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Description of document: National Institute of Standards and Technology (NIST) Measurement Services Council (NMSC) Meeting Minutes, April 2016-January 2017 Requested date: 09-February-2017 Released date: 10-March-2017 Posted date: 17-September-2018 Source of document: **FOIA Request** National Institute of Standards and Technology FOIA & Privacy Act Officer 100 Bureau Drive STOP 1710 Gaithersburg, MD 20899-1710 Email: foia@nist.gov

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UNITED STATES DEPARTMENT OF COMMERCE National Institute of Standards and Technology Gaithersburg, Maryland 20899-0001

MAR 1 0 2017

This letter serves as the final response to your February 9, 2017 Freedom of Information Act (FOIA) request (DOC-NIST-2017-000584) to the National Institute of Standards and Technology (NIST) for:

"Under the provisions of the Freedom of Information Act, I respectfully request a digital/electronic copy of themeeting minutes for the NIST Measurement Services Council (NMSC). I would like to get the meeting minutes for the last five years, or else I will accept whatever lesser amount is retrievable from the NIST internal website (<u>https://inet.nist.gov/nmsc</u>)".

NIST has completed the actual search for responsive records and enclosed are 8 (eight) documents consisting of 26 (twenty-six) pages that are being released with redactions pursuant to 5 U.S.C. § 552 Exemption (b)(5) of the FOIA (5 U.S.C. Section 552(b)(5)). This exemption permits NIST to withhold documents that are reflective of the deliberative process. Because the records are "pre-decisional and antecedent to the adoption of an agency policy," and "a direct part of the deliberative process in that it makes recommendations or expresses opinions on legal or policy matters," they are properly withholdable under the FOIA.

If you have questions or concerns or would like to discuss any aspect of your request, you may contact either the analyst who processed your request, Elizabeth Reinhart, Management Analyst at 301-975-8707, or me, the FOIA Public Liaison/Freedom of Information Act Officer, at 301-975-4054. We may also be reached at <u>foia@nist.gov</u>. In addition, you may contact the Office of Government Information Services (OGIS) at the National Archives and Records Administration to inquire about the FOIA mediation services they offer. The contact information for OGIS is as follows: Office of Government Information Services, National Archives and Records Administration, 8601 Adelphi Road-OGIS, College Park, Maryland 20740-6001, e-mail at <u>ogis@nara.gov</u>; telephone at 202741-5770; toll free at 1-877-684-6448, or facsimile at 202-741-5769.

You have the right to appeal this partial denial of the FOIA request. An appeal must be received within 90 calendar days of the date of this response letter to:

Assistant General Counsel for Litigation, Employment, and Oversight Office U.S. Department of Commerce, Room 5875 14th and Constitution Avenue N.W. Washington, D.C. 20230

Your appeal may also be sent by e-mail to <u>FOIAAppeals@doc.gov</u>, by facsimile (fax) to 202-482-2552, or by FOIAonline, if you have an account in FOIAonline, at <u>https://foiaonline.regulations.gov/foia/action/public/home#</u>. The appeal must include a copy of the original request, this response to the request and a statement of the reason why the withheld records should be made available and why denial of the records was in error. The submission (including e-mail, fax, and FOIAonline submissions) is not complete without the required attachments. The appeal letter, the envelope, the e-mail subject line, and the fax cover sheet should be clearly marked "Freedom of Information Act Appeal."

The e-mail, fax machine, FOIAonline, and Office are monitored only on working days during normal business hours (8:30 a.m. to 5:00 p.m., Eastern Time, Monday through Friday). FOIA appeals posted to the e-mail box, fax machine, FOIAonline, or Office after normal business hours will be deemed received on the next normal business day. If the 90th calendar day for submitting an appeal falls on a Saturday, Sunday or legal public holiday, an appeal received by 5:00 p.m., Eastern Standard Time, the next business day will be deemed timely. If the 90th calendar day for submitting an appeal falls on a Saturday, Sunday or legal public holiday, an appeal received by 5:00 p.m., Eastern Time, the next business day will be deemed timely.

It was previously determined that you are in the "all other" requester category for which chargeable services include search and duplication of responsive documents excluding the cost of the first 2 hours of search and the first 100 pages of duplication. The search and duplication costs were under the chargeable threshold; thus, the documents are being provided at no cost.

Sincerely,

Teit oth

Catherine S. Fletcher Freedom of Information Act Officer

8 (eight) documents / 26 (twenty-six) pages



Intranet

NIST Intranet (https://www.nist.gov/) >NIST Measurement Services Council (https://www.nist.gov/nmsc) >NMSC Minutes, 04/07/16

NMSC Minutes, 04/07/16

NMSC Quick Links

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- Standard Reference Materials (http://www.nist.gov/srm/index.cfm)

Contact NMSC

Sally Bruce, NMSC Chair (https://www.nist.govmailto:sally.bruce@nist.gov) Catherine Cooksey, NMSC Secretary (https://www.nist.govmailto:catherine.cooksey@nist.gov)

Attendees: Sally Bruce, Steve Choquette, Catherine Cooksey, Robert Hanisch, Howard Harary, Laurie Locascio, Jim Olthoff, Antonio Possolo, Kent Rochford, and Greg Strouse Excused: Dereck Orr

1. Introduction

K. Rochford began the meeting by explaining the purpose of the Council. He hopes that through the Council we can achieve coherence across Measurement Services despite the various parts residing in different parts of the organizational structure. The role of the Council is advisory. It should be a venue for discussing major changes, new services, process changes, and other cross-cutting issues relevant to Measurement Services.

2. Charter

The charter for the NIST Measurement Services Council (NMSC) has already been through legal review. K. Rochford is comfortable approving any minor changes. The Council may provide feedback on the content before final approval.

