



Secretariat of ISO/TC 251

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To the Members of
ISO/TC 251
Asset Management

ISO 55011 Asset Management and Public Policy **Survey Report**

1. INTRODUCTION:

At the November 2019 (Quito) meeting, TC 251 approved resolution 15/2019-11 requiring WG7 to draft some form of guidance on the proposed target audience, scope and likely content to assist in progressing the development of ISO 55011. To address these items appropriately, WG7 identified the need to conduct a world-wide survey of the potential users of ISO 55011. To allow sufficient time for WG7 to address these issues raised at the Quito meeting, TC 251 voted in April 2020 (ISO/TC 251/N648) to backstage the development of ISO 55011 to the “Preliminary” stage and draft Design Specification.

The objectives of the survey were to:

1. Gather input from public policy authorities¹ on the challenges they face relating to the delivery of public services;
2. Determine if those who develop, administer, and/or influence the formation of public policy can benefit from guidance that may enhance their existing public policy; and
3. Obtain input on what type of guidance would help promote or enable asset management, especially related to specific public policy instruments or applicable public policy documents.

A team was established, and preparatory work began in June 2020. The online survey, *ISO Survey on ISO 55011 Asset Management and Public Policy* (ISO/TC 251/N686), was launched in November 2020 and responses were accepted through January 2021.

2. OBJECTIVE:

The output of the survey is intended primarily for use by ISO/TC 251/WG7 in establishing the direction of the ISO 55011 design specification and standard development.

¹ For the purposes of this survey, public policy authorities includes persons believed to be experts in the development, administration, or influence of general public policies at different government levels within their countries. Input was also specifically solicited from persons who represent legislative bodies that establish the fundamental legal authorities and appropriate resources to carry out those authorities as well as executive agencies responsible for carrying out those authorities.

3. PROCESS:

The process for preparation and deployment of the survey included:

- Identification of users and potential users for survey deployment, particularly persons believed to be experts in the development, administration, or influence of general public policies at different government levels within their countries
- Development of a suite of three question categories, and 12 questions total
- Utilization of a user-friendly web-based tool (“Google Forms”) for data collection
- Development of an interactive PDF version of the survey to enhance survey accessibility
- Translation of survey formats into the French language for ease of use and to meet the requested needs of a subset of potential users
- Deployment of a pilot survey to improve and validate the process
- Communication and promotion of the survey through website links, including TC 251 web page articles; e-mail; social media (LinkedIn); and presentations.

4. RESULTS SUMMARY:

When analyzing the results, it is important to remember that these represent responses from organizations and individuals who were aware of the survey, were identified as an expert, and willing to provide their input. The survey was not intended to be a representative statistical sample of all interested parties worldwide.

Persons engaged in the survey were believed to be or self-identified as experts in the development, administration, or influence of general public policies at different government levels within their countries. This also includes persons who represent legislative bodies that establish the fundamental legal authorities and appropriate resources to carry out those authorities as well as executive agencies responsible for carrying out those authorities.

Note that all survey respondents were required to provide input to questions 1-10 on the survey. Survey questions 11 and 12 were optional and not all respondents provided a response to these questions. The survey included questions on the respondent’s profile, challenges they face related to the delivery of public services, and what guidance would be helpful to governments and their authorities in realizing the benefits of asset management, achieve public policy objectives, and improve societal outcomes.

Results of the survey were based on the following:

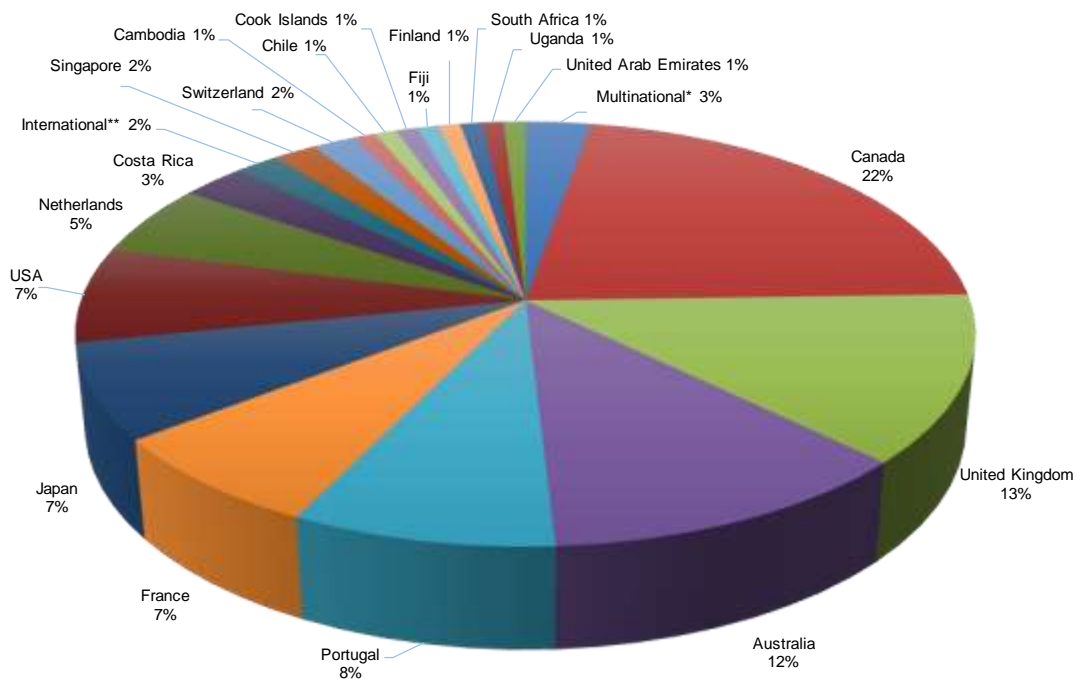
4.1 Number of Responses

A total of 110 survey responses were received, representing over 20 countries.

4.2 Respondents' Profiles

4.2.1 Countries

Question 1 – What country do you work in?

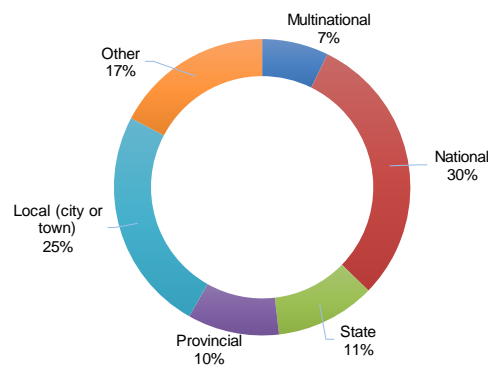


*Note 1 "Multinational" includes two or more named countries. Additional countries affiliated with a survey respondent who self-identified as multinational in nature were not counted to avoid double counting.

**Note 2 "International" includes participants who self-identified their affiliations as "international" or "global" in nature and not to any single country or number of countries.

4.2.2 Level of Government

Question 2 – What level of government organization do you work in or for?



Note 1 "Other" responses included those who self-identified as representing multiple levels of government, former government officials, government consultants or advisors, government associations, not-for-profit government advocacy organizations, or state-owned companies.

4.2.3 Roles in Public Policy

A majority of survey respondents represented roles that “advise on public policy” (55%) and “implement public policy” (51%).

Question 4 - How would you describe your role in public policy?

Role in Public Policy	# of Responses	% of Respondents
Pass Legislation	1	1%
Issue Executive Guidance	20	18%
Issue Implementing Agency Guidance	23	21%
Issue Final Regulations	10	9%
Approve Proposed Legislation or Regulations	4	4%
Submit Proposed Legislation or Regulations	20	18%
Advise on Public Policy	61	55%
Implement Public Policy	56	51%
None	12	11%
Other	19	17%

Note 1 Survey respondents could select all roles in public policy that applied. In addition to the roles listed, “other” roles in public policy identified by survey respondents included those who: monitor public services operators; prepare guidelines; audit, lobby, advise or provide input to governments; provide research and development of public policy; inform and report to government; review effective implementation of policy by relevant agencies; implement government asset management policy; and apply asset management within a state-owned corporation.

