

USNWG ON TAXIMETERS AUGUST 7, 2014 WEB-CONFERENCE SUMMARY

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I. Carry-over items

A. Proposal for a new requirement: S.1.3.3. Customer’s Indications.

The proposal for this new requirement is to ensure that supplementary indicating devices installed for use by the passenger provide sufficient information about the transaction. The original proposal is shown below.

S.1.3.3. Customer’s Indications. – A point-of-sale system’s indicating element positioned in the passenger compartment shall clearly display:

(a) indications for all fees; and

(b) values that are in agreement with indicated values on all other displays.

(Added 201X)**Background:**

This proposed new requirement for NIST Handbook 44 (HB44), Taximeters Code was developed during a meeting of regulatory officials in August 2011 with the intent of addressing indicating elements that directly provide passengers with information regarding a transaction involving a taximeter. This technology is appearing in the taxi industry as “Passenger Information Monitors” or PIMs. It was reasoned that since this type of display will be installed in a location where it is easily viewed by the passenger, the initial proposal focused on making available all relevant information about a trip to the customer.

This proposal was considered by the U.S. National Work Group on Taximeters (USNWG) at their March 2014 meeting. The members provided comments and suggested some changes to the original proposal that included the following.

- It should be clear that the proposed requirement only applies to indicating devices that are interfaced with the taximeter and are intended to provide the passenger information regarding the taxi service.
- The passenger’s display should be capable of continuously displaying a current total of charges.
- It was noted that unless processed by the taximeter or taximeter system, any additions or reductions of the total charge would not necessarily be displayed on a PIM.

Based on the discussions of the work group at the March 2014 meeting, the NIST Technical Advisor revised the initial proposal to consider the points addressed at that meeting. A revised draft is shown below.

S.1.3.3. Passenger’s Indications. – During the normal operation of a taximeter, a supplementary indicating element installed for the passenger’s use that provides information regarding the transportation service provided, shall clearly display at all times the existing, current total charge for the service. Any additional information displayed on the passenger’s monitor shall not obscure the indication of current total charges.

Any required additional information provided by the supplemental indicating element that is not displayed constantly must be accessible to the passenger through clearly identified operational controls (e.g., button, touch-screen, menu, key pad). Additional information that is required shall include:

(a) an itemized account of all charges incurred including fare, extras*, and other additional charges; and

(b) the rate(s) in use at which any fare is calculated.

*** The indication of fare and extras charges shall agree with similar indications displayed on other indicating elements in the system.**

[Nonretroactive as of January 1, 201X]

(Added 201X)

At that time the work group agreed that this proposal was not fully developed and the NIST Technical Advisor agreed to draft a revision that was to be considered at a future meeting.

A revised proposal was drafted based on input from USNWG members during previous meetings and was offered to the work group for reviewed at the August 2014 meeting.

Following the March 2014 meeting of the USNWG, Mr. Bill Fishman presented the NIST Technical Advisor with a draft amendment for a user requirement related to this item. This recommended change would allow for the electronic display of the statement of rates on a PIM while also specifying that rate information, if displayed in that manner, must not obscure other required information. This draft of proposed change to HB44 Taximeters Code requirement, UR.3. is shown below.

UR.3. Statement of Rates. – The distance and time rates for which a taximeter is set, including the initial distance interval and the initial time interval, the local tax rate, and the schedule of extras when an extras indication is provided shall be conspicuously displayed inside the front and rear passenger compartments. The words “Rate,” “Rates,” or “Rates of Fare” shall precede the rate statement. The rate statement shall be fully informative, self-explanatory, and readily understandable by the ordinary passenger, and shall either be of a permanent character or be protected by glass or other suitable transparent material.

A rate statement may be displayed on a physical card or placard or it may be accessed and displayed on an electronic monitor in the passenger’s area. If displayed on a monitor intended for the passenger’s use, the statement of rate information must not obscure additional required information such as passenger charges.

