

Single Security Program Exchange and Float Compensation Proposal

December 14, 2016

Overview of Exchange

- A mechanism to exchange 45-day PCs for 55-day mirror securities ultimately backed by the same pool of loans
 - Open to holders of both TBA and Non-TBA PCs
 - REMICS and ARMS ineligible for exchange
 - Exchange will be at the option of holders and will not be mandatory
 - Will commence on or prior to Single Security Implementation Date and stay open for the foreseeable future
 - We will not charge any exchange fee
- Freddie Mac, jointly with Fannie Mae and FHFA, is seeking advice from regulatory agencies and outside legal counsel on the tax and accounting implications of exchange

Proposed Details of Mirror Securities

- Mirror securities will be ultimately backed by the same loans as the original pool and will replicate the disclosures and cash flows of the PCs but will have new CUSIPs, prefixes, pool numbers and issuance dates
 - Need to look through to 45-day PC for loan-level disclosures
 - Holders that exchange pieces of the same PC over time will receive the same 55-day security in return
- Will be created by Freddie Mac and broadcast with the Fed in advance of Single Security Implementation
- Issuance of mirrors will not impact aggregate supply of securities outstanding

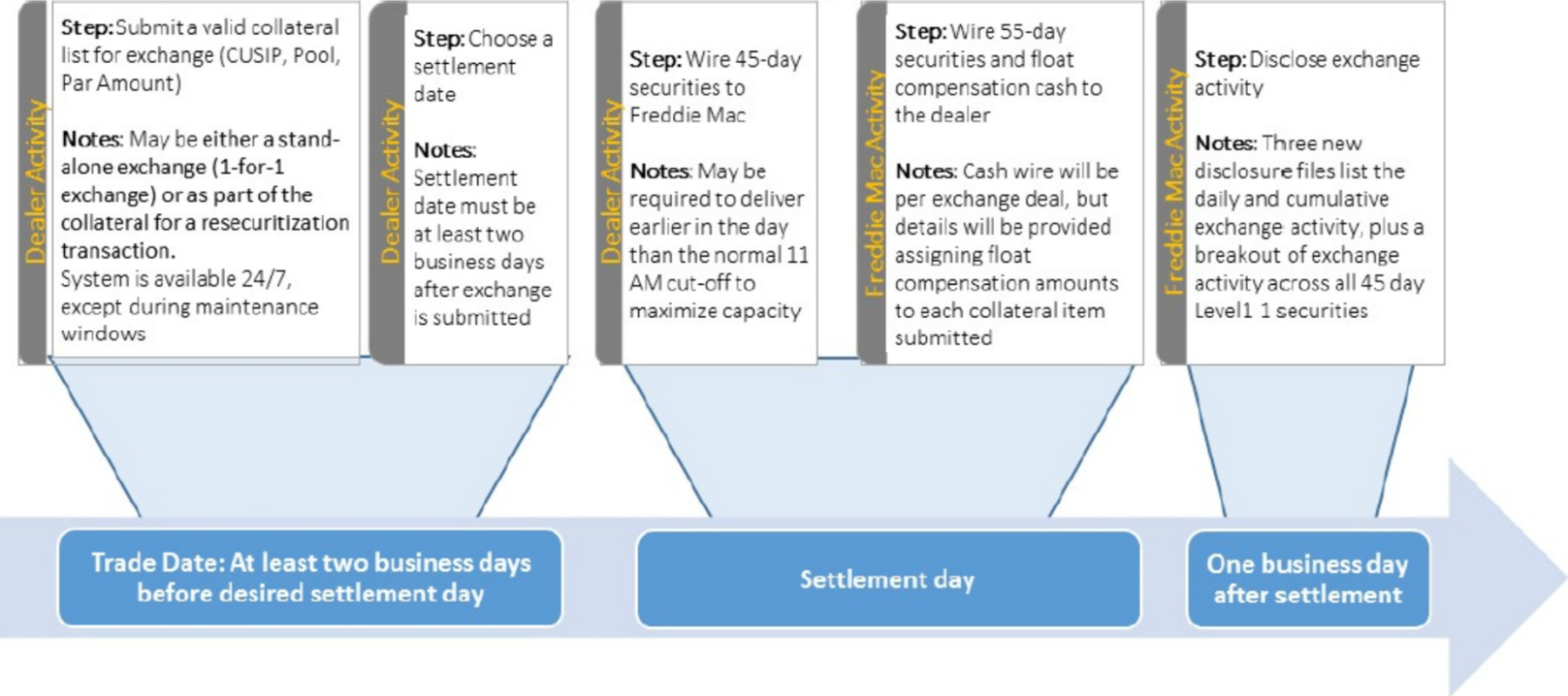
Figure 1: Exchange Example

	Prior to Single Security Issuance and Trading	Single Security Implementation	One day after Single Security Implementation	Two days after Single Security Implementation
	55-day mirror securities created	First day of issuance of Single Security	Investor A exchanges \$4 million of original par of security 123	Investor B exchanges remaining \$6M original par of security 123
	<p><u>Disclosures</u></p> <p>Original Par \$10 million \$10 million</p> <p>Coupon 3 3</p> <p>WAC 3.75 3.75</p> <p>Factor 0.75 0.75</p>	<p>No change to legacy PCs until an exchange takes place</p>	<p><u>Disclosures:</u></p> <p>\$10M \$10M</p> <p>3 3</p> <p>3.75 3.75</p> <p>0.75 0.75</p>	<p><u>Disclosures:</u></p> <p>\$10M \$10M</p> <p>3 3</p> <p>3.75 3.75</p> <p>0.75 0.75</p>
