|  |
| --- |
| Fill the fields needed in SALMON color. If they contain a \* by it’s side, it is mandatory that they are filled. Send the form to BME in an editable formatBME will perform the configuration tasks needed.BME will fill the BLUE fieldsBME will return the form. |

|  |
| --- |
| Entity data |
| Entity’s name\* |       |
| Contact person\* |       |
| Contact phone\* |       |
| Contact email\* |       |
| BIC code used by the entity\* |       |
| Alias assigned by BME**1** | **XXXX** |

|  |
| --- |
| **1. XXXX is the alias assigned by BME when register. For modifications or decomissions, it will have to be filled by the petitioner.** |

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| --- |
| 0.- Request type. UAT environment |
| If it is a modification, you will have to highlight in YELLOW the part to be modified to be easily seen. | Register [ ]  Decomission [ ]  Modify [ ]  | Date\* |       |
| REQUEST SUMMARY |
| MQ |  | REGISTER | DECOMISSION | MODIFICATION |
| MQ with BME Clearing & PTI |  | [ ]  | [ ]  | [ ]  |
| MQ with Iberclear for ISO15022 messages |  | [ ]  | [ ]  | [ ]  |
| MQ with Iberclear for PROPIETARY messages |  | [ ]  | [ ]  | [ ]  |
| MQ with Iberclear for ISO20022 messages |  | [ ]  | [ ]  | [ ]  |
|  |
| SWIFTNet InterAct |  | REGISTER | DECOMISSION | MODIFICATION |
| TDA with Iberclear |  | [ ]  | [ ]  | [ ]  |
| TDA with PTI |  | [ ]  | [ ]  | [ ]  |
| FINplus with Iberclear |  | [ ]  | [ ]  | [ ]  |
|  |  |  |  |  |
| FILES |  | REGISTER | DECOMISSION | MODIFICATION |
| SWIFT FileAct |  | [ ]  | [ ]  | [ ]  |
| MQLotes |  | [ ]  | [ ]  | [ ]  |
| SFTP |  | [ ]  | [ ]  | [ ]  |
|  |  |  |  |  |
| U2A |  | REGISTER | DECOMISSION | MODIFICATION |
| BMEPC |  | [ ]  | [ ]  | [ ]  |

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| 1.- ONLINE-CONNECTIVITY TO MQ SERVERS |
| * If on-line connectivity by the BME network to the MQ BME Clearing server is desired, **Form 1.1** should be filled in with all the information of the channels requested.
* If on-line connectivity by the BME network to CSD MQ Server is desired, **Form1.2** should be filled in
* If connectivity by the SWIFT network is desired (InterAct TDA / IBC), **Form 1.3** should be filled in
* If connectivity is through BT Radianz, the service defined is BME\_PTIGATE\_UAT\_MAD
* If on-line connectivity through SWIFT FINPlus is desired, you will have to fill the **1.4 form.**
 |
| 1.1. On-Line Connection to MQ BME Clearing ServerServer Data |
| IP Server Address for those access through the BME network with leased lines | 10.166.196.228 | Port | 50700 | Queue Manager | BME.MQPTGF1 |
| IP Server Address for those access through the BME network using BT Radianz | 204.109.131.131 |
| IP Server Address for those access through the BME network using BT ADSL | 212.49.152.28 |
| * Indicate and complete the channels that should be used. It can be used for the exchange of messages as:

Settlement Participant for communications with PTI.In case the Entity wishes to use a channel already requested in UAT, indicate the name of the CHANNEL and the QUEUE desired, in paragraph Remarks.  |

|  |  |
| --- | --- |
| Network used (mark an option) | BME. [ ]  BT Radianz [ ]  BT ADSL. [ ]  |

|  |
| --- |
| Channel *–* 1 |
| Protocol | Direction | Channels | Queues |
| PROPIETARY | Send | PTI.PTG.**XXXX2**.FROM.OG | PTI.PTG.**XXXX2**.FROM.QOG |
| Receipt | PTI.PTG.**XXXX2**.TO.OG | PTI.PTG.**XXXX2**.TO.QOG |

