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Foreword

The UNDP Seoul Policy Centre (USPC) is pleased to welcome you all to the International Workshop on Public Construction Transparency: Sharing Korea's Clean Construction System and Initiatives around the World, organized in partnership with the Seoul Metropolitan Government (SMG) and the Korean Ministry of Foreign Affairs (MOFA).

The workshop will facilitate peer-to-peer policy dialogues and thematic discussions to identify effective means to promote transparency and accountability in the public construction sector, using SMG's Clean Construction System (CCS) as a reference point and inspiration.

The successful development and implementation of the Clean Construction System in one of the world's megacities demonstrate that it is indeed possible to strengthen transparency and accountability in the public as well as the private sector in infrastructure development.

The workshop is organized as part of the UNDP Seoul Policy Centre's Development Solutions Partnership on anti-corruption. The Development Solutions Partnerships is our approach to connect Korea with the wider UNDP network as a knowledge broker and facilitator and contribute to the enhancement of the Korea-UNDP partnership on strategic development issues.

The Clean Construction System was presented at the 2015 Seoul Debates meeting on anti-corruption on 29-30 January, as one of several Korean initiatives. Participants expressed great interest in learning more about the system. Since then, the Centre has been working with the city of Seoul to prepare for more in-depth sharing of the system.

The workshop is one of the milestones of these efforts. It brings Seoul city officials together with over 70 overseas participants from 20 countries, as well as 30 other participants from Korea.

This publication has been produced to facilitate the exchange of views and serve as a reference for further knowledge sharing. The Policy Toolbox Section provides a concise summary of Korea's initiatives. We hope that the policy initiatives and lessons learnt shared here will provide an inspiration and a launching pad for ideas for policy makers around the world.

As the Director of USPC, I would like to thank all the contributors and acknowledge those who made tireless efforts for the production of this book, particularly Ms. Myong ja Choi at the Seoul Metropolitan Infrastructure Headquarters, and my staff, Ahjung Lee and Hye-Jin Park, as well as our interns, Soyun Ji, Melissa Nipakasem, Simon Morin-Gelinas, and Chankyu Kim.





Anne Marie Sloth Carlsen
Director of the UNDP Seoul Policy Centre

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Concept Note & Programme



International Workshop for Public Construction Transparency-- Sharing Korea's Clean Construction System and Initiatives around the World

**Wednesday-Friday, 2-4 December 2015
Seoul City Hall, Republic of Korea**

UNDP, Seoul Metropolitan Government, and Korean Ministry of Foreign Affairs

I. The Meeting

The UNDP Seoul Policy Centre (USPC) Development Solutions Partnership on Anti-Corruption (DSPAC) was initiated in 2014. DSP is a new approach for USPC, acting as a knowledge broker and facilitator, to connect Korea with the wider UNDP network and enhance the Korea-UNDP partnership on strategic development issues globally.

In partnership with the Seoul Metropolitan Government (SMG) and the Korean Ministry of Foreign Affairs (MOFA), this multi-stakeholder dialogue & workshop meeting will facilitate peer-to-peer policy dialogues and thematic discussions to find effective means to promote transparency and accountability in the public construction sector, using SMG's Clean Construction System (CCS) as a reference point and inspiration.

Seoul's CCS has helped increase efficiency and transparency in what used to be the most corruption prone sector in Korea, and won the prestigious UN Public Service Award in 2013, in recognition of its innovation and potential for application in other countries. A video introduction of Seoul's Clean Construction System is available at <https://www.youtube.com/watch?v=5nw300tfU00>.¹

Objectives

Meeting Objectives are the following:

- 1) Sharing Korea's experience of and lessons learnt from developing and implementing the "Clean Construction System" (CCS);
- 2) Identifying ideas for effective approaches and strategies to foster common values of transparency and accountability, and to institutionalize CCS-like solutions in the public construction sector; and
- 3) Creating knowledge-solution networks and action-oriented partnerships to support interested participants who wish to adapt and introduce CCS-like systems as appropriate to specific national contexts.²

¹ Seoul's CCS was briefly presented at the 2015 Seoul Debates meeting on 30-31 January 2015. Participants from some 10 developing countries indicated in the feedback form that they had wished to learn more about Korea's development experience and the CSS in particular.

² Since 2014, SMG's CCS has been patented under the Korean law. However, there would be no legal issues or required payment regarding the use of patent in other countries since SMG seeks to share the system for the public interests.

Going beyond technical tools, however, this meeting will provide an interactive forum to share experiences and lessons learnt relating to governance arrangements and development of common values for transparency and public engagement, which enabled SMG's creation and implementation of CCS in the first place. Seoul's first-hand experiences of successes as well as challenges with this system may provide critical insight to those who are seeking to find their own solutions for transparency and accountability in the public construction sector.

In order to facilitate multi-stakeholder partnership building and generation of synergies among the participants and existing initiatives in the sector, the meeting will bring together some 70 overseas participants from more than 20 countries, consisting of Government officials, civil society experts, private sector leaders, and international development partners from interested countries. In addition, the meeting will have experts from prominent international networks, such as the Construction Sector Transparency Initiative (CoST) and the Open Contracting Partnership (OCP), working at national and global levels in the field.

II. What is the Clean Construction System?

The 'Clean Construction System' was introduced in the Korean capital of 12 million inhabitants in 2011. It consists of four e-governance tools: **1) Open Data System** for transparent information management and public access; **2) Subcontractor Payment Monitoring System**; **3) Construction Informer ("Allimi")**; and **4) Electronic Human Resources Management System for Construction Workers**. CCS provides an integrated technological and institutional solution to the complex challenges of the public construction sector. In Korea, CCS has led to transparent management, improved efficiency and effectiveness, and citizens' access to information in the public infrastructure sector, which used to be one of the most corruption-prone sectors in the country.

SMG's arrangements are regarded as the groundwork for transparent municipal administration by putting an end to the previous practices that kept work progress and resource information secret, and by disclosing all the basic information on projects such as the project overview, photos of major processes, and web camera site videos for public viewing. Successful development and implementation of this new system has demonstrated that the government can help bring greater transparency into the private sector in the public infrastructure development by encouraging communication among relevant parties. In the construction field, the new system has not only improved the payment process, but also the overall management of projects, specifically in the areas of financial inputs and resources and materials.

A brief description of key components of CCS is as follows, while a more detailed explanation is provided in presentation summaries.

1) Open Data System (One-Project Management Information System & Construction Allimi)

SMG's Clean Construction System has an open data section, consisting of two web-based tools: One-Project Management Information System (PMIS) and Construction Allimi (meaning "informer" in Korean). Together they help prevent corruption and poor construction work by managing and then releasing to the public the precise and relevant information of large public construction projects

worth more than KRW 500 million (approx. \$450,000). The One-PMIS allows stakeholders in a public construction project to register and share all project-related information, and to monitor project status in real time. As a result, construction info can be managed effectively and corruption during the project implementation stage is prevented. After the construction information has been uploaded on the One-PMIS, relevant information is shared on the Construction Allimi site where citizens can access the information on public infrastructure projects and also give their feedback to the Seoul Metropolitan Government Infrastructure Headquarters.

2) Automated Sub-contractor Payment System

This system allows SMG to make separate payments for prime contractors and subcontractors, and to check if a payment has actually been made to a subcontractor. The system applies to all public infrastructure projects whose construction period lasts longer than 30 days; subcontractors in such projects can register with the online system and use the system immediately. Subcontractors do not have to submit copies of their bankbooks to get access to the payment information as they used to have to do. Now they can monitor the remittance into their accounts in real time as banks now allow their funds transfer information to be available to the subcontractors immediately. In effect, the system has been proven to help numerous subcontracted workers who suffer from greater unstable financial conditions than prime contractors. It has also improved efficiency in the overall work processes and saved significant budget for SMG by shortening bureaucratic procedures over documentation and verification by moving from paper-based to electronic documentation.

Workshop Programme (2-4 December 2015)

DAY 1 (December 2) Venue –Main Conference Hall of the Seoul City Hall (3rd floor) Korean-English interpretation provided			
09:00-09:30	Registration		At the Seoul City Hall, Main Conference Hall (3 rd floor)
09:30-10:15	Opening Session	Welcome	Ms. Anne Marie Sloth Carlsen, Director of the UNDP Seoul Policy Centre
		Congratulatory Speech	Mr. Jae-wan Lee, Deputy Director-General, Development Cooperation Bureau, Ministry of Foreign Affairs
		Opening Remarks	Mr. Patrick Keuleers, Director/ Chief of Profession, Governance and Peacebuilding, Bureau for Policy and Programme Support, UNDP New York
		Keynote Speeches	<ul style="list-style-type: none"> - Honorable Won Soon Park, Mayor of Seoul, Republic of Korea - Mr. Petter Matthews, Executive Director, Construction Sector Transparency Initiative (CoST) International Secretariat
10:15-10:30	Photo Session/ Coffee Break		Group photo will be taken with all participants.
10:30-11:30	Session 1	Overview of the Clean Construction System	Mr. Jong Geon Kim, Division Director, Construction Management Division, Seoul Metropolitan Government (SMG) Infrastructure Headquarters
11:30-13:15	Welcome Luncheon	<i>Attended by Mr. Jewon Lee, Vice Mayor II for Administrative Affairs of Seoul Metropolitan City</i>	At the Mozart Hall, 31F of President Hotel
13:15-15:30	Session 2	Enabling Environment for Clean Construction System: Korea's Policies and Institutional Tools for Information Disclosure, Anti-Corruption, and E-Procurement Chair: Mr. Anga Timilsina, Programme	<ul style="list-style-type: none"> - Mr. Jin Han Jeon, Director, Right to Know Institute, Republic of Korea - Mr. Dae hyun Jong, Deputy Director, Safety Audit & Inspection Division, SMG - Mr. Duck Hee Lee, Deputy Director, Anti-Corruption Policy Division, Anti-Corruption & Civil Rights Commission (ACRC) of Korea - Ms. Min Sook Hong, Assistant Director, International Cooperation

		Manager, UNDP Global Anti-Corruption Initiative	Division, Public Procurement Service (PPS)
15:30-15:45	Coffee Break		
15:45-17:45	Session 3	Experiences and Lessons Learnt Around the World Part I Chair: Mr. Martin Hart-Hansen, Deputy Resident Representative, UNDP Thailand Country Office	<ul style="list-style-type: none"> - Ms. Lindsey Marchessault, Senior Manager for Data and Engagement, Open Contracting Partnership - Mr. Oleksii Sobolev, Advisor to the Minister, Ministry of Infrastructure of Ukraine - Mr. Jiravat Limkhaewprasert, Managing Director, Anti-Corruption Organization of Thailand - Ms. Evelyn Hernández, Manager, CoST Honduras - Mr. Arnel V. De Mesa, Regional Technical Director for Region XI & National Deputy Project Director, Philippines Rural Development Project, Department of Agriculture, Philippines
17:45-18:00	Session 4	Pair Discussion	Sharing challenges and questions to be addressed during the workshop.
DAY 2 (December 3) Venue –Main Conference Hall of the Seoul City Hall (3rd floor) Korean-English interpretation provided			
9:00-9:10	Recap of Day 1		UNDP Seoul Policy Centre
9:10-11:00	Session 5	SMG’s One-Project Management Information System (One-PMIS) and the Construction Informer (“Allimi”) Chair: Mr. Letsholo Mojanaga, Programme Manager for Inclusive Growth, UNDP South Africa Country Office	Presentations by SMG and the One-PMIS management company: <ul style="list-style-type: none"> - Mr. Tae Hag (James) Roh, Manager, Disaster Prevention Facility Division, SMG Infrastructure Headquarters. - Mr. Sung Yeoub Kim, Executive Director, Service Business Division, Bolim Information System Corporation
11:00-11:15	Coffee Break		
11:15-13:15	Session 6	SMG’s sub-contractor payment monitoring system (sPMS) and	Technical presentations from the SMG, the system developer, and the private sector association:

		<p>Electronic Human Resources Management System (E-HRM) for Construction Workers</p> <p>Chair: Ms. Anne Marie Sloth Carlsen, Director of the UNDP Seoul Policy Centre</p>	<ul style="list-style-type: none"> - Mr. Jong Youl Hong, CEO, Paycoms - Mr. Young Jun Jang, Manager, Construction Management Division, SMG Infrastructure Headquarters - Mr. Sang Koo Cho, Director, Department of Support Policy, Korea Specialty Contractors Association (KOSCA), Seoul Metropolitan City Branch
13:15-14:30	Lunch		At the President Hotel Mozart Hall 31F
14:30-15:30	Session 7	<p>Experiences and Lessons Learnt Around the World Part II</p> <p>Chair: Ms. Annet Mpabulungi-Wakabi, Team Leader Governance, UNDP Uganda Country Office</p>	<ul style="list-style-type: none"> - Ms. Lorena Rivero del Paso, Director General of Performance Monitoring and Information, Ministry of Finance and Public Credit, Mexico - Mr. Rueben Lifuka, Chairperson, CoST Zambia - Ms. Teresa Ty-Santiago, State Auditor IV, Commission on Audit, Philippines
15:30-15:45	Coffee Break		
15:45-17:15	Session 8	<p>Expertise Meeting (e.g. those from anti-corruption institutions, public procurement agencies, construction departments, audit & finance institutions, local governments, and UNDP offices)</p>	<p>Participants will be grouped by their expertise groups, and will share their experiences, give peer-to-peer advice, and brainstorm partnership strategies to collaborate on their efforts after the meeting.</p>
17:15-18:15	City Hall Guided Tour		<p><i>Theme of the Tour:</i> Utilizing the City Hall for the Public Engagement and Cultivating the Culture of Public Participation in & Ownership of the City Governance</p>
18:30-20:30	Official Formal Dinner	<p><i>Attended by Mr. In Seok Koh, Assistant Mayor for Seoul Metropolitan Infrastructure, SMG</i></p>	<p>President Hotel Mozart Hall 31F</p> <p>(Mandatory for all overseas participants)</p>

DAY 3 (December 4)			
Venue –Main Conference Hall of the Seoul City Hall (3rd floor)			
Korean-English interpretation provided			
9:00-10:30	Session 9	Experiences and Lessons Learnt Around the World III Chair: Ms. Paavani Reddy, Anti-Corruption Specialist, UNDP Bangkok Regional Hub	- Ms. Karine Badr, Regional Project Analyst, Anti-Corruption and Integrity in Arab Countries, UNDP Regional Bureau for Arab States. - Mr. Michael P. Cañares, Regional Research Manager for Asia, World Wide Web Foundation - Open Data Lab Jakarta - Ms. Cissy Kagaba, Executive Director, Anti-Corruption Coalition Uganda, and Mr. Patrick Musoke, Deputy Director, Strategy Management and Business Development, Kampala Capital City Authority, Uganda
10:30-10:45	Coffee break		
10:45-11:00	Recap of the Discussions		UNDP Seoul Policy Centre
11:00-12:30	Session 10	Country Group Discussion: Development of Country Roadmap for Action	Reflecting on the learning points from the workshop, participants will be grouped by their countries and develop specific action plans and partnership arrangements to increase transparency, efficiency and accountability in the public construction sector through CCS-like systems.
12:30-14:00	Farewell Luncheon		At Dalgaebi Korean Restaurant beside the Deoksu Palace (5 min. walk from Seoul City Hall).
14:00-14:45	Session 11	Presentation of Expertise Group Discussion Results Chair: Ms. Ahjung Lee, Policy Specialist, UNDP Seoul Policy Centre	Rapporteurs will report their group discussion results in Session 8 on key challenges as well as suggestions for addressing specific challenges faced by each expertise group.
14:45-16:30	Session 12	Presentation of Country Action Plans Chair: Mr. Artemy Izmestiev, Policy Specialist, UNDP Seoul Policy Centre	Representatives from each participating country will present their country action plans to the plenary.

