Ad hoc Group

"Geographical Distribution of Reserves"

Document 5:

Border – Crossing Exchange of

Directly activated Tertiary Control Reserve -

Limits and Constraints

Version 1.0 – July 2005

Table of Contents

0. Goal of the Document 3
1. Definition 3
2. Physical Limits 4
2.1 Geographical Distribution of directly activated Tertiary Control Reserve 4
2.2 Cross-Border Transfer Capacities 5
3. Technical Realisation of border – crossing exchange of directly activated Tertiary Control Reserve 6
3.1 Concepts for Technical Realisation 6
3.1.1 Direct activation of the external generation by the Reserve Receiving TSO 6
3.1.2 Request for power by the Reserve Receiving TSO through the Reserve Connecting TSO 7
3.2 Operational risks resulting from fault scenarios 8
3.3 Technical Requirements 11
3.4 Recommended Technical Realisation 11
4. Organisational Constraints 11
4.1 Allocation of Transfer Capacity 11
4.2 Agreement on Exchange Schedules 12
4.3 Risk of Unavailability 12
4.4 Data Exchange Bidder / TSO 13
4.5 Accounting 13
5. Implementation Issues 13
6. Summary 15

0. Goal of the Document

This document gives an overview of the possibilities and the limitations on the cross-border exchange of DIRECTLY ACTIVATED TERTIARY CONTROL RESERVE. It also discusses the organisational aspects and requirements of such exchanges. Furthermore the operational risks associated with cross-border exchange of DIRECTLY ACTIVATED TERTIARY CONTROL RESERVE are analysed in detail. The document does not however take into account local regulations or provide an economical analysis of the subject, nor does it propose any market solutions, subjects which are out of scope of the document. Terms printed in CAPITAL FORMAT are defined within the separated document "Glossary of Terms".

1. Definition

According to the document "Basic Framework and Current State" it is essential to distinguish two different modes of TERTIARY CONTROL RESERVE activation.

- SCHEDULE ACTIVATED TERTIARY CONTROL RESERVE:
  The TERTIARY CONTROL RESERVE is activated with relation to a pre - defined time frame of exchange schedules, e.g. 15 min.
- DIRECTLY ACTIVATED TERTIARY CONTROL RESERVE:
  The TERTIARY CONTROL RESERVE can be activated at any time, independent from a time frame of to exchange schedules. The activation procedure results in a dynamically changing exchange pattern.

The figure 1 illustrates the different use of the "DIRECTLY ACTIVATED TERTIARY CONTROL RESERVE" and the "SCHEDULE ACTIVATED TERTIARY CONTROL RESERVE".

The scope of this document is the analysis of limits for distribution of the DIRECTLY ACTIVATED TERTIARY CONTROL RESERVE. The limits for distribution of SCHEDULE ACTIVATED TERTIARY CONTROL RESERVE is treated in a separate report.

Concerning the rules for geographical distribution the reserve types SECONDARY CONTROL RESERVE and DIRECTLY ACTIVATED TERTIARY CONTROL RESERVE have to be treated in the same way. This is explained in more detail in Chapter 2.