|  |
| --- |
| BIC Codes of the Participant Entities \* |
|  |

|  |
| --- |
| Channel– 2 |
| Protocol | Direction | Channels | Queues |
| PROPIETARY | Send | PTI.PTG.**XXXX2**.FROM.OH | PTI.PTG.**XXXX2**.FROM.QOH |
| Receipt | PTI.PTG.**XXXX2**.TO.OH | PTI.PTG.**XXXX2**.TO.QOH |

|  |
| --- |
| BIC Codes of the Participant Entities \* |
|  |

|  |
| --- |
| MQ Manager Server of the Entity. (If all the channels are in the same queue manager, complete the first entry only) |
| Channel | Direction | Queue Manager | IP (If you NAT the server’s IP address, please indicate it in this questionnaire). | Port (Receipt only) |
| Channel-1\* | Send\* |       |       |       |
| Receipt\* |       |       |       |
| Channel-2\* | Send\* |       |       |       |
| Receipt\* |       |       |       |

Remarks:

|  |
| --- |
| 1. **XXXX is the BME-assigned alias for the entity.**
 |
| 1.2 .On-Line Connection to MQ IBERCLEAR ServerServer Data |
| IP Server Address for those access through the BME network with leased lines | 10.166.196.209 | Port | 50700 | Queue Manager | BME.MQCDCF1 |
| IP Server Address for those access through the BME network using BT Radianz | 75.96.250.121 |
| IP Server Address for those access through the BME network using BT ADSL |  212.49.152.67 |
| * It can be used for the exchange of messages as:

Participant Entity to Iberclear.. |

|  |  |
| --- | --- |
|  Network used (mark an option)\* | BME. [ ]  BT ADSL [ ]  BT Radianz [ ] . |
| Message typesMark the desired options \* | ISO15022 [ ]  PROPIETARY [ ]  ISO20022 [ ]  |

|  |  |  |  |
| --- | --- | --- | --- |
| Messages | Direction | Channels | Queues |
| ISO15022 | Send | IBC.CDC.**XXXX2**.FROM.O | IBC.CDC.**XXXX2.**FROM.QO |
| Receipt | IBC.CDC.**XXXX2**.TO.O | IBC.CDC.**XXXX2**.TO.QO |
| PROPIETARIY | Send | IBC.CDC.**XXXX2**.FROM.O2 | IBC.CDC.**XXXX2**.FROM.QO2 |
| Receipt | IBC.CDC.**XXXX2**.TO.O2 | IBC.CDC.**XXXX2**.TO.QO2 |
| ISO20022 | Send | IBC.CDC.**XXXX2**.FROM.O3 | IBC.CDC.**XXXX2**.FROM.QO3 |
| Receipt | IBC.CDC.**XXXX2**.TO.O3 | IBC.CDC.**XXXX2**.TO.QO3 |

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| --- |
| MQ Manager Server of the Entity. (If all the channels are in the same queue manager, complete the first entry only) |
| Channel | Direction | Queue Manager | IP (If you NAT the server’s IP address, please indicate it in this questionnaire). | Port (Receipt only) |
| Iberclear\* | Send\* |       |       |       |
| Receipt\* |       |       |       |

Remarks

|  |
| --- |
| 1. **XXXX es el alias asignado a la entidad en BME is the BME-assigned alias for the entity.**

**Info note: MQ-ISO20022 cannot be used for the SRD2 identification service.** |

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| --- |
| 1.3 On-line connection by the SWIFTNet network (InterAct – TDA / IBC) |
| * *It can be used for the connection as (it can only be used for ISO15022 and PROPIETARY messages):*

