SUMMARY: In May 2017, the Commodity Futures Trading Commission ("Commission" or "CFTC") launched a new initiative, LabCFTC, to spearhead the CFTC’s effort to facilitate the development and implementation of market-enhancing financial technologies ("FinTech"). As part of that effort, CFTC staff are exploring opportunities to play a constructive role to stimulate innovation and leverage FinTech solutions that can enhance or regulated markets and help make the Commission more effective and efficient in satisfying its mission. The Science Prize Competition Act ("SPCA") authorizes the CFTC to invest federal funds in science and early-stage technology research and development as well as in education. Under this authority, the CFTC may implement a competition and award prizes to stimulate innovation designed to advance the CFTC’s mission. Accordingly, the Science Prize Competition Act may offer a useful mechanism to further the goals of LabCFTC and the CFTC’s mission. This Request for Input solicits feedback on focus areas for potential prize competitions, and how competitions could best be structured and administered. The Commission welcomes all public comments.

DATES: Comments must be received on or before July 24, 2018.

ADDRESSES: You may submit comments, identified by the title, "LabCFTC Prize Competition," or "CFTC"), through the website.

FURTHER INFORMATION CONTACT: Daniel Gorfine, Director of LabCFTC and Chief Innovation Officer, (202) 418–5625; Brian Trackman, Counsel on FinTech and Innovation, Office of General Counsel, (202) 418–5163; Jorge Herrada, Senior Technical Data Specialist, Office of Data and Technology, (202) 418–5346; or LabCFTC@cftc.gov.

SUPPLEMENTARY INFORMATION:

I. Background

A. LabCFTC

In May 2017, the CFTC launched the LabCFTC initiative to further the CFTC’s goal of evolving as a 21st century regulator and keeping pace with technological innovation. LabCFTC is dedicated to understanding and facilitating market-enhancing financial technology ("FinTech") innovation, promoting fair market competition, and ensuring proactive regulatory excellence. LabCFTC is designed to make the CFTC more accessible to FinTech and regulatory technology ("RegTech") innovators, and to inform the Commission’s understanding of emerging technologies and their regulatory implications.

Further to that effort, LabCFTC seeks to spur innovation and innovative applications of FinTech through prize competitions as described further below. By focusing attention on aspects of CFTC operations or regulated markets that could benefit from FinTech and actively encouraging development of innovative solutions, LabCFTC can act as a catalyst to drive progress.

B. FinTech and RegTech Opportunity

Technology-driven innovation is rapidly transforming the markets CFTC oversees, and the way market participants operate and interact. Examples include automated trading, which now constitutes up to 70 percent of trading on regulated futures markets, "big data" capability to enable more sophisticated data analysis and interpretation, machine learning and artificial intelligence to guide highly dynamic trade execution, "smart" contracts that value themselves and calculate payments in real-time, behavioral biometrics that can detect and combat online fraud, and blockchain and distributed ledger technologies. LabCFTC seeks to spur innovation and collaborative solutions to these and other opportunities.


7 Oscar Williams-Grut, WEF: Blockchain Will Become the ‘Beating Heart’ of Finance, Business
which hold promise in increasing operational efficiencies (e.g., identity confirmation, KYC/AML compliance, and trade lifecycle management), may also help facilitate real-time, standardized, and lower-cost regulatory reporting, which benefits both market stakeholders and CFTC. Application of self-executing machine logic, often called “smart contracts” could result in the potential decrease of execution risks, more efficient use of trade-related margin and collateral, and the incorporation of automated regulatory compliance provisions into the contract code.

For market participants, new technologies can improve operational efficiencies, create better workflows, increase transparency, and strengthen compliance. Indeed, emerging financial technologies ranging from blockchain to machine learning to predictive data analytics are already changing the way financial markets operate. And, importantly, for regulators too, including the CFTC, RegTech can help drive more effective and efficient internal operations, as well as surveillance and oversight of regulated markets.8

C. Science Prize Competition Act9

The SPCA authorizes the Chairman of the CFTC to carry out a program to award prizes competitively to stimulate innovation that has the potential to advance the mission of the agency.10 Generally, the subject of the prize competition, eligibility rules to participate, registration process, conduct of the competition, prize, and winner selection criteria must be published in advance.11 Notice must be given on a publicly available Government website such as challenge.gov.12 The head of an agency is required to advertise a prize competition widely to encourage broad participation.13

A competition may have a cash prize purse or a non-cash prize award.14 To win a cash award, an individual or entity must comply with the competition requirements and be U.S.-based.15 Individuals must be U.S. citizens or a permanent resident of the U.S.16 Private entities must be incorporated in and maintain a primary place of business in the U.S.17 While eligibility to win cash awards is limited to individuals and entities that are U.S. based, as described above, there is no limitation on participation in a competition or eligibility to win a non-cash prize award.