16:30-16:45	Coffee break		
16:45-18:00	Session 12	Responses to the Group Presentations and Final Panel Q&A Chair: Ms. Ahjung Lee, Policy Specialist, UNDP Seoul Policy Centre	SMG officials and Korean experts who presented in the CCS sessions will provide their comments (i.e. suggestions based on their own experience and lessons learnt), and answer remaining questions from participants on the CCS.
18:00-18:15	Participant Feedback		Participants are kindly requested to fill out the feedback form.
18:15-18:30	Closing Remarks		-Ms. Anne Marie Sloth Carlsen, Director of the UNDP Seoul Policy Centre -Mr. Jong Geon Kim, Division Director, Construction Management Division, SMG

** All participants are given access to a shared google drive set up by the UNDP Seoul Policy Centre, with all the PPT slides, photos, session summaries, policy toolbox documents, as well as audio & video recording files from the workshop.*

**For questions regarding the workshop programme, please contact Ms. Ahjung Lee, Policy Specialist at the UNDP Seoul Policy Centre at ahjung.lee@undp.org.*

Participant List

Korean Government Partners and Experts

1. Mr. Won Soon Park, Mayor of Seoul, Republic of Korea
2. Mr. Jewon Lee, Vice Mayor II for Administrative Affairs, Seoul Metropolitan City
3. Mr. In Seok Koh, Assistant Mayor, Seoul Metropolitan Infrastructure Headquarters
4. Mr. Jae-wan Lee, Deputy Director-General, Development Cooperation Bureau, Ministry of Foreign Affairs, Republic of Korea
5. Mr. Byungseok Yoo, First Secretary, Division of Multilateral Development Cooperation and Humanitarian Assistance, Development Cooperation Bureau, Ministry of Foreign Affairs
6. Mr. Do-yeon Won, Director, Division of Multilateral Development Cooperation and Humanitarian Assistance, Development Cooperation Bureau, Ministry of Foreign Affairs
7. Mr. Tae kyung Hyung, Director – General, Seoul Metropolitan Infrastructure Headquarters
8. Mr. Jong Geon Kim, Division Director, Construction Management Division, Seoul Metropolitan Infrastructure Headquarters
9. Mr. Jin Han Jeon, Director, Right to Know Institute, Republic of Korea
10. Mr. Dae hyun Jong, Deputy Director, Seoul Audit & Inspection Commission, Safety Audit & Inspection Division, Seoul Metropolitan Government
11. Mr. Duck Hee Lee, Deputy Director, Anti-Corruption Policy Division, Anti-Corruption and Civil Rights Commission (ACRC) of Korea
12. Ms. Min Sook Hong, Assistant Director, International Cooperation Division, Public Procurement Service (PPS), Republic of Korea
13. Mr. Tae Hag (James) Roh, Manager, Disaster Prevention Facility Division, Seoul Metropolitan Infrastructure Headquarters
14. Mr. Sung Yeoub Kim, Executive Director, Service Business Division, Bolim Information System Corporation
15. Mr. Jong Youl Hong, CEO, Paycoms
16. Mr. Young Jun Jang, Manager, Construction Management Division, Seoul Metropolitan Infrastructure Headquarters
17. Mr. Sang Koo Cho, Director, Department of Support Policy, Korea Specialty Contractors Association (KOSCA), Seoul Metropolitan City Branch
18. Ms. Hae min Jung, Director, Construction Management Division, Seoul Metropolitan Infrastructure Headquarters
19. Mr. Hwan Park, Director, Construction Management Division, Seoul Metropolitan Infrastructure Headquarters
20. Ms. Myong ja Choi, Construction Management Division, Seoul Metropolitan Infrastructure Headquarters
21. Mr. Sung tai An, Construction Management Division, Seoul Metropolitan Infrastructure Headquarters
22. Mr. Deuk yeon Hwang, Construction Management Division, Seoul Metropolitan Infrastructure Headquarters

23. Ms. Myoung hee Ji, Construction Management Division, Seoul Metropolitan Infrastructure Headquarters
24. Ms. Jung hee Kim, Construction Management Division, Seoul Metropolitan Infrastructure Headquarters
25. Ms. Ji in Jeong, Construction Management Division, Seoul Metropolitan Infrastructure Headquarters
26. Mr. Gye hwan Shim, Construction Management Division, Seoul Metropolitan Infrastructure Headquarters
27. Mr. Tae hyeok Park, Construction Management Division, Seoul Metropolitan Infrastructure Headquarters
28. Mr. Ji hun Kim, Construction Management Division, Seoul Metropolitan Infrastructure Headquarters
29. Mr. Soon kyun Lee, Construction Management Division, Seoul Metropolitan Infrastructure Headquarters

Country Delegations (Government Officials from Developing Countries)

29. Mr. Oleksii Sobolev, Advisor to the Minister, Ministry of Infrastructure, Ukraine
30. Ms. Lorena Rivero del Paso, Director General of Performance Monitoring and Information, Ministry of Finance and Public Credit, Mexico
31. Ms. Teresa Ty-Santiago, State Auditor IV, Commission on Audit, Philippines
32. Mr. Patrick Musoke, Deputy Director, Strategy Management and Business Development, Kampala Capital City Authority (KCCA), Uganda
33. Mr. Arnel V. De Mesa, Regional Technical Director for Region XI & National Deputy Project Director, Philippines Rural Development Project, Department of Agriculture, Philippines
34. Mr. Rinzin Dorji, Director General, Construction Development Board, Bhutan
35. Mr. Tenzin, Director, Department of Engineering Services, Ministry of Works and Human Settlement, Bhutan
36. Dr. Khaled El Zahaby, Director, National Centre for Housing and Construction, Ministry of Housing, Utilities and Urban Development, Egypt
37. Mr. Nader Nour Eldin Ali mohamed Salem, Technical Project Officer, Governance Center, Ministry of Planning, Monitoring, and Administrative Reform, Egypt
38. Mr. Tegegn Belay Melese, Senior Expert, Corruption Prevention Directorate, Federal Ethics and Anti-Corruption Commission, Ethiopia
39. Mr. Mohammad Azari, Deputy Mayor on Finance and Administration, Mashhad Municipality, Iran
40. Mr. Mojtaba Shakeri Ravesh, Director of Planning and Projects, Mashhad Municipality, Iran
41. Mr. Seyed Abdol Karim Javadi, Member of Mashhad City Council, Iran
42. Mr. Sultan Moh'd Nouredin Abzakh, Advisor to the Chairman of Jordan Anti-Corruption Commission (JACC)
43. Mr. Ali Berro, Advisor to the Minister for Parliamentary Affairs, Lebanon
44. Ms. Andrea Castedo Manly, Chief Project Coordinator, Mayor's Office of Mexico's City Government, Mexico
45. Mr. Naoufal Ouldelmehdi, Head of Strategy Unit, Central Authority for Corruption Prevention, Morocco

46. Mr. Alexander Micah Paman, Head of Unit, Anti-Corruption and Transparency Unit, Federal Ministry of Works, Nigeria
47. Ms. Rasheedat Adunni Okoduwa, Director, Independent Corrupt Practices and Other Related Offences Commission (ICPC), Nigeria
48. Ms. Azuka Chinelo Ogugua, Chief Superintendent, Education, Independent Corrupt Practices and Other Related Offences Commission (ICPC), Nigeria
49. Mr. Kenneth Brown, Chief Procurement Officer, National Treasury, Republic of South Africa
50. Mr. Vukani Patrick Ndaba, Procurement Officer, National Treasury, Republic of South Africa
51. Mr. Pumezo Gulwa, Director of E-Commerce Centre, National Treasury, Republic of South Africa
52. Mr. Moritz Botha, Director of E-Tendering, National Treasury, Republic of South Africa
53. Mr. Chris Jiyane, Deputy Chairman, Construction Industry Development Board, Republic of South Africa
54. Mr. Tortrakul Yomnak, Chairperson, Sub-Committee on Corruption Prevention, National Anti-Corruption Committee, Thailand
55. Dr. Sirilaksana Khoman, Vice Chairperson, Sub-Committee on Corruption Prevention, Advisor to the National Anti-Corruption Commission, Thailand
56. Mr. Thanachoke Rungthipanon, Fiscal Analyst & Director of Electronic Government Procurement Team, Comptroller General's Department, Thailand
57. Mr. Swizin Kinga Mugyema, Commissioner, Local Council Development, Ministry of Local Government, Uganda
58. Ms. Nassuna Mirembe, Directorate of Engineering and Technical Services, Kampala Capital City Authority (KCCA), Uganda
59. Mr. Collins Nizeye, Legal Officer & Member of KCCA Contracts Committee, Kampala Capital City Authority (KCCA), Uganda
60. Ms. Tetiana (Tanya) Lisovska, Head of Unit, Public Procurement Department, Ministry of Economic Development and Trade, Ukraine
61. Mr. Vo Cong Chanh, Director, UNDP Public Administration Reform (PAR) Project, Department of Home Affairs of Da Nang City, People's Committee of Da Nang City, Viet Nam
62. Ms. Dang Ngoc Thu Trang, Government Official, Department of Home Affairs & Project Assistant, UNDP Public Administration Reform (PAR) Project in Da Nang City, Department of Home Affairs, People's Committee of Da Nang City, Viet Nam
63. Mr. Tran Van Man, Head of Division, Investment Evaluation and Monitoring, Department of Planning and Investment, People's Committee of Da Nang City, Viet Nam
64. Ms. Le Hong Thu, Head of Office, Department of Construction, People's Committee of Da Nang City, Viet Nam
65. Mr. Ha Van Thang, Deputy Head, Division of Procurement, Public Procurement Agency, Ministry of Planning and Investment, Viet Nam
66. Mr. Tran Tuan Linh, Project Official, e-Government Procurement Division, Public Procurement Agency, Ministry of Planning and Investment, Viet Nam
67. Ms. Ethel Katongo Nunkwe, Manager for Compliance Monitoring, Zambia Public Procurement Authority
68. Mr. Jeremiah Sande, Regional Manager – South, National Council for Construction, Zambia
69. Mr. Elias Champemba, First Secretary, Embassy of Zambia
70. Mr. Serhii Horopakha, First Secretary, Embassy of Ukraine

UNDP and Development Partners

71. Ms. Anne Marie Sloth Carlsen, Director, United Nations Development Programme (UNDP) Seoul Policy Centre for Global Development Partnerships
72. Mr. Patrick Keuleers, Director/Chief of Profession, Governance and Peacebuilding, Bureau for Policy and Programme Support, UNDP New York
73. Ms. Karine Badr, Regional Project Analyst, Anti-Corruption and Integrity in Arab Countries, UNDP Regional Bureau for Arab States
74. Mr. Martin Hart-Hansen, Deputy Resident Representative, UNDP Thailand Country Office
75. Ms. Paavani Reddy, Anti-Corruption Specialist, UNDP Bangkok Regional Hub
76. Mr. Anga Timilsina, Programme Manager, UNDP Global Anti-Corruption Initiative (GAIN)
77. Ms. Ahjung Lee, Policy Specialist, UNDP Seoul Policy Centre
78. Mr. Artemy Izmetiev, Policy Specialist, UNDP Seoul Policy Centre
79. Ms. Hye-Jin Park, Communications Analyst, UNDP Seoul Policy Centre
80. Ms. Naglaa Arafa, Assistant Resident Representative & Team Leader for Democratic Governance, UNDP Egypt Country Office
81. Mr. Afework Fekadu, Programme Officer, Democratic Governance and Capacity Development Unit, UNDP Ethiopia Country Office
82. Ms. Nancy Fashho, Anti-Corruption Specialist, UNDP Jordan Country Office
83. Mr. Segun Olusola, Programme Associate, UNDP Nigeria Country Office
84. Ms. Fe Cabral, Programme Associate, UNDP Philippines Country Office
85. Mr. Letsholo Mojanaga, Programme Manager for Inclusive Growth, UNDP South Africa Country Office
86. Ms. Annet Mpabulungi-Wakabi, Team Leader Governance, UNDP Uganda Country Office
87. Ms. Diana Zubko, Governance Expert, UNDP Ukraine Country Office
88. Ms. Nguyen Thi Ngoc Han, Programme Officer, Public Administration Reform/Anti-Corruption, Governance & Participation Team, UNDP Viet Nam Country Office
89. Mr. Dick Kampamba, Operational Quality Assurance Officer, UNDP Zambia Country Office
90. Mr. Hoang Xuan Nguyen, Senior Procurement Specialist, World Bank Group, Viet Nam Country Office

Civil Society and International Networks

91. Mr. Petter Matthews, Executive Director, Construction Sector Transparency Initiative (CoST) International Secretariat
92. Ms. Lindsey Marchessault, Senior Manager for Data and Engagement, Open Contracting Partnership
93. Mr. Jiravat Limkhaewprasert, Managing Director, Anti-Corruption Organization of Thailand
94. Ms. Evelyn Hernandez, Manager, Construction Sector Transparency Initiative (CoST) Honduras
95. Mr. Rueben L. Lifuka, Chairperson, Construction Sector Transparency Initiative (CoST) Zambia
96. Mr. Michael P. Cañares, Regional Research Manager – Asia, World Wide Web Foundation – Open Data Lab Jakarta
97. Ms. Cissy Kagaba, Executive Director, Anti-Corruption Coalition Uganda (ACCU)
98. Ms. Rasha Abdel Latif, Senior Program Officer, Partners Jordan

99. Dr. Ziad Momani, Board Member, Jordan Transparency Center (JTC)
100. Ms. Salma AlEsa, Expert on Public Sector Reform, Member of Transparency International Working Group on Global Research Products, Kuwait
101. Mr. Ronald Barakat, Executive Director, Lebanese Transparency Association
102. Ms. Cynthia Gabriel, Executive Director, Centre to Combat Corruption & Cronyism, Malaysia
103. Mr. Offia Samuel Onochie, Program Officer, Procurement Monitoring Project, Public and Private Development Centre (PPDC), Nigeria
104. Mr. Klaikong Vaidhyakarn, Deputy Director, Change Fusion Institute, Thailand
105. Ms. Eunkyung Lee, Team Leader, UN Global Compact Network Korea
106. Ms. Minkyung Kim, Manager, UN Global Compact Network Korea

Opening Speeches



Keynote Speech

Won Soon Park

Mayor of Seoul

Ladies and Gentlemen,

Distinguished guests,

Colleagues,

As the Mayor of Seoul, I would like to extend my warm welcome and thank you for visiting Seoul and the City Hall!

Opening this *International Workshop for Public Construction Transparency: Sharing Korea's Clean Construction System and Initiatives around the World*, I would like to extend my gratitude to over 70 overseas participants from some 20 countries, including government officials, civil society experts, and United Nations Development Program (UNDP) practitioners. In particular, I would like to express my deepest thanks to Director Anne Marie Sloth Carlsen of the UNDP Seoul Policy Center for partnering with the Seoul Metropolitan Government in organizing this meaningful event.

I also extend a special welcome to Mr. Patrick Keuleers, Chief of Profession of the Governance and Peacebuilding Team from UNDP headquarters in New York, Mr. Petter Matthews, Executive Director of the Construction Sector Transparency Initiative, and to the officials from the Korean Ministry of Foreign Affairs, Anti-Corruption & Civil Rights Commission, and the Public Procurement Service for being here with us today.

I don't know how many of you are aware that this past November 25th marked the 6th anniversary of the Republic of Korea's joining the Development Assistance Committee (DAC) of the Organisation for Economic Co-operation and Development (OECD). This is an important day in the history of development aid because joining the DAC marked Korea's final transition to an official donor in the international community. The Republic of Korea is the only country in the world to make this miraculous journey from UN aid recipient to OECD-DAC member.

At the heart of the great story of Korea's development was the Miracle on the Han River, the Innovation of Seoul. And Seoul's innovations still continue today, day and night.

In this historical context, I am delighted, not only as a mayor but as a proud citizen of Seoul and of Korea, to share with you today Seoul Metropolitan Government's transparent administrative policies.

To be frank, I was pleasantly surprised when I first heard that we would share with so many countries our Anti-Corruption Clean Construction System through this workshop. I was also impressed to learn that so many countries around the world take keen interest in public sector construction information disclosure issues. Probably such international attention to Seoul's CCS is because of the pervasive impact of transparency in the construction sector in all spheres of society, regardless of where you live around the globe.

