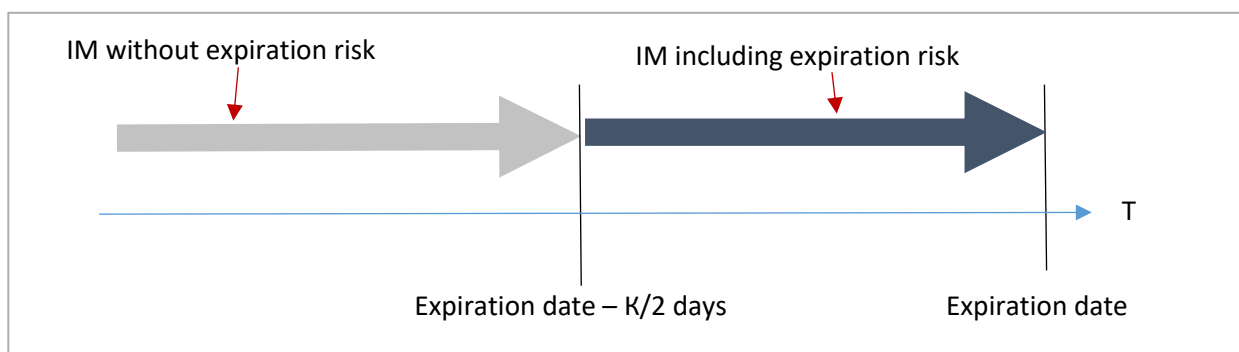


## Treatment of expiration risk of options

Risk associated with the delivery of the underlying asset can be accounted for before an option expires. This risk arises when the option is exercised and a futures position appears that is substantially more risky than the option position was.

### Treatment of expiration risk at clearing member level

- To handle expiration risk at the level of the clearing member, NCC Clearing Bank (NCC) manages initial margin parameters at the level of the brokerage firm.
- NCC sets the parameter  $K^1$ , which designates the number of clearing sessions (including interim ones) before the expiration from which expiration risk is to be calculated.



### Treatment of expiration risk of end clients

- Expiration risks of end clients are managed by clearing members.
- NCC sets the parameter  $D.ncc^2$  designating the number of clearing sessions (including interim ones) before the expiration from which a clearing member may enable risk management with regard to expiration risks.
- A clearing member may set the  $D$  parameter for each client to determine the number of clearing sessions before the expiration from which expiration risk is to be scanned.
- A coefficient  $W$  is used to manage the amount of expiration risk coverage. Client's total initial margin requirements are determined as a weighted average of initial margin covering and not covering expiration risk.  $W$  is the weight of IM with expiration risk:

$$IM_{client} = (1 - W) * IM_{noexp} + W * IM_{exp}$$

where

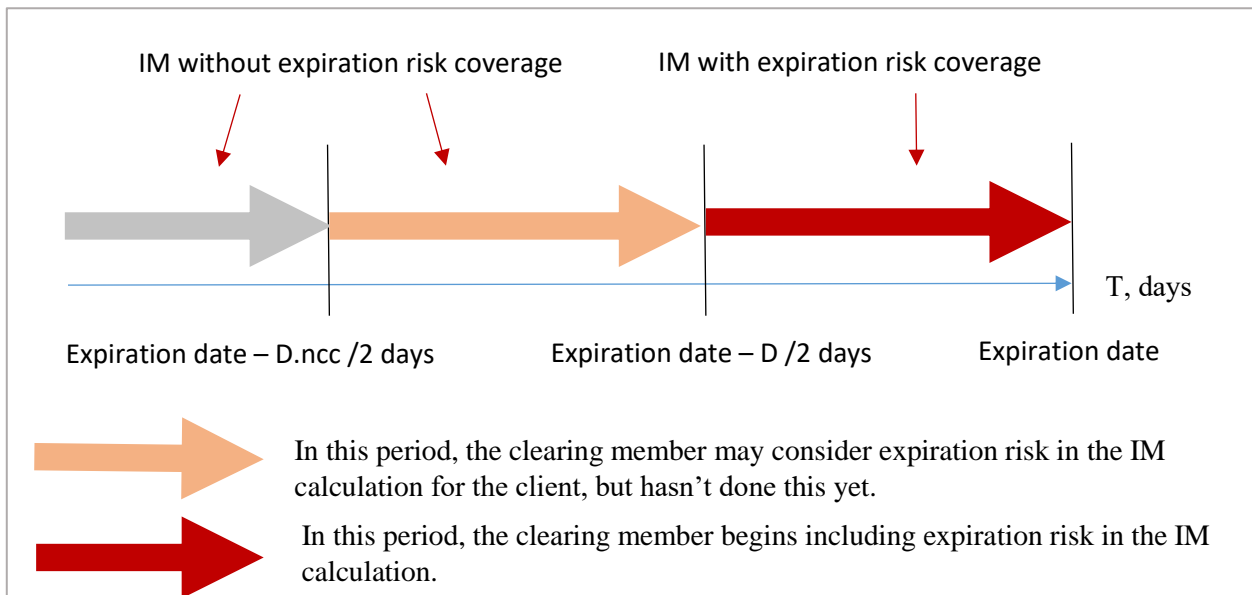
$IM_{client}$  – IM of the end client;

$IM_{noexp}$  – IM of the end client without the expiration risk coverage,

$IM_{exp}$  – IM of the end client with the expiration risk coverage.

<sup>1</sup>  $K = 0$  as of March 2017, i.e. expiration risk is not handled. Changes in parameters are announced on the NCC's website at [nkcbank.ru](http://nkcbank.ru)

<sup>2</sup>  $D.ncc = 20$  as of March 2017. Changes in parameters are announced on the NCC's website at [nkcbank.ru](http://nkcbank.ru)



### Setting the D and W parameters on client sections

A clearing member may tailor the parameters to specific clients or use default values established for the brokerage firm.

Default values  $D.br$  and  $W.br$  are set through applications via the EDI system.

Client specific values  $D.cl$  and  $W.cl$  are set online via trading terminals (or the gateway<sup>3</sup>). The default values correspond with  $D.cl$  and  $W.cl$  set to -1. New clients are assigned default values of the parameters.

<sup>3</sup> Current parameters are shown in the table "part" of the thread "FORTS\_PART\_REPL"

$D.cl$  – num\_clr\_2delivery for 7-character client section

$D.br$  – num\_clr\_2delivery for 4-character section of the brokerage firm

$W.cl$  – exp\_weight for 7-character client section

$W.br$  – exp\_weight for 4-character section of the brokerage firm

Parameters for clients are set by the gateway command FutChangeClientMoney