The SPCA includes guidelines concerning liability and insurance,18 intellectual property rights,19 prize competition judges,20 administering the competition,21 and funding.22 Competitions under the SPCA are not intended to be a substitute for the standard procurement process. Rather, they are aimed at developing solutions to challenges where the solution is not yet well-defined or developed.

Beyond the basic requirements specified in the SPCA, the Commission has a great deal of flexibility in defining and structuring a competition.23 For example, the competition could be scheduled for a day or two, or instead extend over several weeks. The competition may have one single prize, or interim stages of selection. The competition need not be run in the CFTC’s IT environment. Participants could create their submissions in their own environments. Participant submissions in prize competitions could be designated fully public or kept confidential, in whole or part. And the Commission is free to determine the prize, whether to offer a cash prize purse or non-cash prize award. In that regard, the Commission notes that it does not, at this time, anticipate offering a cash prize purse.

II. Request for Input

The Commission believes that science prize competitions offer an exciting opportunity to encourage and spotlight innovation that can benefit the quality, transparency, and integrity of our markets, the market participants who depend on them, the operations and activities of the CFTC, and broader American public. The Commission has begun considering potential competition topics and potential ways to structure competitions under the auspices of its LabCFTC initiative. The SPCA encourages broad consultation in and outside of government when selecting topics.24 Accordingly, to develop its ideas further and help ensure that competitions achieve their objective of facilitating market-enhancing innovation, the Commission is issuing this Request for Input to gather feedback on potential competition topics as well as on the structure and administration of its prize competitions, i.e., what approach would be most effective. The Commission welcomes any comments, including potential competition topics not discussed here or any other element that a commenter believes should be considered.

A. Potential Prize Competition Topics

FinTech is rapidly evolving, and there are many areas where innovation and technology have the potential for significant impact. Accordingly, because the scope of FinTech is so broad, the range of potential FinTech prize competitions is expansive. The Commission would like to identify specific challenges and use cases where a prize competition is especially suited to spur the creation and demonstration of innovative solutions. Ideally, a prize competition would both highlight how new technology can benefit the CFTC as well as the derivatives markets we oversee, and also lead to actionable next
steps, which could include further use case development, additional research or investment, proofs of concept, and implementation.

The Commission has given some preliminary consideration to several topics, described below, that may satisfy its stated objectives. These examples are just that: examples. There are many other potential areas where a prize competition or series of competitions under the SPCA might advance the development of beneficial solutions, which could improve market participants’ ability to serve the needs of clients, enable the CFTC to better fulfill its mission, or enhance the overall quality and integrity of our markets. Therefore, in addition to feedback on any of the potential competition topics described below, the Commission would appreciate suggestions for additional competition topics.

The Commission emphasizes that, as noted, this Request for Input is meant to stimulate thinking about potential prize competitions. The Commission is not endorsing any particular topic, nor is the Commission committing to pursue a prize competition or engage in follow-on procurement to implement specific solutions.

(1) Transaction, Position, and Margin Data and Analysis

Several potential topics relate to challenges around market data: transaction reporting by market participants, data dissemination by the CFTC, data management and analysis, and data cleansing and harmonization. In each case, innovation driven by new technology has the potential greatly to improve current processes and “output,” enabling both market participants and regulators to engage with data more effectively.

For example, standardization of forms and processes, simplified reporting mechanisms, shared, comprehensive data ontologies, and new modes of reporting all offer the potential to greatly enhance the accessibility, quality, and utility of market data that is reported to, and disseminated by, the CFTC. Disseminating data reports in machine readable format, new techniques in data visualization or new ways of combining data streams could help make sense of market activity, educate the public on the role of derivatives markets in the broader economy, identify opportunity and risks, and improve the overall quality of our markets. Likewise with respect to data management,25 cleansing,26 and analysis, new technology could help the agency and stakeholders make good use of available market data to gain insight about market interactions, risk flows, and aggregate exposures. A prize competition in any of these areas could thus be useful.