Ladies and gentlemen,

In this day and age, we are living in the world of the Internet, constantly inundated with new information. However, only in recent years, even in Korea, have citizens been able to readily and systematically access the information kept in public organizations—the information that the people need the most. Since taking office to serve as the Mayor of Seoul, I have therefore led Seoul's administration under the banner of “innovation and cooperative governance.” Here, information disclosure, mutual sharing, and cooperation provided the fundamental basis of my policy directions.

I first created a dedicated information-disclosure department in charge of our public information service, and introduced what I call the 'policy-nude project' to disclose and share with the public all information on the city's policies.

To be sure, we faced some confusion and challenges at the beginning. Some public officials in the Seoul Metropolitan Government told me that disclosing the policy documents that they had just approved the previous day felt like going out into the streets with no clothes on. *It felt like being naked.*

But step by step, we continued with our initiative. As a result, we now disclose every piece of our policy information, aside from those legally prohibited, which enables the 10 million citizens of Seoul to access that real-time information through our dedicated website.³

After three years of the information disclosure policy implementation, we now even disclose the names of our City Planning Committee members and the minutes of their meeting, without reservation.

How was this possible? It was the outcome of continuous communication efforts based on the new understanding that information disclosure goes well beyond the simple act of releasing information. Rather, information disclosure is the critical means to enhance the integrity and accountability of public officials and to increase the level of transparency in society as a whole.

Our experience shows that we can ensure a more transparent construction sector by simply informing people about the kind of work being carried out in their neighborhoods. By disclosing SMG's construction work information on the Construction Informer website, all the stakeholders, from private contractors to Seoul government officials, came to adopt a more transparent, responsible, and accountable administration of public construction development.

³ [Opengov.seoul.go.kr](http://opengov.seoul.go.kr)
International Workshop
for Public Construction Transparency
UNDP Seoul Policy Centre

The construction sector is particularly prone to social conflicts, owing to malpractice in the subcontracting process. Construction project processes are opaque, and frequently, even after hard labor, workers do not receive their due compensation. As a result, unrest spreads beyond private companies, leading workers to protest in the streets, and to greater social conflict.

To address this entrenched problem, the Seoul Metropolitan Government has developed the subcontractor payment monitoring system, and is making efforts to ensure every actor involved in our construction projects can be paid on time.

Ladies and Gentlemen,

To conclude, I have great confidence and pride in sharing with you Seoul's Clean Construction System through this workshop. CCS is exactly in line with my policy direction and values of "information disclosure and transparency enhancement".

In the next three days, I very much look forward to sharing in detail what and how Seoul is accomplishing transparency in the public construction sector, and also to learning from other countries' policy initiatives.

I sincerely hope that our policy initiatives will provide you with "a spark for inspiration" for your own innovations at home, as appropriate in local contexts.

Once again, I would like to thank the UNDP Seoul Policy Centre for making this meaningful occasion, and also thank the Ministry of Foreign Affairs and all of you here today for coming. Thank you.

Keynote Speech

Mr. Petter Matthews

Executive Director, International Secretariat
Construction Sector Transparency Initiative (CoST)

The value of global construction output is expected to increase by \$8 trillion to reach \$17.5 trillion per annum by 2030. It is difficult to determine precisely the value of losses through corruption, but estimates tend to range between 10 and 30 per cent. Data from the CoST programme suggests that a similar amount could be lost through mismanagement and inefficiency. This means that by 2030, unless measures are introduced that effectively improve this situation, close to \$6trillion could be lost annually through corruption, mismanagement and inefficiency.

Losses on this scale cannot be tolerated in any sector, but losses in infrastructure investment have particularly severe consequences. This is because infrastructure underpins almost every aspect of economic growth and human development. Consider for example the most pressing global challenges that we face such as eliminating poverty, achieving food security, rebuilding the global economy and dealing with the effects of climate change – it is inconceivable that we could meet these challenges without a huge increase in public investment infrastructure. Put simply, unless we rapidly improve the efficiency of public infrastructure investments, our efforts to meet the great global challenges of our era could fail.

This requires that we consider two key questions: What is it about the construction industry that leads to losses on such a scale? And what can be done to prevent them in the future? I want to use this speech to begin to sketch out answers to these questions.

With regard to the second question, meaningful improvements will inevitably require a series of reforms that respond directly to the specific conditions of the economies involved. It is not realistic for me to deal with the full spectrum of possible reforms, so I'll concentrate on three that are often neglected – (1) the preoccupation with awarding contracts based on lowest price, (2) improving project preparation, and (3) promoting transparency and accountability. However, I will begin with the first question, what is it about the construction industry that leads to losses on the scale I have described?

Niell Stansbury of the [Global Infrastructure Anti-Corruption Centre](#) has identified 13 features that make construction particularly prone to corruption. They include importantly:

- 1) **Uniqueness:** No two construction projects are the same making comparisons difficult and providing opportunities to inflate costs and conceal bribes.
- 2) **Complex transaction chain:** The delivery of infrastructure involves many professional disciplines and tradespeople and numerous contractual relationships that make control measures difficult to implement.
- 3) **Work is concealed:** Materials and workmanship are often hidden, for example, steel reinforcing is cast in concrete, masonry is covered with plaster and cables and pipes enclosed in service ducts.

- 4) **Official bureaucracy:** Numerous approvals are required from government in the form of licenses and permits at various stages of the delivery cycle, each one providing an opportunity for bribery.
- 5) **Culture of secrecy:** The construction industry has been opaque for so long that secrecy is the norm, there is no culture of openness and efforts to introduce transparency are often treated with suspicion.
- 6) **The scale of infrastructure investments:** Investments in economic infrastructure such as dams, airports and railways can cost tens of billions of dollars making it easier to conceal bribes and inflate claims.

Many of these features are found in other industry sectors, but there are few where all or even most of them are found. Defence and natural resources are comparable with construction and it is not surprising therefore that they also routinely rank amongst the most corrupt sectors.

In some instances, procurement procedures can also inadvertently encourage corrupt behaviour. An investigation by the UK Office of Fair Trading in 2008 uncovered widespread collusion amongst companies bidding for government contracts. It became apparent that in some cases, companies that were invited to tender for work but failed to submit a bid because they were busy on other projects, would be removed from tender lists and denied the opportunity to bid for future work. In some cases, companies consulted with each other and submitted artificially high bids to avoid winning the work but remain on tender lists. These examples of 'cover pricing' are technically breaches of competition law, but in many cases they would not have led to any financial cost to the client or gain for the contractor and could be seen as a rational response to poorly conceived procurement practice.

Instances of cover pricing in the UK have since reduced as a result in part of a move away from competitive tendering based on lowest price and towards a greater focus on quality and collaborative working arrangements. These include framework agreements, partnering and incentivised target cost contracts. This brings us to the second question about what can be done to reduce corruption and inefficiency in the future and the first of three areas of reform, what I termed the preoccupation with awarding contracts based on lowest price.

The UK has during the last 10-15 years deliberately moved away from lowest price bidding. Two issues are particularly important in explaining this move. The first is recognition that lowest price bidding encourages contractors to bid for work at unrealistically low levels. It then becomes impossible for them to maintain standards and make profits, the quality of their work falls and they become more likely to make unjustified claims, delay payments to subcontractors and indulge in corrupt behaviour to recover their losses. The second issue is a consequence of the first - it became apparent that lowest price bidding was not delivering cost savings. In fact lowest price bidding was more likely to result in cost and time overruns, leading ultimately to poor value for money and greater whole life costs in the maintenance and operation of built assets.

This experience of the UK has been documented by Constructing Excellence, the organisation charged with driving the change agenda in UK construction. It has shown that during this period of reform, project overruns reduced from 77 per cent to 27 percent and that projects using alternatives to lowest price bidding were 15 per cent more likely to be completed on time and 44 per cent more likely to finish within budget.

This and similar experiences are now becoming more widely recognised. It is significant for example that a recent review of World Bank procurement procedures resulted in a new procurement framework that for the first time allows contracts to be awarded on criteria other than price.

Project preparation is the second area of reform that I want to look at. Poor preparation (whether due to corruption, negligence or inadequate capacity) is particularly significant as it increases opportunities for corruption later in the delivery cycle. When projects are poorly prepared – for example when they are incompletely designed, poorly budgeted or have dubious or even nonexistent benefits - it can lead to delays that may require changes that can be manipulated to benefit individuals or companies.

My colleague Jill Wellshas identified four essential steps in project preparation and the measures needed to strengthen them. They are:

- (1) Project development and initial screening;
- (2) Formal project appraisal;
- (3) Independent appraisal review; and
- (4) Project section and budgeting.

She makes the point that these processes are often poorly developed in low-income countries and therefore that the measures needed to strengthen them are even more important.

An important initiative aimed at improving project preparation is the International Infrastructure Support System (IISS) that is being developed by the Sustainable Infrastructure Foundation in association with a number of multilateral development banks. The IISS is an online project preparation platform that provides resources to improve project preparation and encourage collaboration between investors and government. It will be accessible to the public and private sector and is intended to provide a high quality, consistent and systematic approach to early stage project development.

The third area of reform is transparency and accountability and this allows me to bring together both my own work with CoST and the focus of this event, the Clean Construction System.

CoST works with government, industry and civil society to disclose information on public investment in infrastructure. The information is designed to inform and empower stakeholders and enable them to hold decision-makers to account. This creates a business environment in which corruption is less likely to occur and helps drive improvements in management and efficiency. Ultimately, improvements in transparency and accountability contribute to better value for money and better quality infrastructure and services.

Taking this opportunity, I would like to share three key elements of the CoST approach which may be relevant to other participants working in this sector as well:

- 1) **Disclosure of information:** Governments are required to disclose information routinely and periodically over the entire project lifecycle. The information is disclosed in the 'Infrastructure Data Standard' (or IDS) format. The IDS comprises 40 data points and was developed during a three year pilot project (2008-2011) involving eight countries. Disclosure might begin on a voluntary basis, i.e. in the absence of any legal requirement to do so, but countries eventually establish a 'Formal Disclosure Requirement' that institutionalises disclosure through making it mandatory.

2) **Assurance:** The information disclosed by government is reviewed by an independent 'assurance team' to check its accuracy and completeness and to interpret it for non-specialists. The assurance team publishes a report of its findings that might include 'causes for concern' that it feels require further examination. When a country introduces a formal disclosure requirement, the volume of information increases. In those circumstances it is not economic for all information to be subject to the assurance process, so a random sample of projects are selected and the data subject to scrutiny.

3) **Multi-stakeholder working:** Reducing corruption and inefficiency is a complex challenge and one that is beyond the capacity of any individual sector to meet alone. This is what is termed a collective action problem. CoST meets this challenge by establishing a multi-stakeholder groups or 'MSGs' to oversee the programme. MSGs comprise representatives from government, industry and civil society. The members of the MSG may have individual objectives, but they also share common objectives linked to improving transparency and accountability. Collaborating to achieve these common objectives is the essence of multi-stakeholder working.

Disclosure, assurance and multi-stakeholder working help to increase transparency and accountability. Transparency and accountability contribute to better value for money and better quality infrastructure and services. This can be demonstrated with two examples of impact.

CoST Guatemala instructed an Assurance Team to review data published during the planning stage of a project to rehabilitate the Belize Bridge in Guatemala City. It identified that inappropriate procurement procedures had been used and asked for a review of the process. It became apparent that the contract award was invalid but further, that the proposed work was unnecessary and if it had gone ahead, could have undermined the structural integrity of the bridge. It was in fact an entirely bogus project designed to steal public funds and the intervention of CoST saved \$5m.

CoST Ethiopia instructed an Assurance Team to examine the data disclosed during the design stage of a project to rehabilitate the Gindeber to Gobensa Road. It identified that a vast sum had been budgeted for earthworks and retaining walls and requested that the Road Agency review the costs. It was shown subsequently that the costs could not be justified and the design team was sacked and debarred for a period from Government projects. The work was redesigned and an amount close to \$4 million saved.

These two projects saved close to \$9m in total, which is modest in terms of overall investment, but the annual costs of a country programme are typically between a hundred and two hundred thousand dollars, so as a return on this investment, the savings are significant.

We recently undertook a review of the CoST programme and attempted to draw out factors of success. Four of the most important are:

- 1) Successful MSGs have had access to funding, high level political support and an effective National Secretariat.
- 2) A National Secretariat requires a broad range of skills, knowledge and experience. The Coordinator leads the work of the Secretariat and it is vital that the individuals appointed are knowledgeable, experienced and adequately rewarded.
- 3) The provision of high quality technical assistance to MSGs at an early stage is vital. Importantly they need support to shape their operating rules and procedures and to build trust and establish the foundations for collaborative working.

- 4) Scoping studies are undertaken in the early stages of a programme. They bring together the detailed knowledge needed to design the programme. In addition to assessing the current level of transparency and identifying the potential value-added of CoST, they also look at political economy factors that might enable or inhibit the programme.

CoST has a growing body of evidence of the positive impact of improvements in transparency and accountability, but there is no room for complacency and we acknowledge that we still have much to learn. This brings me finally to this event and the importance of learning from what has been achieved by our colleagues here in Seoul.

The Clean Construction System or CCS is one of the outstanding international transparency initiatives. The Seoul Metropolitan Government has moved beyond rhetoric and developed and implemented a practical system that works. It promotes transparency - one of the areas of reform that I have argued is extremely important - but it goes further with the incorporation of its subcontractor payment system.

Non-payment and late-payment is not only bad for sub-contractors and workers, it is bad for clients as it causes disputes that delay projects and it is bad for the public as delays undermine value for money. The importance of paying in full and on time should not be underestimated and I am looking forward to learning more about how the subcontractor payment system works.

I want to pay tribute to Honourable Won Soon Park, Mayor of Seoul, and his colleagues at the Seoul Metropolitan Government for being so generous in sharing their experience of developing the Clean Construction System. Our hosts are sharing their experiences with us so that we can benefit from them and adapt and apply the lessons of the CCS in our own countries.

I would also like to thank the UNDP Seoul Policy Centre for Global Development Partnerships for having the foresight to convene this event and for mobilising such an impressive international presence amongst the participants. You have provided us with an extraordinary opportunity and we are indebted to you.

Finally and in conclusion, the scale of the challenge that we face is enormous. We are involved in complex governance reforms that include a fundamental reconfiguration the relationship between governments and citizens with respect to public investments in infrastructure. This is a challenge for all countries, although some have not yet recognised it as such. However, if the challenge is enormous, so are the potential benefits. Better quality infrastructure and services improves lives, transforms economies and helps ensure that all people have a better life. Let us work together and ensure that we succeed.

Welcome Speech

Anne Marie Sloth Carlsen

Director of the UNDP Seoul Policy Centre

On behalf of the UNDP Seoul Policy Centre (USPC), I warmly welcome you all to the International Workshop on Public Construction Transparency: Sharing Korea's Clean Construction System and Initiatives around the World, which we are organizing in partnership with the Seoul Metropolitan Government (SMG) and the Korean Ministry of Foreign Affairs (MOFA).

The workshop will facilitate peer-to-peer policy dialogues and thematic discussions to identify effective means to promote transparency and accountability in the public construction sector, using SMG's Clean Construction System (CCS) as a reference point and inspiration.

Endemic corruption in public infrastructure projects continues to damage the development potential in many, many countries. Therefore, we need approaches like Seoul's Clean Construction System to spread across the world, to ensure that taxpayers' investments in infrastructure actually lead to development dividends for all citizens.

The successful development and implementation of the Clean Construction System in one of the world's megacities demonstrate that it is indeed possible to strengthen transparency and accountability in the public as well as the private sector in infrastructure development.

The workshop is organized as part of the UNDP Seoul Policy Centre's Development Solutions Partnership on anti-corruption. The Development Solutions Partnerships is our approach to connect Korea with the wider UNDP network as a knowledge broker and facilitator and contribute to the enhancement of the Korea-UNDP partnership on strategic development issues.

