



STANDARDS-DRIVEN PUBLIC-PRIVATE PARTNERSHIPS

©2024 American National Standards Institute (ANSI). All rights reserved. Published by ANSI.
Printed in the United States of America.

Last updated November 2024. These models were originally developed as part of an ANSI project performed under financial assistance award 70NANB24H075 from U.S. Department of Commerce, National Institute of Standards and Technology.




Standards-driven public-private partnerships (SD-PPPs) are a type of public-private partnership where resources invested are directly impacting consensus-based standards development. SD-PPPs may or may not involve contractual agreements, financial support, or formal relationships between public and private representatives. Common work products of SD-PPPs may support:

COMMON WORK PRODUCTS OF STANDARDS-DRIVEN PUBLIC-PARTNERSHIPS MAY SUPPORT:

PRE-STANDARDIZATION ACTIVITIES	E.g., Development of landscape analyses, roadmaps, gap analysis, research
STANDARDS DEVELOPMENT	E.g., Support for the proposal and/or formation of new committees, identifying and convening technical experts, content development
IMPLEMENTATION	E.g., Increasing awareness, technical training, workforce development, conformity assessment

Common objectives and work products of SD-PPPs have been formulated into five models. The details associated with the models shown should not be perceived with definitive or restrictive boundaries. The models outline the potential partners, characteristics, objectives, roles, funding, and contractual considerations typically found in the research, standards, and conformity assessment community. There are five models proposed in this document:

COMMON OBJECTIVES AND WORK PRODUCTS OF STANDARDS-DRIVEN PUBLIC-PRIVATE PARTNERSHIPS

 DIRECT PARTICIPATION	The public sector directly participates in the standards development process alongside other stakeholders at the table	 STANDARDS ACCELERATION	Focused on convening stakeholders to discuss opportunities, challenges, and needs for a given technology and applicable sectors
 FUNDED PARTICIPATION	Utilized to increase balance and participation of subject matter experts in the standards development process	 FUNDED STANDARDS DEVELOPMENT	Utilized when stakeholders need resources to conduct research, testing, or data gathering to help inform and develop standards
 POLICY AND CONFORMANCE DRIVEN		The public and private sector collaborate to develop standards specifically to meet a new regulation, policy, or conformity assessment requirement	

Actual SD-PPP use cases often include the characteristics of more than one model. For example, an SD-PPP may be a “standards acceleration” and a “funded participation model.”



DIRECT PARTICIPATION

A direct participation SD-PPP model is when the public sector directly participates in the standards development process alongside any other stakeholder at the table. As with any other participant, they represent their organization and follow any policies set forth by their employer as well as the policies, procedures, and/or bylaws of the SDO supporting the standards development activity. Policies and guidance about federal government participation can be found in [Public Law 104-113](#), National Technology Transfer and Advancement Act of 1995, and [OMB Circular A-119](#), Federal Participation in the Development and Use of Voluntary Consensus Standards and in Conformity Assessment Activities.

PARTNERS INVOLVED	» Government, SDOs and SDO members
OBJECTIVES	» Support the development of standards » Provide insight about what role standards would play in relation to existing or future government regulations/policy » Gather information to inform potential government regulations/policy
WORK PRODUCTS	» Pre-standardization: technical reports, strategic plans » Standardization: standards development » Implementation: increasing awareness, technical training, workforce development on standards
CONVENING MECHANISMS	» Meetings (various forms) of stakeholders through committees, subcommittees, and working/task groups which are organized by SDOs » Collaborative electronic tools used for draft development and approval of work products
PUBLIC SECTOR ROLE	» Government actively participates in an SDO at varying capacities including contributing technical expertise for draft development, voting on ballots, chairing a committee, participating in short and long-term strategy development, hosting meetings, and providing liaison reports
PRIVATE SECTOR ROLE	» SDO provides the infrastructure and services to convene, develop and publish the standards » SDO members actively participate in an SDO at varying capacities including contributing technical expertise for draft development, voting on ballots, chairing a committee, participating in short and long-term strategy development, hosting meetings, and providing liaison reports
FUNDING CONSIDERATIONS	» Funding is not provided by the public or private sector; instead, each organization provides non-financial contributions based on the services an organization normally provides or expertise a representative is permitted to share » SDO membership fees may apply
AGREEMENT CONSIDERATIONS	» No agreements between partners is necessary. » Terms and conditions for SDO membership may apply.

A standards acceleration SD-PPP is primarily focused on convening stakeholders to discuss opportunities, challenges, and needs for a given technology and applicable sectors. The primary objective of SD-PPP activities may not be to develop standards but instead support pre-standardization efforts. Ultimately, the desired outcome is to determine if there is consensus about the need for standards, and to help advance decision-making and therefore accelerate subsequent standards development.

