Month	Chronology of Decisions / Changes given effect to Valuation Methodology in 2017-18
For the month of **March** -meeting held on 1-March-18	**Extending daily filter criteria to important input tenors for G-Sec valuation** As per the extant G-sec valuation methodology, 1 to 7 yr and 10 yr tenors are important input tenors for yield curve generation and the normal filter of 50 trades and Rs.500 cr volume are not applicable to the important input tenors. The security whose No. of trades * volume is the highest in a tenor is selected as nodal point for the tenor. For the important nodal points, even the daily filter is not applied. Even a single trade is considered for inputting the traded yield for curve generation. For other nodal points, daily filter eg. 2 trades and 10 Cr is applied (for 15 years and above). There was always overwhelming no. of trades and volume for the 10 year tenor. A study of last six month data was made to understand the impact of applying filters even to the important input tenors. Traded G-sec data for the period from Sep 2017 to Feb 2018 was studied. Perusal of the data will indicate that either the trades are very low in number and volume which will not even cross the minimum filter of 2 trades or Rs.10 Cr OR the trades are high enough to cross the normal filter of say, 3 trades and Rs.20 cr. Hence, the committee approved to apply the normal filter for the nodal points in 1 to 7 years and 10 years. As a result, the tenors 1 to 14 will have normal filter and the tenors 15 years and above will have normal filter subject to the maximum of 2 trades and Rs.10 cr volume.
For the month of **April** -meeting held on 29-April-17	**5. Valuation of T-Bills** We are publishing scrip wise valuation for T- Bills for testing purpose. If first tenor T- bill is not traded, we take LAF Repo rate which is a fixed one. Instead of LAF repo rate, it was decided to take weighted average repo (basket) rate traded on CROMS. **6. Selection of Nodal Point Securities** In the beginning of every month we select nodal point securities. The criteria are 50 trades and 500 Cr volume in the previous month. That is on an average 2.5 trades per day Rs.25 cr volume. Having selected a security as nodal point, we observe that we end up inputting proxy yields only for that security for most of the days for want of enough trades. This is observed especially in the longer end of the curve. On the basis of data of number of trades and volume for longer end securities between 2035-2055 for the period August 2015-June 2016, it was found that the average number of Trades- Volume in that segment was 3trades- 25 Crores. Accordingly a separate filter criteria for the tenors 2035- 2055 was fixed at 3trades- 25 Crores or the actual filter criteria whichever is lower (wef 1st August 2016). As the trading volume of G-sec fell further, leading to inability to apply the 3trade- 25 Crore criteria, another study was done for the similar data for the period August 2016- January 2017. The average number of trades and volume in the longer end tenor of 2035-2055 was found to be 2trades- 10 crores. So the valuation committee decided to implement the new filter criteria of 2 Trades- 10 Crores or the actual filter whichever is lower (w.e.f 1st March 2017) for the longer tenors. Even then, there was no perceptible change in the number of proxy calculations during March 2017. So another study was undertaken to assess the exact impact of keeping the cap as 2 trades and 10 crore volume. The findings are as under:

	Month : March 2017 No. of trading days :21 No. of proxy calculations during the month: 172 No. of proxy calculations in the longer end (2033-2055) without applying any cap : 161 (93.60%) No. of proxy calculations in the longer end (2033-2055)after applying cap of 2,10: 137 No. of proxy calculations avoided due to the cap of 2, 10: 24 (14.91%) **That means, the nodal point securities were not traded at all on most of the days OR the trades were even less than 2 and volume less than Rs.10 crore.** It is observed that selection criteria are based on NDS-OM + RD segments, whereas for daily filter, we consider only NDS-OM. Therefore, the study was extended to see the impact if we consider NDS-OM + RD deals for applying daily filter. No. of proxy calculations that could have been avoided due to taking up RD deals also: 12 (7.46%) After detailed discussion, it was decided to make another study as under:- a) Delete the nodal point securities which do not have 50 trades & 500 Crore volume on NDS –OM. b) Run the cubic Spline model. **c)** Compare the model yields with the model yields obtained without deleting the nodal point securities. **d)** The study has to cover period of at least 6 Months, continuous and / Random.