(Amended 1977, 1988, 1990, ~~and 1999~~, **and 20XX**)

This proposed change was reviewed by the USNWG during their meeting in May 2014. During that meeting, some of the participants provided comments and offered additional changes that were generally supported by the work group. The NIST Technical Advisor revised this proposal based on those changes. This revised version of proposed changes to UR.3. Statement of Rates included a separation of the initial proposal into a subparagraph, UR.3.1. and is shown below.

UR.3. Statement of Rates. – The distance and time rates for which a taximeter is set, including the initial distance interval and the initial time interval, the local tax rate, and the schedule of extras when an extras indication is provided shall be conspicuously displayed inside the front and rear passenger compartments. The words “Rate,” “Rates,” or “Rates of Fare” shall precede the rate statement. The rate statement shall be fully informative, self-explanatory, and readily understandable by the ordinary passenger, and shall either be of a permanent character or be protected by glass or other suitable transparent material.

UR.3.1. Where permitted, a rate statement may be accessed and displayed electronically on a supplemental indicating element in the passenger’s area. When

the statement of rates is displayed on this type of indicating element, it must not obscure any information that is specifically required to be displayed on this type of indicating element.

(Added 20XX)

(Amended 1977, 1988, 1990, ~~and~~ 1999, **and 20XX**)

Discussion:

At the August 2014 meeting, the participating members of the USNWG were asked to comment on the latest version of the proposal to add a new S.1.3.3. that is shown below.

S.1.3.3. Passenger's Indications. – A supplementary indicating element installed in a taxi to provide information regarding the taxi service to the passenger shall clearly display current total of all charges for a transaction. The current total of all charges must remain visible on the display at all times until the conclusion of the transaction.

S.1.3.3.1. Additional information - Additional information shall also be made available through the passenger's indicating element (as described in S.1.3.3. Passenger's Indications) and must including the following:

(a) an itemized account of all charges incurred including fare, extras, and other additional charges; and

(b) the rate(s) in use at which any fare is calculated.

Any additional information provided must not obscure the current total of charges for the taxi service and may be made accessible through clearly identified operational controls (e.g., key pad, button, menu, touch-screen).

S.1.3.3.2. Fare and extras charges – The indication of fare and extras charges on a passenger indicating element shall agree with similar indications displayed on all other indicating elements in the system.

[Nonretroactive as of January 1, 201X]

(Added 201X)

During the August 2014 meeting, the USNWG considered the most recent changes to the proposed addition of S.1.3.3., S.1.3.3.1., and S.1.3.3.2. The participants were asked to consider if the intended meaning of the phrase “current total of all charges” was clear in describing a total cost to the passenger including all charges that are added to that total as they are incurred. Ms. Aileen Fox suggested using the term “accruing” to describe the running total of charges. Additional editorial changes were recommended by the work group that included adding language in paragraph S.1.3.3.1. which would clarify that the additional information could simply be available to the passenger and not necessarily presented continuously. Also that this additional information would need to be available at the conclusion of a trip. These changes were agreed to by the work group and are reflected in the revision of this proposal as shown in **highlighted text** below.

S.1.3.3. Passenger's Indications. – A supplementary indicating element installed in a taxi to provide information regarding the taxi service to the passenger shall clearly display current total of all charges for a transaction. The ~~current~~ accruing total of all charges must remain visible on the display at all times until the conclusion of the transaction.

S.1.3.3.1. Additional information - Additional information shall also be made available through the passenger's indicating element (as described in S.1.3.3. Passenger's Indications) and must ~~including~~ include the following:

(a) an itemized account of all charges incurred including fare, extras, and other additional charges; and

(b) the rate(s) in use at which any fare is calculated.

Any additional information provided or made available must not obscure the ~~current~~ accruing total of charges for the taxi service and must be available at the conclusion of the trip. This information ~~and~~ may be made accessible through clearly identified operational controls (e.g., key pad, button, menu, touch-screen).

S.1.3.3.2. Fare and extras charges – The indication of fare and extras charges on a passenger indicating element shall agree with similar indications displayed on all other indicating elements in the system.