Tradable Supply	\$7.5M \$0		\$4.5M \$3M	\$0M \$7.5M
Outstanding UPB	\$7.5M	\$7.5M	\$7.5M	\$7.5M

Proposed Dealer Direct and Exchange Process Detail

- Investors will submit exchanges through member of Giant Dealer network
 - Chose to leverage existing dealer relationships to streamline process
- Dealers will submit transactions through Dealer Direct portal that is also being rolled out for Giant formation

Figure 2: Process flow for exchange transactions using the Dealer Direct portal



Dealer Direct Screen Shot – Trade Confirmation Screen

Transactions
REMIC Tools
Pricing
Reports
Support

Remaining Time
1 4 : 3 7

< Exchange

1
✓ Upload an Exchange File

2
✓ Select Settlement Date

3
Review Exchange Details

Transaction ID: 00108 Trade Date/Time: September 20th 2016, 5:24 PM Number of Collateral: 6 Price Grid in Effect: v61 Submitter: CreditSuisse FullAccess	Current User: CreditSuisse FullAccess Dealer: Credit Suisse Settlement Date: September 30th 2016 Cutoff Time for Providing Collateral: 11:00 AM Total Float Compensation (\$): 52,772.82
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	45 Day Securities to Deliver	55 Day Securities to Be Received	Pricing Information											
Exchange ID	Pool Number	CUSIP	Par Amount (\$)	Pool Number	CUSIP	Factor	Base (Ticks)	Loan Bal (Ticks)	FICO (Ticks)	LTV (Ticks)	WALA (Ticks)	Total (Ticks)	Float Comp (\$)	Comments
00001425	A00001	CUSIP4511	5,000,000.00	C00002	CUSIP5512	0.74328162	2.00	0.50	0.00	0.50	0.50	3.50	4,064.82	
00001426	A00003	CUSIP4513	300,000.00	C00003	CUSIP5513	0.53872196	2.25	0.00	-0.50	-0.50	0.00	1.25	83.13	Sample data
00001427	A00001	CUSIP4511	30,000,000.00	C00002	CUSIP5512	0.74328162	2.00	0.50	0.00	0.50	0.50	3.50	24,388.93	
00001428	A00003	CUSIP4513	4,000,000.00	C00003	CUSIP5513	0.53872196	2.25	0.00	-0.50	-0.50	0.00	1.25	841.75	
00001429	A00001	CUSIP4511	20,000,000.00	C00002	CUSIP5512	0.74328162	2.00	0.50	0.00	0.50	0.50	3.50	16,259.29	Sample comment
00001430	A00003	CUSIP4513	34,000,000.00	C00003	CUSIP5513	0.53872196	2.25	0.00	-0.50	-0.50	0.00	1.25	7,154.90	