*Settlement Participant to IBERCLEAR**Settlement Participant in communication with PTI* |

|  |  |
| --- | --- |
| Do you want to use SWIFTNet (InterAct-TDA / IBC) Network to connect as Settlement Participant to IBERCLEAR?\* | Yes [ ]  No [ ]  |

|  |
| --- |
| BIC Code/s of the Participant Entities \* |
|       |

|  |  |
| --- | --- |
| Do you want to use SWIFTNet (InterAct-TDA / IBC) Network to connect as Participant for communication with PTI?\* | Yes [ ]  No [ ]  |

|  |
| --- |
| BIC Code/s of the Participant Entities \* |
|       |

Remarks:

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| --- |
|       |

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| 1.4 On-line connection through SWIFT FINPLUS network |
| * It can be used for participant entities’ connections to IBERCLEAR (only ISO20022 messages)
* Transmission BIC11: IBRCESMMXXX
* DN: ou=xxx,o=ibrcesmm,o=swift
 |

|  |  |
| --- | --- |
| Do you want to use SWIFT FINPLUS network to connect as a participant entity to IBERCLEAR?\* | Yes [ ]  No [ ]  |
| Meetings and general assembly communications \* | Yes [ ]  No [ ]  |
| Digital vote in shareholders meetings.\* | Yes [ ]  No [ ]  |
| Shareholders and last beneficiary identification\* | Yes [ ]  No [ ]  |
|  |
| BIC and DN transmisión codes of the participant entities. |
| Transmission BIC11DN de Transmisión |       |
| Transmission DN |       |

Remarks:

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| 2.-FILE EXCHANGE SYSTEM |
| * If batch connectivity using SWIFTNet Network is desired, **Form 2.1** should be filled in
* If batch connectivity by Batch MQ is desired, **Form 2.2** should be filled in
* If connectivity by SFTP is desired, **Form 2.3**. should be filled in
 |

|  |  |
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| Communication way used by BME to send the PTI End-of-day´s files (Mark ONLY ONE)\* | 1-SFTP [ ]  2-FileAct [ ]   |
| Communication way used by BME to send on-line PTI petition´s responses. (Mark ONLY ONE). If you need more than one channel for a member code, it will be sent to the first requested one.\* |  1-SFTP [ ]  2-FileAct [ ]  3- MQ Batch [ ]   |
| 2.1 SWIFTnet Network use – (SWIFT IBC-FileAct) |
| * It will be used for the connection as:

Participants Entities to IBERCLEARParticipants Entities for communications with PTI.* BME will always send the files with CRLF Windows format.
 |

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| --- |
| BIC Code/s of the Participant Entities \* |
|       |

|  |  |
| --- | --- |
| Format used for the end of line.\* | UNIX (LF) [ ]  WINDOWS (CRLF) [ ]   |

|  |
| --- |
| **Remarks:** |
| 2.2 BME Network use – Batch MQ |
| * Fill in the channels that you are going to use.
* It will be used for the connection as:

Participant Entity and communication with PTI* BME MQ server data are the indicated in **Form 1.1**

If you wish to use a previous requested channel in UAT, indicate Channel and Queue name that you desire in the Remarks paragraph. |
| Channel - 1 |
| Direction | Channels | Queues |
| Send | PTI.PTG.**XXXX3**.FROM.L | PTI.PTG.**XXXX3**.FROM.QL |
| Receipt | PTI.PTG.**XXXX3**.TO.L | PTI.PTG.**XXXX3**.TO.QL |

|  |
| --- |
| BIC Code/s of the Participant Entities \* |
|       |

|  |
| --- |
| Channel - 2 |
| Direction | Channels | Queues |
| Send | PTI.PTG.**XXXX3**.FROM.L2 | PTI.PTG.**XXXX3**.FROM.QL2 |
| Receipt | PTI.PTG.**XXXX3**.TO.L2 | PTI.PTG.**XXXX3**.TO.QL2 |

|  |
| --- |
| BIC Code/s of the Participant Entities \* |
|       |

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| MQ manager server of the entity. (If all channels are in the same queue manager, fill only the first entry)Información requerida a la Entidad. (Rellenar solo si los datos son diferentes al **formulario 1.1** ) |
| Channel | Direction | Queue Manager | IP (If you NAT the server’s IP address, please indicate it in this questionnaire). | Port (Receipt only) |
| Channel-1\* | Send\* |       |       |       |
| Receipt\* |       |       |       |
| Channel-2\* | Send\* |       |       |       |
| Receipt\* |       |       |       |

