

**PAYMENT SYSTEMS  
OVERSIGHT UNIT**

**PSOU  
ASSESSMENT CRITERIA**

**PSOU/OPFK/002**

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## 1. Introduction

This document details the criteria adopted by the Central Bank when assessing payment systems' compliance with the Core Principles promulgated by the Bank for International Settlements (BIS). The criteria are based upon the general approach to assessment described in the Central Bank's *Payment Systems Oversight Unit – Operational Framework* which owes much to the BIS's report *Central Bank Oversight of Payment and Settlement Systems* published in May 2005.

The document is intended as a guide to operators of payment systems so that they might be aware of the Central Bank's approach to assessment and the criteria against which systems will be judged. Operators should note that these assessment criteria are subject to change in line with the further development of the Core Principles, other standards and Central Bank requirements.

## 2. Background

The Central Bank has issued this document so as to comply with the BIS's principle that assessment criteria be transparent and readily available to operators of payment systems.

The Core Principles were published by the BIS as *Core Principles for Systemically Important Payment Systems* in January, 2001. The Core Principles were pitched at a high level in order to be universally applicable. Thus, the BIS allows national overseers to decide the details most appropriate to their own jurisdictions.

In the UAE the Central Bank is responsible for overseeing payment systems and undertakes this responsibility through its Payment Systems Oversight Unit (the PSOU).

## 3. Acknowledgements

In preparing this document the PSOU has drawn upon the experience of consultants and of other overseers and regulators. The PSOU acknowledges the assistance of:

- The Bank for International Settlements
- The European Central Bank
- The Federal Reserve Bank of New York
- Consultants to the Central Bank from the World Bank / Arab Monetary Fund
- Consultants from the firm of Oliver Wyman.

#### 4. Objectives of the PSOU

The PSOU assesses payment systems in the context of the following Central Bank objectives:

- To ensure payment systems are safe, efficient and effective
- To promote the quality and range of national payment systems
- To facilitate the development of modern and innovative systems
- To ensure systems continue to meet the evolving needs of participants
- To ensure the benefits of investment are extended to the general public

In sum, the Central Bank will provide the necessary leadership to place the UAE at the forefront of payment systems technology in order to support national enterprises and their customers.

In carrying out its assessments the PSOU shall be guided but not limited by the Core Principles. Specifically, the PSOU's assessment criteria may evolve to take account of:

- Any new legislation
- Central Bank policy.
- Findings from earlier assessments
- Amendments to the Core Principles (and other relevant standards)
- Conditions specific to the UAE payments market

#### 5 Levels of Compliance

The PSOU assesses payment systems' level of compliance with each Core Principle in the following terms:

- Fully compliant
- Broadly compliant
- Partially compliant
- Not compliant
- Not relevant

According to the BIS all Core Principles are of equal importance and, therefore, a system should be fully compliant in all Principles in order to be allowed to operate. However, under certain conditions, the PSOU may allow a non-compliant system to operate.

## 6 The Core Principles

The following paragraphs identify the assessment criteria for each Core Principle.

### 6.1 Core Principle 1

Core Principle 1 states that:

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

There are two components here: The legal framework operating at the national level (taking account of foreign laws, if applicable) and the rules and regulations particular to an individual payment system.

The PSOU shall examine the system's rules and regulations to make sure they are fair, lawful and enforceable. The PSOU recognises that the system operator's control is limited to its own rules and, if required, the PSOU shall recommend legislative changes in order support a system's rules or to reduce risk, e.g.

- The legitimacy of net settlement
- Settlement finality
- Protection against adverse insolvency effects
- The acceptance of electronic payments

The PSOU shall examine the legislative framework in terms of:

- The jurisdiction governing the system, including relevant legal instruments
- Other relevant jurisdictions (if any)
- Transparency of insolvency rules
- Legal status of the system and/or operator

The PSOU shall examine the system's rules to ensure adequate description of (at least):

- The services provided
- Management structure
- Membership qualifications

- Rights and responsibilities of participants
- Duties and liabilities of participants
- Settlement procedures, including definition of irrevocability and finality
- Dispute resolution procedures
- Suspension and termination procedures
- Variations and discretionary powers

The PSOU shall assess the system in terms of its own rules. Any legislative gaps shall be addressed separately by the PSOU.