[Nonretroactive as of January 1, 201X]

(Added 201X)

The USNWG was asked if the bulleted items in paragraph S.1.3.3.1. (a) and (b) should be included as information that is required to be available to the passenger. Mr. Bill Fishman recommended that this information be presented at all times while others in the group supported simply having this information available to the customer on demand. Ms. Joanne Rausen noted that the typical display area on a PIM was not large enough to allow for the continuous display of all required information and that it should be sufficient to have this data available to the customer if access to it is not difficult. It was also noted that the same information required in S.1.3.3.1.(a) and (b) is required to be included on the passenger's receipt.

The work group was also asked for comments regarding the proposed change to the associated user requirement; UR.3. Statement of Rates by adding a new subparagraph; UR.3.1. The NIST Technical Advisor suggested to the participants that since there is no existing requirement that would prohibit the display of the statement of rates through an electronic display (i.e., a PIM), perhaps the addition of this new paragraph is not necessary. It would seem that this added language would only be warranted if the electronic version of the statement of rates displayed on a PIM is intended to replace rate cards and placards.

There was considerable discussion among the group regarding the intent of this added paragraph and whether this type of electronic display would be a replacement for existing rate cards or placards or simply a supplemental display of this information. The majority of those participants in attendance

did not support the replacement of the traditional (hard-copy) rate card however, they would support the rate information being supplied via electronic display as a supplemental display of the rates.

Conclusion:

The USNWG agreed with the changes shown above for new paragraphs S.1.3.3., S.1.3.3.1., and S.1.3.3.2. and indicated their support for the submission of this proposal for consideration at the Regional Weights and Measures Association meetings.

The work group agreed that the proposed change to UR.3. was not needed and did not believe that this change should be given any further consideration by the USNWG.

B. Proposal to amend S.1.9. Recorded Representation

This proposal would amend the existing specification requirement S.1.9. Recorded Representation that provides a list of required information to be included on a customer receipt. The proposed changes would amend three of the current bulleted items in the existing requirement and add three new bulleted items.

Background:

Consideration of changes to the individually listed items in this existing requirement by the work group began during its September 2012 meeting. The USNWG continued to develop this item during the it's meetings held in July 2013 through March 2014.

Changes that the work group considered during that time included: the addition of the identification of the company/owner of the taxi; including a trip number for the transaction if available; the addition of the phrase "as a minimum" in header the paragraph; and adding the phrase "or other identifying information as specified by the statutory authority" in bulleted item (b).

This item was reviewed again by the USNWG in May, 2014, where yet further changes were made to the draft proposal. Among other (mostly editorial) changes discussed during that meeting, the USNWG recognized that if changes to the total cost, such as any tips or discounts provided are not processed through the taximeter, they would not be reflected on a printed receipt generated by the taximeter. The group agreed that changes in the language could be made to clarify that if these types of alterations of the total cost to the passenger are processed through the taximeter, they will be required to be included on a receipt.

The NIST Technical Advisor agreed to redraft this proposed language to reflect the work group's concerns and present a further revised draft to the USNWG at its next meeting. The latest changes are shown in the revision below. Those changes and their justification are as follows.

- The elimination of previous exemptions provided for extras charges applied to additional passengers and the transportation of luggage. The work group agreed that while these two customary extras charges are widely recognized in the taxi industry, all extras charges should be made available to the customer.
- The deletion of “tip” under bullet point (g). Most of the work group participants agreed that this addition to the total cost of the taxi service could be in the form of a cash payment from the passenger and in many cases it may not be processed through the taximeter.
- The deletion of bullet point (i) and the renumbering of subsequent bullet points. The same reasoning used in the previous bullet regarding tips was applied to these changes to the total cost of the service. These credits or discounts may be in a form where they are not (or can not) be processed through the taximeter.
- The elimination of the note which allows for an electronic version of a receipt. This becomes unnecessary due to a change in NIST Handbook 44 General Code that provides for this form of receipt in all types of devices covered in HB44.
- A separate note has been added to the requirement specifying that any changes to the total cost for the service that are processed through the taximeter must appear on the customer’s receipt.
- The return of the language “whether through an integral or separate recording element” to the header statement. Although this portion of the requirement had been relocated as a note to be included at the bottom of the requirement, the work group agreed that will simplify the requirement and improve its form.