Currently, the charter specifies one vote per OU. K. Rochford hopes that formal voting is be unnecessary as he would like the committee to reach consensus on most issues.

S. Bruce gave an overview of the charter. It documents the purpose of the Council, its membership, voting representation, operating principles, responsibilities, and meeting policies. C. Cooksey, from the Sensor Science Division in the PML, will be serving as Secretary for the NMSC, helping to prepare agendas, drafting meeting minutes, and tracking actionable items.

As an aside, S. Bruce mentioned that there will be an internal website for Measurement Services. It will be a one-stop-shop for all things related to Measurement Services, such as policies, orders, procedures, the charter for the NMSC, NMSC meeting minutes, etc.

The following questions and suggestions concerning the content of the charter were made:

- J. Olthoff asked what is meant by "changes in modes of delivered measurement products." S. Bruce provided, as an example, the development of Standard Reference Instruments.
- J. Olthoff asked if OIAA should be involved in the committee given the charter's reference to "U.S. and international engagement with regard to NIST measurement services." K. Rochford explained that this has been discussed previously. He would like to keep OIAA informed of any relevant discussions. The Director of OIAA could be invited to participate in discussions or included as a member as needed.
- A. Possolo noted that the phrase "quality, relevance, performance, and resources" appears several times throughout the charter. He wondered if "operational issues" might also be included in the series because it might be beneficial to have some high-level awareness of issues that cut across OUs. L. Locascio provided an example that MML has been discussing improving the packaging facilities/capabilities of SRMs at NIST.
- L. Locascio asked how agendas would be determined. S. Bruce moved to section 3 of the meeting agenda which lists typical topic areas, Quality System updates, Measurement Services updates, and Cross-cutting themes. S. Bruce emphasized that the Council member should also suggest topics.
- J. Olthoff suggested that some flexibility be given on the frequency of meetings, monthly meetings may be difficult to coordinate with everyone's schedules. S. Bruce replied that she expects some work will be done by email when meetings are not feasible and that she considers the charter to be a living document that can be updated as needed.
- · R. Hanisch submitted comments on charter to S. Bruce prior to the meeting.

4. Agenda Topics for Future Meetings

In addition to the agenda topics suggested in this meeting's agenda and summarized above, the Council discussed the appropriateness of various topics for consideration by the Council in order to determine what is in scope of the operation of the Council.

- K. Rochford is interested in hearing about new services. G. Strouse noted that the procedure for establishing new calibration services includes a laboratory visit by S. Bruce, G. Strouse, and J. Olthoff. K. Rochford would like to be invited to these visits.
- L. Locascio mentioned that she and R. Hanisch have been discussing modes/methods for evaluating SRDs in terms of quality of data. She wondered at what point in the process the committee would like to be involved. J. Olthoff suggested that the committee be informed during the concept phase in case there might be interest from other parties in participating in the drafting phase. K. Rochford agreed, adding that any policies/products that are developed by an OU could be adopted more widely by other OUs.
- A. Possolo suggested that discussions concerning major investments in Measurement Services should be brought to the committee's attention.
- S. Bruce offered to distribute her quarterly quality report to the committee members.
- J. Olthoff suggested topics such as technology transfer related to standards production from NIST to industry (ex. photonic sensor) and addressing unique customer issues

- R. Hanisch mentioned an issue the Office of Data and Informatics has been discussing recently the 4 R's (reproducibility, replicability, repeatability, reliability). A. Possolo suggested he look to what the QM-I says on these topics and then bring any other specific concerns to the committee for discussion.
- K. Rochford encouraged the committee to let him know about roadblocks that they might encounter in moving forward on issues related to Measurement Services.
- L. Locascio mentioned that MML is planning to sponsor a course(s) on emerging technologies in biomanufacturing for SIM participants.

5. Quality Management System (QMS) Updates

S. Bruce briefly summarized some of upcoming activities.

- She will be presenting the QMS for the Analytical Chemistry Division at the next meeting of the SIM Quality System Task Force (QSTF) in May. The division produces the vast majority of SRMs offered by NIST.
- She has reviewed the proposed revisions for ISO 17025 and will be providing comments to Warren Merkel (Group Leader for the Standards Service Group in the Standards Coordination Office) who is co-convener for the Working Group drafting the revision.
- NIST-sponsored Metrology Course series for SIM participants began this week with the Office of Weights and Measures providing Fundamentals of Metrology. Upcoming course events include Thermometry, Dimensional Metrology, Time and Frequency, and Statistics.

Created 05-11-2016, Updated 05-27-2016



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1. Quality System Updates

S. Bruce reported on the recent SIM Quality System Task Force (QSTF) meeting that was hosted by the National Research Council of Canada in Halifax, Nova Scotia. At the meeting, she presented the quality system for Division 646, and it was accepted for its 5-year re-approval. J. Olthoff is currently serving as the chair of the QSTF, but will step down following the next meeting (scheduled for November 2016). Barbara Goldstein, who is the secretary, will also step down at that time. (See Sally's informal report, QSTF Report May 2016.docx, for more details on the meeting activities).

S. Bruce also mentioned that the revisions for ISO/IEC 17025 (the standard that the NIST quality system is primarily based on) are in progress. The revised standard is currently on track to being published in late 2017. There may be a 3-year implementation phase for the revision. NIST has provided feedback on the Committee Draft revisions through their representation with ICAC (ANSI's International Conformity Assessment Committee) and REMCO (ISO's Committee on reference materials). In general, NIST's concerns with the revisions have focused on impartiality and customer relations, too much emphasis on CIPM MRA, the definition of traceability, and overextension of existing guides and requirements as implied in drafted sections pertaining to reference material.