The Clean Construction System was presented at the 2015 Seoul Debates meeting on anti-corruption on 29-30 January, as one of several Korean initiatives. Participants expressed great interest in learning more about the system. Since then, the Centre has been working with the city of Seoul to prepare for more in-depth sharing of the system.

The workshop is one of the milestones of these efforts. It brings Seoul city officials together with over 70 overseas participants from 20 countries, as well as 30 other participants from Korea.

We are honoured to have you here and grateful that you will share your expertise and experiences on enhancing transparency in the public construction sector.

I also hope that the workshop handbook we have produced with a "policy toolbox" section which summarizes Korea's key policy initiatives will serve as your reference and facilitate further knowledge sharing.

In closing, I would like to thank Honourable Mayor Won Son Park, as well as UNDP's main counterpart in Korea, the Ministry of Foreign Affairs for supporting this event. I would also like to acknowledge and sincerely thank my staff at the Centre, as well as the officials in the Seoul Metropolitan Infrastructure Headquarters, who have worked tirelessly for the past months to enable this meeting.

Equally important, I want to take this opportunity to wish you all a pleasant and memorable stay in Seoul.

Thank you.

Congratulatory Speech

Mr. Jae-wan Lee

Deputy Director-General, Development Cooperation Bureau, Ministry of
Foreign Affairs (MOFA), Republic of Korea

Honourable Mayor, Mr. Won Soon Park,

Ms. Anne Marie Sloth Carlsen, Director of UNDP Seoul Policy Centre,

Mr. Patrick Keuleers, Director of Profession, Governance and Peacebuilding, UNDP,

Mr. Petter Matthews, Director of the Construction Sector Transparency Initiative,

Excellencies, Distinguished guests, and Ladies and Gentlemen,

It is my great pleasure to welcome you all to today's meaningful workshop. On behalf of the Ministry of Foreign Affairs (MOFA), I would like to express my gratitude to the Seoul Metropolitan Government and the UNDP Seoul Policy Centre for partnering with my Ministry in this auspicious meeting. I would also like to extend my special thanks to all the distinguished guests to attend this workshop. Korea values and honors the partnership with each of the countries represented here, and I admire the participants' strong commitment to promoting transparency and accountability in the public construction sector.

Taking this opportunity, I recognize and appreciate the leadership of Mayor Park in propelling institutional innovations and strengthening the business culture of openness and transparency in the public construction sector. I am delighted that Seoul's exemplary efforts and concrete tools can be shared with the world through this workshop.

Korea's Development Cooperation and MOFA's Partnership with the UNDP

MOFA's close partnership with the UNDP holds great historical significance. For more than 40 years, the UNDP has supported the people and Government of Korea. The UNDP closed its Country Office in 2009, as Korea joined the OECD Development Assistance Committee (DAC), affirming its status as a significant contributor of development aid.

Since joining the OECD DAC, Korea began to align its development cooperation governance with global standards, and has played a leading role of facilitating various international discussions for effective development cooperation, with increasing overseas development assistance. Our development cooperation efforts reflect Korea's genuine desire to give back to the international community out of our own history of rising from the ashes of the Korean War and becoming a donor country.

In this context, the Ministry of Foreign Affairs has been supporting the UNDP Seoul Policy Centre since 2011, with the objective of brokering new partnerships between Korea and the developing world through UNDP networks.

With this international workshop fulfilling this objective, it is truly a delight to see almost 20 countries being represented here today by senior government partners, UNDP practitioners, and international experts, along with Korean policy makers and experts.

Importance of the Development Solutions Partnerships

This meeting is part of the Development Solutions Partnerships that my Ministry is supporting through the UNDP Seoul Policy Centre. The Development Solutions Partnerships are surely innovative and promising channels of the UNDP's growing teamwork with Korea. I congratulate the UNDP for successfully forging this meaningful partnership with the Seoul Metropolitan City in the public construction sector.

Beyond this meeting, I hope that development solutions partnerships will multiply in number, leading to distinctive, concrete and sustainable results in developing countries with the support of the Korean Government.

2030 Agenda and Korea's Development Cooperation

As you may be aware, the 2030 Sustainable Development Agenda, with 17 sustainable development goals (SDGs), was adopted in New York last September. Korea is fully committed to this Agenda. It stresses, among others, the importance of building resilient infrastructures, fostering innovations, and building effective, accountable institutions at all levels, all of which are related to the topic of our workshop today. Korea will strive to implement the SDGs at home, and also help other countries meet their goals through effective development cooperation.

Concluding Remarks

To conclude, I hope this workshop will provide a valuable opportunity to broaden and enrich our perspectives on the public construction sector transparency, taking Korea's experience as a reference point and inspiration. Certainly, the invaluable dialogue will help us identify new strategic opportunities for Korea's development cooperation in this area.

I wish you all a successful meeting, as well as a pleasant stay in Seoul. Thank you.

Opening Remarks

Patrick Keuleers

Director/Chief of Profession, Governance and Peacebuilding, Bureau for Policy and Programme Support (BPPS), United Nations Development Programme (UNDP) Headquarters in New York

Honourable Mayor of Seoul, Mr. Won Soon Park,

Ms. Anne Marie Sloth Carlsen, Director of UNDP Seoul Policy Centre for Global Development Partnerships,

Mr. Jae-wan Lee, Ministry of Foreign Affairs, Republic of Korea,

Mr. Petter Matthews, Director of the Public Sector Transparency Initiative International Secretariat,

Excellencies, Distinguished guests, Ladies and Gentlemen,

First of all, I would like to thank Honourable Mr. Won Soon Park, Mayor of Seoul, for his generosity to host this international workshop at this great venue, inside the City Hall.

I would also like to congratulate the Seoul Metropolitan Government and the Korean Ministry of Foreign Affairs for organising this event in partnership with UNDP.

The participation of more than 70 government officials, NGO representatives, and other experts testifies of the world's interest in Korea's development experiences and in the many good practices with regard to transparent and accountable government, including the clean construction systems of the Seoul Metropolitan government.

Before I elaborate on the issue of transparency and accountability in public infrastructure, allow me first to acknowledge UNDP's evolving partnership with the Republic of Korea.

For more than 40 years, between 1966 and 2009, UNDP supported Korea's development, providing over 100 million USD in development assistance and delivering more than 270 projects in support of Korea's transition from an agrarian to an industrial nation.

UNDP assistance included the training of civil servants and supporting the Government's efforts to modernize the Port of Busan, now the world's fifth largest port. UNDP also supported the establishment of research and technology institutes that played critical roles in boosting economic growth, policy making and the emergence of key industries.

In close partnership with Korean institutions, UNDP helped build Korea's capacity in a wide range of areas from forest management, to urban and regional planning, to shipbuilding welding & fabrication, to pollution control, and to the development of Korea's tourism industry, among others.

UNDP closed its Country Office in 2009 when Korea joined the Development Assistance Committee of the Organization for Economic Co-operation and Development (OECD), affirming its status as a developed economy and a donor country. And in 2011, the UNDP Seoul Policy Centre for Global Development Partnerships was established, with the objective of brokering solutions exchanges between Korea and developing countries through UNDP's global networks.

Today's event shows Korea's commitment to assist other countries in their development trajectory by transferring its experiences and good practices.

The Republic of Korea's development trajectory has been remarkable. In less than sixty years, a country devastated by civil war transformed into one of the world's most developed nations. This is a success story that many developing countries are eager to learn from.

UNDP is proud to be part of this partnership and will continue to work together with the Republic of Korea to support the strengthening of public institutions at all levels of government and to share relevant experiences between countries from north and south.

We believe that an efficient, responsive, transparent and accountable public administration is not only of paramount importance for the proper functioning of a nation; it is also the basic means to achieve sustainable human development.

UNDP also works closely with local governments to enhance their capacities for delivering public services, investing in and steering local development, promoting social cohesion and preserving peace. UNDP therefore sees local governments as key actors for achieving the 2030 sustainable development agenda including the goal on sustainable cities.

This international workshop on promoting clean construction comes timely as it takes place right after the adoption of the 2030 agenda for Sustainable Development by the world leaders in New York in September earlier this year.

The new SDGs, with 17 Goals and 169 targets, are universally applicable and far more ambitious than the MDGs. There are goals and targets which relate to poverty, peace, justice and effective institutions, economic growth, urbanisation, infrastructure, energy, and strengthening capacities to promote trade and investment.

Goal 16 in particular breaks new ground as it commits Member States to "promote peaceful and inclusive societies, provide access to justice for all, and build effective and inclusive institutions at all levels". Goal 16 includes a few targets that specifically focus on the curbing of bribery and corruption, the promotion of the rule of law, the development of accountable and transparent institutions and securing access to public information.

To realize the entire 2030 sustainable development agenda, there are two key areas, where significant progress will be needed.

First, major new investments are needed in the infrastructure sector, creating jobs and laying the physical foundations for long-term growth.

Although SDG 9 on resilient infrastructure is the most direct call for increased investment in the sector, infrastructure development also plays an important role in achieving many of the other SDGs such as education, health, water, poverty reduction, and climate change.

According to the OECD, emerging economies alone will require USD 22 trillion of investments in infrastructure over the next 10 years, hence requiring important public and private domestic and foreign funding streams.

Second, improving infrastructure also means that there is a need to improve the governance of the construction sector. Governance failures such as the prevalence of high levels of corruption can lead to the wrong decisions on the kind of infrastructure needed, excessive high prices being paid for construction design and implementation or result in poor quality of construction materials, which can result in disasters and loss of human lives.

According to the Global Forecast for the Construction Industry 2030 report, the value of global construction is expected to grow to USD 15 trillion worldwide by 2025. Transparency International warns however that if not managed carefully, up to one third of this investment could be lost to corruption and mismanagement.

Accountability and integrity measures and improved oversight over the construction sector will thus be of critical importance in order to significantly improve development outcomes overall.

Many countries are now opting for open contracting modalities, including a third party assessment or strengthening the role of civil society in monitoring the contracting processes. Publishing of contract details is now an emerging trend aiming to improve transparency and oversight in public procurement.

In this particular sector, Korea has very rich experiences and good practices to share. For example, the Clean Construction System (CCS) of the Seoul Metropolitan Government which includes two e-governance tools namely the “Open Data System” and the “Subcontractor Payment System” has led to transparent management, improved efficiency and effectiveness, and citizens’ access to information in the public infrastructure sector, which was previously considered one of the most corruption-prone sectors in the country.

By investing in E-procurement, Korea further improved transparency in the contracting processes.

UNDP is one of the major providers of policy and programme support on anti-corruption around the world. In 2014 alone, more than 82 UNDP Country Offices have supported governments and national stakeholders to ingrate transparency, accountability and anti-corruption components in their national development plans and programmes.

We strongly believe that clean construction is of paramount importance for the implementation of the 2030 development agenda and in particular also for achieving Goal 16 on building peaceful, just and inclusive societies.

It will indeed not be possible to have peaceful, just and inclusive societies when corruption continues to deprive many people in society of important development dividends, thereby denying justice, services and security to the majority of the people.

Similarly, clean construction will significantly contribute to the progress on the other goals that rely heavily on infrastructure investments such as health, education, energy, water and sanitation, climate change.

There is indeed overwhelming evidence that quality infrastructure is positively related to human development. Yet, the quality of basic infrastructure remains a challenge in many developing economies, due to the endemic corruption that continues to undermine the development potential of these countries. Approaches like Seoul's Clean Construction System are therefore needed to ensure that investments in infrastructure actually provide development dividends for all people and communities.

In light of these challenges, I believe that this workshop holds a great potential, not only to help us find practical means to enhance transparency in the public construction sector, but also to facilitate our journey in achieving the entire 2030 agenda.

Seoul's first-hand experiences with the creation and implementation of the CCS will provide critical insights to countries seeking to develop their own solutions for enhancing transparency and accountability in the public construction sector.

I also hope that this workshop will be the beginning of many more exchanges and a deepened engagement between UNDP, Korea and partner countries represented here. UNDP is pleased to continue this collaboration with Korea and with the Seoul Metropolitan Government in particular.

I thank you for your attention and look forward to pleasant, dynamic and inspiring discussions for the next three days.

Policy Toolbox: Summary of Korea's Policy Initiatives



I. The Clean Construction System (CCS) of the Seoul Metropolitan Government

The Anti-Corruption Clean Construction System (CCS) is an effective tool to tackle corruption and increase citizen participation in the administration process, and SMG will continue to make efforts to build a more open, clean, and innovative administration.

1. Four Components of the Clean Construction System (CCS)

- **One-PMIS (Project Management Information System)** One-PMIS has enabled real-time information sharing. It has also enhanced efficiency and cost-saving with e-documentation by reducing burdens of document storage and search processes. Utilizing One-PMIS, various stakeholders in the public construction projects can now interact with real-time information in each stage of the project from planning to engineering and construction.
- **Construction Informer (“Allimi” in Korean)** Linked to One-PMIS, the Allimi website discloses work summary, contract status, photographs of the work progress, and contractor information which are citizen related construction information. Much of the information registered in the One-PMIS is automatically transferred to the Allimi website.
- **Subcontract Payment Monitoring System (sPMS or “Daegeum E-Baro” in Korean)** sPMS has created a direct payment system to protect subcontractors suffering from overdue wage payments. Payments are made directly from the developer to the general contractor's, to subcontractor's, and to construction worker's accounts, separately, instead of through a chain of payments made from the developer all the way down to the construction workers via the general contractor and subcontractors.
- **Electronic Human Resources Management System for Construction Workers (E-HRM)** E-HRM utilizes a Radio Frequency Identification (RFID)-based employee clock in/clock out management system, and a personal bank-affiliated electromagnetic ID card (with credit or debit card function) issued to construction workers. The E-HRM records construction worker banking information on the E-HRM server which is then transmitted to One-PMIS. The system benefited construction workers by providing a tool to keep track of their severance grants, while providing more systematic human resources management for SMG.

2. Success Factors

- Development of new systems and smartphone applications to enhance accessibility to citizens and to receive their questions & feedback was crucial in improving SMG's administration processes.
- Mayor's strong leadership to tackle corruption and the overall institutional culture for openness and transparency provided an enabling environment.
- Cooperative relations with international organizations and construction workers unions and applying stakeholders' opinions in the implementation have led to successful adoption and utilization of the system
- Creative and effective utilization of advanced IT technology has contributed to the development and operation of CCS.

II. Information Disclosure Systems in Korea and Lessons Learnt

1. Instruments for Public Information Disclosure in Korea

- **National Law on Information Disclosure**

The Information Disclosure Act (1998) brings about a unified system to cover all information disclosure requests for public organizations.

- **Information Exchange Plaza @ opengov.seoul.go.kr**

Draft documents produced by Seoul city officials are automatically uploaded on the website and open to the public within days *without any need for special requests*. Also readily available are information on construction and civil engineering projects.

- **Information Disclosure Deliberation Committee**

The Committee, whose members consist of outside experts, is established within all government agencies to deliberate the legitimacy of any agency's decision to deny an information disclosure request.

- **Clean Budget @ cleanplus.seoul.go.kr**

The website is linked to Seoul Metropolitan Government (SMG)'s budget system to provide information on where and how the city's funds are used in public construction projects, including all relevant information such as the contracted amount, period and the official in charge for each project.

- **Construction Notifier @ cis.seoul.go.kr**

This website provides real-time disclosure of information on construction projects carried out by SMG by using geographical information systems and web camera feeds.

- **Policy Research Information Service & Management (PRISM) @ prism.go.kr**

PRISM is a shared (national) database and efficient management system for policy research projects conducted by central government branches and local governments. Also published on the website are final reports of contract-based research projects in construction and civil engineering.