These most recent changes are shown in the draft of the proposed changes below.

S.1.9. Recorded Representation. – A printed receipt issued from a taximeter, **whether through an integral or separate recording element**, shall include, **as a minimum** the following:

- (a) date;
- (b) unique vehicle identification number, such as the medallion number, taxi number, vehicle identification number (VIN), ~~or~~ permit number, **or other identifying information as specified by the statutory authority**.*
- (c) start and end time of trip.*
- (d) distance traveled, maximum increment of 0.1 kilometer (0.1 mile).*
- (e) fare in \$;
- (f) ~~for multi-rate taximeters, each rate at which fare was computed and the associated fare at that rate~~.*
- (g) additional charges **in \$** where permitted such as extras, surcharge, ~~telephone use telecommunications charges, tip~~ and tax shall be identified and itemized.* ~~and~~
- (h) total **fare charge for service** in \$ (~~total charge sum of fare, extras, and all additional charges~~).*
- ~~(i) any credits or discounts in \$ applied to the fare.**~~
- ~~(i) trip number, if available** and~~
- ~~(j) telephone number (or other contact information) for customer assistance.**~~

Note:

For systems equipped with the capability to issue an electronic receipt, the customer may be given the option to receive the receipt electronically (e.g., e-mail, text message, computer file).

When processed through the taximeter or taximeter system, additions or reductions of the total cost for the taxi service such as any credits or discounts applied or tips added shall also be included on the receipt.**

[Nonretroactive as of January 1, 1989] *[Nonretroactive as of January 1, 2000] ****[Nonretroactive as of January 1, 201X]**

(Added 1988) (Amended 1999 **and 201X**)

Discussion:

During the August 2014 USNWG meeting, some participants questioned whether it was appropriate to delete the first few words; “for multi-rate taximeters” in bullet point (f) as shown above. Mr. John Roach informed the work group that contrary to previous statements made in USNWG meetings, there are still manufacturers producing taximeters that are only capable of computing fares using a single rate. Since this is the case, the work group was asked whether it is justified to retain the wording “for multi-rate taximeters” that limits this portion of the requirement to only those taximeters capable of using more than one rate. The work group generally agreed that this change will have no effect in the application of that portion of the requirement.

Mr. Bill Fishman stated that since the work group is acknowledging that there are taximeters on the market computing fares at only a single rate, it may be advisable to review other proposals that the USNWG has developed with the assumption that this is not the case. If these other proposals do in fact imply that all taximeters calculate fare, they should be edited accordingly.

Conclusion:

The work group was asked to provide an indication of whether they will support the latest revised draft of this proposal as shown above. The work group agreed to support the proposal and there was no opposition expressed at the August 2014 meeting. The NIST Technical Advisor informed the USNWG that this proposed amendment will therefore be submitted to the Regional Weights and Measures Associations for their consideration.

C. Proposal to add new requirements S.1.4.1 Multiple rate taximeters, S.1.4.1.1. Manual rate changes, and S.1.4.1.2. Automatic rate changes.

These proposed new requirements are being recommended to recognize the use of multiple rates to calculate fare charges by taximeters and to specify what bases for rate changes are permitted and when they may be authorized.

S.1.4.1. Multiple rate taximeters – All rates in use for taximeters equipped to calculate fares at multiple rates must be included in the statement of rates as provided in UR.3.

S.1.4.1.1. Manual Rate Changes – Taximeters equipped with a means for changing the rate applied, that is not protected by a physical or other type of security seal shall be capable of manually applying rate changes of predetermined, flat rates only.

S.1.4.1.2. Automatic Rate Changes – Automatic rate changes may not occur between two consecutive drops and are permitted for differentials including:

- a) **trips that exceed a set distance;**
- b) **trips that exceed a set time limit;**
- c) **day/evening differentials;**
- d) **specific days of the week; or**
- e) **specific dates (e.g. holidays).**

When a change in rate allowed under (a) and (b) occurs, the change must be identified and clearly displayed to the customer. Automatic rate changes allowed under (c), (d), and (e) above shall not occur after the meter has been set to register charges and before the meter has been cleared for that transaction (i.e., between fares).