PARTNERS INVOLVED	» SDOs, research institutions, industry, workforce development providers, government
OBJECTIVES	» Accelerate the development of standards by convening experts to increase awareness about existing and needed research and standards
WORK PRODUCTS	» Pre-standardization: technical workshop and symposia, standards road mapping (landscaping and gap analyses), and other research and technology reports
CONVENING MECHANISMS	<ul style="list-style-type: none"> » Meetings (various forms) of stakeholders through committees, subcommittees, and working/task groups which are organized by one of the PPP partners » Collaborative electronic tools used for draft development and approval of work products
PUBLIC SECTOR ROLE	» Government actively participates in the activity at varying capacities including contributing expertise for development of the work products, such as chairing a committee, participating in short and long-term strategy development, hosting meetings, and providing liaison reports
PRIVATE SECTOR ROLE	» Private sector actively participates in the activity at varying capacities including contributing expertise for development of the work products, such as chairing a committee, participating in short and long-term strategy development, hosting meetings, and providing liaison reports
FUNDING CONSIDERATIONS	<ul style="list-style-type: none"> » Public and private sectors may provide financial support. If a direct result of a grant, the private sector funding may be matched by public sector funding in whole or in part. » Public and private sectors may provide in-kind contributions via technical expertise, host events, as in-kind support. » Private sector may offer financial sponsorships. Contributions are typically received from trade associations and consortia to offset costs for roadmapping efforts.
AGREEMENT CONSIDERATIONS	<ul style="list-style-type: none"> » An agreement, such as a cooperative agreement or MOU, may be utilized to cover roles and responsibilities of activity sponsors » A non-disclosure agreement (NDA) may be utilized and be applicable to all participants. » Terms and conditions for membership may apply depending on which organization is supporting the activity.



FUNDED PARTICIPATION

A funded participation SD-PPP is utilized to increase participation of subject matter experts in the standards development process. Often, startups, small or medium-size enterprises in new or niche technology areas, have limited resources to travel and participate in standards, or, the sector has not yet established enough resources to have as many subject matter experts who have longstanding knowledge and experience both in the field and in standards development. Both resource constraints can delay standards development or impact a balance of representation. For this to be a PPP, some funding for individuals to participate would need to come from the government but may also come from the private sector.

PARTNERS INVOLVED	» Government, industry, research institutions
OBJECTIVES	» Support increased participation to balance the representation of stakeholders in an activity including small and medium-size enterprises, startups, or key technical experts without the resources to pay participation (membership/event) fees or travel
WORK PRODUCTS	» N/A, this supports standards development but the objective is not a tangible work product.
CONVENING MECHANISMS	» N/A, beyond communications among the government, applicant, and SDOs, no activity is convened as a result of this PPP. » Funding recipient would participate in the SDO activities via their convening mechanisms.
PUBLIC SECTOR ROLE	» Active communications with SDO and industry about gaps in expertise at the table » Allocate funding in agency budget and have an application process to access funds » Active participation in standards development is necessary from the public sector if policy/regulations implications exist or are anticipated.
PRIVATE SECTOR ROLE	» Solicit funding from the public sector through the mechanisms offered by the government. » Active communications with the government about gaps in representation » Active participation in standards development is necessary from the private sector.
FUNDING CONSIDERATIONS	» Funding from public entities may be allocated from a government grant or government project budget. » Funding from the private sector may be allocated as well; however, public funding is required for this to be a PPP.
AGREEMENT CONSIDERATIONS	» The partnership may be formal (with contractual agreement) or informal (without contractual agreement). » The government may have an application process and terms for an applicant to abide by. » Contracts may be utilized to cover roles, responsibilities, and reporting of funding providers and recipients.



FUNDED STANDARDS DEVELOPMENT

A funded standards development SD-PPP is utilized when stakeholders need resources to conduct research, testing, or data gathering to help inform and develop standards. The activities may result in content development (such as test methods, best practices, or design requirements), technical presentations at a SDO meeting, or help with anonymizing information so industry data can be shared without revealing IP. In some cases, funding is allocated to an organization or to an individual with the objective of drafting a standard(s).