2. Factors underlying the Development of Korea's Information Disclosure Systems

- Civil society's continued disclosure requests
- Establishment of an open, active and easily accessible Information Disclosure System

3. Lessons learnt

- Developing a legal basis through legislations for information disclosure is crucial.
- Government's cooperation with civil society for continued monitoring and campaign efforts is necessary to expand the reach of the information disclosure policy and to convince the industry of the need for information disclosure.
- Large financial allocation is required for the operation of disclosure systems, which should be viewed as an investment for a more transparent and responsible administration.
- Ongoing 'information disclosure mindset' training program for government officials is key.
- Transparent information disclosure reduces the likelihood and cost of social conflict.

III: Seoul Metropolitan Government's Anti-Corruption Initiatives

1. Integrity Pact & Citizen Inspection Ombudsman

- SMG's Integrity Pact constitutes an agreement against corruption between administrative offices and their subcontractors who bid for contracts and purchase supplies. Violation of the pact leads to cancellation of contracts with punitive measures.
- The 'Citizen Inspection Ombudsman (CIO)' verifies and evaluates the implementation of the Integrity Pact. Up to 7 citizens serve as a direct observer of the bidding process and conduct construction site visits for direct monitoring.

2. Post-Employment Restrictions for Public Officials

- Korea's Public Service Ethics Act restricts the post-employment of retired public officials. Seoul Metropolitan Government (SMG) established its own criteria for restricted public officials, as well as a guideline for retired SMG public officials.
- Restrictions apply to every SMG officer in Grade 4 or higher; as well as grade 7 or higher level officials who worked in *specific sectors* such as construction, civil engineering, environment and taxation among others.
- Any officials under this category may not be employed, within 3 years after retirement, under the following restricted enterprises (institutions): Profit-making private enterprise with over 1 billion KRW capital, over 10 billion KRW apparent transactions; social welfare corporations with over 10 billion KRW basic assets; and public related organizations that perform safety inspections, authorization/permission or procurement.

3. 'One-Strike-Out System' against bribery

- SMG strengthened the existing 'One-Strike-Out System' and enhanced the level of penalties. Public officials who receive even small amount (less than 1,000 KRW) of bribe are to be punished. For those who received more than 1 million KRW, or actively asked for bribes, the minimum penalty will be dismissal from office.

4. Operation of 'Anti-Corruption Hotline'

- SMG established a "hotline" to integrate several existing corruption reporting channels into one. SMG maintained 2 previous channels, 'Report on corruption of public officials', and whistleblowing while newly establishing 3 channels: 1) 'Report on illicit behavior of "Gab" (meaning those with power/advantage in Korean)'; 2) 'Report on illegal solicitation'; and 3) 'Report on favors provided to retired public officials'.

5. Reporting Center for Construction Subcontractors & the Subcontractor Tribune

- The Reporting Center for Construction Subcontractors receives reports, investigates, and exposes illegal subcontracting activities and issue punitive administrative measures under the 'Framework Act on the Construction Industry'.
- The Subcontractor Tribune provides consulting services and remedies to subcontractors. The Tribune also engages in monitoring and inspection activities, analyzes subcontracting problems and provides suggestions to SMG for policy improvements.

IV: Korea's National Anti-Corruption Policies and Tools

1. Integrity Assessment

The 'Integrity Assessment' is conducted annually by the Anti-Corruption & Civil Rights Commission (ACRC) to assess the integrity level of 640 public organizations to identify corruption-prone areas and causes of corruption, based on a survey of more than 250,000 citizens who experienced public services along with public officials and experts. Assessment results are announced to the public.

2. Anti-Corruption Initiative Assessment

ACRC's annual 'Anti-Corruption Initiative Assessment' evaluates the adequacy and effectiveness of anti-corruption initiatives of public sector organizations to encourage improvements in anti-corruption efforts, as well as to share anti-corruption best practices.

3. Corruption Impact Assessment

When Korean laws are drafted or revised, every administrative agency must request the 'Corruption Impact Assessment' by ACRC to review whether the bill contain arbitrary standards, factors hindering fair competition, or excessive discretion of public officials. The administrative agency should then reflect ACRC's recommendation into the law draft. No laws can be exempted.

4. Institutionalized Anti-Corruption Training

The 'Anti-Corruption Training Institute' provides integrity training courses for public officials, such as how to deal with ethical dilemmas they might face on duty.

5. Code of Conduct for Public Officials (CCPO)

Enacted as a Presidential Decree, CCPO provides a set of ethical standards public officials, employees of public companies and public service agencies should comply with while performing their duties. Since 2005, CCPO has been applied to all public officials, as well as to the employees of all public companies and public service agencies in Korea. In November 2010, the Code of Conduct for Local Council Members was also enacted as a Presidential Decree.

6. Protection and Rewards for Whistleblowers

Korea's Anti-Corruption Act includes a series of reward systems and protective measures for whistleblowers who report on corruption in the public sector. It is prohibited to disclose and report a whistleblower's identity without his or her consent. If a case of whistleblowing results in the recovery or increase of revenues in a public organization, up to KRW 3 billion or 2 billion may be rewarded for corruption and public interest whistleblowing cases respectively.

7. Enactment of the Improper Solicitation and Graft Act (2015)

The Act stipulates 15 types of improper solicitations in detail and addresses punishment on both public officials and private persons including legal persons for accepting or offering money or other valuables, regardless of whether such an offer is given in connection with the public officials' duties or in exchange for any favors. If a public official receives money or other valuables in excess of 1 million won (\$1,000), he or she will be punished by an imprisonment for not exceeding three years or by a fine not exceeding 30 million won (\$30,000). The punishment is the same in the case of his/her spouse committing the offence.

V: Korea's ON-line E-Procurement System (KONEPS)

1. System Development

- Procurement Electronic Data Interchange (EDI) was developed by the Korea's Public Procurement Service (PPS) over three years from 1996 to 1999, EDI facilitated procurement related information sharing between PPS departments, business firms and public buyers. EDI was later introduced and adopted by all public institutions.
- Korea ON-line E-Procurement System (KONEPS) was developed by PPS and launched in 2002 as a means to combine and consolidate all national procurement platforms into a single, all-inclusive window. This was done to simplify the process for users.

2. Key Functions and Characteristics of KONEPS

- KONEPS allows bidders to register on a single platform which displays and handles tender information for all public institutions, greatly simplifying the bidding process.
- Competitive bidding opportunities, as well as micro-purchases subject to private contracts are increasingly advertised online thanks to the convenience of e-Bidding.
- As bid results are opened online on a real time basis, there is no room for public officials to make arbitrary decisions.
- The system completely eliminates the need for submission of paper documents, and reduces payment lead time by allowing tasks to be processed in one system.
- The 'On-line Shopping Mall' system included in KONEPS allows for procuring entities to browse, order and pay for products through a comprehensive online catalogue.
- KONEPS was adapted for mobile use in 2008 in order to continue providing a convenient user experience.
- KONEPS provides an extremely secure system for users through multiple anti-intrusion measures and data safeguards.

3. Outcome of KONEPS implementation

- KONEPS has enhanced the overall efficiency of the procurement administration. There are also economic costs saved by operating this e-Procurement system. PPS has reorganized the procurement service by converting it into an e-commerce base and is expected to save US\$ 8 billion every year.
- Nation-wide use of KONEPS has led to efficient disclosure of information and overall reduction of avenues for corruption and abuse, dramatically enhancing the transparency of the public procurement process in Korea.
- Access to information is facilitated on all fronts, and the paperwork required to run the procurement system has been massively reduced.
- In addition, KONEPS has stimulated the development of e-Commerce in the private sector, as the mind-set for e-Commerce has expanded based on accumulated experiences of online transactions with KONEPS. This has played a prominent role in narrowing the digital divide for 110,000 businesses, most of which are small sized.

4. Global Cooperation in e-Procurement

- E-Procurement system projects that benchmarked KONEPS successfully developed in Costa Rica, Mongolia, Tunisia, Cameroon and Viet Nam.

VI. The Seoul Metropolitan Government's Project Management Information System (One-PMIS) for a Clean Construction Administration

1. Overview of One-PMIS

- Developed by SMG, One-PMIS is an internet-based electronic integrated management system where real-time information of public construction projects are collected and stored, in order to eliminate corrupt practices in the construction industry.
- The system facilitates the analysis, evaluation and control of various construction projects by managing information produced throughout the project life cycle - planning/surveying, engineering, construction and closure.

2. Components of One-PMIS

- **Standard classification system:** assigns unique codes to all information categories that forms the basis of any construction information system.
- **Project management system:** includes project overview, schedule management, reporting system between developers and contractors, and safety management.
- **Electronic document exchange system:** establishes a more efficient and timely work process by allowing online transmission of documents in digital format between SMG and project contractors, including an online approval system between the contractor and subcontractors.
- **Construction Informer ("Allimi"):** Information stored in One-PMIS is then made available to the public on SMG's "Allimi" website.

3. Key Features of One-PMIS

- **Construction Report Management:** Daily, weekly and monthly reports are uploaded and shared on One-PMIS.
- **Web Camera Installation:** Construction site web camera images are transferred to One-PMIS. This allows stakeholders to conduct real-time monitoring in the office without actual site visits.
- **Safety e-TV:** This feature in One-PMIS provides information for safety awareness and risk prevention, along with crisis response instructions for emergency scenarios.
- **Document and Blueprint Storage & Management System:** All documents/blueprints of construction projects are uploaded in the One-PMIS for storage and sharing among relevant stakeholders. (Construction documents produced prior to the adoption of One-PMIS were also scanned and stored in digital format.)
- **Integrated Safety Inspection Management System:** It allows reports on safety inspection of project sites and follow-up actions to be directly filed online and shared with all through an on-line system (including penalties imposed and corrective actions undertaken). Accumulated over time, it also serves as a depository of safety-related information of Seoul's construction projects for policy making and monitoring.
- **Soil Bank System:** The system provides information on the optimal allocation of soil quantity required for various construction, and allows the constructors to ensure necessary quantities of soil is delivered to the project sites. As such, it minimizes soil waste, reduces unnecessary buying costs, and expedites the construction process by

preventing schedule delays that might otherwise occur with soil transportation, particularly in the case of landfill construction projects.

- **Project Portfolio Management System:** It shows the project portfolio (overview information) of each industry, contractor, and expert that are involved in SMG's construction projects. This feature also provides records of construction workers penalized for the violation of safety protocols.

4. Features of the Construction Informer ("Allimi")

- It discloses information stored in One-PMIS and allows citizens to make searches and access the information, such as scheduling information, contracts, status of work progress, and budgets.
- Citizens are also able to utilize the "Ask the Assistant Mayor" section of the Construction Informer website to provide feedback regarding construction work performed in the city.

5. System Training and Maintenance

- SMG provides practical user-training for One-PMIS on a monthly basis. Special training programs are also offered whenever there are modifications made in the system.
- Since continued maintenance is crucial, SMG's operation support team provides users with a call center, remote support services, as well as an online manual service.

6. Benefits of One-PMIS Adoption

- **Increased efficiency and transparency in construction administration**

Through an electronic information system that is open to all stakeholders, including the public, One-PMIS contributes to the reduction of fraudulent practices in construction administration. A comprehensive information management system also reduces work schedule times and project costs.

- **Consistency and speed in work process**

Work duplication is reduced with a unified information management system based on a standard classification system. A paper-less information exchange, automatized work process and readily available project information also reduces administrative costs and improves efficiency. Furthermore, process integration is achieved, as the system is linked up to other relevant information networks such as the electronic-procurement system.

- **Enhanced organization's competitive advantage in project management**

As a tool for information sharing and exchange, One-PMIS maximizes the organization's processing competency in construction projects through an IT infrastructure networked with related organizations and other information systems. Many functions for sharing and exchange also improve the quality of the organization's customer services, allowing it to better meet the challenge of growing international competition in the industry.

7. Lessons Learnt for Other Countries

- Real-time information sharing among stakeholders to provide cross-checking is an effective measure to tackle corruption.
- Minimizing unnecessary personal contacts prevents inappropriate relationships built between the developer and the supervisor/contractors.

- Disclosing information to civil society enhances the community's monitoring and builds a culture of accountability and transparency in the construction administration.
- Policy decision-maker's strong will to tackle corruption determines the organization's willingness to adapt to the new system, and ensures the system implementation among relevant stakeholders.
- Dedicated system development/operation team positioned on the top of the organizational chain of command is required for effective implementation of the system. For instance, the task can be assigned to the organization's audit and inspection team, management and planning division that deals with the demands of the CEO, or even to the financial division that oversees the budget.
- Identification of country-specific corruption patterns, along with systematization and standardization of anti-corruption tools, such as One-PMIS, are necessary.
- Efficient operation/data management is required for the sustainability of the system.
- Prioritize and develop those functions that are most in demand, based on stakeholder feedback and requests received during the system adoption period.

VII: Subcontract Payment Monitoring System (sPMS or “Daegeum E-Baro” in Korean)

1. Background Information on the Construction Industry in Korea

- Public construction projects in Korea are either directly managed by the developing authorities or delegated to general contractors. In large-scale projects, general contractors employ multiple subcontractors, creating a payment chain structure all the way down to suppliers.
- This system can lead to delays and defaulting on payments to contractors lower in the supply chain. lead to a variety of problems such as overdue payments due to contractors going bankrupt, which

2. Overview of SMG’s sPMS

- It was created by the Seoul Metropolitan Government (SMG) to ensure that construction workers and other subcontractors reliably receive their wages and payments.
- It divides the total cost of construction projects and ensures that project costs paid by SMG to major contractors are transferred to subcontractors through a secure account from which other withdrawals are disabled.
- This payment method prevents other contractors from appropriating payments meant for subcontractors lower in the supply chain and reduces payment delays.

3. Adoption Process and Success Factors

- The system was first developed in 2011 but was initially unpopular since it required training and extra work to utilize. Despite monthly training programs, usage of the system remained low until 2013, when SMG enacted a city ordinance requiring the use of SPMS in the payment of city commissioned construction work contracts that last over 30 days.
- SMG convinced contractors to adopt the system by marketing it as a way to reduce the worker strikes from delayed payments, which lower the chances of construction work being delayed or halted. This allows contractors to keep a reliable work schedule.

4. Success Factors and Results

- The success of sPMS was made possible by a combination of SMG’s unwavering political will to implement the system and close cooperation with private program developers.
- The system has been benchmarked by several government agencies and has served as a model to several sister systems, such as “Clean Pay”.
- About 90 percent of users surveyed about the system reported that it was effective in reducing payment delays.
- The system was recognized in 2013 by the United Nations and won the 1st prize at the Korea IT Innovation Awards in the same year.
- A national law requiring all government entities adopt subcontractor payment monitoring systems, like that of SMG, is being deliberated and expected to pass in late December 2015.

5. Avenues for Improvement

- Based on users’ request, SMG is planning to undertake more promotion, expansion of the sPMS user training program and call center, while also improving an improved User Interface and simplifying functions.

VIII. Seoul's Electronic Human Resources Management System for Construction Workers (E-HRM) to Achieve Anti-Corruption at Construction Sites

1. Rationale: Background for the System Development

- In Korea, construction workers are paid on a work-day basis and their severance grants are evaluated and paid through the Construction Workers Mutual Aid Association (CWMA), a central government agency.
- Written recording of the hours worked by construction workers was often inaccurately done. Employers were often suspected of falsifying work records or not reporting severance payments made to construction workers.

2. Functions of E-HRM

- The Seoul Metropolitan Government (SMG) and CWMA worked together to adopt the Electronic Human Resources Management System for Construction Workers (E-HRM) in order to ensure accurate work records are registered.
- E-HRM combines the use of an RFID-based time management system and electromagnetic, bank-affiliated ID cards issued to construction workers (which can be credit or debit cards). Bank-associated cards reduce the chance of the card being lost or misused.
- To increase the bank card ownership rate further, a debit card option (as opposed to a credit card option) was provided to construction workers with poor credit ratings.
- Employees simply swipe their cards when starting and finishing work. Their work clock information is then uploaded to a database.
- The database is linked up with SMG's construction management information system (One-PMIS) for easy access and monitoring.