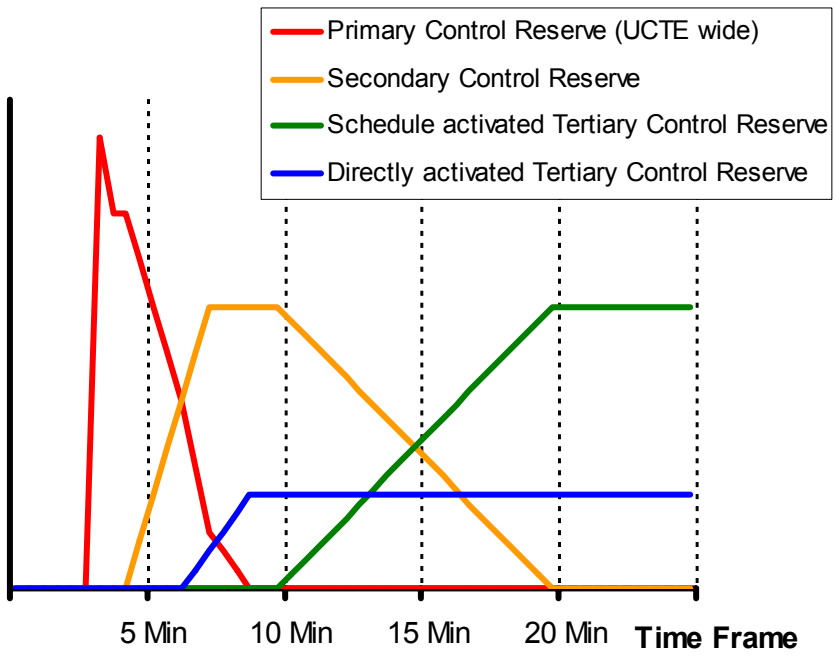

Fig. 1: Activation of different reserve types

2. Physical Limits

2.1 Geographical Distribution of directly activated Tertiary Control Reserve

DIRECTLY ACTIVATED TERTIARY CONTROL RESERVE follows the aim of SECONDARY CONTROL RESERVE to free up the PRIMARY CONTROL RESERVE within 15 minutes after the occurrence of an imbalance with different means. The SECONDARY CONTROL RESERVE is activated within the automatic process of the Load Frequency Control whereas the DIRECTLY ACTIVATED TERTIARY CONTROL RESERVE is a manually activated exchange schedule. An important goal to complete the action of SECONDARY CONTROL when the SECONDARY CONTROL RESERVE is not sufficient to free up the PRIMARY CONTROL RESERVE.

According to the analysis made in the document "Border – Crossing Exchange of Secondary Control Reserves – Limits and Constraints" the following rules for geographical distribution are proposed:

- Transmission Capacity must be available between RESERVE RECEIVING TSO and RESERVE CONNECTING TSO – taking into account all RESERVE TRANSITING TSOs affected
- To gain experience with the monitoring and the reliability it is proposed to keep a share of 1/2 of the total SECONDARY CONTROL RESERVE / TERTIARY CONTROL RESERVE needed inside the CONTROL AREA (see document 4).
- Exchange between neighbouring CONTROL AREAS recommended as a starting point to gain experience.
- Each TSO (both in the role as RESERVE CONNECTING TSO and RESERVE RECEIVING TSO) decides about the number of Virtual Tie – Lines allowed according to the result-

ing accuracy of the ACE measurement. In general the measurements of virtual tie – lines should meet the same requirements as the physical tie – lines (see OpHb: resolution, accuracy, redundancy, etc.). The TSO judges the accuracy of the ACE, taking into account these requirements and the number of physical / virtual tie – lines.

2.2 Cross-Border Transfer Capacities

In general, in case of DIRECTLY ACTIVATED TERTIARY CONTROL RESERVE exchanges between two CONTROL AREAS there is a necessity of having enough available transfer capacity. This applies not only for the RESERVE CONNECTING TSO and RESERVE RECEIVING TSO but also for all RESERVE TRANSITING TSO involved. According to the analysis made in the document “Border – Crossing Exchange of Reserves – Use of Transmission Capacity” it can be concluded that a power flow resulting from directly activated TERTIARY CONTROL activation should use a part of NTC.

3. Technical Realisation of border – crossing exchange of directly activated Tertiary Control Reserve

3.1 Concepts for Technical Realisation

According to the document "Basic Framework and Current State" the following three scenarios exist for the technical realisation of border – crossing exchange of DIRECTLY ACTIVATED TERTIARY CONTROL RESERVES:

1. Direct control of the external generation by the RESERVE RECEIVING TSO
    a) Adaptation of the LFC by the measurement value from the external generation
    b) Adaptation of the LFC by the requested power from the RESERVE RECEIVING TSO
2. Power request by the RESERVE RECEIVING TSO through the RESERVE CONNECTING TSO

3.1.1 Direct activation of the external generation by the Reserve Receiving TSO

In the case of direct activation of the external generation unit the RESERVE RECEIVING TSO activates manually its request for power to the generation by using an exchange schedule – independent of an accounting time frame. The LFCs of both the RESERVE RECEIVING and the RESERVE CONNECTING TSO have to be adapted in order to shift the generation unit "virtually" from the area of the RESERVE CONNECTING TSO to that of the RESERVE RECEIVING TSO. For this purpose the generation unit information (on – line measurement value of active power for scenario a) or request for power for scenario b)) has to be added to the LFC of the RESERVE RECEIVING TSO and subtracted from the LFC of the RESERVE CONNECTING TSO. The direct control of the generation unit by the RESERVE RECEIVING TSO fits to the contractual relation of border – crossing exchanging of DIRECTLY ACTIVATED TERTIARY CONTROL RESERVE from a GenCo.

