



**MONTE
DEI PASCHI
DI SIENA**
BANCA DAL 1472

BRRD – Resolution Plan

Critical FMIs Identification Methodological Note

Working Priorities 2018 A.4

Siena, 31st October 2018

TABLE OF CONTENTS

1. PURPOSE.....3

2. INTRODUCTION4

3. CRITICAL FMIS IDENTIFICATION METHODOLOGY 5

3.1 FMIs Mapping 5

3.2 Critical and Essential FMIs Identification 5

3.3 Scoring Assignment and Judgmental Analysis 6

4. CONCLUSIONS.....7

ANNEX 1 8

ANNEX 2 14

1. Purpose

The purpose of this document is to provide the methodology adopted by the Monte dei Paschi di Siena Group for the identification of the critical FMIs and the defined priority scoring model.

2. Introduction

The definition of a methodology aimed to identify critical FMIs is a prerequisite for the information set filling requested by the Resolution Authority for the purpose of drawing up the Resolution Plan. The Group has defined the methodology as a result of exchanges with the SRB and on the basis of the following regulatory references:

- **“Principles for financial market infrastructures, BIS – April 2012”** which provides the FMI definition as follows: *“FMI is defined as a multilateral system among participating institutions, including the operator of the system, used for the purposes of clearing, settling, or recording payments, securities, derivatives, or other financial transactions.”*;
- **“Guidance on the FMI Report, SRB - 2018 update”** which:
 - aims at providing guidance to institutions for completing the reporting template on FMIs;
 - supports the Bank's identification of FMIs by identifying the main types of FMIs and dividing them into the following clusters: Payment System Large Values (PS-LV); Retail System (PS-retail); Central Securities Depositories ((I)CSDs); Securities Settlement Systems (SSS); Central Counterparties (CCPs); Trade repositories (TRs); Trading venues; Intermediaries.

The methodology described in this document will be updated following regulatory changes and/or at the request of the Resolution Authority.

3. Critical FMIs Identification Methodology

The Group' Critical FMIs identification methodology is developed into three phases as follows:



3.1 FMIs Mapping

The Group, based on the list of potential FMIs suggested by the SRB and available within the FMIs Report, proceeds to identify its potentially critical FMIs by filling the FMIs Report with the required qualitative and quantitative information. The evidence of the FMIs' criticality, evaluated according to the methodology described in the following paragraphs, is provided to the Resolution Authority through the "GMPS_WTN_FMI_Up_To_Date_28062018" file.

The non-exhaustive list of potential FMIs and the "GMPS_WTN_FMI_Up_To_Date_28062018" are attached at Annex 1 and Annex 2, respectively.

3.2 Critical and Essential FMIs Identification

The Single Resolution Board defines FMIs "critical" ed "essential" as follows:

- *The access to an FMI is considered **critical** if its disruption or failure can present a serious impediment or completely prevent the performance of one or several **critical functions**. If such access can be substituted easily by another FMI or service provider to a comparable extent, with a comparable quality, with an acceptable cost and within a reasonable timeframe, then it should not be considered as critical. Nevertheless, a substitute is only credible if:*
 - *A relationship has already been established and the institution under resolution does not need to sign a new contract with that FMI or PCCS service provider;*
 - *Instructions can be re-routed within a reasonable timeframe;*
 - *The relevant FMI does not take credit or liquidity risk on the reporting institution. Indeed, RAs cannot unilaterally stop interacting with an FMI and use another FMI instead, if the institution has open positions or used credit lines with the relevant FMI.*
- *A FMI access is considered **essential** if it is necessary for the continuity of a **core business line**.*

Take into account that the list of “essential FMIs” is residual in respect of “critical FMIs”. This means that a critical FMI is for sure also essential; where a FMI is not vital for the continuity of a critical function, it is to be evaluated if it is anyway necessary for the continuity of other non-critical functions within a certain core business line (if yes, this is to be mapped as an “essential FMI”).