2. Measurement Services Updates

Calibrations (G. Strouse)

- QM-II for Division 680 has been approved and is posted on the Quality System's SharePoint site (https://share.nist.gov/sites/qs/division_docs/default.aspx (https://share.nist.gov/sites
- Million-pound force machine is back online following extensive refurbishment (<u>http://www.nist.gov</u>/pml/div684/grp07/nist-million-pound-weight-stack-restoration-is-complete.cfm (<u>http://www.nist.gov</u>/pml/div684/grp07/nist-million-pound-weight-stack-restoration-is-complete.cfm))
- New calibration service, electronic brachytherapy, was approved.(<u>http://www.nist.gov/pml/div682/grp02</u> /e brachy.cfm (http://www.nist.gov/pml/div682/grp02/e brachy.cfm))
- · Encouraging calibration staff to give instructional talks at NCSLI regional meetings.
- Comparison measurements with the mercury manometer are beginning for the newly developed photonic pressure standard.

Standard Reference Data (R. Hanisch)

(b)(5)

 Continue working on the modernization of SRD web interfaces. Currently, interfaces for 3 SRDs have been upgraded.



Standard Reference Materials (S. Choquette)

- Currently trying to find a solution for the long term maintenance of data (and analysis code, if applicable) that supports results provided in SRM certificates. Working with R. Hanisch on this issue.
- Also, looking at developing a template for Report of Analysis (ROA) that would allow easy conversion to SP260. Considering adding the SP260 citation to SRM certificates to increase staff recognition for the significant amount of work required to produce SRMs.

3. Cross-cutting themes

We ran out of time before addressing these issues in the agenda. They will be discussed at the next meeting on June 2, 2016. They will be moved to the first portion of the agenda.

Action Items



3. Set up an email alias for NMSC. [Assigned: C. Cooksey]

4. Send link for the draft internal webpages for Measurement Services to NMSC. [Assigned: S. Bruce]



Created 06-17-2016

NIST

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NMSC Minutes, 06/02/16

NMSC Quick Links

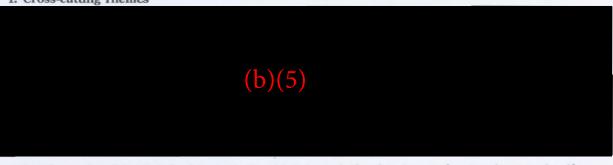
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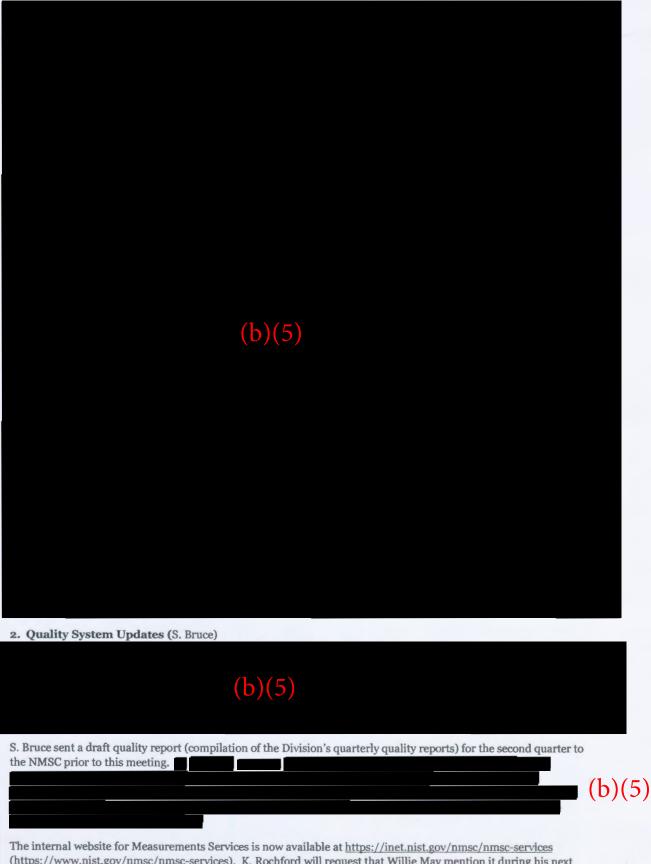
1. Cross-cutting Themes



A. Possolo mentioned that there has been some discussion about whether there is a penalty to pay in uncertainty if verification of measurement is made. For instance, a gravimetric preparation of a gas mixture is verified by comparing it with measurement results obtained independently by an unrelated method. Does the uncertainty of the verification step apply to the uncertainty of the measurement? The Council agreed no it does not, unless the verification result is used in the measurement. They suggested this interpretation should be added to the QM-I or in revisions of the NIST uncertainty publications.

There were several updates regarding NIST collaborations with outside entities.

• Cryogenic flow and CEESI – The cryogenic flow facility was relocated from NIST Boulder to CEESI in Colorado. It was reassembled there and is currently operational. Control of this calibration service will be the responsibility of the Fluid Metrology Group in Gaithersburg. The long term plan is to develop a water-based solution in Gaithersburg within the next 5 years, so that the facility at CEESI can be dismantled.



(https://www.nist.gov/nmsc/nmsc-services). K. Rochford will request that Willie May mention it during his next Town Hall meeting. It is intended to be a "one stop shop" for Measurement Services. S. Bruce requests that the NMSC review it and send suggestions to her.

S. Bruce mentioned the following upcoming metrology events: JCGM-GUM, JCGM-VIM, Meeting of the CC Presidents, CCU, BIPM-VMAS (emerging challenges in materials metrology), SIM Training – Time and Frequency, the BIPM Summer Course, NVLAP training, and the TEMPMEKO International Symposium on Temperature (where G. Strouse will give a keynote at a plenary session).

3. Measurement Services Updates

S. Bruce requested that the Measurement Services representatives send their updates in advance of the meeting in the form of bullet points, which will be included in the minutes. This will, hopefully, improve the efficiency of the meetings.