4.2.4 Government Sector(s) Represented

The top government sectors represented included: transportation (39%); water, wastewater, and waste (37%); and general government (e.g., administration, treasury, etc.) (22%).

Question 5 -What government sector(s) do you work in or for?

Government Sectors	# of Responses	% of Respondents
Water, Wastewater, & Waste	41	37%
Transportation	43	39%
General Government (e.g. Treasury, Administration, etc.)	24	22%
Oil & Gas	6	5%
Electrical Utility	17	15%
Industry and Manufacturing	6	5%
Health	6	5%
Education	8	7%
Agriculture	3	3%
Environment, including Flood Defense	17	15%
Natural Resources and Land Management	12	11%
Defense	9	8%
Tourism and Entertainment	6	5%
Mining	6	5%
Fishing	2	2%
Information Technology/Security	5	5%
Research and Development	11	10%
Law Enforcement	5	5%
Other(s) [please specify]	21	19%

Note 1 Survey respondents could select more than one response option. “Other” sectors identified by survey respondents included: infrastructure, housing, real property, and parks and recreation.

4.3 Challenges

Question 6 - Of the following, which are your top challenges related to the delivery of public services?

Challenges Faced	# of Responses	% of Respondents
Balancing the need for new infrastructure against the need to maintain existing infrastructure	68	62%
Obtaining sufficiently accurate and timely data to support good decision-making	65	59%
Understanding current infrastructure performance and service delivery	61	55%
Understanding the long-term mission consequences of current policy and funding choices	60	55%
Having clear infrastructure performance and service quality expectations	56	51%
Securing adequate resources (e.g., financial, non-financial, and/or competencies)	52	47%
Needing to prioritize short-term issues over long-term mission	50	45%
Meeting infrastructure performance and service quality expectations	47	43%
Including goals that address sustainable development	40	36%
Aligning current or future policies	38	35%
Demonstrating compliance of subordinate governments or non-governmental entities with the national or local government's objectives and related goals	18	16%
Other [please specify]	13	12%
Appraising and supporting successful transition of new public policy authorities	10	9%

Note 1 Responses to this question were intended to support identification of public policy needs and areas where asset management-related guidance may help.

Note 2 Survey respondents could select more than one response option. "Other" challenges identified by survey respondents included:

- Addressing the policy challenges and aligning funding in a multi-order government environment
- Navigating digital and technology transformations
- Changing behaviour and improving culture to implement asset management
- Managing differing public expectations
- Persuading public officials to make sound infrastructure choices rather than popular choices
- Incentivizing proactive long-term planning
- Coordinating data standards
- Continually improving organizational maturity levels
- Increasing skill levels.

4.4. Significant Points for ISO 55011 Development

4.4.1 Areas governments would benefit from additional public policy guidance or assistance

Ninety-seven percent (97%) of survey respondents identified areas where their government would benefit from additional public policy guidance or assistance related to asset management. Only 3% (3 respondents) reported none.

Question 7 - Please identify which of the following areas would your government benefit from additional public policy guidance or assistance related to asset management.

Public Policy Guidance	# of Responses	% of Respondents
Understanding the long-term mission consequences of current policy and funding choices	58	53%
Balancing the need for new infrastructure against the need to maintain existing infrastructure	57	52%
Understanding current infrastructure performance and service delivery	55	50%
Securing adequate resources (e.g., financial, non-financial, and/or competencies)	54	49%
Obtaining sufficiently accurate and timely data to support good decision-making	53	48%
Having clear infrastructure performance and service quality expectations	52	47%
Aligning current or future policies	43	39%
Meeting infrastructure performance and service quality expectations	41	37%
Needing to prioritize short-term issues over long-term mission	36	33%
Including goals that address sustainable development	35	32%
Demonstrating compliance of subordinate governments or non-governmental entities with the national or local government's objectives and related goals	18	16%
Appraising and supporting successful transition of new public policy authorities	17	15%
Other	11	10%
None of the above	3	3%

