Q&A

The following are answers provided by Hewlett-Packard (HP) to the Questions from page 31 and 32 of the document titled, *Building a New Infrastructure for the Secondary Mortgage Market*, dated October 4, 2012 and released by FHFA for industry comment.

HP is submitting answers from the perspective of building a new securitization platform and potentially operating the system. HP will not be addressing policy, legal, or regulatory aspects of these questions. However, it is important to recognize that the HP proposed approach, solution and capabilities will support all of the requirements of the business, operations, legal, policy, regulatory requirements, and technology that exist today as well as in the future.

HP also believes that additional details, some of which we have added the end of this section, should be further reviewed to ensure the success of the new securitization platform.

1. The proposed securitization platform has four core functions (issuance, disclosure, bond administration and master servicing). Will these core functions provide an efficient and effective foundation for the housing finance system going forward?

In general, yes. However, there are many other functions and common services that could, over time, be included as part of the core platform that will be addressed in Question #2. These services may not directly be part of the early releases of the new securitization platform, however, they should to be considered as the architecture is being defined to ensure low operational costs and ensure data transparency. These functions should, over time, be integrated in a common manner and have the ability to be extended and scaled due to change in policies and changes in the market. It is recognized that some of these common functions may actually be part of the new securitization platform, and some aspects may be run by private enterprise and integrated into the new securitization platform via standard programming interfaces (APIs). The extensibility of these functions can be assured by adherence to industry standard: technologies, data models, and integration.

Taking an approach of seamless and industry standard integrations as well as using a standard data model/dictionary will reduce data duplication, maximize flexibility, reduce manual intervention, reduce costs, and reduce errors. Standards will improve connectivity with all underwriters and ensure data entry in a consistent manner including the implementation of templates, which eliminates rekeying and data duplication. Standards also allow for visibility of all types of information (data, text, images, video, and audio) and ensure scalability and extensibility.

Designed and properly implemented, information that passes through these functions will be transparent and securely available in real-time as well as retained historic record and available for analytic analysis. The information can then be made available—in electronic form as well as through portals—to authorized users and regulators. In this way private capital investors will be able to view and receive the information in any manner they desire. Information such as credit exposure, asset value, and repayment capabilities will be readily available for analysis. This model could also become the model for the private sector, which would ensure that this sector does not create new standards that are incompatible with the new FHFA securitization platform.

2. Are there additional functionalities that should be considered as core functions of the platform? For example, should the platform independently verify or determine the following or rely on an issuer or guarantor:

- Underwriting and loan eligibility rules?

- Pooling rules?

The current platform fundamentally consists of front-end processes (such as data validation) and back-end processes (such as servicing). HP suggests a more thorough and in-depth discussion as to the merits of which functions and data should reside within/co-exist with the new securitization platform, the movement of all business functions over time, and the consequences of stranding business functions on legacy platforms for extended periods of time.

Relative to additional functions, the platform should have a rules-driven underwriting engine that is standardized underwriting templates and they should be available to all parties. This will ensure consistency of data gathering, scoring, and analysis, and it will eliminate rekeying. The platform should have a common data validation environment that ensures all loans conform to the rules and policies that have been established and as they change over time. Likewise, rules for pooling should be centrally managed with the ability to because of changes in markets demands and policies. This approach will allow for improved flexibility while better controlling additions, changes, modifications, and deletions to the environment.

Collateral management could be conducted in a common manner as part of the new securitization platform. This will reduce costs and allow for consistency of valuation and revaluation of all loans. In this manner, collateral will be transparent, secure, and visible to all authorized parties. This type of transparency will encourage private investment and allow for ease of regulatory oversight.

Examples of other functions that should be considered common are reporting, servicing compensation, securities issuing, maintenance of monthly master servicing of loans, tracking and disclosure of securities balances, distribution of payments (principal and interest) to investors, tracking and disclosure of the underlying loan performance data, ability to create a competitive servicing compensation structure, and disclosure to investors and guarantors. A GAP analysis should be conducted on all business functions and those that lend themselves to straight through processing, with rules, should be candidates for the new platform.

Maximizing commonality of core functions and data standards will reduce OPEX, improve NPV and IRR, reduce errors, reduce manual intervention, eliminate data duplication, and allow private capital providers with seamless and easy-to-use interactions. These interactions will encourage additional private capital to turn to this platform for investment options and risk participation.