3. Expected Outcome of E-HRM

- The system is expected to greatly simplify the task of calculating workers' severance grants.
- The system can also help prevent the misreporting of laborers' work hours by employers.
- For further improvement, SMG is currently preparing a project linking E-HRM with its Subcontract Payment Monitoring System (sPMS). This will allow SMG to crosscheck labor cost payment requests with the work record database.

4. Success Factors

- Close collaboration between the central government agency and SMG has been crucial.
- Construction workers are motivated by the ability to secure their severance grants.
- Work record management creates a motivation for contractors to adopt the system.

5. Benchmarking Potential of E-HRM

- RFID technology is commonly used worldwide; adoption of the system is possible just with simple debit cards.
- The system could also be easily deployed in any country with an Internet network since the card time recordings are transmitted to the system server through cable Internet.
- Thus, not many countries are likely to face technical barriers that would prevent the implementation of such a system. However, cultural improvements and government policies will be necessary for the success of E-HRM.

IX: Specialty Construction Companies' Usage of Subcontract Payment Systems in Korea

1. Rationale: Background for the System Development

- **Low utilization rates of the Central Government's Subcontractor Payment System**
Korea's Public Procurement Service has been operating the 'Subcontract Protector' system to manage subcontractor payments. In the first half of 2014, 0.2% of total constructions registered in Korea Online E-Procurement System (KONEPS) utilized the 'Subcontract Protector' which was 0.6% in the second half. First half of this year so far, the utilization of the system accounts for 0.9%, which rose by 0.3%p but which is still less than 1%.

2. Seoul Metropolitan Government's Subcontractor Payment Monitoring System (sPMS)

- Utilization of SMG's own subcontractor payment system has reached a stabilizing status.
- 865 constructions which is worth 998 billion 348 million KRW (approx. 862 million USD) utilized "SMG's Subcontractor Payment System" at the end of June 2015. This account for 88% of SMG's entire construction, and 97% of entire price of supply, which are 980 cases, 1029 billion 309 million KRW (approx. 887 million USD).
- After interviewing special contractor practitioners in Seoul, simplifying procedures (i.e. reducing paperwork) was identified as key in achieving efficiency in the subcontractor payment system. Subcontractor payment system enabled online-payment of subcontracts and real-time verification of the payment, which made it possible to monitor whether the subcontract payment was made according to the schedule. Practitioners reported that they did not face difficulties in utilizing the system.

3. Private Enterprise's Subcontractor Payment System

- Some of the bigger construction enterprises partially establish and utilize their own payment monitoring systems.
- This private subcontractor payment system is more user-friendly, and shows high compatibility with Microsoft programs, which simplify data uploading and data revision.
- However, there are potential legal issues of 'private information protection' since the workers need to upload private information in the system, and the system safety itself is also questionable.
- Another challenge exists with system users' fee. During the wage transaction, subcontractor payment system will issue a 'commission' for every worker which puts economic burdens on the special contractors.

4. Conclusion

- Special contractors may prefer the government subcontractor system over the private subcontractor payment system which incurs higher user costs.
- In the case of Central government (Public Procurement Service)'s subcontractor system, it needs persistent maintenance and management to resolve systematic errors or data compatibility issues that the system faced in the early stages
- In the case of SMG's subcontractor payment system, the system may be improved by providing notification features to accurately relay subcontract payment schedules, and provide efficient file uploading to reduce redundant data input.

Part I. Korea's Experiences and Lessons Learnt in Promoting Public Construction Transparency

- Overview of the Clean Construction System
- Enabling Environment for Clean Construction System: Korea's Policies and Institutional Tools for Information Disclosure, Anti-Corruption, and E-Procurement
- SMG's One-Project Management Information System and the Construction Informer ("Allimi")
- SMG's Sub-Contractor Payment System and Electronic Human Resources Management System for Construction Workers

Overview of the Clean Construction System



Anti-Corruption Clean Construction System (CCS)

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I. Republic of Korea Overview

Even a first-time visitor to Seoul can move around the city with ease using its subway system. Looking at the city's endless blocks of buildings and traffic, and experiencing the high speed of its broadband network will make you feel like you are in one of the most advanced countries in the world.

This modern cityscape was unimaginable 70 years ago. The Republic of Korea had half of the country destroyed and about 2 million people killed during the Korean War that broke out on June 25, 1945. Fifty years ago, South Korea was a war-torn nation desperately in need of overseas assistance with little food and shelter to provide its people.

Despite the devastation, the entire nation came together to rebuild the country. Rapid advances were made in the country's infrastructure with the construction of new roads, bridges, and industrial facilities. Once an aid-recipient, the country successfully reinvented itself, successfully hosting the 1988 Seoul Olympic Games about 30 years ago, and is now providing assistance to other countries in need. The transformation achieved in just half a decade was so profound that people named it 'the miracle on the Han River.'

II. Anti-Corruption Clean Construction System (CCS): Development Background

The growth-centered construction boom came with a few problems of its own. Shoddy construction practices and the absence of a sound maintenance system resulted in the collapse of the Seongsu Bridge in Seoul in 1994 that took the lives of about 50 people. A year later, in 1995, illegal land use alteration and building extension caused the Sampoong Department Store to collapse, causing more than 1,500 casualties. The disasters highlighted the importance of a robust maintenance and repair system, resulting in the enactment of the Special Act on the Safety Control of Public Structures and the establishment of the Korea Infrastructure Safety Corporation, which conducts safety inspections on decrepit facilities and the repair and reinforcement work on those not meeting safety standards.

Any collapse causes irreparable damage to both the asset and the human lives involved. The Seoul Metropolitan Government (SMG) has been trying to find an effective way to prevent the practice of shoddy construction work in the industry. As a result, SMG came up with a measure that would infuse the country's advanced IT industry innovations into the construction process. All construction work processes will be managed, operated, and opened to the public through a series of interlinked systems.

The Anti-Corruption Clean Construction System (CCS) first adopted in 2012 consists of One-PMIS (construction project management and operation), Construction Informer (disclosure of information on construction projects)⁴, Daegeum E-Baro (labor payments), and E-HRM (construction work force management and benefit services).

III. Introduction: Anti-Corruption Clean Construction System (CCS)

1. One-PMIS (Project Management Information System)

The old system required people to visit the related offices in person in order to obtain information on the state of the construction processes and new project contracts, and the agencies needed a dedicated storage space for managing the archive of documents and as-built blueprints. Searching through the archive for older documents was time-consuming and there was always the possibility of missing documents. As recently as five years ago, efficient project management was something hard to achieve.

The situation has changed with the various aspects of a project managed under the single system of One-PMIS. The new system enables officials to take the necessary measures to deal with work delays as they occur by sharing in real-time information related to each stage of the project from planning to engineering and construction. All participants of a given construction project are now given a tool that effectively connects them with the others. Also, e-documentation has brought efficiency to the document storage and search processes.

With the added features of Safety E-TV and construction machinery management, One-PMIS is now one of the most indispensable tools used at construction sites to prevent safety hazards.

2. Construction Informer

Why is construction work being carried out in front of our house? When will it end? These are common questions an average city dweller might ask. The Construction Informer system is the tool to answers all your questions.

The construction information registered in One-PMIS is displayed in real-time on the Construction Informer website. Related information including the work summary, contract status, photographs of the work progress, and contractor information can be searched by entering the name of the specific construction work in the search window or simply clicking on the map. To increase citizen participation, new features such as pages for site tour requests and feedback entry ('Ask the Director') were added and process results can be verified via smartphone.

⁴ A system to notify citizens of information regarding the city's construction projects
International Workshop
for Public Construction Transparency
UNDP Seoul Policy Centre

3. Daegeum E-Baro

Overdue wage payment is an entrenched problem the country has been facing. You might ask, “Why is this happening?” The answer lies in the country's unique wage system structure. In most cases, the contract for a large-scale construction project is offered by the central government or local governments to a general contractor depending on the project's tender requirements. The general contractor grants contracts to multiple subcontractors for carrying out the actual construction work. Then, the subcontractors employ workers under employment agreements signed on a daily basis, paying their wages at the end of each work day. Since construction workers are at the mercy of the subcontractor for their jobs, they may decide not to complain about the company's unfair or illegal practices, including the delay of daily payments.

SMG adopted Daegeum E-Baro in 2012 to break away from the old system. Under the Daegeum EBaro system, payments are made directly from the developer to the general contractor's, subcontractor's, and construction worker's accounts, instead of through a chain of payments made from the developer all the way down to the construction workers via the general contractor and subcontractors. Direct payment to construction workers' accounts can reduce and even prevent overdue wages.

Since its introduction in 2012, as of 2015, the Daegeum E-Baro system has seen 27 and 81 times more annual users and registered construction workers. In further recognition of its quality, the system has been benchmarked by 13 different agencies and legislation requiring the adoption of the system for all construction projects is being drafted.

4. E-HRM (Electronic Human Resources System)

Construction workers are employed on the spot at construction sites with the verbal consent from the supervisor or a signature in a roll book. This kind of practice makes it impossible to identify the exact number of workers deployed to the site when an emergency occurs. While struggling to find a way to resolve this problem, a new electronic human resources system (E-HRM) was developed based on the fact that the Construction Workers Mutual Aid Association that works to manage construction workers' retirement fund and SMG, which needed a systematic workforce management system, actually shared the same goal.

Once a construction worker swipes the bank credit card ID through a reader, this information is recorded on the CWMAA's E-HRM server and then transmitted in real-time to One-PMIS. Thanks to the new system, construction workers can now keep track of their retirement grants, SMG has found a tool for more systematic HR management, and CWMAA can administer its retirement fund more accurately.

It is planned for E-HRM to be used in all of the city's construction projects and legislation requiring the adoption of the system is being drafted.

IV. Success Factors

SMG is continuing with the development of new systems and smartphone applications to have more citizens involved in the program, and all of their feedback is being used to improve the city's administration processes.

Under the mayor's strong leadership to realize an administration of integrity, all city officials strive to reduce shoddy work and illegal practices in the construction sector.

SMG has also established cooperative relations with international organizations including UNDP, NGOs, and construction workers unions. All parties' opinions are appreciated and applied to the implementation of the program and SMG is making sure that cooperation remains strong with continued consultation with other organizations.

The last part is about the development of IT technology. SMG is a city of the advanced IT industry, being selected by the World E-government Evaluation Committee as the number one municipality in the world for six consecutive years. This achievement has contributed to the development and operation of CCS.

V. Conclusion

The Anti-Corruption Clean Construction System (CCS) can help reduce shoddy work along with fraudulent and illegal practices in the construction industry, and it can engage more citizens in the city's administration process. CCS is not a fix-all solution to the problem of fraudulent practices at all project sites, but it is a powerful and effective tool to reduce a substantial amount of fraudulent activities. SMG will continue to make efforts to build a more open, clean, and innovative administration.

Enabling Environment for Clean Construction System: Korea's Policies and Institutional Tools for Information Disclosure, Anti-Corruption, and EProcurement



Information Disclosure Systems: Cases from the Republic of Korea and Lessons Learnt for Other Countries

Jin Han Jeon

Director, Right-to-Know Institute of Republic of Korea⁵

I. Information Disclosure Systems in the Republic of Korea

1. Information Disclosure System (Ministry of Interior)

Korea enacted and has implemented its Information Disclosure Act since 1998. Korea is 13th in the world and first among Asian countries. In the early stages of its implementation, there were tensions between civil society and the government despite the legislation's goals of preventing budget waste and bringing transparency to the administrative processes. There was a spike in litigations filed in the administrative court concerning information disclosure requests. However, the policy quickly took shape once the information disclosure system was established. Applying a unified system to cover all requests for central administrative agencies, local governments, education offices, and other public organizations is a rare case of advanced information disclosure to be found in the world. The new system has helped boost the number of disclosure requests and change public officials' perspectives on the disclosure policy.

2. 'Information Exchange Plaza' @ opengov.seoul.go.kr (Seoul Metropolitan Government)

The Seoul Metropolitan Government (SMG) is working with the civil community to ensure its citizens' right to request a broad range of information generated from its administrative efforts to provide welfare, security, employment assistance, transportation, and other services to its 10 million residents. All administrative information is open to the public ('Nude Project') to guarantee transparent and responsible procedures, with only a few exceptions provided by the law. To this end, an innovative website dedicated to information disclosure was launched, which can be accessed via smartphone and other devices. Draft documents produced by city officials are automatically uploaded on the website and open to the public within days without any need for special requests. More than 6 million search-ready official documents are currently available on the website for any citizen in need of information. Also readily available is information on construction and civil engineering projects. The system is the first of its kind in the world. It is worth noting that such an open system always raises concerns regarding personal information exposure.

⁵ Member of the Information Disclosure Deliberation Committees at Seoul Metropolitan Government, Korean Intellectual Property Office, and Anti-Corruption and Civil Rights Commission of Korea; Director, Information Disclosure Center for a Transparent Society (2008–2015); Senior Analyst, Human and Memory Archives (2006–2008); Assistant Administrator, Information Disclosure Group, People's Solidarity for Participatory Democracy (2002–2006).

3. Information Disclosure Deliberation Committee (Seoul Metropolitan Government)

There is an Information Disclosure Deliberation Committee established in each of the government agencies. The Committee, whose members consist of outside experts, is set up to review the legitimacy of any agency's decision to deny an information request. SMG has two deliberation committees up and running whose members consist of ten outside experts including lawyers, professors, and civil activists. SMG's committees review the legitimacy of any decision by the administration to refuse an information disclosure request after hearing from the official in charge about the rationale behind such a decision at committee meetings. A case in point is the media report on the safety issues raised at Lotte E&C's 120-story building construction site. The news triggered a series of information disclosure requests from citizens, including the building's blueprint. In reality, the committee decided to deny the requests on the grounds that the requested construction-related information included confidential business information. Nonetheless, the case has reaffirmed that all information related to construction projects approved by the city may be subject to an information disclosure request.

4. 'Clean Budget' @ cleanplus.seoul.go.kr (SMG)

A dedicated website for the 'Clean Budget' program serves in addition to the above sites to disclose the city's budget expenditure information more easily and clearly. The website is linked to SMG's budget system to provide information on where and how the city's funds are used. From planning to implementation and post review stages, all related information is open to the public to make the budget procedures more transparent and to shift the focus of audits from budget execution results to the decision-making process. Most impressive is the fact that the website discloses not only the list of bidders and their sub-contractors that have won the city's construction projects, but also the contracted amount, period, tender type (public vs. private), and the name of the official in charge for each project.

5. 'Construction Informer' @ cis.seoul.go.kr (SMG)

This is a website dedicated to the real-time disclosure of information on construction projects carried out by SMG, and is provided by the urban infrastructure headquarters. The website uses geographical information systems and web camera feeds in offering construction-related information. Its goals are the transparent disclosure of construction works and the prevention of any inconveniences to the residents of Seoul.

6. 'PRISM' @ prism.go.kr (Ministry of the Interior)

PRISM (Policy Research Information Service & Management) is a shared database and efficient management system for policy research projects conducted by central government branches and local governments. Its goals are to establish a fair and transparent management system for policy research projects, minimize budget waste, and improve the overall quality and utilization in policymaking of the research findings. Also published on the system's website are the final reports of contract-based research projects in construction and civil engineering which may impact the Ministry of Land, Infrastructure and Transport and local governments' policy-making.

II. Reason for the Successful Development of Information Disclosure Systems in the Republic of Korea

1. Civil Society's Continued Disclosure Requests

There has been an on-going effort from Korean civil society to request the disclosure of official information since 1998. The most requested areas were national construction and public works where a large amount of the budget is allocated every year. At first, the government was adamant about denying all such requests. However, as the administrative court made more and more decisions in favor of the disclosure of information, and it became increasingly difficult to ignore conflicts surrounding information disclosure. This led to the government's adoption of a system of voluntary disclosure with or without requests. More information has been disclosed as more politicians with civil group backgrounds started to be elected as mayors and governors. Cooperation between the civil community and the government is crucial to the success of the information disclosure policy.

2. Establishment of the Information Disclosure System

Online information disclosure requests have surged in Korea since 2002. Government information was just a few clicks away and could be easily obtained at home, which led to a more active information disclosure system. As for the government, more officials began to realize that an open information system was key to the effective promotion of government policies. The popularity of the system reached a higher level with the media making information disclosure requests to gain information for their special and investigative reports.