Note 1 Survey respondents could select more than one response option. “Other” areas identified by survey respondents that governments could benefit from additional public policy guidance or assistance related to asset management included:

- Digital transformation
- Governance and interaction with government and its agencies
- Demonstrating the benefits of asset management for municipalities
- Clear guidance on federal and state government intervention and direction into specific industries/sectors
- Human behavioural aspects that assist in the changes needed to implement asset management for success
- Support for longer term (multiyear) projects
- Effective financial reporting framework for infrastructure
- Understanding drivers for service so government can meet the real need rather than the apparent need
- Having a scalable, flexible and consistent framework in place that is effectively enforced so performance, costs and risks can be measured and reported effectively.

4.4.2 Public Policy Instruments

Out of the 15 public policy instruments surveyed, over 50% of respondents reported that guidance on 13 of them would be “very helpful” or “somewhat helpful.”

Question 8 - Please rate how helpful guidance would be on the following public policy instruments and how they can be developed in a way that promotes good asset management for your government/public policy authorities.

Public Policy Instrument	Average Rating	Not Applicable (1)	Of No Help (2)	Of Little Help (3)	Somewhat Helpful (4)	Very Helpful (5)	% Somewhat Helpful or Very Helpful
		%	%	%	%	%	
Data and Information	4.2	4%	3%	13%	31%	50%	81%
Risk Management	4.2	2%	6%	10%	34%	48%	82%
Sustainability and Resilience	4.1	2%	4%	13%	45%	36%	82%
Government Strategic Plans	4.0	4%	5%	14%	37%	40%	77%
Training and Capacity Building	4.0	4%	5%	17%	34%	40%	74%
Quality of Service Goals	3.9	6%	6%	15%	39%	34%	73%
Governance Models	3.9	5%	8%	18%	35%	35%	69%
Financial Instruments	3.8	5%	7%	21%	37%	29%	66%
Risk Management	3.6	6%	11%	21%	38%	24%	62%
Public Governance and Whole of Government	3.6	7%	10%	22%	35%	25%	61%
Research and Innovation Partnerships	3.5	6%	12%	25%	38%	18%	56%
Audits	3.5	9%	15%	18%	36%	22%	58%
Legal Framework	3.4	12%	14%	23%	30%	22%	52%
Competition Policy and Procurement	3.2	12%	17%	26%	33%	12%	45%
Tariff and Tax Policy	2.9	16%	20%	32%	24%	8%	32%

Note 1 Survey respondents had the option of writing in additional public policy instruments that their government would benefit from international guidance on. These included tools, templates, and/or guidance material related to:

- Structuring and implementing contracts to enable good asset management, and delivering good asset management practice across contractual boundaries into contracted public services
- Incentives for good asset management in different contexts
- Equal access rights (across a country to “level up” deprived areas and how to evaluate that priority)
- Change management, including evaluation of possible scale of change required for governments
- Knowledge management across government departments
- Public accountability, linking financial reporting and asset management
- Mandatory training for elected officials
- Organizational restructuring for resource allocations
- Integration with other levels of government
- Asset renewal policies
- Use of real deferred maintenance estimates for natural and built assets (to be booked in financial reporting as future liability similar to pension liabilities)
- More robust approaches to infrastructure depreciation reporting
- Life cycle management (CAPEX + OPEX)
- Economic analyses
- Value management frameworks
- Key sustainability indicators and appropriate targets in place with subsequent audit and follow up

4.4.3 Useful guidance information

Eighty-five percent (85%) of survey respondents reported that examples and case studies would be helpful – including elements of good practice and lessons learned for how public policy instruments have been applied to support good asset management.