(2) Enhancing Market Transparency and Oversight

FinTech innovation may enhance market transparency and oversight in a number of ways. Already, the Internet of Things (IoT) is making new kinds of information available that may be relevant to pricing derivatives and assessing market risks. A prize competition could address, for example, how FinTech can be deployed in the derivatives markets to detect behavior or information that may assist the Commission in detecting fraud or abuse.

A more ambitious competition topic could address leveraging FinTech innovation to enhance the availability of accurate, timely transactional data, including trade prices. Commentators have noted that new technologies have the potential to improve market transparency and oversight at a lower cost.27

(3) Systemic Risk Analysis

The Commission believes it is critical to its core function to successfully monitor and prevent the build-up of systematic risk.28 New technologies can help the Commission discharge this vital responsibility by providing new ways to track and assess risk. Using distributed ledgers, Cloud-based storage, machine learning, and other new technologies could enable new methods for conducting stress tests, for example, and gauging the impact(s) of unforeseen events on the financial system as a whole.

(4) Improving the Accessibility of CFTC Regulations

A longstanding critique of regulatory frameworks is their complexity. Over time, as regulations continue to evolve, rule sets tend to become more intricate. Updates may be difficult to track and engender unintended consequences. For regulated entities this presents a tremendous compliance challenge. Each entity must know which rules apply to it, understand what those rules require, structure an appropriate compliance program, and keep the program up to date. These challenges may be even more significant for relatively young or lean entities looking to scale their activities in an increasingly fast-moving market. For other market participants, regulators, and the public more broadly, complex regulations can obscure straightforward regulatory goals and impede meaningful review of the overall regulatory framework.

The Commission believes that technology may offer meaningful opportunities to make the regulatory framework more accessible, reduce burdens and enhance overall compliance.29 There are a variety of potential approaches, including:

- Coding rules to make them machine readable,
- Creating common ontologies to make rules more understandable and

25 Data management is a broad discipline that defines and governs how an organization makes use of data. It includes such areas as data governance, data architecture, data security management, data quality, reference and master data, meta data, and data transformation.

26 Data cleansing is vital to making use of data resources. It refers to the process of preparing data for analysis. The CFTC handles numerous data sets that range in complexity. In many cases, the utility of the dataset is reduced because the quality of the data is imperfect. Entries in fields may not be consistent in form or format. Data requirements may be interpreted differently by different respondents (or even within different divisions of the same firm), resulting in different types of entries. Data elements may be entered improperly or inadvertently omitted. Manual data cleansing, however, cannot scale.


29 Other regulatory authorities are already exploring these possibilities. For example, the UK Financial Conduct Authority hosted an event where participants demonstrated technology to link regulatory obligations to internal policies in a cost effective, automated and auditable fashion. See Yaa Asare, “JCWG and ClauseMatch Launch Next Generation Regulatory Policy Management Solution,” https://regtechfs.com/jcwg-and-clausematch-launch-next-generation-regulatory-policy-management-solution/.
highlight where rules may be inconsistent or diverge.

- Creating visual, interactive representations of the regulatory framework, that enable linking of related rules and mapping of regulatory requirements to specific function, teams and individuals within a regulated entity, and

- Developing machines that “digest” rules to determine data and other requirements, as well as ideal compliance approaches for specific entities.

(5) Strengthening CFTC’s Administrative Process

Technology-based solutions geared to address regulation, regulatory process, and the day-to-day operations of market regulators present the CFTC a meaningful opportunity to leverage innovative FinTech directly. For example, as a market regulator the CFTC’s rulemaking process is of vital importance. A key element of that process is the opportunity for public comment. But when the CFTC puts out a rule proposal, the agency may receive hundreds, sometime thousands, of comment letters. While the Commission currently uses some technology solutions, the review process remains labor intensive and could benefit from automation. How can innovative technology make the notice-and-comment process “smarter,” more dynamic, and more effective?

B. Administration of Prize Competitions

In addition to comment on potential competition topics, the Commission also seeks public input on the administration of any prize competition. The SPCA provides significant flexibility to agencies in how a prize competition is conducted. The Commission wishes to structure prize competitions to attract broad interest, to be fair to all participants, and to encourage market-enhancing innovation. Broadly, the Commission is interested in how these goals can best be accomplished through a prize competition. We are particularly interested in the following areas:

(1) Eligibility

The SPCA requires that prize competition winners be, in the case of entities, U.S. based or, in the case of individuals, U.S. citizens. The Commission seeks input on what additional requirements, if any, should govern participation in a CFTC-sponsored FinTech prize competition.