Remarks:

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| 1. **XXXX es el alias asignado a la entidad en BME is the BME-assigned alias for the entity.**
 |

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| 2.3 Data for the SFTP connectivity for the exchange of files |

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| Required:* BME network connection
* Client Open SSH 5.5 or higher (Winscp, Filezilla, etc..)
* After the generation of a pair of public and private keys SSH-2 RSA with 2048 bits encoding, please send to BME a text file with the public key.
* If the connection is through shared lines, you must set a limitation of bandwidth for no longer than 0.5 Mb bandwidth
* It can be used for the transfer of files as:

Settlement Participant of IBERCLEARSettlement Participant and PTI Communications* BME will send the files with the same format of end of line received by the entity.
* For Connectivity through VPN, please see point 3 in next page of this document.

If this technical information has already been supplied for UAT access, it is not necessary to complete the technical section, but the Entities codes must be filled in. |

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| Technical data supplied by BME |
| Protocol | SFTP |
| SFTP Server Port in BME | 22 |
| Server´s SFTP BME's network IP address | 10.166.196.228 |
| Server´s SFTP BT's network Radianz IP address | 204.109.131.131 |
| User for the connection of the Entity to BME (XXXX) is the Alias | sftpXXXX  |
| Subdirectory in BME for the reception files Mechanism | output |

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| Technical data supplied by the Entity |
| Network use (mark ONE) \* | BME: [ ]  BT Radianz: [ ]  Internet (VPN): [ ]  |
| Client SFTP IP address (NAT address before BME).\* |       |
| File name that contains the public key\* |       |
| Compression system of the files, by default is NONE.\* | NONE: [ ]  | ZIP: [ ]  | GZIP: [ ]  |
| Format used for end of line\* | UNIX (LF) [ ]  WINDOWS (CRLF) [ ]  |

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| --- |
| BIC Code/s of the Participant Entities \* |
|       |

Remarks:

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| *3.-* BME-PC CONNECTIVITY |

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| * It will be necessary:

Access towards <https://gui.bme-pc.es>Modification of “HOSTS FILE” of your computer, that includes “x.x.x.x gui.bme-pc.es”.* + - Where “x.x.x.x” should be 10.166.4.155 for access by BME network or for VPN (port 443)
		- Where “x.x.x.x” should be 75.96.193.250 for access by BT-R (port 443)
		- Where “x.x.x.x” should be 212.49.152.9 for access by BT-ADSL (port 443)
* If connection to a DNS is needed, the connectivity to IP10.166.4.118 (port 53) and 10.166.4.119 (port 53)
* If this technical information has already been supplied for UAT access, it is not required to complete it.
* If connectivity is via VPN you must complete the attached application for "VPN -Service Request Form"
	+ You must install the Cisco AnyConnect Client software. Software and instructions (Cisco AnyConnect VPN Client. Installation Manual ) can be downloaded in <https://software.grupobme.es/helpdesk>
		- User: helpdesk
* To access https must install the certificate provide to you by BME.
 |

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| Information to be supplied by the Entity |
| Network used (mark an option)\* | BME. [ ]  BT Radianz. [ ]  BT ADSL. [ ]  Internet (VPN). [ ]  |
| IP addresses of the computers through which you are going to access (NAT direction before BME). \*An IP address should be provided for each terminal\* |                           |
| Does the Entity have a certificate for access to BME-PC?\* | SI: [ ]  NO: [ ]  |
| Company Tax Number (VAT)\* |       |
| Mobile phone number\* |       |

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| Technical information supplied by BME |
| If you do not have one, a certificate and instructions for the installation will be supplied.The necessary password will be sent by SMS to the phone number indicated in order to install the Certificate |

Remarks:

