# CAPACITY MANAGEMENT POLICY
## TECHNOLOGICAL INFRASTRUCTURE

This policy establishes the conditions and controls regarding the extent of use of resources of DCV technological infrastructure, deemed necessary to provide the market with a suitable securities custody and liquidation service.

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## 1. BASES

### Brief sketch of some measures adopted

DCV has been operating since late 1995 with the infrastructure supporting the custody and liquidation of public offer securities. In this period and with the purpose of securing the proper operation of the infrastructure, some capacity studies have been carried out, based mainly on equipment renovation processes or on the imminent impact that may result from a change in the conditions of the business or architecture of the applications.
Similarly, some incidents or problems that have resulted in an "unsuitable" response time of the applications or in compliance with the process schedules engaged with the market involved the adoption of some metrics that would allow defining "sensible" securities for the transactional response time and execution timetables of business processes.

### Brief review of the capacity model

In 2009, the Superintendency of Securities and Insurance (SVS) requested Depósito Central de Valores S.A. (DCV), to perform a study conductive to establishing a capacity model that would allow relating resource use securities to the businesses supported, considering a historical perspective and establishing the metrics whereupon such model operates, to finally establish a capacity policy that accounted for the results obtained and that would represent DCV statement of compliance concerning this matter.
The analysis addressed in the study requested considers various aspects connected with work load and use of resources:

- Infrastructure architecture
- Rate study and Equivalent Units (EU) subproduct
- Information registered in DCV Systems
- *Capacity Planning Study*
- Conceptual framework contributed by the "Queuing Theory"

And allows establising, among others:

- Expected Response Time of an EU
- The maximum value admissible for the expected response time without causing service degradation.
- Processing capacity with regard to historical use.

- Some current architecture growth limits.

## 2. CORPORATE STATEMENT

This policy establishes the features in order to deal with the levels of use DCV technological infrastructure shows, whether these are resources required for online processing of transactions or batch processing in architecture. It considers both the historical securities upon which DCV has engaged its service quality and the capacity study completed in March 2010.

The availability of resources for processing must show levels tending to ensure an increase in business requirements, without risking compliance with the service quality DCV has imposed, up to certain margins. Said margins are expressed in this policy for the knowledge of the partaking entities.

DCV infrastructure is comprised by three types of components:

- **Components involved in customer service:** Such enabling the application systems architecture for the processing of services offered to clients, particularly securities custody and liquidation.
- **Enabler Components**: Such that, without being required for the provision of services to clients, enable activities related to same.
- **Support Components**: Such with no impact in the services offered to clients and that, in general, fulfill support functions to the management of administrative tasks.

Resource availability administration varies according to the type of component referred to and tends to more rigorously protect such supporting securities custody and liquidation services.

## 3. SCOPE

The policy considers its applicability on varied scopes, related to infrastructure capacity:

- **Technological resources:** Such attributes featuring the use and looseness of same, such as levels of processing use, main memory, secondary memory and looseness these resources must disclose.
- **Processing Times:** Such attributes that allow valuing the quality of the services showed by clients, both in the transactional response time and the timely execution of the processes.
- **Business volume:** Quantifiable indicators that allow offering processing capacity for a known business volume.

- **New business:** Levels of use shown by the infrastructure shall consider the future incorporation of new services.

## 4. POLICY GOVERNABILITY

### 4.1. Capacity Committee

It shall look after the capacity management administration process, detailed follow-up of the use of resources and compliance with the metrics and thresholds defined, looking for improvement opportunities and controlling its implementation. Said committee will record a minute reflecting the engagements and improvement opportunities detected, informing the IT and Processes Committee once every quarter.

### 4.2. IT and Processes Committee

The IT and Processes Committee must look after compliance with this policy, for which purpose it will receive detailed information from the Capacity Committee every quarter (4 times a year), knowing the current situation and the results of the measures proposed and adopted.

## 5. POLICY RULES

### 5.1. Components involved in customer service

5.1.1. The average level of resource use in transactional hours and daily must remain under 35%, particularly such resources identified as more scarce.

5.1.2. The duration of the batch processing outside transactional hours must be such that this may be completely executed two times before initiating the next workday.

5.1.3. When beginning each calendar year, the infrastructure must dispose of a resource reserve (looseness) of about 30% of resources assigned and in operation.

5.1.4. These components must allow processing 2.8 times the previous year average daily trading, with a degradation of response time not exceeding 50% of the securities showed in the same period.

5.1.5. These components must allow processing 1.4 times the historical maximum trading registered for one day, with a degradation of response time not exceeding the 50% normally exhibited.

### 5.2. Support components to customer services

5.2.1. The average level of resource use in transactional hours and daily shall not exceed 60%.

5.2.2. The infrastructure must be provided with resources reserve of 10% of resources assigned and in operation when beginning the calendar year.

## 5.3. Components not involved in customer services

5.3.1. The average level of resources use in transactional hours and daily shall remain under 70%.

5.3.2. When commencing the calendar year, the infrastructure shall be provided with resource reserve of about 5% of resources assigned and in operation.

## 5.4. Average Response Times

5.4.1. 98% of transactions must register a processing time below 2 seconds.

5.4.2. Due to the impossibility of controlling the environment through which transactions are dispatched to DCV servers, the measurements previously exposed will be performed from the moment the transaction is received in the central server until the response is also dispatched from the central server.

## 5.5. Application of a capacity model

5.5.1. A follow-up model of the capacity must be kept that enables to verify the values expressed in this policy.

5.5.2. Model validation will be performed biannually, in such way as to verify the estimation bases and to adjust investment budgets tending to comply with this policy

## 5.6. Summary of operation rules

The following chart contains a summary of the values indicated previously, and relates to a processing center:

| | | Type of Component | | |
|---|---|---|---|---|
| Capacity | | SERVICE | SUPPORT | Non PARTICIPATING |
| Resources | Use of Resources | <= 35% | <= 60% | <= 70 % |
| | Resource reserve | 30% | 10% | 5% |
| Processing Times | Batch processing capacity | 2 x | N/A | N/A |
| | Transactional Response Time | <= 2 (s) | N/A | N/A |

| | | | | |
|---|---|---|---|---|
| **Business Volume** | **Previous year trading average** | 2.8 x | N/A | N/A |
| | **Trading historical maximum** | 1.4 x | N/A | N/A |

## 6. NONCOMPLIANCE WITH THE POLICY

Noncompliance with the policy will be assessed by the IT and Processes Committee. The measures adopted will depend on the particular situation originating the noncompliance, and will be subject to follow-up by the committee.

## CHANGES CONTROL

| Ver./Rev. | Section | Change | Date | Responsible |
|---|---|---|---|---|
| V1 | All | Policy creation | 01-Sep-2010 | Nelson Fernández |
| | | Revision and comments | 21-Sep-2010 | Juan Videla<br>Fernando Yañez |
| | | Revision and comments | 22-Sep-2010 | Gonzalo Diethelm |
| | | Dispatch to "IT and Processes Committee" for comments prior to approval and release. | 29-Sep-2010 | Nelson Fernández |
| | | Revision by IT and Processes Committee | 07-Oct-2010 | Nelson Fernández |
| | | Revision by IT and Processes Committee | 18-Oct-2010 | |
| | | Board presentation and approval | 26-Oct-2010 | Board |
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