INTRODUCTION

The Standards Alliance is a public-private partnership between the American National Standards Institute (ANSI) and USAID designed to assist developing countries in effectively implementing their commitments under the WTO’s Technical Barriers to Trade (TBT) agreement.

The main objectives of the overall Standards Alliance program includes increased understanding of WTO TBT principles, encourage transparency in the development and alteration of technical regulations, and improve implementation of the TBT Agreement’s Code of Good Practice for the preparation, adoption and application of standards, with the larger goal of promoting trade and economic development.

The International Association of Plumbing and Mechanical Officials (IAPMO) has submitted a proposed statement of work for engagement under the Standards Alliance, which was agreed by the National Standardization Agency of Indonesia (BSN). This statement of work, in addition to a sub-recipient agreement between ANSI and IAPMO has informed this work plan.

The Standards Alliance looks forward to carrying out the Indonesia work plan in cooperation with IAPMO, which will lead implementation of the activities described above. Additional activities may be proposed in future work plans.

The Standards Alliance project for Indonesia has the following objectives:

- Adoption and implementation of a Uniform Plumbing Code for Indonesia that references international standards, is developed in an open consensus manner, facilitates trade and addresses clean water and effective sanitation needs of Indonesia.
- Increase the use of international standards in Indonesia, by adoption, adoption or normative referencing.
- Establish uniform or third party accreditation of certification programs for plumbing products and personnel, based on international standards for accreditation.
- Strengthen the capacity of national and regional government institutions, to support programs and projects related to standardization, certification and accreditation.

The specific program tasks under the Indonesia Standards Alliance Project in the first year (described in more detail in the next section) include:
- Development of a Uniform Plumbing Code specific to Indonesia (UPC-ID) through an open consensus process
- Study tour to 2 U.S. cities for Indonesian officials
- Develop implementation plan for the UPC-ID, in coordination with BSN, the Ministry of Public Works and Ministry of Industry
- Create personnel certification program to train installers and code enforcement officials on the UPC-ID

The work plan for the second year will incorporate additional activities and training based on the results of the first year progress and outcomes.

Following completion of the year one activities, expected outcomes of the initiative include:

- Publication of the draft national plumbing standard by BSN and public comment period
- Endorsement of UPC-ID and publication as SNI (Indonesian national standard)
- Removal of market access barriers through referencing of key international standards in the UPC-ID
- Partnerships established with educational institutions for professional training programs

**ACTIVITIES**

In support of the overall project objectives listed above, this section outlines the activities that have already been identified to be carried out in the first year (2014). To the extent possible, the activities listed include the full scope of work. Some activities may require further discussion between counterparts in Indonesia and the U.S., and other activities may be added to the work plan upon mutual agreement by ANSI, IAPMO and BSN, and pending availability of resources.

1. Development of UPC-ID through an open consensus process

BSN, IAPMO and ANSI will collaborate to develop and adopt the Uniform Plumbing Code for Indonesia (UPC-ID.) This code will be based on IAPMO’s flagship document, the Uniform Plumbing Code. The adoption of this standard will ensure a level playing field for trade in Indonesia. It also addresses a critical infrastructure need of the Indonesian people, contributes to future economic growth and becomes the foundation for the development of Indonesian standards improving health, safety and the environment. Work surrounding this initiative began in late 2012 when officials from IAPMO and BSN met to agree begin discussing the concept of WIN and action items that BSN wanted to fast track.

Deliverables in this project area include:

a. IAPMO leadership attended a signing ceremony and press event with BSN, Ministry of Public Works, and Ministry of Industry in Jakarta to strengthen collaboration held on March 2013
b. BSN to add the development and adoption of UPC-ID to its 2013 Official Agenda. BSN to assist IAPMO and Ministry of Public Works in the implementation efforts of UPC-ID following the adoption of UPC-ID.
c. BSN to appoint a Technical Committee to work on revising the UPC for Indonesia
d. IAPMO & ANSI will host a group of key BSN and Ministerial officials on a 2 city tour of the United States designed to educate and highlight the key elements of the process which they are undertaking.

e. IAPMO to appoint a technical expert to serve as a liaison and to promote the inclusion of related international standards into the code adoption.

f. Standards Adoption process
   i. BSN to review and catalog the current standards being used in Indonesia
   ii. IAPMO will outline available US standards for the Indonesia market.

g. The BSN Technical Committee will review and revise the code and work with the IAPMO team to draft a publication for public review and comment.

h. The UPC-ID will be published and available in public domain.

2. Work with BSN, the Ministry of Public Works, and the Ministry of Industry to have the code implemented and adopted nationally.

IAPMO will continue to foster relationships and partnerships with the regulatory bodies that will adopt, implement, and mandate the use of this code to assist in the protection of Indonesian citizens through the safe delivery of water through proper codes and standards.

Deliverables in this project area include:
   a. IAPMO will work specifically with the Ministry of Public Works and Ministry of Industry to develop an implementation plan and actions for national adoption.
   b. IAPMO has identified 4 jurisdictions which it will target for adoption of the UPC-ID in the first two years.

3. Create a personnel certification program to train installers and code enforcement officials on UPC-ID.

The goal of the educational program is to prepare multiple levels of professional groups in Indonesia to read, understand, interpret, engage, and apply the provisions of the UPC-ID to plumbing designs, initial installations and to maintain plumbing systems.

Deliverables in this project area include:
   a. IAPMO will develop a curriculum for a Plumbing Education to Employment Program to provide a framework for plumbing education and training.
   b. IAPMO will develop a training program for inspection officials on the provisions of the new code.
   c. IAPMO will identify and establish formal relationships education institutions throughout Indonesia. Partners will include organizations such as; universities, colleges, polytechnics, vocational institutions, government departments, large construction departments, consultants, contractors, managers, developers, builders, and associations.
4. Develop a third party testing laboratory and certification program for the testing and certification of plumbing products for the Indonesia market to ensure that they meet the standards set forth in the UPC-ID.

Deliverables in this project area include:

   a. Research needs and demands for testing lab in Indonesia to test plumbing products including lead free product testing.
   b. Respond to demand of manufacturers looking for third party alternative within Indonesia for plumbing product testing and certification services to appropriate health and safety standards referenced in UPC-ID.
   c. Initiate development of a globally recognized testing laboratory for plumbing product testing from the ground up, including facility, construction, equipment, and staff.
   d. Develop the third-party product certification program per ISO/IEC 17065 to certify plumbing products for compliance to standards set forth in the UPC-ID.

5. Ongoing Development of Supporting Codes, Educational Programs, and Third Party Testing and Certification and development of relevant standards.

Deliverables in this project area include:

   a. Develop supporting codes and supplements on par with the global community, referencing internationally recognized standards for accompanying products and systems including Uniform Mechanical Code, Solar Energy Code, Green Plumbing Code Supplement, Water Efficient Rating Scheme, and other applicable Codes.
   b. Ongoing regulation and development of personnel certification through developed plumbing curriculum to ensure trained workforce to implement and to enforce UPC-ID.

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**SCHEDULE**

The schedule envisioned for the implementation of the activities described above is shown below.

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