R. Hanisch coordinates an ad hoc Working Group for the CIPM, entitled the International Metrology Resource Registry. The Working Group held a workshop at the BIPM in April 2016 to address the challenge that the network of NMIs hold valuable collections of reference data and provide state-of-the-art metrology services; yet, there is no easy way to find out, across all NMIs, where particular data and data-related services are located. Examples of such data include:

- Standard Reference Data
- Reference Data
- Data associated with publications
- Data associated with Standard Reference Materials (SRMD)
- Simulation data

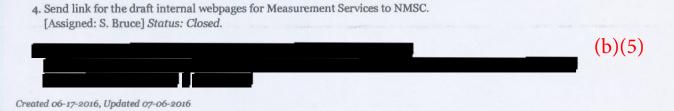
R. Hanisch shared with us the soft launch of the BIPM launched a website for the International Metrology Resource Registry at <u>http://imrr.bipm.org/ (http://imrr.bipm.org/)</u>. The website is currently under development, a demonstration of the Registry will be given at the fall meeting of the NMI Directors to be held at the BIPM.



Status of Action Items from previous NMSC meetings.



 Set up an email alias for NMSC. [Assigned: C. Cooksey] Status: Closed.





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NMSC Minutes, 08/04/16

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Attendees: Sally Bruce, Steve Choquette, Catherine Cooksey, Robert Hanisch, Howard Harary, Mike Kelley, and Greg Strouse

1. Review of Action Items List

S. Bruce began the meeting by reviewing the list of action items. Status updates are provided below.



- Review internal webpages for Measurement Services and send comments to S. Bruce. [Assigned: NMSC members] Status: Closed. No comments received. Contacts were updated on the homepage of the site.
- Schedule upcoming meetings for NMSC. [Assigned: S. Bruce]Status: Closed. Meetings have been scheduled for 9/19, 10/27, 11/21, and 12/22.
- Update publications or QM-I to address additional topics for the Evaluation and Expression of Measurement Uncertainty. [Assigned: A. Possolo and S. Bruce (for NIST-QM-I)]Status: Open. S. Bruce is currently working on the next revision of QM-I (version 10) where this can be addressed.





• Create suggested language for referencing use of a NIST calibration/SRM.[Assigned: S. Bruce and G. Strouse]Status: Open. S. Bruce is going to reach out to G. Porter in PBA to discuss this issue. There is some language in the Pro Forma Invoice for Calibration Services that might be utilized. S. Bruce would like to see uniformity in the language used across NIST.



2. Cross-cutting Themes

The BIPM is hosting course called Leaders of Tomorrow that aims to train new, inexperienced, and potential RMO technical committee chairs and working group conveners. The course is scheduled for November 7-18, 2016. (http://www.bipm.org/en/cbkt/leaders-of-tomorrow.html (http://www.bipm.org/en/cbkt/leaders-of-tomorrow.html (http://www.bipm.org/en/cbkt/leaders-of-tomorrow.html))

NIST needs to confirm if they will be sending a student in order to secure a room at the conference hotel with the other students.

3. Quality System Updates

S.Bruce mentioned that several of the corrective actions stemming from the OIG recommendation have due dates in October.

Quality reports for the 3rd (fiscal year) quarter were due in mid-July. S. Bruce has begun to compile the results into a quality report for the ADLP. There are 3 Divisions who have not submitted reports. S. Bruce has reached out to their quality managers. If the reports continue to be outstanding, K. Rochford is planning to send emails to the respective OU Directors. S. Bruce sends reminders to all of the quality managers through calendar items and emails (before and after the due dates).

(b)(5)

S. Bruce and G. Strouse briefly mentioned some recent metrology events. NCSLI took place in late July. Several NIST staff received awards; including Corey Stambaugh from the Quantum Measurement Division who won the Best Paper Award, Ron Ginley from the RF Technology Division who won the Wildhack Award, and Antonio Possolo who won an award for Best Paper in the Journal Measure. Conference on Precision Electromagnetic Measurements (CPEM) took place in mid-July. It was decided at that meeting that watt balances will now be called Kibble balances in honor of B. P. Kibble who invented the watt balance. NIST experts hosted sessions and gave many papers at CPEM. Seven NIST staff attended and presented at TEMPMEKO, an international symposium on temperature and thermal measurements, in late June. There was also the Annual meeting of the National Council on Weights and Measures in Denver where the next Chief of NIST's Weights and Measures Office was introduced. NVLAP hosted a 3-day assessor training event in June. Upcoming events include IMEKO (A. Possolo is a keynote speaker), NIST Quality Managers meeting (August 23), NIST QMS training event (Sept 13 and 15), and the BIPM Leaders of Tomorrow Course (see above topic under Cross Cutting Themes).

4. Measurement Services Updates

G. Strouse had several items to report for Calibration Services. First, the internet time service installation in the NIST Gaithersburg Central Computing Facility is almost complete (should be done by the end of the week). PML is working with GSA on a network contract. Second, a new coordinate measuring machine (CMM) has been delivered to NIST Gaithersburg and installed. It will be used initially by Divisions 683 and 684 for research related to the gravitational constant (big G). Then, it will be used for calibrations. The instrument will be maintained by the Dimensional Metrology Group (Division 683).

R. Hanisch reports that the Office of Data and Informatics will be initiating a technical review of the SRD portfolio. This will include both internal and external peer reviews, and include distributor and end-user feedback. (b)(5)

S. Choquette also reported that the Office of Reference Materials will be conducting an internal audit of their Quality Management System in September. He is monitoring the progress of the NIST customer relationship management (CRM) database. His office may be one of the first groups to pilot the system.