The PSOU shall assess the system's rules thus:

- Fully compliant - document comprehensively addresses all of above criteria
- Broadly compliant - document addresses all of above criteria but lacks detail
- Partially compliant - some significant criteria are not properly addressed
- Non-compliant - most of the significant criteria are not properly addressed

## 6.2 Core Principle 2

Core Principle 2 states that:

*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.*

The PSOU will examine the system's documentation to make sure that financial risks are made clear and available to all participants. The documentation should be up to date, comprehensive, and accessible (e.g. on a protected Web-site). The documentation should, as a minimum, specify:

- Credit and liquidity risks incurred by participants or the operator
- How these are managed and contained by the system
- How these are managed by any manual or other procedures
- Rights and obligations of all relevant parties in the management and containment of financial risks
- Sources and cost of intraday liquidity
- Acceptable collateral
- Procedures for handling a default and other abnormal situations
- Discretionary powers of the system operator

The PSOU shall examine the system's documentation and assess it to be one of the following:

- Fully compliant - documentation addresses all above criteria
- Broadly compliant - documentation addresses all above criteria but lacks detail
- Partially compliant - major credit and liquidity risks are not properly addressed
- Non-compliant - insufficient description of the risks

The PSOU recommends system operators commit to ensuring participants remain aware of issues surrounding risk management through ongoing contact with participants through, for example:

- User guides
- Periodic workshops
- Training courses
- Bulletins

This level and frequency of contact is encouraged by the Central Bank.

### 6.3 Core Principle 3

Core Principle 3 states that:

*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.*

The PSOU expects system operators to make proper and adequate provision for managing and mitigating financial risks. In addition, the system should include features that encourage users to minimise risk to other users of the system.

#### Credit Risks

The PSOU will assess the system in terms of: (at least)

- Credit checks undertaken on new applicants
- Ongoing monitoring of participants' credit-worthiness
- Limits on participants' positions

- Monitoring of participants' intraday credit exposure
- Limits on settlement institutions' exposure
- Rules concerning funding of and access to settlement accounts
- Whether these accounts may be overdrawn
- Collateral requirements

### Liquidity Risks

The PSOU will assess the system in terms of (at least):

- Overall rules and procedures for liquidity management
- Liquidity monitoring (individual and system)
- Queue management and gridlock resolution
- Sources of provision of liquidity, particularly in contingency situations
- Collateral requirements

### User Behaviour

The PSOU recommends that users be encouraged to behave in such a way as to optimise the system's throughput whilst avoiding placing other users at risk. Typical incentives include reduced transaction fees for earlier submissions and mandatory submission of a proportion of payments in various time-slots throughout the business day.

When assessing real-time gross settlement systems the PSOU recommends that system facilities be available to allow users to actively manage their submissions. Typical facilities might include real-time on-line enquiry, real-time on-line advices, allocating priorities and by being able to withdraw payments (prior to settlement).

The PSOU shall examine the system's document and assess it to be one of the following:

- Fully compliant - system manages user behaviour, credit and liquidity risks
- Broadly compliant - system manages credit and liquidity risks
- Partially compliant - system manages some credit and liquidity risks
- Non-compliant - ineffective in all regards

#### 6.4 Core Principle 4

Core Principle 4 states that:

*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.*

The main thrust of this Core Principle is that there should be minimal delay between the acceptance of a payment, the finality and irrevocability of the payment instruction, and its final settlement. Whilst this is the case with real-time gross settlement systems it is not so as far as deferred settlement and net settlement systems are concerned.

The PSOU assesses compliance against, as a minimum, the following considerations:

- Is the business day convenient for participants
- When is finality achieved both in respect of transfer instructions and transfer of assets
- Does settlement take place at least daily
- Are users aware of the full life cycle of the payments processes i.e. submission, validation, acceptance, irrevocability, rejection, finality of payment, settlement
- Are users aware of settlement timings
- Are there clear cut-off times
- How are participants notified of temporary changes to settlement timings
- How are unsettled transactions processed after cut-off time
- Does the system provide reconciliation reports
- What are the procedures in the event of a default e.g. is unwinding possible
- Are there set timelines for rejecting a payment
- Are timelines strictly enforced
- Do the rules specify procedures for rejecting a payment
- Are the rules strictly enforced
- Is it possible / practice for participants to circumvent the rules

The PSOU shall assess the system as one of the following:

- Fully compliant - System settles on day of value or presentment
- Broadly compliant - System usually settles within 24 hours of day of value or presentment to the system
- Partially compliant - System usually settles within 48 hours of day of value or presentment to the system
- Non-compliant - Any other settlement regime

**NB** -Presentmentø is used in this context to accommodate paper-based instruments such as cheques

## 6.5 Core Principle 5

Core Principle 5 states that:

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

Consistent with BIS recommendations the PSOU includes deferred settlement systems within the scope of this Core Principle.

In assessing netting systems the PSOU shall pay particular attention to measures implemented to protect the system and other participants in the event of a default by the participant having the largest settlement obligation.

If the system employs a deferred settlement regime the PSOU requires the settlement institution to make good any shortfalls in funding.