<u>a) Adaptation of the LFC by the measurement value from the generation unit</u>

The on – line measurement value of active power is sent from the generation unit back to the LFCs of both the RESERVE RECEIVING and the RESERVE CONNECTING TSO. If the generation unit produces according to an underlying schedule in addition to providing for DIRECTLY ACTIVATED TERTIARY CONTROL RESERVE the schedule has to be subtracted from the measurement value accordingly. This introduces the concept of virtual tie - lines which connects the generation unit in the CONTROL AREA of the RESERVE CONNECTING TSO directly to the CONTROL AREA of the RESERVE RECEIVING TSO.

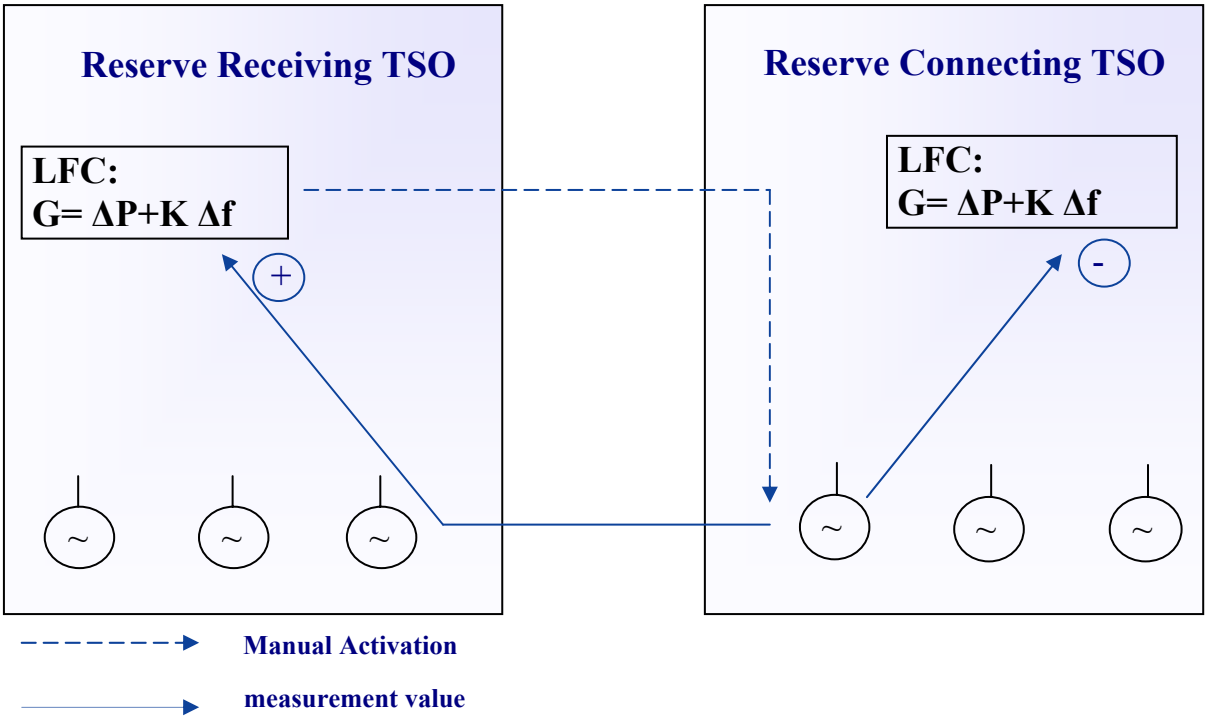

Fig. 2: Technical Realisation of DIRECTLY ACTIVATED TERTIARY CONTROL RESERVE across the Border: Scenario 1. a)

b) Adaptation of the LFC by the requested power from the RESERVE RECEIVING TSO

The request for power from the RESERVE RECEIVING TSO to the generation unit is sent to the RESERVE CONNECTING TSO by manually activating an exchange schedule – independent of an accounting time frame. This request for power is used for an adaptation of the LFCs of both the RESERVE RECEIVING and the RESERVE CONNECTING TSO. Delegation of the responsibility of the DIRECTLY ACTIVATED TERTIARY CONTROL for this part of the reserve to the RESERVE CONNECTING TSO is supposed. This responsibility may be stopped in case of an outage of the generation by manually adapting the requested power to zero.

3.1.2 Request for power by the Reserve Receiving TSO through the Reserve Connecting TSO

The principle of this solution is that the RESERVE RECEIVING TSO does not send its request for power directly to the generation unit but to the RESERVE CONNECTING TSO. The RESERVE CONNECTING TSO adjusts either the power of the plants which the RESERVE RECEIVING TSO has contracted with or the power plants the RESERVE CONNECTING TSO has contracted with. A full delegation of the responsibility of the DIRECTLY ACTIVATED TERTIARY CONTROL for this part of the reserve to the RESERVE CONNECTING TSO is supposed. The block diagram is presented in figure 4.