(Added 20XX)

Background:

These requirements were included as an item on the agenda for the September 2012 meeting of the USNWG however, due to time constraints were not considered at that time. The work group did however, consider the addition of these new requirements shown above at its May 2014 meeting.

The USWNG recognized that the use of multiple rates adds to the complexity of charges that the passenger must consider. This understanding is the basis for these requirements that are intended to clarify the information provided to the customer. There has been concern expressed by some USNWG members that rate changes made without restriction will provide opportunities for fraudulent use of taximeter systems.

An important point to be noted and considered is that depending on the manner in which the rate change takes place, the passenger may or may not be cognizant of the fact that the rate that was initially applied has been changed and that the taximeter is now calculating fare at a different rate. If the driver must perform an action (such as pressing a button on the taximeter itself) to enact a change of the rate applied, this may provide some notice to the passenger that a change has taken place. If however, the rate is changed automatically without any action performed by the driver, the passenger may not perceive that any change has occurred.

During the May 2014 meeting the work group reviewed the proposed new requirements and noted that the language used in S.1.4.1. conformed more to the structure and language of a user requirement in that it addressed the manner in which the device was used rather than the way it has been designed. The participants of that meeting suggested amending the wording to better align with the format of a specification requirement.

At the time of the May 2014 meeting, the group was under the assumption that all taximeters produced today have the capability to perform calculation of fares using more than one rate. Although that notion has since been refuted, the work group at that time recommended that the first sentence of S.1.4.1. be amended to reflect this.

The work group discussed the concerns regarding the potential for fraudulent use by applying an inappropriate rate during the calculation of fare and how various methods of applying and changing rates could encourage misuse of the device. Also discussed during the May 2014 meeting was the provision for sealing rate change function and device programming.

No conclusions were made at the USNWG May 2014 meeting regarding this item. The NIST Technical Advisor did agree to revise the draft for S.1.4.1. and to provide that revision for a review by the work group at its next meeting.

Discussion:

At the August 2014 USNWG meeting, the work group was asked to consider the amended version of S.1.4.1. as presented below:

S.1.4.1. Multiple rate taximeters – All rates in use for taximeters equipped to calculate fares at multiple rates must be included in the statement of rates as provided in UR.3. A taximeter may utilize more than one rate to calculate fares.

The NIST Technical Advisor explained to the work group that this revision was done according to the comments made during the previous meeting. Those comments indicated that since the existing user requirement, UR.3, already addresses the need for rates that are used to be provided on the statement of rates, the first portion of this paragraph is not needed. The newly added portion of this proposed requirement (also recommended during the May 2014 meeting) to replace the stricken portion and simply states that a taximeter is permitted to use more than one rate to calculate fares. The USNWG was asked to consider that this remaining portion of the proposed requirement may not be necessary since there is no requirement currently in the Taximeters Code that prohibits this.

The USNWG was asked to consider additional questions regarding the other paragraphs in the proposal including the following.

- If the rate that is initially applied is changed through a manual interface such as keypad, button, or touch-screen either on the taximeter or another device is there a need to provide some sort of alert to the passenger that a change in rate has occurred?
- If the rate that is initially applied is changed through an automatic programming, (beyond driver control), what would be an appropriate means to alert the passenger that this change has occurred?
- Are there specific types of rate changes that should not be allowed to be controlled manually by the driver? For example changes in rate due to: Holidays; rush-hour differentials; trips that exceed a threshold in time or mileage; etc.
- Similarly to the previous question, are there any specific reasons for a rate to change that should not be allowed to be automatically controlled through programming of the taximeter?

With regards to the proposed new paragraph S.1.4.1.1., the work group in general did not support the attachment of the ability to make manual rate changes to the ability to apply a security seal to that feature. Most of the USNWG expressed the belief that manual rate changes that can be made by the driver using the operational controls on the taximeter must be allowed. Under certain circumstances, these types of changes are justifiable and necessary.