3. Transparent Disclosure and Reduced Cost of Social Conflicts

Both the government and civil society agreed that the transparent disclosure of information made an overwhelming contribution to reducing the costs of social conflict. Experts in the field agreed that as democracy advances, more people tend to exercise their right to know, and a government of secrecy will only increase the costs of social conflict. This trend served as momentum to urge the authorities to reduce social costs by building a voluntary information disclosure system and offering information services to their citizens.

III. Lessons Learnt

1. Preparing a Legal Basis

Korea's information disclosure policy started with Cheongju City's enactment of its Information Disclosure Ordinance in 1992. The ordinance was a stepping stone to the legislation of the Information Disclosure Act of 1996. Establishing the legal basis, no matter how small or incomplete, is crucial to build a robust system for the transparent disclosure of construction and public works information.

2. Cooperation with Related NGOs

The government's efforts alone are not enough to expand the reach of the information disclosure policy. Continued monitoring and campaign efforts by related NGOs are necessary. Large construction companies are especially sensitive to disclosing information on construction and public works. To make it work, it is important for the government to join with civil society to convince the industry of the need for information disclosure. The participation of outside experts in policy-making and website design processes is important. The best result can only be produced when the provider and recipient of the disclosed information can freely and effectively communicate with each other.

3. Disclosure Costs Money

SMG is allocating a substantial amount of the annual budget for the operation of disclosure systems. The website opengov.seoul.go.kr, for example, has already cost the city more than KRW 2 billion. All policies cost money, and the information disclosure policy, which needs several websites and systems to be built, is no exception. The expenses must be viewed not as waste, but as an investment in a more transparent and responsible administration.

4. Continued Training for Related Officials

The mindset of the government officials is another key to the success of the policy. In the Republic of Korea, all government employees must participate in an information disclosure mindset training program at least once a year. Most of the program instructors are outside experts. Without the right mindset, no policies or promotional campaigns will bring about policy success.

Introduction to Seoul Metropolitan Government's Anti-Corruption Initiatives: Case of the Construction Sector

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I. Implementation of the Integrity Pact and Monitoring & Evaluation activities of the Ombudsman

Since July 1, 2000, the Seoul Metropolitan Government (SMG) has applied the Integrity Pact system to all public contracts. The Integrity Pact is designed to prevent corruption of contracts in the public sector by having administrative offices and their subcontractors, who bid for contracts and purchase supplies, to sign and implement an agreement to prohibit corrupt activities.

The main contents of the Integrity Pact are as follows: Sub-contractors shall not engage in price-fixing or provide bribes and gifts to related public officials. Contractors and related public officials shall not accept any bribes. In case of a violation of the Integrity Pact, the contract will be voided, subcontractors' eligibility to participate in biddings will be restricted, punitive measures against whistleblowers will be prohibited, and the company will be recommended to establish a code of conduct.

SMG additionally operates a Citizen Inspection Ombudsman (CIO) system to verify and evaluate the implementation of the Integrity Pact. The Mayor of SMG appoints the CIOs consisting of up to 7 citizens who are either experienced experts (e.g. lawyers, accountants, engineers) with extensive technical knowledge and work experience in construction-related fields, or others with high social reputation and integrity.

In order to verify and evaluate the transparency and fairness of the subcontractor's bidding process for public construction contracts worth over 3 billion KRW (approximately 2.56 million USD), service contracts over 500 million KRW (approximately 426 thousand USD) and supply purchase contracts over 100 million KRW (approximately 85 thousand USD), the CIO participates in two activities. First, CIOs serve as direct observers of the bidding process. Second, they monitor directly on site whether stakeholders are adhering to the signed Integrity Pact. To this end, CIOs conduct construction site visits to access relevant documents and interview related personnel.

Just last year the CIOs participated in a total of 229 Integrity Pact monitoring and evaluation activities. Of these, 132 cases were observer activities and 97 were on-site monitoring and evaluation activities. CIOs identified 81 cases of possible corruption practices or cases which required partial revisions, and recommended measures for reform.

1. Post-Employment Restrictions for Public Officials

In order to restrict the possibility of retired public officials getting jobs in private enterprises and negatively influencing their former affiliation through acts of solicitation or seeking favors, the employment of retired public officials is restricted by law (Public Service Ethics Act) and any violation of this law is punishable through fining or imprisonment.

Restrictions apply to all public officials that are grade 4 or higher, and to officials in specific sectors (e.g. construction, civil engineering, environment, taxation) that are grade 7 or higher. Officials in this category may not be employed for three years following retirement in companies or institutions related to any division or institution with which the official was affiliated for more than 5 years prior to retirement.

Post-employment restricted companies (or institutions) are defined as follows, and they are announced annually by the Ministry of Personnel Management:

1. Profit-making private enterprises with capital over 1 billion KRW (Approx. 850 thousand USD) or annual transaction size over 10 billion KRW (Approx. 8.5 million USD)
2. Social Welfare Corporations with basic assets over 10 billion KRW (Approx. 8.5 million USD)
3. Related public organizations that perform safety inspections, licensing regulations or procurements.

SMG operates a 7-member public official ethics committee consisting of citizens with expert knowledge and social reputation in order to screen post-employment job requests from retired SMG personnel. Screening evaluation results are disclosed on the SMG website to ensure the fairness and transparency of the screening process.

Moreover, SMG established a 'Guideline for retired SMG public officials' and provides regular training to retiring officials in order that they can enjoy a dignified and honorable retirement without engaging in acts of solicitation or favor-seeking to reap unfair benefits.

2. 'One-Strike-Out System' Against Bribe-Taking Officials

The 'One-Strike-Out System' aims to punish public officials who receive bribes as small as 1,000 KRW (Approximately 1 USD) regardless of relation to their work. Particularly in cases where a public official receives bribes worth over 1 million KRW (approximately one thousand USD) or actively requests bribery of any amount, the system applies regardless of whether the bribe was compensatory or work related. The resulting penalty is, at the minimum, dismissal from work, even in the case of a first-time perpetration.

The 'One-Strike-Out System' was a previously existing policy but since the October 2014 public official innovation policy reforms which strengthened the level of penalties, corruption of public officials decreased by 39% within the first year.

3. Operation of the 'Anti-Corruption Hotline'

SMG established a "hotline" to integrate several existing corruption reporting channels into one. In order to protect the privacy of whistleblowers, corruption reports are only accessible to the Mayor and the Head of the Inspection Committee.

In the process of establishing this integrated corruption reporting 'hotline,' three channels were newly established: 1) Report on illicit behavior of *Gab* (meaning those with power/advantage in Korean, 2) Report on illegal solicitation, and 3) Report on favors provided to retired public officials. Two previous channels were maintained: Report on corruption of public officials, and whistleblowing.

The 'Report on illicit behavior of *Gab*' is a channel whereby citizens, contract counterparts and parties receiving permission from public officials (who are *Gab* in their relationship) can report any inconvenient or illicit behavior. The 'Report on illegal solicitation' is a channel whereby public officials must self-report any improper solicitation in an 'illegal solicitation reporting system.' Citizens who witness illicit behavior by such public officials may also file a report.

Citizens or public officials may also utilize the 'Report on favors provided to retired public officials' channel to report on public officials who receive illicit solicitation from retired public officials and provide them favors.

4. Reporting Center for Construction Subcontractors & the Subcontractor Tribune

Large construction companies that win big construction contracts outsource specific construction processes to subcontractors (SMEs), and various illegal or illicit activities have occurred during this process. Large construction companies mainly utilize their dominant status to abuse excessive competition among subcontractors to lower prices. This undermines the rightful interest of subcontractors and leads to poor construction quality and safety hazards.

SMG opened a 'Reporting Center for Construction Subcontractors' in 2011 to protect socially vulnerable subcontractors from such illegal and unfair activities. Since its opening, an average of 268 cases have been reported annually. Following investigation, if illegal subcontracting activities are exposed, punitive administrative measures including correction orders and suspension of businesses are taken as outlined by the 'Framework Act on the Construction Industry'.

Examples include the low price subcontracting activities of the Seo-Binggo Elevated Bridge and Gangbyun Buk Ro Crossroad Improvement Construction of 2015, and multi-level illegal subcontracting activities of the Gangbuk Regional Purification Plant Construction of 2014.

In 2015, there was a report on the late payment of a construction machinery rental for the Seo-Binggo Elevated Bridge and Gangbyun Buk Ro Crossroad Improvement Construction project. Investigation took place on the construction site and low price subcontracting activities were exposed that illegally restricted the rights of the subcontractors. SMG issued a correction order on overdue payments of

the construction machineries and low price subcontracting activities in order to resolve the civil complaint.

In 2014 SMG exposed multi-level illegal subcontracting activities at the Gangbuk Regional Purification Plant construction site and imposed a suspension of business. When multiple levels of subcontracting takes place, construction prices are lowered at each level, and the subcontractor at the lowest level must carry out the construction at a very small price. This leads to poor quality construction, safety hazards and overdue payments. For this reason the 'Framework Act on the Construction Industry' prohibits such multi-level subcontracting activities.

SMG also appointed a Subcontractor Tribune to provide pro bono consulting services and remedies to overcome illegal or illicit subcontracting activities. The tribune consists of eligible lawyers who not only provide consultation services but also engage in monitoring and inspection activities to prevent illicit subcontracting activities. They also analyze subcontracting problems and provide suggestions to SMG for policy improvements. The Subcontractor Tribune has been active since March 2015 and has completed 49 consultations and 27 construction site inspections to resolve problems and provide improvements.

II. Concluding Remarks

Construction-related corruption became endemic during the development era in the Republic of Korea. Socio-cultural factors of nepotism, paternalism, patronism emphasizing school, hometown and blood lineage hamper the fight against corruption in the construction sector. Much time and effort is needed to eradicate corruption in the construction sector.

There is no perfect policy, and no matter how well policies are managed, complete eradication of corruption will not be possible. Humans cannot be completely rational, and personal traits also influence corrupt practices. SMG's anti-corruption initiatives listed above are no exception.

However, in order to secure fairness, fix imbalances to prevent low quality construction and negligent accidents, and to enhance competitiveness in the construction industry, sustainable anticorruption initiatives are crucial. SMG's anti-corruption initiatives may not bring about immediate and sizeable impact, but these initiatives will help refresh social awareness of corruption and provide citizens with a new perception of corruption.

SMG's anti-corruption initiatives may not be applicable to every country and every city, but this paper puts value on the fact that SMG's initiatives may provide reference to anyone who seeks to develop and improve their anti-corruption initiatives.

Korea's National Anti-Corruption Policies

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I. Evolution of the Korean government's anti-corruption policies

While Korea experienced a dramatic economic growth during 1970s and 1980s, transparency and ethics issues relatively did not get much attention. Illegal practices and misconduct were overlooked or tolerated to a certain extent if they were for economic growth.

Along with the international community's efforts to fight corruption such as the enforcement of the OECD Anti-Bribery Convention in 1999, a drive to improve transparency of the business sector and society as a whole began to form within Korean society after the Asian Financial Crisis in 1997.

Particularly, civic groups and academia strongly urged the government to enact an anti-corruption legislation and to establish an independent anti-corruption body.

As a result, the Anti-Corruption Act was enacted in 2001 and the Korea Independent Commission Against Corruption (KICAC) was established in January 2002 as a national anti-corruption agency. With the enactment of the Anti-Corruption Act, the Korean government put anti-corruption and national integrity at the top of its agenda, and put a lot of efforts to build a systematic national anticorruption system led by the KICAC.

Between 2002 and 2007, the KICAC implemented and improved preventative measures, including pan-governmental anti-corruption policies, institutional improvements, Integrity Assessment, anticorruption training, and the Code of Conduct for Public Officials. Also, it organized and upheld reactive measures such as receiving and handling of corruption reports and protection and reward for whistleblowers.

In February 2008, the Anti-Corruption and Civil Rights Commission (or ACRC) was newly established, integrating the KICAC with other agencies. As a result, the ACRC has become a new comprehensive anti-corruption agency that deals with not only anti-corruption but also civil complaints and administrative appeals.

The ACRC works hard to promote its anti-corruption efforts within the broader goal of protecting rights and interests of people. The ACRC integrates its duty of protecting people's rights with the anticorruption work, thereby improving unreasonable institutions that impose burden on the public and businesses.

Moreover, as a part of efforts to fill the loopholes of the existing anti-corruption systems and policies, the ACRC promoted the enactment of the "Act on the Protection of Public Interest Whistleblowers," the "Code of Conduct for Local Assemblymen," and the "Improper Solicitation and Graft Act."

II. Korea's major anti-corruption measures

As a national anti-corruption agency, the ACRC has comprehensive policies in place to prevent corruption. Particularly, it conducts the Integrity Assessment that evaluates potential corruption risks, the Anti-Corruption Initiative Assessment, and the Corruption Impact Assessment. They are internationally recognized corruption risk assessment tools exclusively developed by the Korean government. The ACRC also provides new types of integrity training.

1. Integrity Assessment

In order to encourage voluntary anti-corruption efforts in the public sector, the ACRC assesses the integrity level of each public organization every year, and announces the assessment results to the public.

In 2014, the ACRC measured the integrity levels of 640 public organizations. The Integrity Assessment is based on a survey of more than 250,000 citizens who experienced public services along with public officials and experts.

The ultimate goal of the Integrity Assessment is to identify corruption-prone areas and causes of corruption by different public organizations. The results of the Integrity Assessment provide useful information to improve anti-corruption policies and regulations, and to provide customized consulting service to prevent corruption.

2. Anti-Corruption Initiative Assessment

The Anti-Corruption Initiative Assessment is conducted to assess the adequacy and effectiveness of anti-corruption initiatives of public sector organizations. The purpose of the Assessment is to encourage public sector organizations to improve their own anti-corruption efforts, as well as to share and disseminate the best practices in anti-corruption.

The results of the assessment are used to identify and improve corruption-prone areas in each public organization, provide incentives to organizations with outstanding results, and promote a culture of integrity in each organization.

3. Corruption Impact Assessment

In terms of corruption prevention, the Korean government has developed and implemented truly unique and effective anti-corruption policies. They include the Integrity Assessment that I just explained and another one is the Corruption Impact Assessment.

In order to prevent corruption effectively, we need to go beyond detecting and punishing individual corruption cases. We need to fundamentally eliminate root causes of corruption in the existing laws and administrative systems.

The Korean government is preemptively exploring and enhancing laws by monitoring if they contain arbitrary standards, factors hindering fair competition, or excessive discretion of public officials whenever laws are enacted or revised.

No laws can be exempted from the Corruption Impact Assessment. Every administrative agency must request the Corruption Impact Assessment from the ACRC whenever laws are drafted. If the ACRC recommends an improvement on the bill after conducting the Assessment, the administrative agency in charge should reflect the ACRC's recommendation into their draft. In addition, the Corruption Impact Assessment results are referred to the Cabinet or Vice minister meetings for the legislation.

4. Anti-corruption training

The Anti-Corruption Training Institute established in October 2012 provides integrity training courses which stimulate trainees with various programs, thereby receiving positive responses from public officials.

Especially, the training courses consist of integrity concert, letter recitation, and monodrama to better appeal to trainees and to guide them to think out of the conventional frame while instructing them how to deal with ethical dilemmas they might face in performing duties.

In the "Integrity Pansori" session, Pansori, which is Korean traditional opera, is performed in a revised modern version. This session is designed to explain that what was perceived normal in the past can be regarded as corruption today. Exciting rhythms and interesting lyrics of the song help the audience take in the values of integrity easily.

Integrity training is promoting ethics of public officials, especially high-ranking public officials, in a more effective way than relatively boring and lecture-based courses of the past.

5. Code of Conduct for Public Officials

Under the Anti-Corruption Act, the Code of Conduct for Public Officials (CCPO) was enacted as a Presidential Decree in February 2003. The CCPO provides a set of ethical standards that public officials should comply with in performing their duties.