5. New Action Items

· Send comments or edits on the draft definition of SRI to S. Bruce. [Assigned: NMSC members]

Created 09-02-2016, Updated 09-12-2016



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1. Review of Action Item List

 Update publications or QM-I to address additional topics for the Evaluation and Expression of Measurement Uncertainty.

[Assigned: A. Possolo and S. Bruce (for NIST-OM-I)]

Status: Ongoing. S. Bruce is currently working on the next revision of QM-I (version 10) where this can be addressed.

(b)(5)

• Create suggested language for referencing use of a NIST calibration/SRM. [Assigned: S. Bruce and G. Strouse] Status: Ongoing. S. Bruce is going to reach out to G. Porter in PBA to discuss this issue. There is some language in the Pro Forma Invoice for Calibration Services that might be utilized. S. Bruce would like to see uniformity in the language used across NIST.



2. Cross-cutting Themes

N. Rioux from the Standards Coordination Office spoke to the Council about the Standards Committee Participation Database. The database has been in existence for some time, but was recently upgraded to improve usability and reporting. The database maintains records of staff participation in Standard Developing Organizations and other metrology committees, such as Consultative Committees and RMO committees. Typically, OUs have a Lab Liaison who is given lab administrative privileges in the database and coordinates the efforts of the OU to populate the database with information. This annual update can occur at one specific time or throughout the year. Rioux requests that OUs confirm with her their Lab Liaisons so that she can have the right contact information for disseminating information and training related to the database. ITL and CTL have already identified their Lab Liaisons.

3. Quality System Updates (S. Bruce)

S. Bruce reviewed some aspects of the charter for the NMSC. The charter states that the NMSC will produce an end of the year report. S. Bruce suggests that this report summarize activities for the fiscal year, such as significant changes to Measurement Services, Summary of NMSC activities, and an Analysis of the Quality Management System.

(b)(5)

The charter also states that the NMSC may establish subcommittees and working groups. S. Bruce requests that the Assessment Review Board (ARB) become a subcommittee of the NMSC. This action would not change the function or operation of the ARB, which has been in existence for many years. (b)(5)

S. Bruce also requested that the NMSC establish a temporary working group for FY17 to facilitate the integration of the requirements of the new ISO/IEC 17034 ^[i] standard into NIST-QM-I. The Council agreed.

S. Bruce reported that a draft of NIST-QM-I v10 should be available for distribution to the Division Quality Managers and ARB members next month.

There are several deadlines next month for completing corrective actions related to the Inspector General's report on the Quality System. S. Bruce will be compiling those records.



S. Bruce reported that SCO sponsored Quality System training event last week. The training took place over 1.5 days and covered a range of topics from global metrology topics to conducting internal audits. Approximately 100 people attended, at various times, throughout the training period.

S. Bruce also mentioned some upcoming metrology events: Metrology Symposium at CENAM, annual meeting of the CCPR, various CCQM meetings, and the NMI Directors Meeting and the 105th meeting of the CIPM in late October.

4. Measurement Services Updates

G. Strouse reported on several recent activities in Calibration Services. The mercury differential pressure standard (up to 13 kPa) has been replaced by the photonic pressure standard.

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(b)(5)

Strouse also reported that network contract for the internet time service has been awarded. It is anticipated that Gaithersburg's system will be operational by the start of the new (calendar) year. The start dates for the operation of Boulder's and Fort Collins's systems will be determined at a later time.

Various calibration staff will be involved in training activities at upcoming NCSLI regional meetings. Additionally, Strouse is working with PBA to develop a metrology training portal on the NIST website that would list NIST-hosted and NIST-led training events.

B. Hanisch reported that the SRD Office is currently conducting an internal review of the SRD program.

The SRD Office will be hosting 6 open houses (Data and Donuts) for staff to ask questions about data policy, publication, etc. (For dates and times, go to askODI.nist.gov.)

(b)(5)

Hanisch will attend next month's NMI Directors meeting at the BIPM to demonstrate a trial version of the International Resource Registry of NMI data collections.

S. Choquette reported that the SRM Office will be conducting annual reviews of projects develop SRMs. The SRM Office is currently conducting an internal audit of its compliance with ISO 9001.

5. New Action Items

(b)(5)

- Confirm Lab Liaison for the SCPD with N. Rioux via email, copying S. Bruce. [Assigned: OU Directors]
- Define ARB as a subcommittee of the NMSC in NIST-QM-I. [Assigned:S. Bruce]
- Form a temporary working group to facilitate the integration of the requirements of the new ISO/IEC 17034 standard into NIST-QM-I. [Assigned:S. Bruce]

[i] (https://www.nist.gov) The NIST Quality System is partially based upon ISO Guide 34, Guide 34 for Reference Material Production is being elevated to an ISO standard: 17034 is in final draft stage. Only editorial changes can be made, the Standard will be published within the next year.

Created 10-05-2016

NIST

Intranet

NIST Intranet (https://www.nist.gov/) >NIST Measurement Services Council (https://www.nist.gov/nmsc) >NMSC DRAFT Minutes, 10/27/2016

NMSC DRAFT Minutes, 10/27/2016

NMSC Quick Links

- Agendas and Minutes (https://inet.nist.gov/nmsac/nmsac-meetings)
- Calibration Services (http://www.nist.gov/calibrations/index.cfm)
- Measurement Services (https://inet.nist.gov/nmsac/nmsac-services)
- NIST Quality System (http://www.nist.gov/qualitysystem/index.cfm)
- NMSC Charter (https://inet.nist.gov/files/pdf/measurement-services-council-charter-ver-1pdfpdf)
- · Policies and Procedures (https://inet.nist.gov/nmsac/nmsac-policies-and-procedures)
- Standard Reference Data (http://www.nist.gov/srd/index.cfm)
- Standard Reference Instruments (http://www.nist.gov/srm/standard-reference-instruments.cfm)
- Standard Reference Materials (http://www.nist.gov/srm/index.cfm)

Contact NMSC

Sally Bruce, NMSC Chair (https://www.nist.govmailto:sally.bruce@nist.gov) Catherine Cooksey, NMSC Secretary (https://www.nist.govmailto:catherine.cooksey@nist.gov)

Attendees: Sally Bruce, Maria Polakoski for Steve Choquette, Adam Morey for Robert Hanisch, Liz Mackey, Antonio Possolo, and Greg Strouse.