(2) Format

Prize competitions may take many forms. Hackathons, for example, may take place over a short period: one or perhaps a few days.30 During that time, competitors come together to create and submit a solution that meets the challenge presented. By contrast, a FinTech prize competition could be structured to permit competitors to work on their own pace over a longer period, and then submit their solution by a stated deadline. In the case of a CFTC-sponsored FinTech prize competition, the Commission seeks public input on what format may be most suitable.

(3) Conditions of Participation

The Commission is considering what, if any, conditions of participation it should impose around a potential prize competition.

(4) Advertising

The Commission is interested in reaching the widest range of potential participants that it can in regard to CFTC-sponsored FinTech prize competitions.

(5) Evaluation Standards

Once entries are submitted as part of a competition, they must be reviewed and evaluated to determine a prize winner. The Commission seeks public input on the evaluation process and appropriate standards of evaluation (e.g., how easily might a proposed solution be scaled, how robust is a proposed solution, how resilient, how adaptable to market changes or changes to the regulatory framework, etc.).

(6) Judges

As part of a prize competition, judges must be selected to evaluate entries and select the winner(s). The Commission seeks input on the judge selection process and the appropriate mix of judges from among various stakeholder groups: financial market participants, commercial end-users, researchers and academics, FinTech innovators, specialists and experts (e.g., data scientists, technologists, etc.), financial and technology press, government officials, CFTC staff, and members of the general public.

30 Generally, a hackathon is an event typically of short duration at which participants engage in collaborative computer programming, often to address a coding challenge or to develop a solution to an identified problem. Federal agencies such as the Department of Health and Human Services have sponsored successful hackathons, for example, the HHS Opioid Code-a-Thon in December 2017, https://www.challenge.gov/challenge/hhs-opioid-code-a-thon/.

(7) Prize

The Commission seeks feedback on the selection of a suitable prize. For example, the Commission could offer a “CFTC Market Innovator of the Year” award to recognize select competition participants. Generally, the Commission seeks input on what type of prize may best encourage meaningful participation that results in real-world solutions relevant to the competition topic. As noted, the Commission does not at this time anticipate providing a cash purse, but notes that under the SPCA, an agency may partner with outside entities which may sponsor cash awards.31

Specific Questions for Input

As noted, the Commission seeks feedback on candidate prize competition topics and on the administration of a prize competition. The Commission’s broad goal is to stimulate thinking and highlight efforts to apply new technology in ways that may enhance our markets. In addition to any general input, the Commission is interested in responses to the following:

Regarding prize competition topic selection:

1. Are there subject matter areas or specific topics that the Commission should particularly consider or focus on for a potential prize competition?

2. What criteria should the Commission use to select prize competition topics?

3. Are there subject matter areas or specific topics that are not suitable for a prize competition? Please be specific as possible or provide examples where appropriate.

4. What competition topics may help illuminate areas where new technology can reduce costs or improve services for market participants and end-users who depend on these markets to manage risk?

5. What competition topics may highlight areas where the regulatory framework could work better or needs significant revision to accommodate market-enhancing FinTech?

6. Which existing regulatory compliance or regulatory reporting processes do you feel would most
benefit from RegTech? Please be specific as possible or provide examples where appropriate.

Regarding administration of a prize competition:
7. What ground rules should govern participation in a CFTC-sponsored FinTech prize competition?
   • For example, are there particular eligibility requirements that the agency should adopt?
   • Should competition entries be designated “open source,” or should each participant retain full control of its entry and any decision about its availability?
   • Should any different rules apply to winning entries?
8. How should prize competition judges be selected?
   • Should the Commission select a single judge or panel to evaluate prize competition submissions?
   • If a panel, how large?
   • And what is the appropriate mix of stakeholders?
   • What additional requirements, if any, should apply to judges?
9. What general evaluation standards or criteria may be appropriate in the context of a CFTC-sponsored FinTech prize competition? Regarding the evaluation process, are there models or protocols that the Commission might adapt with regard to prize competitions it sponsors?
10. What type of prize is likely to encourage the greatest participation from a broad range of innovators? What factors should the Commission consider? If the prize is other than a cash purse, what type of prize may be suitable?
11. Generally, are there any rules, policies, or practices that the Commission should adopt to facilitate a prize competition or encourage participation? For example, what modes of advertising and publicity may be most effective? And, likewise, are there any rules, policies, or practices that could impede participation in a prize competition?

