

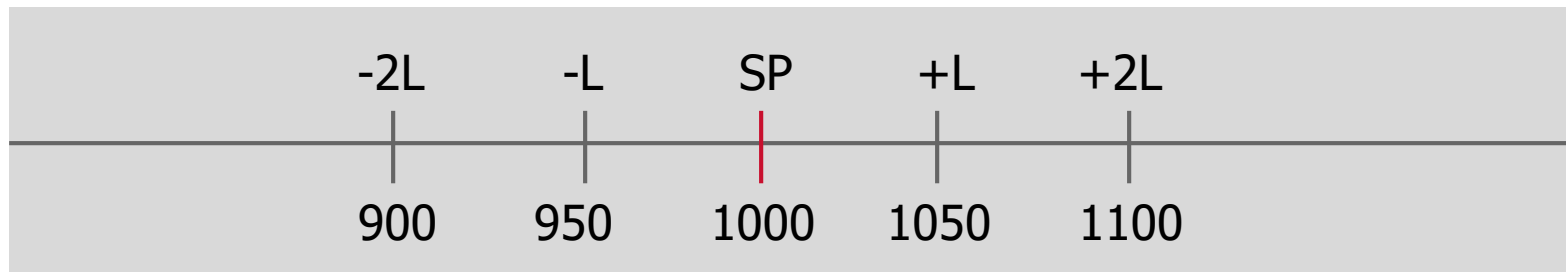


MOSCOW  
EXCHANGE

## Trading limits

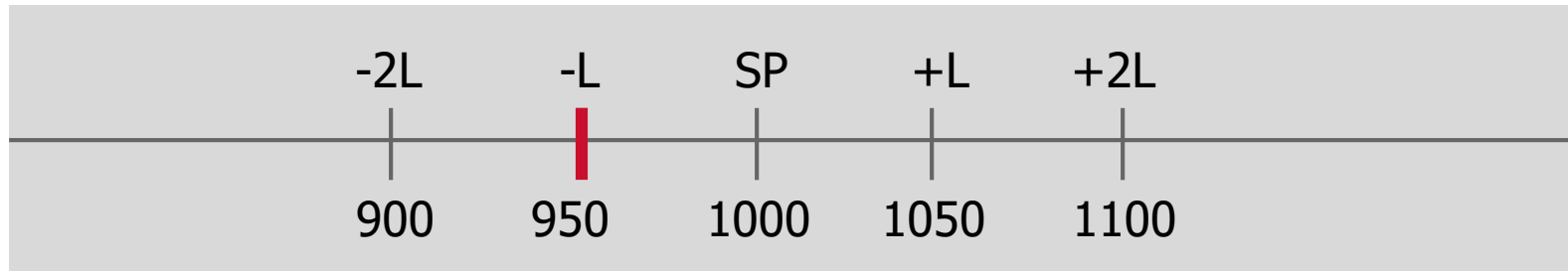
How changes in trading limits for  
MOEX derivatives instruments work

# Settlement price and limits



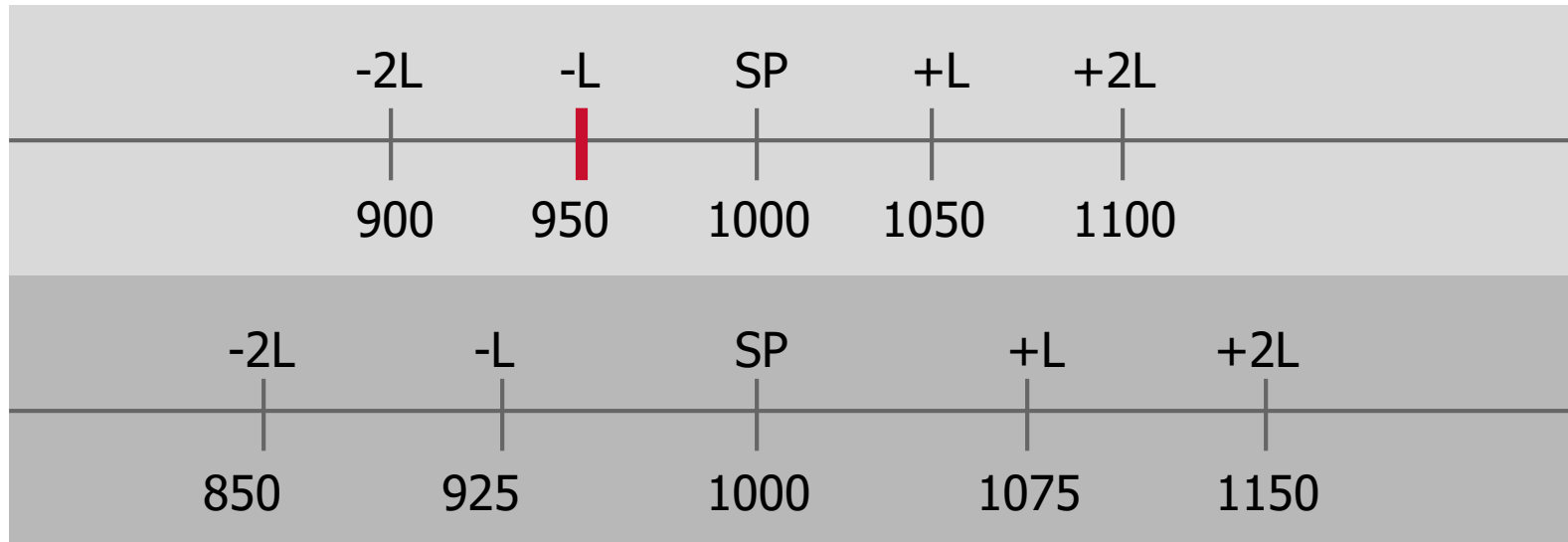
- SP – settlement price of the last clearing session
- L – price limit, which is calculated as basic initial margin divided by 2, orders can be entered within this range
- Range (-L:+L) – basic initial margin
- Range (-2L:+2L) – range for risk calculation. Margin for the position will be the MAX LOSS of the position within this range, which cannot exceed 3L. For example, the max margin of 3L can occur if a long position is bought at the upper limit price.
- L is calculated in absolute terms (RUB, points etc.), eg. If SP = 1000, basic initial margin = 10%, then basic initial margin in absolute terms = 100, L = 50