For the month of **March** -meeting held on 1-April-17	The market participants informed about the heightened trading activities towards the end of the trading session on 31.03.2017 though the closing prices were almost flat. A section of the participants objected to the valuation prices of the following securities:- a. 6.97 GS 2026 - The last trade happened at 17:00:01 hours i.e after the market hours. b. 8.24 GS 2033 - The last trade happened @ 107.46 price (16:59:42 hours) which is apparently off-market level as per code of conduct. c. 7.59 GS 2029 - The last two trades happened @ 102.15 price and the trade before that was @ 102.60 price. d. 7.88 GS 2030 - The last trade happened @ 104.50 price (16:59:59 hours) and the trade before that was @ 104.80 price (16:59:56 hours). CEO, FIMMDA informed that when he took up the matter with CCIL regarding the trade at 17:00:01 in 6.97 GS 2026, it was informed that the trade was a normal trade and the time difference was due to large number of transactions at the closing time. Some members felt that the trade should be accepted as the last trade of the day. Some suggested to consider the weighted average of last 50 trades or if 50 trades were not there during the last two hours, then weighted average of trades during the last two hours for valuation. However, it was felt that any such change in the valuation methodology should not be based on an odd incident like this. After detailed discussion, majority of the participants felt that in the absence of any objection from the counter parties, CCIL may settle the transaction, but for valuation purpose, the trade should not be considered as it took place after the closing time of 17:00:00.

	As far as the last trade in 8.24 GS 2033 is concerned, the CEO FIMMDA informed that the DRC members ruled that the trade was an erroneous trade and FIMMDA has requested RBI to reveal the counterparties' names. In the past also when the last trade is a disputed trade/off-market trade, it was not considered as last trade for valuation purpose. Hence, it was decided to ignore the trade for valuation purpose. The other two trades, viz. 7.59 GS 2029 and 7.88 GS 2030 were not erroneous/off-market trades and they were well within the trading hours. Hence, it was decided to consider them as last trade for valuation purpose. After incorporating the above changes, FIMMDA recalculated the G-Sec prices and the same was approved by Valuation Committee as FIMMDA, PDAI G-sec Prices as on 31st March, 2017. (The prices are uploaded on FIMMDA's website). 5. **Valuation price and yield of FRB and IIB:** The model price and yield of all Govt. securities are replaced by LTP/LTY on NDS-OM. FRB price and yield were derived based on methodology published on FIMMDA website. The model price and yield of FRB securities were replaced by traded prices and yield if there were 3 trades and Rs.25 Cr volume on that day. In case of G-Sec, the model price/yield are replaced with LTP/LTY even if there is 1 trade and Rs.5 Cr volume and that is as per RBI master circular on investment which says that, 'market value' for the purpose of periodical valuation of investments included, in the AFS and HFT categories would be the market price of the script as available from the trades/quotes on the ……SGL account transactions……. No filter criterion is mentioned in the RBI circular. It was decided that for FRB and IIB also the model price/yield be replaced with LTP/LTY even if there is 1 trade and Rs.5 Cr volume. This change was incorporated in the revised list of G-Sec prices/yields published by FIMMDA as of 31st March, 2017
For the month of **February** –meeting held on 1-March-17	**Daily Filter criteria for considering Level 1 inputs for yield curve generation: (decided in 1st March, 2017)** We are presently experiencing problems in getting sufficient no. of Level 1 – Traded prices in tenors 2032-2055 i.e. say 15 years and beyond segment. The selected nodal points based on nodal point criterion of the month for 15 years and beyond segment do not qualify the daily filter criteria. The nodal points qualifying daily filter are used for curve construction. So, to get more Level 1 inputs for generation of yield curve it was found necessary to rationalize the threshold for these segments. Previous threshold for these segments was 3 trades and 25 crores as discussed in August valuation meeting. The data of no. of trades/volume of nodal points in the segment 2032-2055 for the period Aug 2016 to Jan 2017 which failed to pass the daily filter criteria was studied and shown to the members. The data showed that the average of trades and volume for securities which failed to pass the daily filter criteria was 2 trades and 10 Crores during this period • So, it has been decided to adopt the following procedure: Daily Filter criteria will be calculated as per the present rule described in the methodology. For the segments 15 years and beyond, the no. of trades and volume calculated as per the filter criteria or 2 trades and Rs.10 crores whichever is less will be the daily filter criteria for considering the securities traded yields to be input into the Matlab yield curve generation.