principle 11
19	Risks related to dependencies between EB participants and their underlying clients	EB needs to define an action plan for an analysis of the different potential risks related to dependencies between participants and their underlying clients' activity (based on the data available in the system). Next step will be for EB to develop, where relevant, adequate policies and procedures for the identification, monitoring and mitigation of the potential material risks to which EB is exposed.	EB	
		For consideration in the normal course of business		
2	Assessment of Board functioning	Consider the exercise of an *external* assessment of the Board's functioning	ESA	
2	Disclosure of the conflict of interests policies	Disclosure of the conflict of interests policies	ESA	
5	For a limited number of cases and for limited amounts, EB relies on credit risk mitigation measures that do not qualify as adequate collateral (e.g. guarantees)	When adequate collateral is not used, EB should either rely on other types of recourse that can be considered as adequate collateral to cover credit extensions or consider the related credit extensions as non-collateralised credit exposures within the limit set in Principle 4	EB	
22	Full compliance with ISO standards (corporate actions)	EB should continue to increase its compliance with international communications standards	EB	
23	Clarity of Operating Procedures (OPs)	EB is currently conducting a complete review of its OPs (to be finalised in 2013) in order to increase the ease of understanding of the rules and risks that clients need to manage	EB	