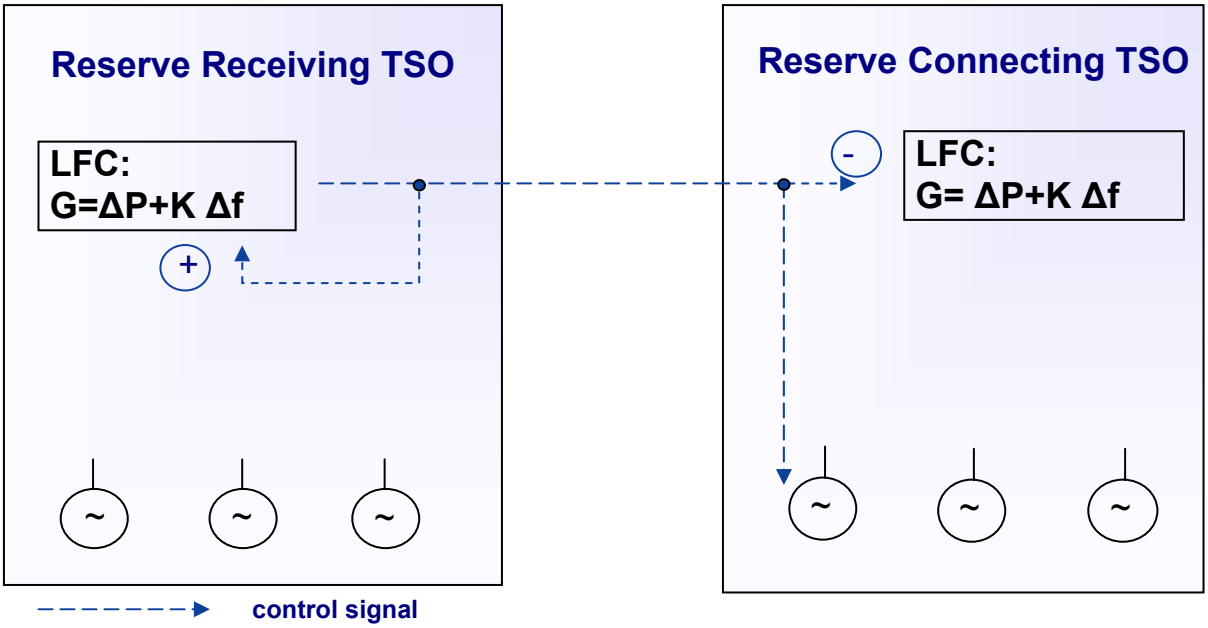

Fig. 3: Technical Realisation of DIRECTLY ACTIVATED TERTIARY CONTROL RESERVE across the Border: Scenario 1. b)