During the August 2014 meeting, Ms. Joanne Rausen explained that the New York Taxi and Limousine Commission has regulations in place that will not permit a driver to initiate certain types of rate changes unless certain circumstances are met. An example is that a manually initiated rate change that is applied when the taxi leaves a geographic defined area will not be enabled unless the GPS locator for that particular taxi has verified that the vehicle has indeed traveled outside that defined area. In addition, taxis operating within New York City will provide an alert to the passenger that a rate change has occurred via a passenger information monitor (PIM).

Mr. Byron Corcoran pointed out that the draft proposal states that a manual type of rate change would only be permitted to happen when the initial rate applied is changed to a flat rate only. Mr. Corcoran explained that many taximeters in various U.S. locations today have the ability to change rates from

one time and/or distance based rate to a different time and/or distance (not a change to a flat rate) based rate. All of the rates used during a trip would then be identified on a passenger's receipt. This information served to make the work group aware that the controls that New York City has adopted (as mentioned above) are not universally applied.

Mr. Corcoran also noted that on some models of taximeters the ability to manually change rates may be accomplished at any time through the operational controls on the taximeter however, the manufacturer may have the ability to disable that function to be in compliance with jurisdiction's regulatory practices. In addition the programming of some taximeters may allow that once the taxi has been hired, the rate applied can not be changed until the transaction is completed.

Mr. Bill Fishman expressed his concerns about manually controlled rate changes and stated that it is his belief that that type of rate change will need to be regulated more stringently than the automatic type of rate changes. Mr. Fishman stated that he also believes that the automatic rate changes programmed into a taximeter are less likely to be used in a fraudulent manner because those are programming choices typically made by licensed service providers or regulatory agents.

With the points made above in mind, the group recognized that the development of this requirement may be predicated to some degree on the ability of local authority to set regulation. Thus, it may be preferable to add language in these requirements that specifies the application of some requirements is dependent upon whether local regulation is permissive of certain features.

Most of the USNWG generally supported the intent of the proposed new paragraph S.1.4.1.2. and agreed that the circumstances under which these types of automatic rate changes take place will determine whether or not the rate change should be permitted. Mr. Byron Corcoran added that there should be one additional rationale listed for a rate change in this paragraph which would be a change in rate once a certain monetary threshold has been met. Mr. Corcoran explained that in some jurisdictions, a different rate will be applied once the charge for the transportation service has exceeded a certain monetary amount.

Conclusion:

The working group agreed that these proposed new requirements need further consideration and development and that the USNWG should continue to address this proposal during future meetings.

II. New Items

A. Review of final drafts for proposed changes to HB44 that will be submitted for consideration by Regional Weights and Measures Associations.

The following proposed changes are those that the working group has worked on in the past and are now ready for a final review before being submitted as proposed changes to HB44. Upon final review and approval by the USNWG, these proposed changes will be submitted to the Regional Weights and Measures Associations for consideration.

1. Amendment of the definition for “point-of-sale system” in HB44 Appendix D

Background:

The USNWG has agreed that the existing definition for POS in HB44, Appendix D could be improved by describing the specific functions of a generic POS system rather than defining the term by listing the hardware components used when the system is performing these operations. The USNWG agrees that the existing definition for point-of-sale systems in HB44, Appendix D should be amended as shown below to make that term more clearly understood and more suitable to apply to all types of weighing and measuring devices.

point-of-sale system. – An assembly of **interactive** elements including a weighing or measuring element, an indicating element, and a recording element (~~and may also be equipped with a “scanner”~~) used to complete a direct sales transaction. **The system components, when operated together must be capable of the following:**

- 1. determining the weight or measure of a product or service offered;**
- 2. calculating a charge for the product or service based on the weight or measure and an established price/rate structure;**
- 3. determining a total cost that includes all associated fees involved with the transaction;**
- 4 providing a printed sales receipt. ~~For systems equipped with the capability to issue an electronic receipt, the customer may be given the option to receive the receipt electronically (e.g., e-mail, text message, electronic file).~~**

(Amended 201X)

Discussion/Conclusion:

During the August 2014 meeting, the USNWG was asked to note a recent change that has not been reviewed by the work group since the item was last included as an agenda item in December 2013. This change consists of removing the statement under bulleted item 4 regarding the allowance for an electronic form of receipt. This change has been made due to a recent change in HB44 General Code that added similar language in that section of HB44 which will apply to all devices covered in the handbook.