1. Review of Action Item List

1. Update publications or QM-I to address additional topics for the Evaluation and Expression of Measurement Uncertainty. [Assigned: A. Possolo and S. Bruce (for NIST-QM-I)] Status: Ongoing. A Possolo stated that it was related to verification of measured values. He will also check with Jerry Rhoderick in MML. S. Bruce indicated that QM-I (version 10) will soon be sent out for review, with a mid-November due date.

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	(b)(5)		
4. Create suggested language for reference	ing use of a NIST calibration/SRM	[Assigned: S. Bruce and G. Strouse]	

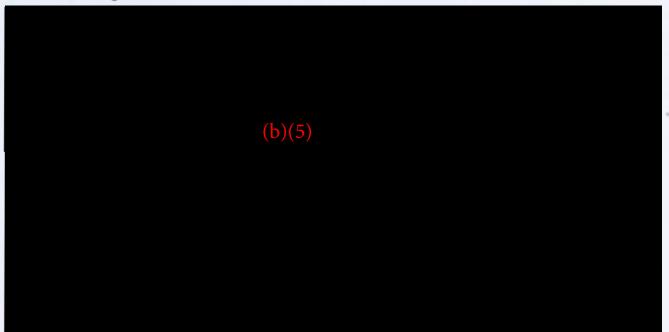
4. Create suggested language for referencing use of a NIST calibration/SRM. [Assigned: S. Bruce and G. Strouse] *Status: Ongoing.*

(b)(5)

(b)(5)

- 8. Confirm Lab Liaison for the SCPD with N. Rioux via email, copying S. Bruce. [Assigned: OU Directors] Status: Closed. OU POCs are: CTL-Mike Janezic, EL-Kirk Dohne and Kristy Thompson, ITL: Mike Hogan and Elaine Newton, MML-Mike Fasolka, and PML-Jim Olthoff and Greg Strouse.
- 9. Define ARB as a subcommittee of the NMSC in NIST-QM-I. [Assigned: S. Bruce] Status: Closed. Pre-draft version of QM-I v10 was emailed to ARB for their feedback on 10/5/2016. It has has been incorporated, and the document is in near-final state.
- 10. Form a temporary working group to facilitate the integration of the requirements of the new ISO/IEC 17034 standard into NIST-QM-I. [Assigned: S. Bruce] *Status: Open. The working group will be formed later this FY.*

2. Cross-cutting Themes



In keeping with the charter, S. Bruce some suggested goals for the NMSC for FY 17. They include:

- Produce and vet metrology-related Directives, i.e., measurement uncertainty, metrological nomenclature, traceability, and CIPM MRA.
- Update Comprehensive Records Management document sections pertaining to the NIST Measurement Services.
- Review revision 10 of NIST-QM-I.
- Communicate and inform potential changes in modes of delivered services, products, or methods of delivery (including inter-Division moves).
- Close actionable items on a timely basis.
- Advise the ADLP on Designated Institutes; SIM and APMP funded activities and participation in the RMO's; and CRADA's that impact metrological traceability and those that are internationally partnered.

3. Quality System Updates (S. Bruce)

S. Bruce reported that NIST-QM-I v10 is ready to distribute to NMSC and Division Quality Managers for comments and edits. She also reported that she is ready for a data call from the OIG on closure of corrective actions.

S. Bruce also mentioned on some recent metrology events, namely JCRB meeting, CCPR meetings, and CCQM meetings. Upcoming metrology events include: NMI Directors meeting, CIPM meeting, World Standards Day, APMP General Assembly, International workshop on Analysis of Dynamic Measurements, SIM Week (General Assembly and Quality System Task Force meetings), and Leaders of Tomorrow (BIPM).

4. Measurement Services Updates

G. Strouse reported on recent discussions concerning the suffixes for Calibration Service IDs (C, S, M). He had recently received a two-part request related to the suffixes used to distinguish different types of provided measurements. He provided as background that the suffixes and their meanings are as follows:

- C is for an SP 250 catalog-listed calibration, which has an established procedure and well-understood and documented associated uncertainties.
- S is for a special calibration which may have flexible procedures and where uncertainties are not sufficiently
 established or fixed to publish the calibration in the SP 250 catalog.
- M is for a measurement assurance activity coordinated by a NIST measurement service which functions as proficiency testing of its customer(s).

The request was received from the Ted Doiron, Quality Manager of the Engineering Physics Division, along with Eric Stansfield, Deputy Quality Manager, and Group Leader Dan Sawyer. The first request was to change -S calibrations to -C calibrations in multiple cases where the calibration had evolved to a state of stability sufficient to fit in the -C category. This request was motivated by customer confusion about the -S and -C distinctions. The second part of the request was to just eliminate the suffixes. It was indicated that the first part of the request was approved and the second part would be brought to this Council for discussion. This discussion was held and covered the possible unintended consequences, such as the Key Comparison Database listed-CMCs which utilize these suffixes, and the negative impact on DoD procurement of NIST Measurement services when item names change. There is also continuing need to distinguish special calibrations that do not have fixed uncertainties. An informal consensus developed to retain the suffixes and their distinctions, but to encourage the reclassifying of calibrations that have evolved from -S to -C.