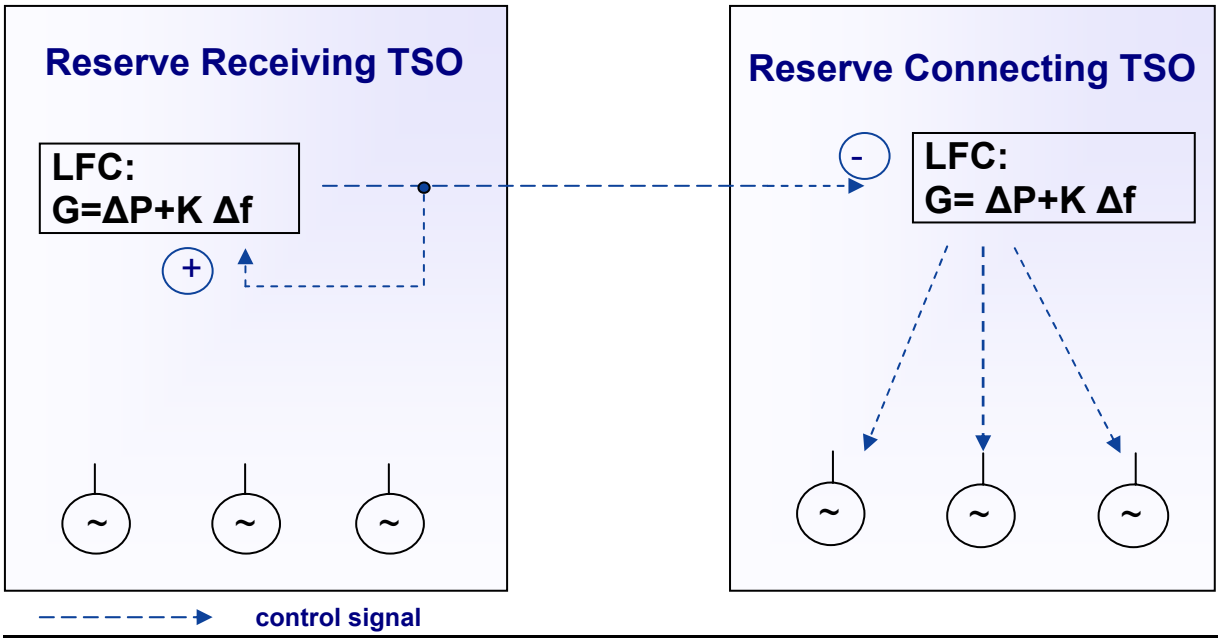

Fig. 4: Technical Realisation of DIRECTLY ACTIVATED TERTIARY CONTROL RESERVE across the Border: Scenario 2.

3.2 Operational risks resulting from fault scenarios

To evaluate the different scenarios for technical realisation the operational risks resulting from fault scenarios are analysed. The following fault scenarios were taken into account:

1. Outage of the generation unit used for cross – border DIRECTLY ACTIVATED TERTIARY CONTROL RESERVE
2. Tripping of tie lines and potential drop of interchange capacity on tie lines for DIRECTLY ACTIVATED TERTIARY CONTROL RESERVE,

3. Data acquisition and transmission problems concerning:
   - a power request to « outer » generation plants and
   - the data exchange necessary for correct reaction of the load frequency control of the RESERVE CONNECTING TSO and the RESERVE RECEIVING TSO,
4. Wrong response of « outer » generation units to the load-frequency control of a RESERVE RECEIVING TSO (no respect of technical terms enclosed in the contract)

Analysis of the different scenarios:

Analysis of Fault Scenario 1 (the outage of a generation unit):
Depending on the technical realisation the results differ:

- Adaptation of the LFC by the measurement value from the generator: In case of an outage of a generation unit, the measurement value decreases to zero and consequently the adaptation of the LFCs of RESERVE RECEIVING and RESERVE CONNECTING TSO also decreases to zero.; → the RESERVE RECEIVING TSO has to compensate for the missing power;
- Adaptation of the LFC by the request for DIRECTLY ACTIVATED TERTIARY CONTROL RESERVE from the RESERVE RECEIVING TSO: this request (exchange schedule) from the RESERVE RECEIVING TSO does not change in case of an outage of the generation unit (unless it is stipulated in the contract that the availability of the generator must be communicated to the RESERVE RECEIVING TSO in which case the RESERVE RECEIVING TSO shall adapt the exchange schedule to take this into account); thus from the point of view of the RESERVE RECEIVING TSO the generation unit is still available for DIRECTLY ACTIVATED TERTIARY CONTROL; unless the request (exchange schedule) is not changed accordingly, the adaptation of the LFC of RESERVE RECEIVING and RESERVE CONNECTING TSO still remains. → As a result, for this scenario the risk of an outage of a generation unit for DIRECTLY ACTIVATED TERTIARY CONTROL RESERVE is only shifted from the RESERVE RECEIVING TSO to the RESERVE CONNECTING TSO if the availability of the generator is not taken into account by the control mechanism.
- Indirect control of the generator by the RESERVE RECEIVING TSO via the RESERVE CONNECTING TSO: In this case the RESERVE CONNECTING TSO has to care to replace the generation unit with the outage by another unit. Also in this case the RESERVE CONNECTING TSO has to compensate unless the request (exchange schedule) is not changed accordingly.

As a result only in the first case (and in the second case providing the availability stipulations) the RESERVE CONNECTING TSO has not to bear the risk

Analysis of Fault Scenario 2 (drop of interchange capacity):
This scenario may occur everywhere on European network (and inside any national transmission grid), but in the scope of DIRECTLY ACTIVATED TERTIARY CONTROL RESERVE distribution, it deals with tie lines OF RESERVE TRANSITING TSO with RESERVE CONNECTING and RESERVE RECEIVING TSO. A RESERVE TRANSITING TSO must study any N-1 scenario to check if

it can transmit directly activated Tertiary energy between TSO, whatever commercial transit due to long term contracts or spot sales on its tie lines, without congestion problems and line tripping for overload. It has to be pointed out that transmission of DIRECTLY ACTIVATED TERTIARY CONTROL RESERVE must not use Transmission Reserve Margin (see document "Use of Transmission Capacity").