I have read and agree to the [terms of the Exchange Circular](#)

Confirm

Discard and Cancel Transaction

Dealer Direct is currently under development, so this screen format is subject to change. Values are for illustrative purposes only

Approach to Exchange Capacity

- There may be technological and counterparty constraints that limit the capacity of the exchange
- We are talking to market participants about how and when they may wish to conduct exchanges
 - The previous plan was to promote CUSIP aggregation and do “all or nothing” settlement
 - We have heard that this approach could place dealers at risk if they hold collateral from counterparties without the ability to complete the exchange transactions due to delivery failures from other investors
 - We are analyzing alternatives, and may be able to provide bulk upload of a list of collateral piece line items, but settle at the individual line-item level
- There are ongoing efforts to improve exchange capacity that would allow for more flexibility on how exchanges are submitted

With this change, each “piece” of collateral in an Exchange transaction will settle individually

- Regardless of how many pieces of collateral a Dealer enters in a single exchange transaction, each piece of a 45-day security submitted for exchange can settle (or fail) individually
 - Even if multiple pieces of the same CUSIP are submitted within the same transaction...
 - ...as long as each piece has its own row in the list of 45-day pools uploaded for the transaction
- Float compensation will be paid at the Exchange transaction level for all pieces that did settle
- The team is exploring alternatives for treatment of failed pieces (e.g., auto-rolling to next available settlement date)

1 Single Exchange transaction in Dealer Direct

2 Each “piece” of a 45-day CUSIP that is submitted must have its own row within the transaction to settle individually

3 If the first row is delivered, it will settle...
...even if another piece of the same CUSIP in row 3 fails

4 Float compensation will be calculated for all pieces that settle successfully and paid in aggregate for the entire exchange transaction

Exchange upload Example

Pool #	CUSIP	Par Amount
A00001	CUSIP4511	5000000
A00003	CUSIP4513	300000
A00001	CUSIP4511	3000000
A00003	CUSIP4513	4000000
A00001	CUSIP4511	2000000
A00003	CUSIP4513	3400000

45 Day Securities to Deliver				55 Day Securities to Be Received		Pricing Information									
Exchange ID	Pool Number	CUSIP	Par Amount (\$)	Pool Number	CUSIP	Factor	Base (Ticks)	Loan Bal (Ticks)	FICO (Ticks)	LTV (Ticks)	WALA (Ticks)	Total (Ticks)	Float Comp (\$)	Com	
00001425	A00001	CUSIP4511	5,000,000.00	C00002	CUSIP5512	0.74328162	2.00	0.50	0.00	0.50	0.50	3.50	4,064.82		
00001426	A00003	CUSIP4513	300,000.00	C00003	CUSIP5513	0.53872196	2.25	0.00	-0.50	-0.50	0.00	1.25	63.13	Sampl	
00001427	A00001	CUSIP4511	30,000,000.00	C00002	CUSIP5512	0.74328162	2.00	0.50	0.00	0.50	0.50	3.50	2,388.93		
00001428	A00003	CUSIP4513	4,000,000.00	C00003	CUSIP5513	0.53872196	2.25	0.00	-0.50	-0.50	0.00	1.25	841.75		
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00001430	A00003	CUSIP4513	34,000,000.00	C00003	CUSIP5513	0.53872196	2.25	0.00	-0.50	-0.50	0.00	1.25	7,154.90		

Proposed Approach to Float Compensation

- We will provide approximate fair value compensation to investors for the additional 10 days of delay in receipt of payments
 - This follows the precedent in 1990 Gold exchange and responses to the RFI
- We will offer a schedule of rates that will be informed by fair value, with at least one rate for every term/coupon combination
 - May also offer payups for specified characteristics
- Will use OAS valuation methods and will leverage models from dealers and analytics providers
- Float offered to market could differ from model values and Freddie Mac reserves the right to change values over time
- Float values will be available to the public through Freddie Mac website and other sources

Table 5: Sample Float Compensation Schedule (Values in ticks)