# Hitting the limit for the **first** time (1/2)



- If a price hits a limit (-L), meaning we have limit sell orders at SP-L price, e.g. 950 then a 5 minute countdown starts:
  - if the price has not moved (trades can still happen at SP-L price)  
Administrator will send a message into the Derivatives Trading Terminal: "if the price stays we will halt trading and increase this instrument limits"
  - if price goes higher than SP-L, countdown starts again
  - if price stays, then trading is halted

## Hitting the limit for the **first** time (2/2)



- Administrator will increase trading limits by 1.5 times, so  $L$  will be 75.
- At this point initial margin for futures position will increase 1.5 times (eg. 150). Initial margin for options position might increase more than by 1.5 time, dependent on the risk profile of the position
- Administrator will re-start trading which will now take place within the new range

# Issuing MCs (1/2)

1

If a GCM has insufficient funds after the increase in trading limits, the Exchange will NOT require to cover the difference before the next clearing session

2

If after the clearing session GCM's funds are insufficient, the Exchange will issue a Margin Call and the GCM will have time to replenish its fund until 45 minutes before the start of the next clearing session

3

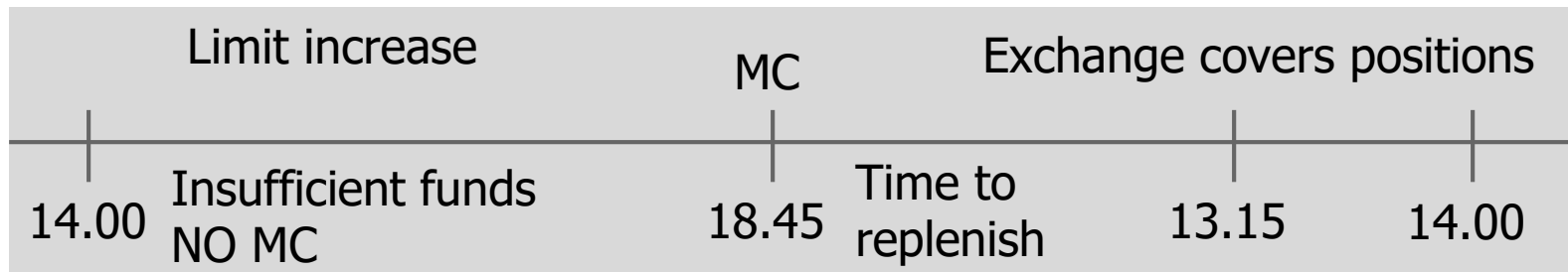
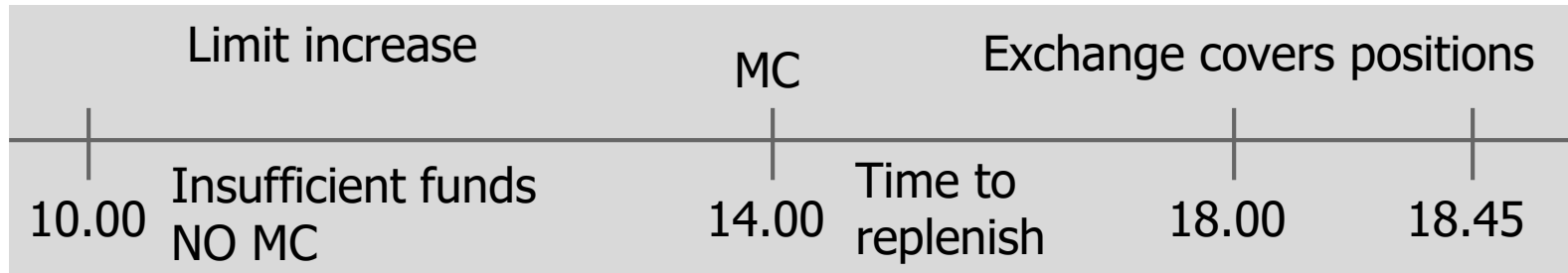
Please note that variation margin for the session will be calculated as the difference between SP and L (start of trading session limit), eg.  $1000-950=50$