Analysis of Fault Scenario 3 (data transmission problems):

- This fault scenario may obviously happen for directly activated TERTIARY CONTROL of any TSO. Nevertheless, the matter is more critical as several TSOs are involved, as well transits on tie lines. Thus, it is necessary for the RESERVE CONNECTING TSO to monitor regularly the response of the generation units and facing a problem, enter into the engagement of warning without delay, both the RESERVE RECEIVING TSO and the RESERVE TRANSITING TSO. The operational risk is limited when it affects a limited number of generation units. In the case of concentrated « pack » of generation plants for DIRECTLY ACTIVATED TERTIARY CONTROL RESERVES, even the loss of a few data transmission links may jeopardise European system frequency, this is one reason for spreading DIRECTLY ACTIVATED TERTIARY CONTROL RESERVES over many locations. In the case of 1a) it must be stressed that the transmission of the measurements is critical which should be reflected in the recommendations for back-up procedures
- In addition to the case of malfunction of measurement value transmission every data transmission problem concerning exchange values could lead to a mismatch of set values of the load frequency controllers involved. Appropriate measures as e.g. confirmation procedures and adjustment / correction of wrong set values have to be elaborated. These measures should aim at reducing the risk for the RESERVE CONNECTING TSO as much as possible.

Analysis of Fault Scenario 4 (response quality):

The last fault scenario is a contractual problem. Reliable monitoring should show that the generation plants do not comply with their commitments, although this is more complex than internal monitoring as the units are not directly connected to the RESERVE RECEIVING TSO network.

Conclusion:

Specific rules for different fault scenarios have to be established to avoid longer periods of unbalance as well as "unfair" bearing of risks of the involved partners. It must be kept in mind for scenario 1 a) and 1b), that a RESERVE RECEIVING TSO has to conclude a contract with a GenCo including direct contact concerning connection / measuring points for a probably limited contracted time which makes problems of data transmission and responsibility more complex. In addition the rules for handling problems of power transmission have to be determined carefully.

3.3 Technical Requirements

In the case of scenario 1 a), the adaptation of the LFC by the measurement value from the generator, a data exchange of the measurement value of the generation units to both the RESERVE RECEIVING TSO and the RESERVE CONNECTING TSO has to be set up. If border – crossing exchange between CONTROL AREAS / BLOCKS occurs the data exchange of the measurement value of the generation units has to be set up for all CONTROL AREAS / BLOCKS affected. The measurement values are used for the adaptation of all LFC involved. In case of the scenarios 1 b) and 2, no data exchange of the measurement values of the generation units is needed; the LFC involved are adapted on the basis of exchange schedules in all cases described, a data exchange of such an exchange schedule from the RESERVE RECEIVING TSO to all other TSOs affected has to be set up. For these solutions agreed and well defined procedures as well as appropriate equipment for the handling of fast data exchange including confirmation / reconfirmation is necessary.

3.4 Recommended Technical Realisation

Taking into account the operational risks resulting from fault scenarios and the technical requirements mentioned above the technical realisation the scenario 1 a) is recommended. Its advantage is that it guarantees the full responsibility for the reserve to the RESERVE RECEIVING TSO. However there is the disadvantage of set – up of additional data exchange for every bidder. Especially in case of an outage of a generation unit, the measurement value decreases to zero and consequently the adaptation of the LFCs of RESERVE RECEIVING and RESERVE CONNECTING TSO also decreases to zero. With that the RESERVE RECEIVING TSO has to compensate for the missing power.

In the case of the concept of full delegation of the responsibility for the reserve from the RESERVE RECEIVING TSO to the RESERVE CONNECTING TSO scenario 2 is recommended. This is the most consequent solution for this concept which gives the necessary means to the RESERVE CONNECTING TSO keeps the situation independently under control.

Scenario 1 b) is not recommended since it mixes up the responsibilities for the reserve between RESERVE RECEIVING TSO and RESERVE CONNECTING TSO.