In accordance with the foregoing, the Group considered a FMI:

- as “critical” if the disruption or a failure of the access to FMI can present a serious impediment or completely prevent the performance of one or several Critical Functions (CFs). In this view, the critical access to FMI are indicated in the column “Mapping to Critical Functions” of the .xls “GMPS_WTN_FMI_Up_To_Date_28062018”;
- as “essential” if the access to FMI is necessary for the continuity of a Core Business Lines (CBLs). In this view, the essential access to FMI are indicated in the column “Mapping to Core Business Lines” of the .xls “GMPS_WTN_FMI_Up_To_Date_28062018”;
- as “critical” and “essential” upon the occurrence of both the above conditions. This case occurs when both to the column “Mapping to Critical Functions” and the column “Mapping to Core Business Lines” of the .xls “GMPS_WTN_FMI_Up_To_Date_28062018” are filled in.

3.3 Scoring Assignment and Judgmental Analysis

The Group has defined a priority scoring assigned to each FMI, in accordance with the following criteria:

- **“High Priority”** has been assigned to those FMIs considered “critical” (linked to one or more CFs regardless the linked to CBLs);
- **“Medium Priority”** has been assigned to those FMIs considered “essential” but not “critical” (linked to one or more CBLs but not linked to CFs);
- **“Low Priority”** has been assigned to those FMIs that are not “critical” neither “essential” (not linked to CFs or CBLs).

Finally, the mentioned criteria could be integrated following a **judgment analysis** by an expert aimed at considering further aspects such as, for example, the volume of transactions and the level of substitutability.

The analysis could lead to possible changes in the priority scoring assigned, shifting their priority from “medium ” to “low” or from “medium ” to “high ”.

4. Conclusions

The following is a recap of the main FMIs which, on the basis of the methodology illustrated in the previous paragraphs, were judged critical by the Group during the 2018 exercise. The complete list of the FMIs identified by the Group can be consulted within the excel attached.

FMI's Type/System	FMI's Designation
Payment System	EBA/STEP2
	BI comp
	TARGET 2
	EBA euro 1
CSDs and SSS	Clearstream
	Monte Titoli
	Target 2 Securities
Central Counterparties (CCPs)	Cassa Compensazione e Garanzia
	LCH.Clearnet Ltd
	Ice Clear Europe Ltd
Trade repositories (TRs)	None Critical FMI for TRs type
Trading venues	MTS Italy (cash & repo) - MR
	MTA - MR
	MOT/EuroMOT - MR
	EuroTLX - MTF
	Aste ECB (€)
	Bloomberg - MTF
	ETF-Plus - MR
	NYSE Euronext Cash (Paris, Bruxelles, Amsterdam)
	SEDEX (Borsa Italiana)
	Borsa Italiana Equity - MTF
	AIM-MAC - MTF
	IDEM - MR
	MIV - MR
	EuroMTS - MTF
	Tradeweb - MTF
	BGC Brokers LP - OTF_BGCO
	ICAP WCLK - MTF_IMRD
Intermediaries	Merrill Lynch International Ltd
	Goldman Sachs Group, Inc.
Other	Citibank
	Systematic Internaliser De@I Done Trading (DDT)

Source: Internal elaboration

Annex 1

Di seguito si riporta la lista non esaustiva di potential FMIs suddivise per tipologia di sistema e consultabile all'interno dell' FMIs Report scaricabile dal sito www.srb.europa.eu.com.

PS Large Value		
FMI name	Operator or parent company (if relevant)	Country
RECOUR	NBB	BE
BOJ-NET (Bank of Japan Financial Network System)	Bank of Japan	JP
CERTIS (Czech Express Real Time Interbank Gross Settlement System)	Czech National Bank	CZ
CHAPS (Clearing House Automated Payment System)	Bank of England	UK
CHIPS	The Clearing House	US
CLS		US
Croatian LVPS	Hrvatska Narodna Banka (central bank)	HR
EURO 1	EBA Clearing	EU
Fedwire Funds Service	Federal reserve Bank of New York	US
KRONOS	Danmarks Nationalbank	DK
REGIS	Banca Nationala a Romaniei (central bank)	RO
RINGS (Real-time Interbank Gross-settlement System)	Central Bank of Bulgaria	BG
RIX	Sveriges Riksbank	SE
SORBNET	Narodowy Bank Polski (central bank)	PL
STEP 1	EBA Clearing	BE
TARGET2	ECB	BE
VIBER	Magyar Nemzeti Bank (central bank)	HU