The PSOU shall assess the system as one of the following:

- Fully compliant - settlement system has full provision against default
- Partially compliant - settlement system has advanced provision against default
- Non-compliant - settlement system has no provision against default
- Not applicable - real-time gross settlement system

## 6.6 Core Principle 6

Core Principle 6 states that:

*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.*

Whereas participants in Central Bank systems all settle in Central Bank money this is not necessarily the case with private systems. Where settlement does not use Central Bank assets system operators must satisfy the PSOU that provision has been made in respect of, at least, the following:

- The supervisory regime (if other than the Central Bank) applying to the settlement institution
- The credit-worthiness of the settlement institution

- The liquidity of the assets used for settlement and their transferability into other liquid assets or claims on the Central Bank
- The management of risks associated with any non-cash asset
- Possible exposure of participants to default by settlement institution
- Possible exposure of participants to default by other participant(s)

**NB** Some of the above are relevant also to Central Bank systems.

Where settlement is in commercial bank money the PSOU recommends:

- Provision of Central Bank credit facilities to settlement institutions
- Deposition by settlement institutions of collateral with the Central Bank

The PSOU shall assess the system as one of the following:

- Fully compliant - settlement assets represent a claim on the Central Bank
- Broadly compliant - other assets are used but associated risks are well-managed
- Partially compliant - other assets are used but there is some exposure to risk
- Non-compliant - any other condition

## 6.7 Core Principle 7

Core Principle 7 states that:

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

The main thrust of Core Principle 7 is that operators should ensure the availability of their systems for both the submission of transactions and their settlement.

This is a very broad Core Principle which goes to the heart of system design and implementation. In general, system operators and their software suppliers should employ a structured development method that addresses the entire life cycle e.g. design, testing, change control, release management, and business continuity planning. Security is a key component and should be considered at every stage of development and operation.

The PSOU assesses the system thus:

- Operational reliability
- Frequency and severity of system incidences
- Reasons for outages
- System performance monitoring and reporting
- Business continuity planning and management
- The availability of a DR site
- The location of the DR site
- Synchronisation of data between Production and DR sites
- Schedule and content of DR / BCP testing
- Physical and logical access controls
- Physical security of the site(s)
- Documented security policies and procedures
- Agreed service levels and security requirements of participants and relevant third-party service providers
- Quality of technical support provided to participants
- Use of encryption for authentication, privacy and integrity
- Security tests and audit controls

The above represents a comprehensive (though not exhaustive) list of considerations which focuses upon security and continuity of operations. Note that, in certain systems where participants rely upon each other's availability, the concept of the "system" is extended to include the availability and security of participants' systems.

System operators should consider:

- The appointment of a specialist security manager
- The availability of properly-trained support staff
- The clear separation of powers/functions between front- and back-office staff
- The restriction of access to production systems on a strictly "needs-must" basis
- Monitoring and reporting participants' relevant third-party compliance with agreed service levels
- Negotiating local support from system vendors

The PSOU shall assess the system as one of the following:

- Fully compliant - satisfies all security and operational continuity criteria
- Broadly compliant - satisfies the main security criteria and DR / BCP requirements
- Partially compliant - satisfies some security and DR / BCP requirements
- Non-compliant - insufficient security and operational policies and measures

## 6.8 Core Principle 8

Core Principle 8 states that:

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

This Core Principle focuses upon the efficiency of the services provided and their cost-effectiveness. The BIS is concerned to ensure, on the one hand, competition in the market and, on the other, the commercial viability of systems. Note that, with respect to its own systems, full cost recovery is not always a Central Bank priority; this might be the case where the system is considered a "social good".

The PSOU is concerned mainly with the position of the service within the economy and the quality and efficiency of services delivered to participants. Thus, the assessment will consider a wide range of criteria including, but not limited to:

- The performance of the system against its business objectives
- The views / levels of satisfaction of participants
- The responsiveness of the service to meeting participants' evolving business requirements
- The performance of RTGS in avoiding gridlock
- The pricing policy and cost methodology used
- The ability of the system to recover its costs
- The consequences of business failure or service withdrawal
- The availability of alternative or comparable systems
- Does the system inhibit competition

The PSOU places great store by the views of participants, the users of the system. In addition, the PSOU is especially concerned to avoid reputational risk to the UAE and its institutions.

With respect to RTGS the PSOU requires a smooth flow of payments. Thus, gridlock should be avoided by:

- The operator offering incentives aimed at dispersing payments evenly throughout the business day
- The settlement institution providing adequate intra-day liquidity to all participants

Bearing in mind the requirements of Core Principle 3 settlement institutions should provide a level of liquidity which exposes neither themselves nor the participating institutions to unacceptable or unmanageable credit risks.

