

**Group Member Access (GMA) Program.  
Frequently Asked Questions**

**1. General Scope and Approach**

<p>Q: Which are the Clearing Segments covered by GMA?</p>	<p>For SA : all UCS clearing segments (Cash, Derivatives) are supported by GMA</p> <p>For LTD: in priority GMA is being rolled out for LME Clearing on Synapse. Other Clearing activity segments like Freight, Repo's, Swaps will follow according to schedule to be communicated. LCH.Clearnet Ltd is planning to go live with Synapse for LME in October 2009 with testing starting in July 2009.</p>
<p>Q: Why isn't it possible to connect to LCH.Clearnet via other solutions than the one proposed?</p>	<p>GMA is an LCH.Clearnet Group access service which has to follow strict requirements in terms of quality, high security and resiliency. It is not an open access model.</p> <p>The service is commercially available through LCH.Clearnet which has appointed 2 solutions through an extensive selection process: Radianznet operated by BT and SFTI Managed Connection operated by NYSE Technologies.</p> <p>Both solutions are proposed at same competitive costs to mitigate financial impacts for users.</p>
<p>Q: Why has LCH.Clearnet opted for a direct commercial model?</p>	<p>LCH.Clearnet requirements are for a highly secure, controlled and independent solution. Given the importance of data exchanged with members there is a need for a cost efficient and controlled solution which can be implemented in a timely manner. The direct model provides LCH.Clearnet with flexibility and control, and allows offering competitive pricing to members.</p>

<p>Q: Why have you changed the name of the project for GMA?</p>	<p>CMA was the initial name of the project and has been changed into GMA in order to better reflect the Group dimension of the proposed solution :</p> <ul style="list-style-type: none"> <li>- One global highly secure and scalable access architecture</li> <li>- One common access for Group LCH.Clearnet services described above</li> <li>- Harmonized commercial model and pricing between LTD and SA</li> <li>- Coordinated process for ordering and roll out, even if separate membership to 2 different CCP's</li> </ul>
<p>Q: What happens to my “Bourse Connect” network infrastructure and CAP /MAP solutions after migrating to GMA?</p>	<p>Since 2008, NYSE Euronext, via its subsidiary NYSE Technologies, has become the full owner and operator of the Bourse Connect network and is in direct contractual relationship with Bourse Connect customers, including all LCH.Clearnet SA members</p> <p>During 2009 , the Bourse Connect network used for Trading and Clearing will be dismantled by NYSE Technologies.</p> <p>The LCH.Clearnet GMA offer is the new solution for clearing member access and has been designed to meet key CCP service requirements like scalability, resiliency and security.</p> <p>Operationally, the CAP/MAP and Bourse Connect existing infrastructure will be dismantled only after successful migration of Clearing members to the new solution, and under NYSE.Technologies responsibility.</p>

## 2. Commercials

<p><b>Q:</b> What is the VAT status which applies to my firm with GMA invoice ?</p>	<p>For SA users :the same status as for other LCH.Clearnet SA invoices applies.</p> <p>VAT will be applied; non resident members could request to be invoiced without VAT.</p>
<p><b>Q:</b> When am I going to receive my first invoice during the migration process ?</p>	<p>For the GMA network access, there will be a predefined period of time (one or two weeks in most cases) after completion of the secured IP connectivity during which no invoice will be sent. This period of time shall be used for User acceptance and technical migration to the new GMA service.</p> <p>Invoicing will start from nearest 1<sup>st</sup> or 15<sup>th</sup> of the month after such defined migration period.</p> <p>SA Members will be required to inform the BCNN (now NYSE technologies) provider about the timing of their GMA migration and discuss the service dismantling for the MSA and CAP after all clearing connectivity has been migrated successfully towards the new GMA service.</p>
<p><b>Q:</b> What happens to my old network infrastructure, old CAP's and dismantling costs ?</p>	<p>Regarding any dismantling costs, Members are informed that NYSE Technologies has decided in 2008 to stop in 2009 the AMS service (Bourse Connect), and thus for SA Clearing members as this is a shared network resource.</p> <p>AMS and CAP/MAP dismantling costs, if any, have to be dealt with directly with NYSE Technologies</p> <p>NYSE Technologies also confirmed that maintaining the physical CAP/MAP solution on a</p>

	replacement solution for AMS would be difficult and costly, which has led LCH.Clearnet to develop the LCAP offering
<b>Q :</b> Where is the official price list for GMA ? What about the official Fee grid ?:	The official SA Fee Grid will be updated after the GMA project completion The GMA price list is described directly in the Order Form sent on March 6 <sup>th</sup> 2009 to Users.