The participants of the meeting all agreed to support the item in its current form. This item will be submitted as a proposed change to HB44.

2. Proposed amendment to S.1.2. Advancement of Indicating Elements

This proposal would amend S.1.2. Advancement of Indicating Elements so that certain fare indications would be permitted to advance by means other than the movement of the vehicle or by the time mechanism.

S.1.2. Advancement of Indicating Elements. – Except when a taximeter is being cleared, the **fare charges displayed on the** primary indicating and recording elements shall be susceptible of advancement only by:

- a). the movement of the vehicle;
- b). by the time mechanism;
- c). **a combination of both a) and b); or**
- d). **the entry of a monetary amount associated with a flat rate or negotiated flat rate where permitted.**

Advancement of the indications for charges, other than fare may occur through manual or automatic means.

(Amended 1988, **and 201X**)

Discussion/Conclusion:

No further comments were voiced at the August 2014 meeting of the USNWG. This item is supported in its current form by all participants in that meeting. This item will be submitted as a proposed change to HB44.

3. Proposed amendment for S.2. Basis of Fare Calculations

This proposed change to the existing S.2. addresses the lack of any reference in the requirement to a fare charge that is based on a flat rate or negotiated flat rate when either distance traveled or time elapsed has not occurred at the time the rate is determined.

S.2. Basis of Fare Calculations. – A taximeter shall calculate fares only upon the basis of:

- (a) distance traveled;
- (b) time elapsed; ~~or~~
- (c) a combination of distance traveled and time elapsed; **or**
- (d) an established flat rate or negotiated flat rate.**

(Amended 1977 **and 20XX**)

Discussion:

The NIST Technical Advisor recommended that this proposed change not be submitted for consideration by the Regional Weights and Measures Associations. The primary reason for this recommendation is the recognition that this existing requirement specifies the criteria on which a *calculation* of fare by a taximeter can be based upon and because the proposed added language would insert a basis of fare (for an established flat rate) which involves *no* calculation on the part of the taximeter, this proposed amendment is not considered appropriate. The NIST Technical Advisor explained that an additional factor why this item should not be pursued is that since a flat “rate” is not based on the

metrological function of a taximeter (calculating a fare based on time and/or distance), flat rates (or fixed amounts) should not be a subject that is covered under HB44 regulations.

In contrast, in the previous item (proposed change to S.1.2.) flat rates are referred to in the proposed changes although, in that context the reference to that type of rate is simply a justification for the displayed indications of the taximeter to advance.

Conclusion:

The USNWG generally agreed that this proposal involves a requirement concerned with the advancement of indications and that this is not an appropriate location to state that a flat rate may be displayed by the taximeter. The members of the work group participating at the meeting expressed no support for any further development of this item and agreed that it should not be submitted as a proposed change to HB44 Taximeters Code.

4. Changes proposed under paragraph S.1.1.1. Recording Elements and S.1.1. General.

The proposal to add new paragraph S.1.1.1. Recording Elements would require that a receipt be made available from taximeters or taximeter systems for all transactions as is shown below.

S.1.1.1. Recording Elements. – A receipt providing information as required in S.1.9. Recorded Representations shall be available from a taximeter or taximeter system through an integral or separate recording element for all transactions conducted.

For systems equipped with the capability to issue an electronic receipt, the customer may be given the option to receive the receipt electronically (e.g., e-mail, text message, electronic file).

[Nonretroactive January 1, 201X]

(Added 201X)

To facilitate this change to the NIST Handbook 44 Taximeters Code, additional changes have been recommended to paragraph S.1.1. General, as shown below.