The PSOU shall assess the system as one of the following:

- Fully compliant - meets all relevant criteria
- Broadly compliant - meets most criteria
- Partially compliant - meets some criteria
- Non-compliant - major system inefficiencies and /or users generally dissatisfied

## 6.9 Core Principle 9

Core Principle 9 states that:

*The system should have objective and publicly disclosed criteria for participation which permit fair and open access.*

This Core Principle focuses upon the fairness of the system insofar as its services are available to all participants without discrimination and at reasonable cost to all would-be participants. In undertaking its assessment the PSOU considers not only the fairness of existing access rules but also whether participation might be made available to other groups in order to benefit the wider payments market. In this respect the PSOU will be implementing a Central Bank policy of modernising national payment systems and extending the benefits throughout the population.

The PSOU considers the following (at least):

- Are participation access and exit criteria clear and publicised
- Are the access and exit criteria fair and proportionate to the systemic importance of the payment system
- Are appropriate services available to all participants without discrimination
- Must participants be regulated financial institutions
- Must participants hold a settlement account
- Must the settlement account be held at the Central Bank
- Could participants be foreign-based institutions
- Could participants be non-financial institutions
- Is access through tiering a possibility
- What are the liquidity requirements
- How do participants prove they have sufficient liquidity
- Do fee levels operate to exclude would-be participants
- Are exclusion policies and procedures clearly specified

Many payment systems have traditionally been available to banks only. The banks very often are joint owners / administrators of the system and they set the rules. The PSOU accepts that these arrangements might be fully justified in many cases. However, the PSOU needs to be satisfied that the system's rules are not anti-competitive and do not prevent optimal use of the system. For example, bearing in mind the number of banks in the UAE, the PSOU would be concerned if high fees inhibited the use of, say, a real-time gross settlement system. Furthermore, the PSOU might support the direct participation in a clearing house of certain very large non-banking corporations to facilitate, for example, their overnight Treasury operations or payroll processing. Such direct access to a system might be both possible and desirable even if participation required sponsorship by a banking participant.

The PSOU shall assess the system as one of the following:

- Fully compliant                    - participation is open to all even if indirectly via a sponsor
- Broadly compliant                - participation is restricted but justified
- Partially compliant              - participation is restricted justifiably but open to change
- Non-compliant                    - participation is restricted unjustifiably but closed to change

#### **6.10 Core Principle 10**

Core Principle 10 states that:

*The system's governance arrangements should be effective, accountable and transparent.*

The main thrust of this Core Principle is that good management is fundamental to compliance with the Core Principles as a whole. In this context 'good management' includes accountability to the system's owners, customers and regulators.

In anticipation of forthcoming BIS changes to this Core Principle the PSOU will assess also the operator's commitment to its 'social responsibilities' and contribution to financial stability. The BIS's intention here is to mitigate Core Principle 8's apparent focus upon profitability and draw operators' attention to their obligations to the wider society in which they operate. This means that operators owe 'at least' a duty of care to their service, their customers and to the institutions of the UAE. The PSOU considers it very important that operators:

- Are suitably qualified to provide service
- Are committed to the long-term success of their service
- Ensure their services evolve to suit business requirements
- Establish and enforce high professional standards overall
- Respect the interests and requirements of their participants

The PSOU considers the following additional criteria:

- Management's qualifications and experience
- Management accountability for the performance of the system
- Transparency of management structure and responsibilities
- Published annual reports
- Involvement of users, auditors and overseers in making decisions
- User satisfaction with governance
- Existence of a user group that meets regularly
- Prompt communications to users and at the appropriate levels
- Published dispute resolution procedures

The PSOU shall assess the system as one of the following:

- Fully compliant - meets all requirements in full
- Broadly compliant - meets most requirements but some minor defects
- Partially compliant - meets most requirements but some significant defects
- Non-compliant - poor management and / or poor user relations

## 7 Overall Assessment

The PSOU will treat each system on its merits when considering an overall assessment. According to the BIS all Core Principles are of equal importance and, therefore, a system should be fully compliant in all Principles in order to be allowed to operate. However, the PSOU reserves the right to allow systems not fully compliant to operate if the system is otherwise safe, efficient, well-managed and, generally, fit for purpose. In the case of these non-compliant systems the PSOU and the operator shall agree a schedule of change and improvements. This schedule may include agreeing:

- Changes and improvements
- Their respective priorities
- Their implementation dates
- PSOU follow-up actions
- Sanctions if changes are not made

## 8 Conclusion

This document elaborates on the provisions of the PSOU's framework document to inform operators of payment systems of the Central Bank's policies with respect to the Core Principles.

It is in the interests of all parties that the assessment criteria be known ahead of the formal assessments. It is the Central Bank's intention to be seen as fair and objective in its assessment of both internal and external systems.

The Central Bank's mission is to see established a modern and comprehensive range of payment systems operating at the highest standards of quality and value for money. To this end, system operators should be aware that the Central Bank aims to progressively raise thresholds so that all systems are fully compliant.