Electronic data and data through customized portals should be provided using common functions that can be customized.

3. Will the framework for a model PSA described in this paper provide the foundation for a standardized contractual framework for the housing finance system going forward?

Technology rules should monitor, alert, and enforce any standards determined by the contractual framework, now and in the future. Changes to the environment should be made and reflected in real-time.

4. Are there additional elements/attributes that should be included in a model PSA? For example,

    - Should the model PSA define when a non-performing loan is required to be purchased out of the trust?

    - Should the model PSA define when a non-performing loan is required to be transferred to a specialty servicer?

Business and data rules should be implemented that will support the notification of non-performing loans and have the ability to seamlessly transfer it, if required, to a specialty servicer as well as automatically notify investors and make changes in servicing and bond administration. To the extent possible, standards should exist regarding viewing policies, regulations, and data, defining when data can or should be changed. Business and data rules are essential if private investors are to participate in risk sharing. Private investors count on consistency of policies and rules, and they need to know when and why deviations might occur. Without this visibility, investors may see this environment as unreliable, which could lower participation or cause investors to price more risk into the purchasing/ guaranteeing of pools. Flexible payment and guarantor schemes should be made available in any configuration that promotes incremental private investment and risk-taking.

A solution, with industry standard data model and rules, tied to business and data rules, will assist in preemptive notifications of deteriorating loans, loans that are non-performing, and the movement of loans to specialty servicers if required. All automated processes could have manual interventions if there is a need to physically review the loan and its status. Allowing the data model and rules to "'drive the process" will reduce TCO and errors. These same rules can act as exception processing guides for any loans that may be determined to require manual intervention.

5. If the framework for a model PSA is a good contractual foundation, how should compliance with the PSA be monitored in the future?

From the day a mortgage pool is formed it should be consistently monitored and analyzed to ensure that it is performing according to the contractual foundation. Combining business rules and data rules with historical analytics and a workflow engine will note deviations, make them visible on a dashboard, and create automated alerts. Technology, based on agreed polices, will be able to monitor compliance and visually report on it in a clear manner. This same information should also be able to be viewed and analyzed over time periods. Deviations from the established norms should appear as preemptive flags to regulators and, where appropriate, private capital investors. Details of deviations should be readily available and understandable. This highly visible information should be available in real-time and historical.

There is a strong need to tie the data that is currently part of the new securitization platform to all other relevant sources of data to achieve the desired level of data transparency.

6. What enhancements to the role of trustee should be considered in order to better attract private capital to the housing finance system?

Entities that participate in private capital investments and risk participation respond best when they have full and complete transparency of data (real-time, historical, and analytical) that is always available with the ability to view it in a consistent manner. Private capital also responds in a positive manner when fees and risk positions can be changed

and quickly adjusted to accommodate changes in the market, risk environment, regulations, or polices.

As the economy changes over time, private capital wants an environment that can change and flex quickly so as to maximize return on capital. Therefore, the technology that supports the role of the trustee, enhancer, and guarantor must be responsive to requirements and changes. There needs to be a "single source of the truth" for information, and there needs to be the ability to access this information in real time and to view trends from a historical and analytical point of view. Whatever modifications, additions, or deletions the trustee desires to make should be reflected in technology as soon as the change is made. This type of real-time notification and change capabilities will drive confidence that will improve private capital investments and risk participation.

7. How should document custodial and assignment responsibilities be handled in the housing finance system going forward?

No matter the policy decisions, the technology must be able to support any and all changes though secure, user-defined rules and supported by workflow, processes, and case management. These functions should be integrated into a single and common capability. Separate rule engines and business process engines have proved to significantly restrict scalability.

Topics where additional dialog may be warranted

- Expanding the usage of common services to lower operating costs

- Scaling ability to taking on the private sector

- Taking an expanded approach to achieve the stated goal of data transparency thereby ensuring private capital participation

- Better defining which common services and functions should be in the new securitization platform vs. being performed by the private sector

- More granular discussion of which services will best adapt to the implementation of rules and straight-through processing

- Standards (other than those established by MISMO) that are sought by FHFA have vastly differing meaning to users and providers. A discussion of what standards are and why they are important from both a business and technology point of view should occur in advance of any architecture development or build

- Means of lowering barriers to entry for new issuers, guarantors, and other market entrants

- More detailed discussion around transition alternatives

- Will the new platform also be used to offer white-label services to the private sector?

- System availability requirements should be clearly defined