4. Organisational Constraints

4.1 Allocation of Transfer Capacity

As mentioned in Chapter 2 for the border – crossing exchange of DIRECTLY ACTIVATED TERTIARY CONTROL RESERVE, the transfer capacity has to be available accordingly. With this, the exchange of DIRECTLY ACTIVATED TERTIARY CONTROL RESERVE has to be taken into account in the process of transfer capacity assessment, allocation and nomination. If the DIRECTLY ACTIVATED TERTIARY CONTROL RESERVES are contracted on a daily basis, the transfer capacity has to be allocated short term (ST); in case of longer contracting periods for DIRECTLY ACTIVATED TERTIARY CONTROL RESERVES the capacity allocation has to be long term (LT) ac-

cordingly. The process needed for this purpose is described in detail in the document "Border – Crossing Exchange of Reserves – Use of Transmission Capacity".

4.2 Agreement on Exchange Schedules

DIRECTLY ACTIVATED TERTIARY CONTROL RESERVES are considered as energy reserves and cross border availability resembles the already practised exchange schedules between TSOs in the UCTE. Concerning organisational requirements, it has to be taken into account that the validation of exchange programs for DIRECTLY ACTIVATED TERTIARY CONTROL RESERVE has to be performed in very short time, even shorter than for SCHEDULE ACTIVATED TERTIARY CONTROL RESERVE (within minutes) among the TSO involved. Considering its purpose to restore the PRIMARY CONTROL RESERVE within 15 minutes this process is very time critical, in particular if different hierarchical levels of schedule management co-ordination are involved (CONTROL AREA, CONTROL BLOCK, co-ordination centre). The use of fast and reliable data transmission and data processing systems exchange including confirmation / reconfirmation has to be applied and the application of more direct data validation procedures has to be developed, at least in case of scenario 1 a), that includes the data communication between the RESERVE RECEIVING TSO and the GenCo.

4.3 Risk of Unavailability

In the case of a cross - border exchange for DIRECTLY ACTIVATED TERTIARY CONTROL RESERVE there is the risk that a TSO is not in the position to cover its needs, although enough reserve is available in its CONTROL AREA / BLOCK. This could occur when DIRECTLY ACTIVATED TERTIARY CONTROL RESERVE is sold to other TSOs and no more reserve is available in its CONTROL AREA / BLOCK. For this case local market rules are a possibility to assure that every TSO is in the position to cover its needs of DIRECTLY ACTIVATED TERTIARY CONTROL RESERVE. As an example reciprocity of access to DIRECTLY ACTIVATED TERTIARY CONTROL RESERVE among CONTROL AREA / BLOCK could be a prerequisite.

In addition, with increasing border –crossing exchange of DIRECTLY ACTIVATED TERTIARY CONTROL RESERVE the need is growing to verify that the market participants can ensure the supply. One risk is double selling of reserves by suppliers. To cope with this risk rules for monitoring will be necessary including complete information exchange among TSOs involved. The monitoring is a specific task of the Connecting TSO.

4.4 Data Exchange Bidder / TSO

A daily information process between Bidders and TSOs involved has to be set up. The RESERVE RECEIVING TSO has to inform the RESERVE CONNECTING TSO about the day – ahead share of each bidder in the area of the RESERVE CONNECTING TSO. The bidder has to inform the RESERVE CONNECTING TSO about the generation units planned for the next day provision of DIRECTLY ACTIVATED TERTIARY CONTROL RESERVES. Based on this information the Connecting TSO has to check that the bidder is in the position to fulfil his contractual duties. For example misuse by multiple bids of one share of reserve to different TSOs has to be excluded. In addition the RESERVE CONNECTING TSO has to be in the position to monitor the delivery of DIRECTLY ACTIVATED TERTIARY CONTROL RESERVE per generation unit. This leads to additional efforts for the RESERVE CONNECTING TSO.

4.5 Accounting

The accounting of the DIRECTLY ACTIVATED TERTIARY CONTROL RESERVES including any kind of penalty is up to the bilateral contract between the RESERVE RECEIVING TSO / RESERVE CONNECTING TSO and the Bidder. In addition the following aspects have to be taken into account:

- The **requested delivery** for DIRECTLY ACTIVATED TERTIARY CONTROL RESERVES exchanged among TSOs has to be taken into account in the procedure for the UCTE accounting of unintentional deviations.
- The accounting of the **requested delivery** for DIRECTLY ACTIVATED TERTIARY CONTROL RESERVES should be based upon the corresponding exchange schedule - integrated for the activation time. In this case any deviation between the physical delivery and the requested delivery of TERTIARY CONTROL RESERVES is treated according to the local rules of the balancing mechanism of the RESERVE CONNECTING TSO (scenario 1b) and 2) resp. the RESERVE RECEIVING TSO (scenario 1a)