	Term		
	30	20	15
			1.5
	1.75	1.5	1.25
	1.75	1.5	1.25
	1.75	1.5	1.25
Coupon	1.75	1.25	2.25
	1.75	1.25	2.75
	1.75	1.25	3
	2	1.25	3
	2	1.25	3

Disclosure of Exchanges

Freddie Mac will product 3 new disclosures and a tie out table to inform the market of the progress of the exchanges

- Daily 45-Day to 55-Day Exchange Activity – Will provide information on all exchange transactions on the preceding business day, including original par exchanged and the CUSIPS and security identifiers of the 45 and 55-day securities
- Cumulative 45-Day to 55-Day Exchange Activity – Will provide information on all exchange activity to date for all exchange-eligible PCs; will begin to publish this report upon mirror issuance so market participants can map 45- and 55-day securities and cohorts
- Aggregate Level 1 Collateral Exchange Activity – Will break down all exchanges to date to their lowest level PC collateral, to help with calculations by market participants of supply and prepayments
- Exchange Tie Out Table – A table provided daily with data on the available supply of 45- and 55-day securities on a cohort level to facilitate trading

Sample Exchange Disclosures

Table 1: Sample Freddie Mac Daily Exchange Activity Report

Freddie Mac 45 Day Security Identifier	Freddie Mac 45 Day Security CUSIP	Freddie Mac 55 Day Security Identifier	Freddie Mac 55 Day Security CUSIP	Issuance Investor Security UPB	Exchanged Issuance Investor Security UPB	Cumulative Exchanged Issuance Investor Security UPB	As of Date
A92014	312940GX1	ZA5900	314287TM2	1,185,804	1,185,804	1,185,804	1292016
Q24207	3132M4KU8	ZA6208	314286RG9	26,952,462	10,000,000	19,000,000	1292016
G06550	3128M8TF1	ZD5782	314290JF6	397,641,826	15,000,000	250,000,000	1292016
G06550	3128M8TF1	ZD5782	314290JF6	397,641,826	75,000,000	250,000,000	1292016
A57681	3128KLRA7	ZT6216	314260RS1	766,190,442	20,540,000	125,540,000	1292016
A57681	3128KLRA7	ZT6216	314260RS1	766,190,442	5,000,000	125,540,000	1292016
A57681	3128KLRA7	ZT6216	314260RS1	766,190,442	15,000,000	125,540,000	1292016

Table 2: Sample Freddie Mac Cumulative Exchange Activity Report

Freddie Mac 45 Day Security Identifier	Freddie Mac 45 Day Security CUSIP	Freddie Mac 55 Day Security Identifier	Freddie Mac 55 Day Security CUSIP	Issuance Investor Security UPB	Cumulative Exchanged Issuance Investor Security UPB	As of Date
A92014	312940GX1	ZA5900	314287TM2	1,185,804	1,185,804	1292016
Q24207	3132M4KU8	ZA6208	314286RG9	26,952,462	19,000,000	1292016
Q17733	3132J9BB3	ZR8912	314270UL7	1,146,662	-	1292016
G07501	3128M9U26	ZR4206	314250RE2	47,714,833	12,500,000	1292016
G06550	3128M8TF1	ZD5782	314290JF6	397,641,826	250,000,000	1292016
A70272	3128L3JR8	ZT6301	314264BD3	3,980,680	300,000	1292016
A57681	3128KLRA7	ZT6216	314260RS1	766,190,442	125,540,000	1292016