Source: SRB website

PS Retail		
FMI name	Operator or parent company (if relevant)	Country
Athens Clearing Office (ACO)	Bank of Greece	EL
Automated Clearing House (ACH)	The Clearing House	US
BACS		UK
Bankgirocentralen BGC AB (Bankgirot)		SE
BI-COMP	Banca d'Italia	IT
BISERA (Bank Integrated System for Electronic Payments)	BORICA-BANKSERVICE AD	BG
BORICA	BORICA-BANKSERVICE AD	BG
CEC	STET (FR)	BE
Clearing Service Austria (CSA)	OeNB and Geldservice Austria (GSA)	AT
Clearing Service International (CSI)	OeNB and Geldservice Austria (GSA)	AT
Cyprus Clearing House	Cyprus Stock Exchange	CY
DIAS (Interbanking Systems S.A.)		EL
Electronic Clearing System (EKS)	Latvijas Banka (central bank)	LV
Equens		NL
EuroELIXIR	KIR	PL
Express Elixir	KIR	PL
Faster Payments Service		UK
FedACH Services	Federal Reserve Bank	US
Interbank Clearing System (ICS)	GIRO Elszámolásforgalmi Zrt.	HU
Irish Paper Clearing Company (IPCC)		IE
Irish Retail Electronic Payments Clearing Company (IRECC)		IE
JCC Sepa Direct Debits System		CY
KIR – Krajowa Izba Rozliczeniowa (National Settlement Office)	KIR	PL
KUBAS	Lithuanian Central Credit Union	LT
LINK		UK
Malta Clearing House	Central Bank of Malta	MT
RPS	Bundesbank	DE
SENT	Transfond SA	RO
SEPA-MMS	Bank of Lithuania	LT
SICOI	Banco de Portugal	PT
SIPS	Národná banka Slovenska	SK
SNCE (Sistema Nacional de Compensación Electrónica)		ES
STEP 2	EBA Clearing	BE
STET	STET	FR

Source: SRB website

CCP Derivatives

FMI name	Operator or parent company (if relevant)	Country
ATHEXClear (Athens Exchange Clearing House SA (Athex Group	EL
Austraclear (ASX Clearing)	ASX	AU
BME Clearing	BME	ES
Casa de Compensare Bucuresti SA		RO
Casa Romana de Compensatie SA	Sibex	RO
Cassa Compensazione e Garanzia (CC&G)	London Stock Exchange	IT
CME Clearing Europe Limited		UK
EUREX Clearing AG	Deutsche Börse	DE
ICE Clear Europe Limited		UK
ICE Clear Netherlands		NL
KDPW_CCP S.A.		PL
LCH Clearnet Ltd		UK
LCH Clearnet SA		FR
LME Clear Limited		UK
Nasdaq OMX Clearing	NASDAQ OMX	SE
National Securities Clearing Corp. (NSCC)	DTCC	US
SIX x-clear	SIX SIS	CH

Source: SRB website

CCP Securities		
FMI name	Operator or parent company (if relevant)	Country
ATHEXClear (Athens Exchange Clearing House SA (Athex Group	EL
Austraclear (ASX Clearing)	ASX	AU
BME Clearing	BME	ES
Casa de Compensare Bucuresti SA		RO
Casa Romana de Compensatie SA	Sibex	RO
Cassa Compensazione e Garanzia (CC&G)	London Stock Exchange	IT
CCP Austria		AT
EUREX Clearing AG	Deutsche Börse	DE
EuroCCP		NL
Fixed Income Clearing Corp (FICC)	DTCC	US
KDPW_CCP S.A.		PL
LCH Clearnet Ltd		UK
LCH Clearnet SA		FR
National Securities Clearing Corp. (NSCC)	DTCC	US
SIX x-clear	SIX SIS	CH