5. Implementation Issues

Before the implementation of border – crossing exchange of DIRECTLY ACTIVATED TERTIARY CONTROL RESERVES the following topics have to be treated:

a) Adaptation of UCTE Operation Handbook Policy 1
b) Contractual Issues
c) Technical Issues
d) Availability of Transmission Capacity
e) Related Market Rules

The main issues to be taken into account are given in the check lists below.

a) Adaptation of UCTE Operation Handbook Policy 1

The border – Crossing Exchange of DIRECTLY ACTIVATED TERTIARY CONTROL RESERVES is not allowed since only multiples of ¼ h schedules are specified in the current version of UCTE

Operation Handbook. Thus before the implementation of border – crossing exchange of DIRECTLY ACTIVATED TERTIARY CONTROL RESERVES the Policies 1 / 2 has to be adapted accordingly.

b) Contractual Issues:

Scenario1

- Contractual Agreement among TSO necessary:
  - Responsibility of TSO involved
  - Pre – Qualification of generation units
  - Accounting of Reserves
  - Information exchange for the monitoring of reserves
  - Treatment of error scenarios
    - Responsibility in the case of mistakes in exchange schedules connected to DIRECTLY ACTIVATED TERTIARY CONTROL RESERVE
- Contractual Agreement between each Receiving TSO and Supplier

Scenario 2

- Contractual Agreement among TSO necessary:
  - Responsibility of TSO involved
  - Pre – Qualification of generation units
  - Accounting of Reserves
  - Treatment of error scenarios
    - Responsibility in the case of mistakes in exchange schedules between TSOs
    - Responsibility if the delivered reserve is not equal to the schedule activated reserve
- Contractual Agreement between Connecting TSO and Supplier

c) Technical Issues

- Realisation of data exchange for measurement values (Scenario 1a)
- Change of the exchange programs in the LFC
- Monitoring of the supply of reserves
- Realisation of direct electronic data exchange procedures
- development of a system for checking inconsistencies in transactions

d) Availability of Transmission Capacity

- Assessment / development of a day – ahead / intra - day estimation of available capacity (methods, procedures and tools)
- development of a system for allocation of the available capacity over all transactions and reserves (methods, procedures and tools)
- Usage of transmission capacity by activation of available TERTIARY RESERVE
- curtailment methods and congestion management (e.g. priority rules)

e) Related Market Rules

- adaptation of rules, laws or existing contracts in each country if needed (example: expansion of the bidding rules)
- Gate closures (time limits for offers)
- Activation periods
- Product Specifications (e.g. Lead time)

6. Summary

The directly activated TERTIARY CONTROL RESERVE can be exchanged border – crossing taking into account a number of constraints in the UCTE system. The following rules are developed in this document:

- The transmission capacity needed has to be available. In case of limited transfer capacity it has to be decided how to share the transfer capacity between market transactions and the TSO for directly activated Tertiary CONTROL RESERVE. In any case the allocation of transfer capacity to the different kinds of transactions has to be organised accordingly.
- To gain experience with the monitoring and the reliability it is proposed to keep a share of 1/2 of the total SECONDARY CONTROL RESERVE / TERTIARY CONTROL RESERVE needed inside the CONTROL AREA.
- Each TSO decides about the number of Virtual Tie – Lines allowed according to the resulting accuracy of the ACE measurement.
- Exchange between neighbouring CONTROL AREAS recommended as a starting point to gain experience.

The document recommends two technical solutions for border-crossing exchange of DIRECTLY ACTIVATED TERTIARY CONTROL RESERVES, points out the operational risks resulting from fault scenarios and summarises the implementation issues to be taken into account. The major question is whether the RESERVE RECEIVING TSO keeps the full responsibility for the reserve or delegates this responsibility completely to the RESERVE CONNECTING TSO.

The border – Crossing Exchange of DIRECTLY ACTIVATED TERTIARY CONTROL RESERVES is not allowed since only multiples of ¼ h schedules are specified in the current version of UCTE Operation Handbook. Thus before the implementation of border – crossing exchange of DI-

RECTLY ACTIVATED TERTIARY CONTROL RESERVES the Policies 1 / 2 has to be adapted accordingly.

As ETSO transfer capacity definitions are currently only available for adjacent CONTROL AREAS / BLOCKS it is recommended to allow only applications between neighbouring CONTROL AREAS / BLOCKS to gain additional experience on the implementation issues as a first phase. On the basis of this experience as a second phase the complete opening of the border – crossing exchange of DIRECTLY ACTIVATED TERTIARY CONTROL RESERVES can be decided.