4

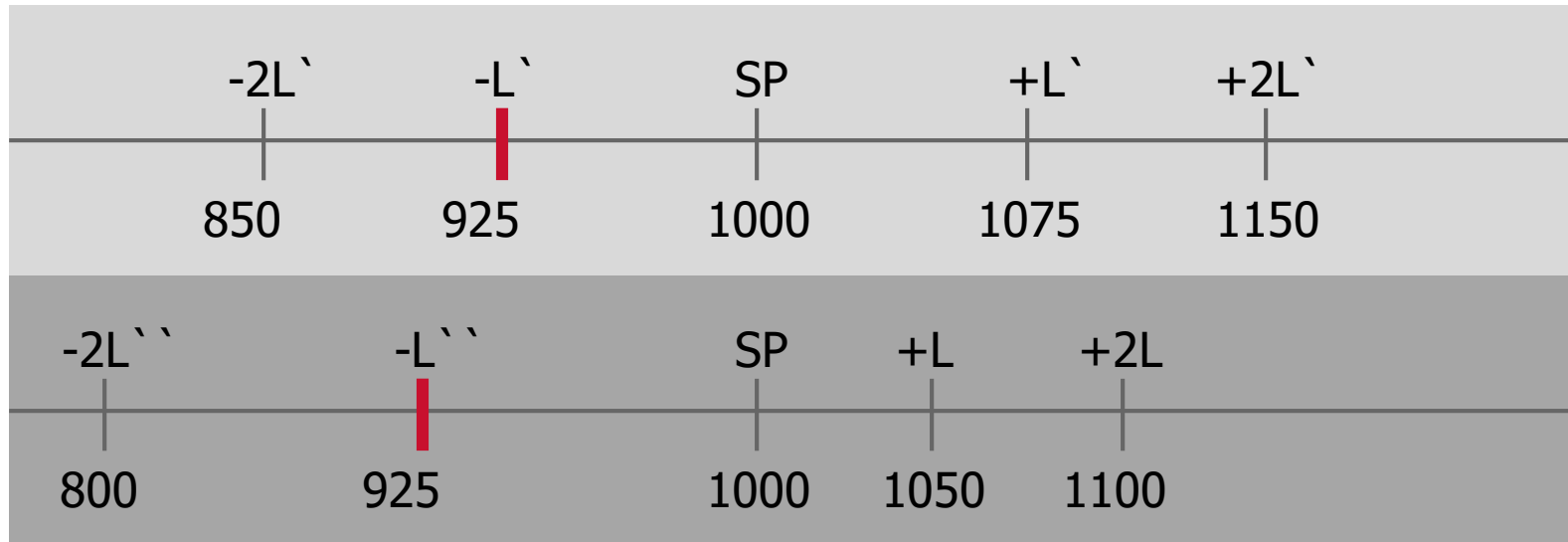
Please note that if the contract accounts for less than 25% of OI for this instrument, trading will not be halted. If the contract's price stays at the SP-L level for last 5 minutes of the trading session, its limits will be increased automatically during the clearing session



# Issuing MCs (2/2)



# Hitting the limit for the **second** time



- If the price reached  $-L'$ , which is the new limit, then
  - $+L'$  will be moved back to  $+L$
  - $-L'$  will be moved based on the negotiation with market participants. The Exchange will consult with GCMs and traders and make a decision. As a rule  $-L''$  will become previous  $-2L$
- The process will be reversed during the clearing session, meaning that initial margin will increase by 1.5 times, settlement price will move by a limit and become  $SP-L$ , eg. 950

# Initial margin reduction rules (1/2)

1

During the clearing session we calculate settlement price  $SP(t)$

2

We find the difference between  $SP(t)-SP(t-1)$ , which is the settlement price of the previous clearing session

3

We then calculate a range of SP differences back until  $SP(t-9)-SP(t-10)$

4

Interim clearing sessions are taken into account

5

We get ten results from  $X(t)$  to  $X(t-9)$





# Initial margin reduction rules (1/2)

6

We compare  $X(t)$  with  $(L(t-1))/2$

7

If  $X$  is less in all instances, then

- $L(t) = \max(L(t-1)*0,75; \text{basic initial margin rate})$

8

In such a way initial margin and price limits will be going down until they return to their minimum level

9

Such comparison takes place during every clearing session



# Notice on limits

1

Please note that initial margin and price limit are calculated and further used in absolute terms (RUB, points etc.)

2

If price goes from 1000 to 1200 and returns to 1000, with 10% basic initial margin, absolute initial margin will be 100 -> 120 -> 120, while price limit will be 50 -> 60 -> 60

3

A decrease from 60 to 50 will happen based on the Initial margin reduction rules



# No limit change situations

There are situations when trading limits will not be modified

1

Trading limit is hit for the third time during one trading session

- The price will stay at the level until the end of the current trading session

2

Trading limit is hit during the evening session

- The limit will only be modified during the regular trading session commencing at 10am Moscow time, provided the price stays at the limit level