Sample Exchange Disclosures

Table 3: Sample Freddie Mac Daily Level 1 Report

Level 1 Security Identifier	Level 1 Security CUSIP	Issuance Investor Security UPB	Resecuritized Issuance Investor Security UPB	Cumulative Exchanged Issuance Investor Security UPB	Issuance Investor Security UPB Remaining Eligible for Exchange	Cumulative Issuance Investor Security UPB Exchanged through Resecuritizations	Aggregate Exchanged Issuance Investor Security UPB	Aggregate Issuance Investor Security UPB Remaining Eligible for Exchange	Security Factor	Security Factor Date	As of Date
A92014	312940GX1	1,185,804	-	1,185,804	-	-	1,185,804	-	0.34243132	12016	1292016
Q24207	3132M4KU8	26,952,462	-	19,000,000	7,952,462	-	19,000,000	7,952,462	0.73406	12016	1292016
Q17733	3132J9BB3	1,146,662	-	-	1,146,662	-	-	1,146,662	0.88938028	12016	1292016
A70272	3128L3JR8	3,980,680	3,680,680	300,000	-	2,314,067	2,614,067	1,366,612	0.06323913	12016	1292016
A57681	3128KLRA7	766,190,442	540,941,712	125,540,000	99,708,730	340,093,569	465,633,569	300,556,872	0.03808993	12016	1292016
A57687	3128KLRG4	50,904,538	50,904,538	-	-	32,004,013	32,004,013	18,900,524	0.02948858	12016	1292016
Q21145	3132JNHWO	7,359,417	7,359,417	-	-	1,927,968	1,927,968	5,431,448	0.72334929	12016	1292016
Q21218	3132JNK71	4,024,061	4,024,061	-	-	1,054,195	1,054,195	2,969,865	0.7629613	12016	1292016

Table 4: Sample Tie Out Table (\$'s in millions)

Term	Coupon	Freddie															Fannie			UMBS			
		Total Outstanding			45-day unexchanged			55-day Exchanged			55-day new issue			Total 55-day Outstanding			Outstanding			All 55-day Outstanding			
		REMIC	Float	Total	REMIC	Float	Total	REMIC	Float	Total	REMIC	Float	Total	REMIC	Float	Total	REMIC	Float	Total	REMIC	Float	Total	
30	2.5	826	1,652	2,478	789	1,396	2,185	0	182	182	37	74	111	37	256	293	1,239	2,478	3,717	1,276	2,734	4,010	
	3	75,586	151,171	226,757	73,424	127,394	200,818	0	19,454	19,454	2,162	4,323	6,485	2,162	23,777	25,939	113,379	226,757	340,136	115,540	250,534	366,074	
	3.5	120,401	240,802	361,203	117,518	209,093	326,611	0	25,944	25,944	2,883	5,765	8,648	2,883	31,709	34,592	180,602	361,203	541,805	183,484	392,913	576,397	
	4	76,118	152,236	228,354	72,945	117,337	190,283	0	28,553	28,553	3,173	6,345	9,518	3,173	34,899	38,071	114,177	228,354	342,531	117,350	263,252	380,602	
	4.5	34,870	69,739	104,609	32,126	39,560	71,686	0	24,692	24,692	2,744	5,487	8,231	2,744	30,179	32,923	52,305	104,609	156,914	55,048	134,788	189,836	
	5	19,814	39,627	59,441	18,111	20,900	39,011	0	15,322	15,322	1,702	3,405	5,107	1,702	18,727	20,430	29,720	59,441	89,161	31,423	78,168	109,591	
	5.5	12,507	25,015	37,522	12,271	22,420	34,691	0	2,123	2,123	236	472	708	236	2,595	2,831	18,761	37,522	56,283	18,997	40,117	59,114	
	6	8,009	16,018	24,027	7,600	11,520	19,121	0	3,680	3,680	409	818	1,227	409	4,498	4,907	12,014	24,027	36,041	12,422	28,525	40,947	
	6.5	3,161	6,323	9,484	2,953	4,035	6,988	0	1,872	1,872	208	416	624	208	2,288	2,496	4,742	9,484	14,226	4,950	11,772	16,722	
	7	890	1,781	2,671	808	880	1,689	0	737	737	82	164	246	82	900	982	1,335	2,671	4,006	1,417	3,571	4,988	
	7.5	275	549	824	259	380	639	0	138	138	15	31	46	15	169	184	412	824	1,235	427	992	1,420	
	8	136	273	409	134	251	385	0	18	18	2	4	6	2	21	23	204	409	613	206	430	637	
	8.5	42	84	126	40	65	106	0	15	15	2	3	5	2	19	20	63	126	189	65	111	145	209
	Total	352,635	705,270	1,057,904	298,071	596,142	894,214	0	122,731	122,731	13,653	27,307	40,960	13,653	150,037	163,691	528,952	1,057,904	1,586,857	542,606	1,207,942	1,750,547	