PARTNERS INVOLVED	» Government, industry, research institutions, SDOs
OBJECTIVES	» Accelerate standards development by funding initial research
WORK PRODUCTS	<ul style="list-style-type: none"> » Pre-standardization: Research, research reports, databases, statistics » Pre-standardization: Formation of a new standards developing committee or SDO » Standards Development: Draft proposed test methods, design specification, best practices » Implementation: Increasing awareness, technical training, workforce development on standards, inform conformity assessment activities
CONVENING MECHANISMS	<ul style="list-style-type: none"> » Structure: A center of excellence (COE) or institute may be formed to carry out the research but this is not always the case. A singular or narrow scope of research may not require a formal structure to be established. » Strategic Planning: Convene Advisory / Steering committee meetings to direct and maintain the mission, goals, and strategic direction of the project » Research Projects: Convene meetings and events to outline project scope, execute project and evaluate results
PUBLIC SECTOR ROLE	<ul style="list-style-type: none"> » Active communications with SDO and industry to learn and identify challenges and solutions to standards development obstacles » Allocate funding in agency budget and have an application process to access funds » Active participation in standards development is necessary from the public sector if policy/regulations implications exist or are anticipated
PRIVATE SECTOR ROLE	<ul style="list-style-type: none"> » Solicit funding from the public sector through the mechanisms offered by the government » Active communications with the government about challenges and solutions to standards development obstacles » Active participation in standards development is necessary from the private sector
FUNDING CONSIDERATIONS	<ul style="list-style-type: none"> » Public and private sectors may provide financial support. If as a direct result of a grant, the private sector funding may be matched by public sector funding in whole or in part. » Public and private sectors may provide in-kind contributions via technical expertise, host events, as in-kind support. » Private sector may offer financial sponsorships. Contributions are typically received from trade associations and consortia to offset costs for efforts.
AGREEMENT CONSIDERATIONS	<ul style="list-style-type: none"> » An agreement, such as a cooperative agreement or MOU, may be utilized to cover roles, responsibilities, and reporting of funding providers and recipients. » A non-disclosure agreement (NDA) may be utilized and be applicable to all participants.



POLICY AND CONFORMANCE DRIVEN

A policy and conformance driven SD-PPP is utilized when the public and private sector collaborate to develop standards specifically to meet a new regulation, policy, or conformity assessment requirement. Initiation of this SD-PPP may also be the result of an emergency (e.g., pandemic or incident involving fatalities). This SD-PPP stands out as its own model solely because it requires rapid development of one or more standards and dedicated resources to accomplish this in a specific timeline. This scenario typically involves a combination of characteristics described in the Direct Participation, Standards Acceleration, and Funded Participation SD-PPP models.

PARTNERS INVOLVED	<ul style="list-style-type: none"> » Government, industry, research institutions, SDOs
OBJECTIVES	<ul style="list-style-type: none"> » Enable or accelerate standards development to support an anticipated new regulation or certification requirement. The standards are expected to be incorporated by reference.
WORK PRODUCTS	<ul style="list-style-type: none"> » Pre-standardization: Strategic plans and roadmaps » Standards Development: Standards (one or more standards) » Implementation: Increasing awareness, technical training, workforce development on standards, inform conformity assessment activities
CONVENING MECHANISMS	<ul style="list-style-type: none"> » Meetings (various forms) of stakeholders through committees, subcommittees, and working/task groups which are organized by one of the PPP partners » Collaborative electronic tools used for draft development and approval of work products » Direct communication to determine, execute and report milestones
PUBLIC SECTOR ROLE	<ul style="list-style-type: none"> » Lead or actively participate in communications with the private sector to jointly develop a strategic plan which sets forth specific needs, timeline with milestones, and other necessary expectations for execution » Allocate funding in agency budget to ensure government staff have support to actively engage in strategic plan development and execution
PRIVATE SECTOR ROLE	<ul style="list-style-type: none"> » Lead or actively participate in communications with public sector entities to jointly develop a strategic plan which sets forth specific needs, timeline with milestones, and other necessary expectations for execution » Determine if additional funding is needed and budgeted for to support the private sector if acceleration of deliverable is needed » Allocate funding in organizational budgets to ensure staff have support to actively engage in strategic plan development and execution
FUNDING CONSIDERATIONS	<ul style="list-style-type: none"> » Funding is not required by the public or private sector. In some instances, each organization provides non-financial contributions based on the services an organization normally provides or expertise a representative is permitted to share. » To ensure success, all stakeholders will need to allocate additional time and resources for accelerated efforts over longer periods of time. It may require that responsibilities of non-related activities are reallocated to other staff temporarily or permanently. In addition to time investments, it is likely that travel to events will increase significantly especially as the activity begins. » SDO membership fees may apply
AGREEMENT CONSIDERATIONS	<ul style="list-style-type: none"> » The partnership may be formal (with contractual agreements) or informal (without contractual agreement). » If funding is part to the partnership, agreements may be utilized to cover roles, responsibilities, and reporting of funding providers and recipients. » A non-disclosure agreement (NDA) may be utilized and be applicable to all participants.