Question 9 - What kinds of information should international guidance provide that might be useful to your policy makers in developing and implementing public policies that support good asset management?

Guidance Information	# of Responses	% of Respondents
What public policy instruments can support good asset management	70	64%
Why certain policy instruments should be applied, expected benefits or outcomes of each	70	64%
How to apply/implement certain policy instruments that support good asset management	73	66%
Where certain public policy instruments have been applied for this context	54	49%
Examples and case studies (including elements of good practice, lessons learned –successes, challenges, and how policy instruments have been applied in relevant public policy documents to support good asset management)	94	85%
Other [please specify]	5	5%

Note 1 Survey respondents had the option of writing in additional types of information that international guidance should provide. Specific or other types of information included:

- Life cycle analyses and full cost evaluation methods
- Comparative analyses of traditional vs. public private partnership procurement models of delivery to assess if an approach results in better asset management over the life of the asset
- Stronger focus on meaningful objectives setting that answers 'why are we doing this'
- Case studies demonstrating current problems with the application of the current International Financial Reporting Standards and a better solution
- Research and evidence-based examples where a scalable, flexible and consistent framework can assist in demonstrating an entity can effectively communicate with their stakeholders (and decision makers) on the performance, cost and risk trade-offs
- Better understanding of the benefits of asset management, and the risks of not adopting asset management.

4.4.4 Target Audience

Seventy-six percent (76%) of survey respondents considered the main target audience for international guidance on enabling asset management through public policy would be those who “advise on public policy.”

Question 10 - Who do you consider is the main target audience for an international guidance document on public policy enabling asset management that supports achievement of desired government or public service outcomes? Those who:

Target Audience	# of Responses	% of Respondents
Advise on public policy	84	76%
Implement public policy	64	58%
Issue implementation agency guidance	56	51%
Issue executive guidance	54	49%
Issue final regulations	42	38%
Submit proposed legislation or regulations	42	38%
Approve proposed legislation or regulations	41	37%
Pass legislation	24	22%
Other [please specify]	8	7%

Note 1 Survey respondents had the option of writing in other target audiences. Other target audiences included:

- Those who are involved in the development of legislation, policy, and reporting frameworks, including audits,
- Those who influence policy makers who can mandate asset management and/or support the adoption and allocation of resources.

5. KEY TAKEAWAYS AND OTHER CONSIDERATIONS

Demand for international guidance: The survey responses indicate that ISO 55011 would be beneficial. Ninety-seven percent (97%) of survey respondents supported the benefits of such a guidance standard with additional commentary provided in support of international guidance focusing on common guidance across countries with good practice examples and case studies for developing/applying public policy instruments that enable good asset management.

Good practice examples and case studies: Eighty-five percent (85%) of survey respondents indicated that the type of guidance that would be most helpful within the standard would be examples and case studies (including elements of good practice, lessons learned – successes, challenges, and how policy instruments have been applied in relevant public policy documents to support good asset management). Survey respondents further commented the importance of good practice case studies acknowledging that the functions of governments and methods of formulating public policies vary from country to country, and for this reason common guidance even if the system and organization are different can be useful especially if the reasons behind the methods and benefits are clearly stated.

Other considerations in the development of ISO 55011 as commented by survey respondents included the following themes:

- Centralization of municipal infrastructure management to national governments vs. the principle of subsidiarity (in relation to governance/accountability and capacity development in emerging economies and least developed countries to help achieve Sustainable Development Goals)
- Whole of government perspective and the connection of asset management to budget planning cycles and expenditure
- Language accessibility (it was commented that asset management language and processes have a very technical, engineering-based feel and can be a barrier to policy adoption and capability development)
- Diversity as a policy consideration
- Education for public officials in asset management.

6. NEXT STEPS:

- The survey results will be a significant input for the ISO/TC 251/WG7 members during the development of the ISO 55011 design specification and standard.

We would now like to offer our thanks to those who provided their responses, and also to those who worked on the survey development, translation, and data analysis.

Yours sincerely

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