In providing your responses, please be as specific as possible, and offer examples where appropriate. The Commission encourages all relevant comments; commenters need not address every item.

III. Conclusion

The Commission appreciates your time and effort responding to this Request for Input on potential CFTC-sponsored FinTech prize competitions. The information provided by stakeholders will help us refine our understanding and future approach, and identify how the Commission can best structure prize competitions to maximize their positive impact.

More broadly, the input from this request will further aid the Commission in identifying FinTech trends and areas where emerging technologies and innovation may offer significant potential benefit.

In that respect, we look forward to continuing to engage proactively with the innovator community and market participants to promote market-enhancing FinTech, to identify opportunities to update our regulatory framework, and to implement new technology-based approaches to fulfill the CFTC’s mission on behalf of the American people.

Issued in Washington, DC, on April 20, 2018, by the Commission.

Christopher Kirkpatrick,
Secretary of the Commission.

Appendix To Request for Input on LabCFTC Prize Competitions—Commission Voting Summary

On this matter, Chairman Giancarlo and Commissioners Quintenz and Behnam in the affirmative. No Commissioner voted in the negative.

[FR Doc. 2018–08673 Filed 4–24–18; 8:45 am]

BILLING CODE 6351–01–P

DENALI COMMISSION

Denali Commission Fiscal Year 2019 Draft Work Plan

AGENCY: Denali Commission.

ACTION: Notice.

SUMMARY: The Denali Commission (Commission) is an independent Federal agency based on an innovative federal-state partnership designed to provide critical utilities, infrastructure and support for economic development and training in Alaska by delivering federal services in the most cost-effective manner possible. The Commission was created in 1998 with passage of the October 21, 1998 Denali Commission Act (Act). The Act requires that the Commission develop proposed work plans for future spending and that the annual work plan be published in the Federal Register, providing an opportunity for a 30-day period of public review and written comment. This Federal Register notice serves to announce the 30-day opportunity for public comment on the Denali Commission Draft Work Plan for Federal Fiscal Year 2019 (FY 2019).

DATES: Comments and related material to be received by May 31, 2018.

ADDRESSES: Submit comments to the Denali Commission, Attention: Corrine Eilo, 510 L Street, Suite 410, Anchorage, AK 99501.

FOR FURTHER INFORMATION CONTACT: Corrine Eilo, Denali Commission, 510 L Street, Suite 410, Anchorage, AK 99501. Telephone: (907) 271–1414. Email: ceilo@denali.gov.

Background

The Denali Commission’s mission is to partner with tribal, federal, state, and local governments and collaborate with all Alaskans to improve the effectiveness and efficiency of government services, to build and ensure the operation and maintenance of Alaska’s basic infrastructure, and to develop a well-trained labor force employed in a diversified and sustainable economy.

By creating the Commission, Congress mandated that all parties involved partner together to find new and innovative solutions to the unique infrastructure and economic development challenges in America’s most remote communities. Pursuant to the Act, the Commission determines its own basic operating principles and funding criteria on an annual federal fiscal year (October 1 to September 30) basis. The Commission outlines these priorities and funding recommendations in an annual work plan. The FY 2019 Work Plan was developed in the following manner.

• A workgroup comprised of Denali Commissioners and Commission staff developed a preliminary draft work plan.
• The preliminary draft work plan was published on Denali.gov for review by the public in advance of public testimony.
• A public hearing was held to record public comments and recommendations on the preliminary draft work plan.
• Written comments on the preliminary draft work plan were accepted for another ten days after the public hearing.
• All public hearing comments and written comments were provided to Commissioners for their review and consideration.
• Commissioners discussed the preliminary draft work plan in a public meeting and then voted on the work plan during the meeting.

The Commissioners forwarded their recommended work plan to the Federal Co-Chair, who then prepared the draft work plan for publication in the Federal Register providing a 30-day period for public review and written comment. During this time, the draft work plan will also be disseminated to Commission program partners including, but not limited to, the Bureau