G. Strouse also identified a need to remind staff of the importance of customer service, especially related to turnaround times. Such reminder is planned to be done by S. Bruce and G. Strouse when folders are more than 120 days overdue.



One approach will be to meet with the group leader and quality manager for the areas of concern. There is an expectation that a situation of a folder being 120 days overdue would involve identifying the cause of the delay, notifying the customer, documenting it in the CSS, and implementing corrective and preventive actions. Recent customer service surveys indicate about 95 % satisfaction. The remaining 5 % need attention. M. Polakoski asked about the sufficiency of the CSS to support this effort. Response was that functionality was there; getting staff to use comment fields, etc. is what is required. It was mentioned that this might be a training issue.



A. Morey (representing B. Hanisch) informed the Council about the new inet page for SRD (<u>https://inet.nist.gov</u>/<u>odi/standard-reference-data-program (https://www.nist.gov/odi/standard-reference-data-program)</u>). He also reported that an internal peer review is on-going for SRD products.

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M. Polakoski (representing S. Choquette) reported that the internal quality system audit for the Office of Reference Materials, which is based upon ISO 9001, has been completed. Each group leader will soon be provided with a list of action items. The audit was performed against the criteria of ISO 9001:2008. ORM expects to have findings addressed prior to the upcoming NIST assessment in early spring of 2017.

5. New Action Items



- Encourage the Divisions to review their listing of C and S services during the reviews of the FY 17 fees. [Assigned: G. Strouse]
- 3. Meet individually with Division representatives to discuss late calibrations (> 120 days overdue). [Assigned: G. Strouse and S. Bruce]

Created 11-03-2016

NIST

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<u>NIST Intranet (https://www.nist.gov/)</u> ><u>NIST Measurement Services Council (https://www.nist.gov/nmsc)</u> >NMSC Minutes, 11/21/2016

NMSC Minutes, 11/21/2016

NMSC Quick Links

- Agendas and Minutes (https://inet.nist.gov/nmsac/nmsac-meetings)
- · Calibration Services (http://www.nist.gov/calibrations/index.cfm)
- Measurement Services (https://inet.nist.gov/nmsac/nmsac-services)
- NIST Quality System (http://www.nist.gov/qualitysystem/index.cfm)
- NMSC Charter (https://inet.nist.gov/files/pdf/measurement-services-council-charter-ver-1pdfpdf)
- · Policies and Procedures (https://inet.nist.gov/nmsac/nmsac-policies-and-procedures)
- Standard Reference Data (http://www.nist.gov/srd/index.cfm)
- Standard Reference Instruments (http://www.nist.gov/srm/standard-reference-instruments.cfm)
- Standard Reference Materials (http://www.nist.gov/srm/index.cfm)

Contact NMSC

Sally Bruce, NMSC Chair (https://www.nist.govmailto:sally.bruce@nist.gov) Catherine Cooksey, NMSC Secretary (https://www.nist.govmailto:catherine.cooksey@nist.gov)

Attendees: Sally Bruce, Steve Choquette, Catherine Cooksey, Paul Hale, Bob Hanisch, Antonio Possolo, Claire Saundry, and Greg Strouse

1. Review of Action Item List

 Update publications or QM-I to address additional topics for the Evaluation and Expression of Measurement Uncertainty. [Assigned: A. Possolo and S. Bruce (for NIST-QM-I)] Status: Closed. A Possolo has suggested text for the QM-I (see Cross-cutting themes below) and it will be distributed to the Council for review.



4. Create suggested language for referencing use of a NIST calibration/SRM. [Assigned: S. Bruce and G. Strouse] Status: Open. S. Bruce is planning to leverage language in the Pro Forma Invoice for Calibrations and will create a draft in the coming week.

(b)(5)

- 6. Form a temporary working group to facilitate the integration of the requirements of the new ISO/IEC 17034 standard into NIST-QM-I. [Assigned: S. Bruce] Status: Open. ISO/IEC 17034 was approved in early November. It was decided at the recent ILAC meeting to allow a 3-year implementation of the requirements for 17034. S. Bruce will begin forming the working group after the beginning of calendar year 2017.
- 7. Encourage the Divisions to review their listing of C and S services during the reviews of the FY 17 fees. [Assigned: G. Strouse] Status: Closed. PML has sent a request to Divisions to update their FY17 calibration fees and review the listing of C and S services.
- 8. Meet individually with Division representatives to discuss late calibrations (> 120 days overdue). [Assigned:

G. Strouse and S. Bruce] Status: Closed. Several meetings have been scheduled for late November.

2. Cross-cutting Themes

C. Saundry, International and Academic Affairs Office, presented an update on SIM and International Metrology topics (see NIST SIM-Activities 2016 NMSC 11-21-16.pdf).

NIST also funds and supports capacity building and research exchange through various training activities, such as NIST Metrology training courses, SIM Guest Researcher appointments, calibration services and SRMs, and the SIM time scale. NIST will be hosting the 2018 SIM General Assembly.

C. Saundry also reported that NIST has recently joined APMP as an associate member.

Previously, A. Possolo had brought an issue to the Council's attention regarding uncertainty in verifying measurement results (see NMSC meeting minutes for 6/2/2016). For example, a sample is characterized by a given method and has an uncertainty associated with it. Later, this characterization is verified by a different method. There is a disagreement within the international community about whether the uncertainty associated with this verification method should be incorporated into the uncertainty for the sample when the verification results will not be used to modify the original measurement results. A. Possolo does not believe that the uncertainty associated with the verification method should be added (in quadrature or in any other way) to the original uncertainty evaluation, and he proposes to add such a statement to the NIST quality manual. He suggests addition a definition for verification nad also adding several paragraphs to QM-I Section 5.4.3. These suggested revisions will be distributed to the Council for review.