Source: SRB website

ICSD and/or SSS		
FMI name	Operator or parent company (if relevant)	Country
Austraclear (ASX Settlement)	ASX	AU
BOGS (Bank of Greece Securities Settlement System)	Bank of Greece	EL
Central Depository & Clearing Company		HR
Central Depository AD		BG
Centralna klirinško depotna družba (KDD)		SI
Centrální depozitár cenných papírů SR a.s. (CDCP)		CZ
Centralny Depozytar Cennych Papierow (CDCP) SR		SK
Clearstream Banking AG	Deutsche Börse	DE
Clearstream Banking Luxembourg		LU
Cyprus CDCR (Central Depository and Central Registry)	Cyprus Stock Exchange	CY
DSClear	Sibex	RO
DTC (Depository Trust Company)	DTCC	US
Eesti Väärtvõrk (ECSD)	NASDAQ OMX	EE
Euroclear Bank	Euroclear	BE
Euroclear Belgium (part of ESES)	Euroclear	BE
Euroclear Finland	Euroclear	FI
Euroclear France (part of ESES)		FR
Euroclear Netherlands (part of ESES)	Euroclear	NL
Euroclear Sweden AB	Euroclear	SE
Euroclear UK & Ireland Limited (EUI) (CREST)	Euroclear	UK
Government Securities Depository (GSD)	Bulgarian National Bank	BG
Hellenic Exchanges (HELEX)	Athex Group	EL
Iberclear	BME	ES
INTERBOLSA		PT
KDPW S.A.		PL
KELER		HU
Latvian Central Depository (LCD)	NASDAQ OMX	LV
Lietuvos centrinis vertybinių popierių depozitoriumas	NASDAQ OMX	LT
LUX CSD	Deutsche Borse	LU
Malta Stock Exchange CSD		MT
Monte Titoli	London Stock Exchange	IT
National Depository of Ukraine		UA
NBB SSS	NBB	BE
OeKB CSD (WSB System)		AT
RoClear	Depozitarul Central SA	RO
SAFIR	Banca Nationala a Romaniei (central bank)	RO

SIX SIS	SIX SIS	CH
SKARBNET4	Narodowy Bank Polski (central bank)	PL
SKD (Short Term Bond System)	Czech National Bank	CZ
VP Lux	VP Securities AS	LU
VP Securities	VP Securities AS	DK
T2S (SSS - only for direct connectivity)		EU

Source: SRB website

Trading venue		
FMI name	Operator or parent company (if relevant)	Country
ATHEX (Athens Exchange)	Athex Group	EL
Austraclear (ASX Trade)	ASX	AU
Bolsa de Barcelona	BME	ES
Bolsa de Bilbao	BME	ES
Bolsa de Madrid	BME	ES
Bolsa de Valencia	BME	ES
BondSpot S.A.		PL
Borsa Italiana SpA	London Stock Exchange	IT
Bratislava Stock Exchange		SK
Budapest Stock Exchange		HU
Bulgarian Stock Exchange		BG
Bursa de Valori Bucuresti		RO
Burza cenných papírů Praha, a.s. (Prague Stock Exchange)	CEESEG AG	CZ
CEESEG AG (Wiener Borse)	CEESEG AG	AT
Cyprus Stock Exchange	Cyprus Stock Exchange	CY
Deutsche Börse AG	Deutsche Börse	DE
Euronext Amsterdam Cash Market	Euronext	NL
Euronext Brussels SA	Euronext	BE
Euronext Lisbon SA	Euronext	PT
Gielda Papierow Wartosciowych w Warszawie (Warsaw Stock Exchange)		PL
Irish Stock Exchange Ltd		IE
Ljubljana Stock Exchange	Zagreb Stock Exchange	SI
London Stock Exchange Ltd (LSE)	London Stock Exchange	UK
Luxembourg Stock Exchange		LU
Malta Stock Exchange		MT
MEFF Sociedad Rectora de Productos Derivados S. A.	BME	ES
Mercados de Deuda Pública en Anotaciones		ES
MTS	London Stock Exchange	UK/IT
MTS Portugal	London Stock Exchange	PT
Nasdaq OMX Stockholm	NASDAQ OMX	SE

NYSE Euronext Paris	Euronext	FR
Prague Stock Exchange (Burza cenných papírů Praha, a.s.)		CZ
RM-SYSTEM Czech Stock Exchange		CZ
SIX Swiss Exchange	SIX SIS	CH
Wiener Börse (see also (CEESEG AG)	CEESEG AG	AT
Xetra (Deutsche Börse)	Deutsche Borse	DE

Source: SRB website

Trade repository		
FMI name	Operator or parent company (if relevant)	Country
DTCC Derivatives Repository / Data Repository	DTCC	UK, US, JP, SG

Source: SRB website

Annex 2



GMPS_WTN_FMI_U
p_To_Date_28062018