S.1.1. General. – A taximeter shall be equipped with a primary indicating element ~~and may be equipped with a recording element.~~

(Amended 1988 **and 201X**)

Background:

At the December 2013 meeting of the USNWG, the participants debated whether to propose a requirement that would mandate a recording element be included in the taximeter system when certain criteria were met or whether to require a recording element for all taximeter systems. It was the decision of the work group, determined through a ballot after that meeting, that all

taximeter systems manufactured and placed into service after an effective date (non-retroactively) would be required to include a recording element.

During the USNWG's meeting in March 2014, the participants agreed to support the proposed addition of paragraph S.1.1.1. Recording Elements shown above. It was noted however that this proposed change would create a conflict with paragraph S.1.1. General in that this requirement states that a recording element is optional for a taximeter.

During the May 2014 meeting of the USNWG, the NIST Technical Advisor pointed out this potential conflict and offered a possible resolution (shown above) that involved the deletion of the language "and may be equipped with a recording element" from that paragraph. This change was not perceived to have any detrimental effect on existing taximeter systems that have been in service and approved in the past.

Discussion/Conclusion:

During the May 2014 meeting, the NIST Technical Advisor pointed out that the current proposal included a statement in the second paragraph of S.1.1.1. which would allow for the passenger's receipt to be provided in electronic form. This provision however, is already adopted as a change to HB44 General Code which is applicable to all types of weighing and measuring devices and to include that statement in the Taximeters Code is not necessary. In recognition of this fact, the recommendation to delete the second paragraph under S.1.1.1. was made. The work group participants were asked if they would support the proposal if this statement was removed from the previous draft. There were no further comments from the USNWG and it was agreed that the revised proposal shown below would be submitted for consideration as a change to HB44.

S.1.1. General. – A taximeter shall be equipped with a primary indicating element ~~and may be equipped with a recording element.~~

(Amended 1988 and 201X)

S.1.1.1. Recording Elements. – A receipt providing information as required in S.1.9. Recorded Representations shall be available from a taximeter or taximeter system through an integral or separate recording element for all transactions conducted.

~~*For systems equipped with the capability to issue an electronic receipt, the customer may be given the option to receive the receipt electronically (e.g., e-mail, text message, electronic file).*~~

[Nonretroactive January 1, 201X]

(Added 201X)

5. Proposal to add two new definitions to HB44 Appendix D

The definitions listed below are for terms being used in the drafting of other agenda items and therefore it is recommended that definitions for these terms be added to Handbook 44, Appendix D.

flat rate. – a predetermined, fixed fare indicated on the taximeter based on a definite and specific point of origin and a definite and specific destination point.
[5.54]

(Added 20XX)

negotiated flat rate. - A fixed fare that is not predetermined and is based on a destination point that is agreed upon by both driver and passenger which is then entered into the taximeter by the taxi driver. [5.54]

(Added 20XX)

Background:

Considering that some of the other proposals for changes to HB44 that have been developed by the USNWG use these two terms, at the May 2014 meeting the work group reviewed the drafts of proposed definitions to be added to HB44 Appendix D. At that meeting, participants generally agreed with the draft and supported the effort to submit these definitions for consideration at the Regional Weights and Measures Associations meetings in the fall of 2014.

Discussion:

These proposed new definitions were presented to the USNWG at their meeting in August 2014 for a final review by the work group. The work group participants made several

comments regarding the proposals at that time which indicated that these definitions should be further developed.

The specific concerns noted by the USNWG include the recognition that a “negotiated flat rate” on some taximeters may be able to be entered into the system via of a passenger information monitor (PIM) or the taxi company’s dispatch system. This would conflict with the statement contained in the proposal indicating that a negotiated flat rate is entered into the taximeter by the driver. Also, the proposed definition for “negotiated flat rate” states that this type of fare is “based on a destination point that is agreed upon by both driver and passenger...” however, it was pointed out that there may be other bases for this type of fare. Other bases for a negotiated rate could, for example include the application of a higher rate during inclement weather conditions.

Conclusion:

Based on the above comments, the work group acknowledged that this proposal could be improved upon and that it would be beneficial for the USNWG to spend additional time developing these definitions. This item will therefore be placed on the agenda of a future USNWG meeting.

III. Attendance:

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