3. Quality System Updates

S. Bruce has received feedback on QM-I v10 from the Division Quality Managers. She will incorporate their comments and A. Possolo's suggestions (see above) and then send it to the Council for review.

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S. Bruce decided to delay discussion of staff participation in NMI/DI peer reviews for a future meeting. She also reported that next week and the following week there are JCGM Working Group meetings for VIM and GUM. A. Possolo indicated that he will video conference with JCGM WG:1: VIM and that Chuck Ehrlich will attend both the JCGM WG:1 and JCGM WG:2 (VIM) meetings.	

4. Measurement Services Updates

. The technical review/audit of current SRDs is in progress		(b)(5)
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No updates for Calibrations or Standard Reference Materials. See Action Item e. for update on Standard Reference Instruments.

5. New Action Items

No new action items.

Created 12-08-2016

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NIST

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<u>NIST Intranet (https://www.nist.gov/)</u> ><u>NIST Measurement Services Council (https://www.nist.gov/nmsc)</u> >NMSC Minutes, 01/19/2017

NMSC Minutes, 01/19/2017

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- NIST Quality System (http://www.nist.gov/qualitysystem/index.cfm)
- <u>NMSC Charter (https://inet.nist.gov/files/pdf/measurement-services-council-charter-ver-1pdfpdf)</u>
- Policies and Procedures (https://inet.nist.gov/nmsac/nmsac-policies-and-procedures)
- <u>Standard Reference Data (http://www.nist.gov/srd/index.cfm)</u>
- Standard Reference Instruments (http://www.nist.gov/srm/standard-reference-instruments.cfm)
- Standard Reference Materials (http://www.nist.gov/srm/index.cfm)

Contact NMSC

Sally Bruce, NMSC Chair (https://www.nist.govmailto:sally.bruce@nist.gov) Catherine Cooksey, NMSC Secretary (https://www.nist.govmailto:catherine.cooksey@nist.gov)

Attendees: Barbara Belzer, Sally Bruce, Steve Choquette, Bob Hanisch, Mike Kelley, Antonio Possolo, Greg Strouse, and Anita Vanek

1. Review of Action Item List



3. Create suggested language for referencing use of a NIST calibration/SRM. [Assigned: S. Bruce and G. Strouse] Status: Closed. Sally pulled together the language in the Pro Forma Invoice for Calibrations and other sources for a possible web page dedicated to provide uniform, brief, and positive information with respect to appropriately referencing the use of NIST Measurement Services. She distributed the draft prior to this meeting (see email dated 1/19/2017).

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5. Form a temporary working group to facilitate the integration of the requirements of the new ISO/IEC 17034 standard into NIST-QM-I. [Assigned: S. Bruce] Status: Open. ISO/IEC 17034 was approved in early November. It was recommended at the recent ILAC meeting to allow a 3-year implementation of the requirements for 17034. Sally has reached out to Bob Watters to prepare a gap analysis of the NIST-QM-I and the 17034. Steve, as the Technical Contact for Watters's contract, will be involved in reviewing the work.

2. Cross-cutting Themes



He has engaged the Commerce Data Service for an impact study for SRD and has initiated a technical review of the portfolio of existing SRD. Plans are underway for an external peer review of SRD.

Anita Vanek from OISM provided an overview of a "one-face" e-commerce portal for customers who purchase NIST Measurement Services and training. The goal of this business solution is to benefit the customers by having a single profile for each company and streamline the back-end of the business processes at NIST. She discussed two possible approaches: one leveraging SalesForce and the other a hybrid commercial off-the-shelf (COTS) product and custom build. The Council members asked a few questions about advantages to each approach, in general the sense was that the concept is a great idea. Anita will continue to work with the points of contact in each of the measurement services: Calibrations, Reference Material, Reference Data and will come back to the NMSC to present updates on concept and solution details as this moves forward.

3. Quality System Updates

Sally reported that QM-I v10 was approved and made publicly available in late December. Following the publication of the new version of QM-I, all objective evidence supporting the completion of action items from the OIG audit, was submitted. We are now awaiting word from the Management and Organization Division that this audit is closed.

Sally noted that two divisions will be assessed soon: Div. 642 (Rockwell Hardness) in February and Div. 685 (Photometry and Radiometry) in March. The former will be presented at the next SIM QSTF meeting (early April), while the latter will be presented at the fall SIM QSTF meeting.

There are two upcoming metrology events. Greg reported on the NCSLI Tech Exchange (January 23 and 24, 2017). There will be 6 NIST seminars offered at this event, and attendance and participation by 10 SIM (NMI) metrologists and 40 industry metrologists. Topics include contact thermometry, pressure and vacuum, flow measurement and uncertainty, microwave measurements, accreditation, and the NIST Uncertainty Machine and NIST Consensus Builder. Greg also reported that the course, NIST Fundamentals of Metrology, will take place the week of January 30, 2017. It is open to SIM participants only.

4. Measurement Services Updates

Greg reported that he has implemented an improved process for billing and receivables for Calibration Services.

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penalties, and interest due to incorrect billing addresses, lost invoices, or delayed processing by NIST receivables.

Bob reported that the recent signing of the American Innovation and Competitiveness Act provides an expanded definition of SRD. He distributed a handout that contains the new definition (SRDActUpdate.pdf). It is also available online at https://www.congress.gov/bill/114th-congress/senate-bill/3084/text#toc-id2f8b53dc-ee88-4bfa-aceb-2b952753dae5 (https://www.congress.gov/bill/114th-congress/senate-bill/3084/text#toc-id2f8b53dc-ee88-4bfa-aceb-2b952753dae5).

(b)(5)



No updates for Standard Reference Materials.

5. New Action Items

1. Review suggested language for referencing use of NIST calibrations/SRMs and send comments or edits to Sally by January 31, 2017. [Assigned: NMSC]

Created 02-06-2017

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