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| BME-PC features |
| Application |
| **Description of the tool** | Client terminal to access to BME tool. |
| **Entorno de ejecución** | Browser (Edge, Chrome, FireFox) |
| **Execution of the tool**  | It is executed on web browser connected to the BME network  |
| **Internet access**  | NO |
| **Updating of the tool and components**  | The tool will be updated on BME servers. You will receive nothing for its installation for making it work.  |
| **Installation of additional elements** **Other characteristics** | The application does not need to install nothing on the client’s computer..Uncheck the boxes in the compatibility view mode.Do not use emulators from versions prior to 8. |
| Security- Authentication |
| **Authentication**  | User/Password + Web browser Certificate  |
| **Certification type** | Auto signed X'509 SHA256 PKCS12 2048 bits |
| **Administration**  | Users are managed with a tool developed for this purpose, where roles and rights of each one are set up.  |
| **Level of authorization**  | Roles are defined as Profiles and they content the authorized menu options as well as the relationship with Entities-Members.  |
| **Password features**  | The password has to content at least a capital letter, a number, a special symbol and also it has to be longer than 8 characters.  |
|  **Management of the password**  | Initially, the password is set up by an administrator. It is mandatory to change it when the user login to the application by the first time. It will be sent and save encrypted.  |
| **Accessibility to the user credentials**  | Only the administrator of the system can access to the credentials, but it cannot see the user password.  |
| **Force a new password**  | The application does not obligate to change from time to time the password, but the administrator can force its reboot. |
|  |  |
| Security-Remote access |
| **Remote access**  | Nowadays it is only allowed the access through the BME Market network. |
| **Getting credentials**  | For any type of access, it would be necessary to contact with the BME business unit in order to know the necessary credentials.  |
| **Inactivity of the system** | The session can be lost if there is not activity at the terminal in 15’. |
| Processed Information |
| **Processing of the information** | The application does not deal with any type of data in local. All the information is kept on the internal servers of BB. DD. |
| **Processing of the cookies**  | If the session is in shadow variables, the application does not manage cookies.  |
| Monitoring |
| **Network security**  | The terminal to access are previously identified in the network.  |
| **Follow-up** | The IP of the connected client terminal is controlled so only y the necessary protocols and ports (HTTPS/443) are active. |
| **Control access**  | There are tools for the administrator of the system in order to verify the access to the terminal client with the periodicity that it is deemed appropriate. |

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| - ANNEX - |

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| *Hereafter we explain the different channels of communication as well as its possible applications.**1.1. On-Line connection to MQ BME Clearing server and PTI** *It can be used to the exchange of messages as:*

*Member of BME Clearing to BME Clearing**Equity Market Member for PTI communications* *Settlement Participant to BME Clearing* *Settlement Participant to PTI communications.**1.2 On-Line connection to MQ IBERCLEAR server** *It can be used to the exchange of messages as:*

*Settlement Participant Entity to Iberclear.**1.3 On-Line connection through SWIFTNet Network (InterAct – TDA / BME Clearing)** *It can be used the connection as:*

*Member of BME Clearing to BME Clearing**Settlement Participant to BME Clearing.**1.4 Services/applications that BME allows for FINPLUS** *Meetings/general assembly communications*
* *Digital vote in shareholders’ meetings.*
* *Identification of shareholder and beneficiary.*

*2.1 Using SWIFTnet Network – (SWIFT IBC-FileAct)** *It can be used for the connection as:*

*Equity Market Member for PTI communications,**Settlement Participant to IBERCLEAR* *Settlement Participant for PTI Communications.**2.2 Using BME Network - MQ Lots** *It can be used for the connection as:*

*Equity Market Member for PTI communications**Settlement Participant for PTI communications.**2.3 Data for the connectivity through SFTP for files exchanged** *It can be used for the transfer of files as:*

*Equity Market Member for PTI communications**Member of BME Clearing to BME Clearing**Settlement Participant to BME Clearing**Settlement Participant to IBERCLEAR**Settlement Participant for PTI communications.**3 BME-PC Connectivity* |