### 3. Ordering process

**Q :** What happens if I cannot send the OF before April 24<sup>th</sup> ?

We need the Order Forms signed back for April 24<sup>th</sup> in order to plan the roll out in a organised and controlled manner  
If there are any difficulty for meeting the April 24<sup>th</sup> deadline, Members should contact urgently LCH.Clearnet for Assistance

## 4. Technical Solution

<p>Q: Is it possible to mix GMA operational access using the BT/R and SFTI solutions?</p>	<p>The mix access (one link with BT/R and one link with SFTI) is not allowed for GMA as the resiliency automation is not guaranteed on Member side, nor on LCH.Clearnet DC side.</p>
<p>Q: Who should I determine my bandwidth requirements on GMA?</p>	<p>For SA only members : Standard bandwidth, in line with LCH.Clearnet Capacity planning requirements, should be a reserved capacity of 2Mbps for up to 9 SLE (about 3 LCAP x 3 attached SLE) (indicative) and including up to 3 eCCWs connectivity. Above these requirements, please consult LCH.Clearnet SA.</p> <p>For LTD members only: please contact the LTD account manager as specific bandwidth requirements apply depending on clearing activity profile.</p> <p>For Members both on SA and LTD opting for one common GMA connectivity, the minimum requirement is for 4Mbps capacity to be confirmed for Ltd access requirements.</p>
<p>Q: Can I use in parallel my Prod and Back up links ?</p>	<p>The resiliency topology for GMA connectivity is Active / Passive mode. So, the backup link is used only if the primary link is down, with no load balancing option.</p>

<p>Q: Now that the CAP /MAP is not physically located on my data room any more, what is the performance impact on having to pull the files over GMA from the LCH.C central infrastructure?</p>	<p>There should be no impact Chosen network and central infrastructure for LCAP is with high capacity, scalable and resilient.</p> <p>A choice will also be given to member to get files in compressed (.GZ) format, in order to optimize their bandwidth allocation.</p>
<p>Q: Could I continue to use my current CAP by connecting it on the new IP network?</p>	<p>The migration of legacy Member CAP on the new IP network (BT/Radianz or NYSE.Tech/SFTI) is not possible.</p>
<p>Q : Do I have to manage myself the active/passive line switching in case of failure for the Silver Split solution ?</p>	<p>The Silver split solution implies that the customer is enabling the synchronisation dialog between the VPN boxes over its own extended LAN or WAN. This will ensure that connectivity is automatically switched between the 2 sites in case of circuit failure .</p>

## 5. Legal and contractual

Q : Will there be a new contract (access agreement) repealing and replacing the agreement composed of the OF+ the attached schedules?

A new LCH.Clearnet SA Access Agreement has been discussed during 2008 with members.  
The Order Form and attached schedules encompassing the GMA network connectivity solutions and new LCAP gateway service are drawn up on the terms and conditions already agreed with the Members.

## 6. Security and Resiliency

<p>Q: What kind of Security and resiliency tests are expected or required by LCH.Clearnet SA before going live ?</p>	<p>LCH.Clearnet SA will publish a detailed User Technical Acceptance guide for GMA .</p> <p>Before going live, the User will have to :</p> <ul style="list-style-type: none"> <li>- Check the GMA network resiliency tests (failover, switchover,...) according to its tier configuration choice (like Platinum, gold or silver)</li> <li>- Declare to LCH.Clearnet SA its test execution success</li> </ul>
<p>Q : Do you guarantee the same level of security / continuity between the new solution and the legacy one?</p>	<p>At Network level (security and continuity level improved)</p> <ul style="list-style-type: none"> <li>• Legacy : <ul style="list-style-type: none"> <li>- Circuit resiliency was a recommendation and not mandatory</li> </ul> </li> <li>• New solution : <ul style="list-style-type: none"> <li>-Circuit resiliency is mandatory for Production access</li> <li>- Dedicated VPN channel and encrypted flows (IPSEC)</li> </ul> </li> </ul> <p>At files and messages format and content level</p> <ul style="list-style-type: none"> <li>- No change</li> </ul> <p>At CAP level (security and continuity level improved)</p> <ul style="list-style-type: none"> <li>• Legacy : CAP solution <ul style="list-style-type: none"> <li>- Desktop computer on member site</li> <li>- Physical Dongle authentication</li> </ul> </li> <li>• New LCAP solution : <ul style="list-style-type: none"> <li>- LCAP services provided and implemented on LCH.Clearnet SA Datacenter's</li> <li>- Resiliency level 1 : LAM</li> <li>- Resiliency level 2 : Cluster</li> <li>- Resiliency level 3 : Disaster recovery site</li> <li>- Logical Dongle authentication</li> </ul> </li> </ul>

## 7. Project roll out to Users

<p>Q : Can I modify / rationalize my configuration before ordering my new connectivity ?</p>	<p>Due to the complexity of the migration :</p> <ul style="list-style-type: none"><li>- we need to freeze Members' configurations from beginning to end of global GMA roll-out [01/04-31/12/2009], given technical complexities and risks;</li><li>- CAP will be migrated on one-to-one basis;</li><li>- Freeze period will be applied, member-to-member (for improved flexibility)</li></ul>
<p>Q : Do you plan a possibility fro roll-back in case of problem during the migration ?</p>	<p>A roll-back from LCAP to the legacy CAP will be possible in case of problem during first days of the LCAP migration. This operation will be done following a detailed process between Users and LCH.Clearnet, coordinated by CTH</p>