In July 2005, the Anti-Corruption Act was amended, and the CCPO is now applied to all the employees of public companies and public service agencies as well as public officials. In November 2010, the Code of Conduct for Local Council Members was also enacted as a Presidential Decree.

In the early stages of implementing the CCPO, there was skepticism about its benefit. However, it is now believed to have great impact on improving integrity and transparency in the public sector.

For example, it helped reduce malpractices committed by public officials by banning undue gifts or gratuities and encouraging use of business promotion budget only for right purposes. It also contributed to enhancing public officials' sense of morality.

6. Protection and rewards for whistleblowers

In Korea, a systematic protection system for whistleblowers was introduced in 2002 when the Anti-Corruption Act was enacted. The Act provided a series of protective measures - such as the guarantee of confidentiality and of a person's status - for whistleblowers who report on corruption in the public sector.

However, in cases of violations of public interest occurring in private areas related to health, safety, and the environment, the protection system for whistleblowers was insufficient. These deficiencies within the system led to trouble for some who reported violations.

As a result, the ACRC passed the Act on the Protection of Public Interest Whistleblowers, so that informants in the private sector who were previously left in this legal blind spot could also receive protection.

It is prohibited to disclose and report a whistleblower's identity without his or her consent. If violated, the ACRC may request disciplinary action against those involved. In the case of a public interest violation, infractions may lead to criminal punishment.

If it is likely or certain that a whistleblower may be physically harmed due to whistleblowing, necessary protective action can be requested.

It is prohibited to take any injurious action towards whistleblowers with regard to their employment, administrative, or financial status. Violators are subject to fines or criminal punishment.

If any crime is committed by a whistleblower through the process of whistleblowing, punishment of the whistleblower may be mitigated or exempted. For example, if confidential information is included in the contents divulged through whistleblowing, the whistleblower in question is exempted from the obligation of confidentiality despite existing agreements concerning confidentiality.

In addition to these protections, the ACRC has established a reward system as a means of protecting whistleblowers. If a case of whistleblowing results in the recovery or increase of revenues in a public organization, up to KRW 3 billion or 2 billion may be rewarded for corruption and public interest whistleblowing cases respectively.

In the case of public interest whistleblowing, any physical or emotional damages caused by whistleblowing are compensated by providing medical expenses to the whistleblower in question.

In cases of corruption reporting, awards are given for increasing financial income or preventing financial damage to a public organization, or serving the public interest, even in cases involving no direct financial benefit to the public organization.

III. Enactment of the Improper Solicitation and Graft Act

The Improper Solicitation and Graft Act passed the National Assembly of Korea in this March. The bribery culture based on family ties and regional or academic relationships have been one of the main causes of corruption in Korean society. This connection-oriented culture makes corruption become more secretive and routine, hindering the fair performance of public officials.

In addition, public officials who had accepted bribes often went unpunished under the previous regulations if the bribes proved not to be given in exchange for any favors. This practice led to the undermined trust toward the public sector

In this regard, the Act has been promoted for 3 years by the ACRC to enhance public's trust on government by disconnecting collusive ties behind closed doors, and by addressing loopholes when imposing punishment on public officials who offer or accept graft.

The Act applies to all the public institutions including constitutional institutions, central administrative agencies, local governments, offices of education, and public service-related organizations.

In addition, private schools and media companies were later included in the Act during the course of meetings at the National Assembly. Also, spouses of public officials cannot receive money or other valuables in relation to the public officials' duties.

Lastly, general public or private companies that improperly solicit or provide financial advantages to public officials can be punished under this Act.

The Act stipulates 15 types of improper solicitations in detail. The acts defined as improper solicitation include those acts of exerting influence on granting license or permits, imposing disadvantageous measures, evaluating, decision-making, and providing financial benefits.

Then, what will be the consequences of violating the Improper Solicitation and Graft Act? The Act is designed to target improper solicitation directed by an influential third party. For example, let's say a stakeholder. A solicited B who can exert influence over a public official C. In this case, a fine for negligence not exceeding 10 million won (\$10,000) will be imposed to the solicitor A.

For a third party B who made an improper solicitation for a stakeholder A, a fine for negligence not exceeding 20 million won (\$20,000) will be imposed if B is a private person and 30 million won (\$30,000) if B is a public official. If the public official C conducts duties as directed by an improper solicitation, C will face an imprisonment for up to 2 years or a fine up to 20 million won (\$20,000).

The fair performance of a public official's duty will be undermined if the official receives financial advantages or entertainment. However, existing laws punish public officials only when the acceptance of benefits is related to their official duties and at the same time the benefits are given for any favors.

The Act prohibits public officials from accepting money or other valuables regardless of whether such an offer is given in connection with their official duties or in exchange for any favors.

If a public official receives money or other valuables in excess of 1 million won (\$1,000), he or she will be punished by an imprisonment for not exceeding three years or by a fine not exceeding 30 million won (\$30,000).

If a public official receives money or other valuables not exceeding 1 million won (\$1,000) in connection with a public official's duties, a fine for negligence of 2-5 times the amount of the advantages received will be imposed.

If a spouse of a public official receives money or other valuables in connection with the public official's duties, the public official will face the same punishment as if the public official receives them.

IV. Conclusion

One of the characteristics of Korean anti-corruption policy is that its implementation and promotion were initiated as an administrative goal of the President. The goal and scope of the government's anti-corruption policy have changed with the times depending on the situation. However, from the time of President Kim Dae-jung to current President Park Geun-hye, the importance of anticorruption policy has always been at the forefront of the attention of presidents and the priority of government policy.

Today, we are living in an era where addressing corruption and safeguarding integrity have become essential. No matter how good the government policy is, the public will not trust the policy of a corruption-ridden government. In that case, government policy will not be as effective as expected because it will face strong opposition from the public in the implementation process.

When Korea was rushing for economic growth, it could not pay much attention to justice and fairness. However, now every sector of Korean society realizes that integrity, ethics, and transparency are preconditions for sustainable development and prosperity.

Korea's ON-line E-Procurement System (KONEPS)

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I. System Development

Since the 1990s, digitalized procurement administration has been viewed as one of the most important agendas in the reform of the public sector. In order to improve efficiency and transparency through digitalization of procurement administration as part of public reform, the Korean government implemented the Procurement EDI (Electronic Data Interchange) system in 1999, eBidding system in 2000, and e-Payment system in 2001. In 2002, it established a comprehensive national e-Procurement system called Korea ON-line E-Procurement System (KONEPS), as one of 11 key projects for e-Government.

The initiative for establishing the Procurement EDI system for the Korean government was taken up by Public Procurement Service in 1996, and completed in 1999. It enabled the shared use of procurement related information among Public Procurement Service departments, public buyers, and business firms. During the pilot stage, electronic data exchange was implemented for processing 10 key procedures including procurement request, procurement request changes and accounting for 20 central and local government agencies. For e-Document distribution, the EDI/EC support center system was established. Afterwards, the electronic data exchange expanded to cover a broader range of procedures, and by 2001, the application of EDI has grown to cover the entire span of procurement procedures for all public institutions. The application of the procurement EDI has led to reduced processing time, reduced document volume due to the conversion into e-Documents, and reduced payment lead time.

The development of an e-Bidding system was implemented from May to October 2000. In September 2000, a pilot homepage was opened for bidder registration and the issuance of e-Signatures for eBidding. The e-Bidding system began its full operation in January 2001, and from March 2001, the use of the system began to spread throughout the government. Another important component of Korea's e-Procurement is the e-Payment system, which was launched in June 2001, replacing the previous payment method of national treasury checks with electronic account transfer (EFT).

As illustrated above, the EDI system, e-Bidding system, and e-Payment system have been developed individually. The implementation of these systems yielded productive results in some areas, but the absence of an all-inclusive single window for public procurement still left the users with certain inconveniences. Some public entities individually started developing their own e-Procurement systems, causing unstandardized multiple system developments. Despite the success with some entities, many public entities still conducted procurement tasks with paper documents. Therefore, the government took the initiative of establishing a comprehensive national e-Procurement system. This project, dubbed "the G2B project", was selected as one of the e-Government projects, and implemented through cross-governmental efforts. The G2B project aimed at drastically restructuring

the procurement administration based on a 'single window' to public procurement and internet based work process. The system implementation project was awarded to Samsung SDS consortium in February 2002. After 5 months of system implementation work under PPS's direction and oversight, Korea ON-line E-Procurement System (KONEPS) was launched in September 2002.

II. Key functions and characteristics of KONEPS

Before KONEPS, bidders had to check tender notices through the official gazette, associated documents, bulletin boards, and the website of each procuring entity. Similarly, they had to register for bid participation with each individual procuring entity for separate tenders. Since its establishment, KONEPS published tender information from all public institutions, thus functioning as the single window to public procurement. It also enabled the sharing of bidder information, thereby allowing bidders to participate in all public biddings with a one-time registration through KONEPS.

KONEPS processes the entire procurement procedures online, from tender notice, awarding, and contracting through to payment. Thanks to the data exchange linkage with the G4C system of the Ministry of Public Administration and Security (MOPAS), KONEPS eliminated the need for the submission of paper documents such as business registration certificates and tax payment certificates. Through the linkage with industry associations, KONEPS also automatically collects information on the bidder for qualification assessment, and subsequently rendering paper submissions obsolete. It digitalized 166 document forms for electronic processing, including bid, contract, inspection request, and payment request. Most of the documents previously submitted personally or via postal services came to be submitted via the internet.

As KONEPS processes the payment process online, such as delivery report, inspection request, and payment request, it effectively reduced the payment lead time. Since the contracting unit, inspection unit, and payment unit process their respective tasks through the common system, it also streamlined the payment process. KONEPS is linked to the government accounting system (d-Brain) of the Ministry of Strategy and Finance and the B2B system of Korea Financial Telecommunications & Clearings institute (KFTC), which allows the procuring entities to administer payment via electronic fund transfer.

The On-line Shopping Mall system, developed as a component of KONEPS, provides the electronic catalogue of products available for purchase on the bases of unit-price contracts established by PPS. Procuring entities can directly order products from the On-line Shopping Mall site, and administer on-line payment.

A comprehensive standardization project was undertaken as a part of KONEPS's development in order to enhance worldwide compatibility with e-Commerce systems in the private sector and eliminate inefficiency resulting from redundant separate codifications. KONEPS adopted the UNSPSC classification of the UN and operates on a standardized product catalogue system that allows quick product registration and search. Product properties, including specifications, contract terms and manufacturer information, have also been restructured to comply with international standards.

Since 2004, KONEPS began to further evolve as a "ubiquitous electronic procurement system". As the first of KONEPS's mobile services, Mobile Information Service was launched in March 2004. This system allowed browsing and searching for tender information via PDAs. In 2005, after implementing the authentication schemes for mobile devices, KONEPS opened its Mobile Bidding Service which

enabled bid submission through PDAs. In order to further increase user convenience, PPS made further efforts to implement electronic signature and encryption technologies for mobile phones. In 2008, KONEPS began to provide its mobile service that enabled bid submission via mobile phones.

KONEPS operates on the highest level of security. For network security, it is equipped with a dual fire-wall, intrusion detection system, and security solutions. Intranet is separated from extranet, the log access and program modification history are automatically managed, and program modifications are monitored on-line by an independent third party entity. The servers and networks are managed on a dual operation basis, the data is mirrored at the back-up center, and ITSM applies to its management.

III. Outcome of KONEPS implementation

The e-Procurement system has greatly enhanced efficiency and transparency through the following means, amongst others:

1. Reform of related laws and regulations
2. Real-time disclosure of information on the progress of bidding and contracting
3. Reduction of face-to-face contacts between procurement officials and bidders
4. Prevention of abuse of power by government officials
5. Reduction of paperwork
6. Systematic publication, management and shared use of information
7. Integrated management of resources

A research in 2009 reported that the direct and indirect cost savings achieved through KONEPS are estimated to be 8 billion USD per year. Of this, savings of USD 1.4 billion was made on the government's administrative cost, and savings of USD 6.6 billion was made on the private sector's transaction costs. In addition, the elimination of paper-based work process is estimated to reduce the carbon emission by 620,000 tons every year. In terms of work productivity, 1058 employees of PPS handled 190,000 contracts in 1997. After the establishment of KONEPS, the number of contracts handled by PPS drastically increased while the staff size remained at the same level. In 2007, 913 PPS employees handled 810,000 contracts, signifying a five-fold growth of work productivity compared to 1997.

IV. Global Recognition of the Excellence of KONEPS

Recognizing KONEPS as an exemplary case of public sector innovation, the United Nations decided to grant 2003 Public Service Award to PPS. UN considered KONEPS has significantly enhanced convenience for corporations and public institutions, reduced transaction costs and prevented unfair practices and irregularities. In 2004, UN once again selected KONEPS as a best practice model in the public sector. KONEPS has continued to represent public sector innovation through ICT, receiving various recognitions, including 'Global IT Excellence Award' by the World Information Technology and Services Alliance (WITSA) in 2006 and 'e-Asia Award' from AFACT in 2007.

V. Global Cooperation in e-Procurement

Many developing countries as well as international development banks have shown substantial interest in PPS's innovations in procurement administration achieved through the implementation of KONEPS. PPS is actively and cooperating with such countries and providing support for their successful E-Procurement implementation. The implementation of the e-Procurement pilot system for the Government of Vietnam in 2008 was the first of the successful outcomes. In addition, PPS has exported the E-procurement systems based on KONEPS to Costa Rica, Mongolia, Tunisia, and Cameroon. In the case of Costa Rica, PPS entered a cooperative MOU with the government of Costa Rica in May 2008, and the implementation project for the Costa Rican E-Procurement system commenced in July 2009. This E-Procurement system implementation project 'Mer-link' was funded by the Costa Rican Government, and undertaken by the KONEPS developer with PPS's consultancy and support. 'Mer-link' has been globally recognized, winning the "Citizen-Centered e-Government" Award in December 2012, awarded by Organization of American States (OAS). For Tunisia, the successful implementation of the E-Procurement system 'TUNEPS' was attributable to its strong political commitment and joint effort made by PPS and the Korea International Cooperation Agency (KOICA) using the Official Development Assistance (ODA) fund.

SMG's One-Project Management Information System and the Construction Informer (“Allimi”)



Realizing an Ethical Construction Administrative Process Using One-PMIS

Tae Hag (James) Roh

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Infrastructure Headquarters

I. Seoul's Construction Environment

1. Construction Projects

The Seoul Metropolitan Government (SMG) carries out multiple construction projects to build the city's infrastructure, from roads to subway lines, bridges and tunnels. Project design and planning is broken down by task, and is undertaken by various departments in charge e.g. flood and disaster control measures are taken by the Flood and Disaster Control Department, while subway planning is managed by the City Transportation Headquarters. The Seoul Metropolitan Infrastructure Headquarters (SMIH) is in charge of carrying out the actual construction work based on the planning and design decisions of each of the SMG departments. Seoul consists of 25 districts ('gu' in Korean), and each district office, as a local government unit, carries out construction projects using its own budget together with co-funding from SMG. Most are small-scale construction works, such as underground sewer pipe replacements or road maintenance, which are worth under KRW 1 billion.

2. Seoul Metropolitan Infrastructure Headquarters

SMIH currently employs about 340 officials working in 2 bureaus, 10 departments and 50 divisions. The annual budget stands at around KRW1.6 trillion. The Infrastructure Bureau consists of the General Construction Department, the Public Works Department, the Building Department, the Equipment Department, and the Safety Management Division. The Clean Construction System (CCS) is managed by a team seated in the General Construction Department at the very top of the organization because it is in charge of overseeing anti-corruption and safety at all construction sites.

3. Legislation on Construction Projects and Information Management

The two main laws that regulate the construction industry in the Republic of Korea are the 'Framework Act on the Construction Industry' and the 'Construction Technology Promotion Act.' Legislation on information management includes the 'Personal Information Protection Act', 'Act on the Protection of Information and Communications Infrastructure', and other laws relating to the promotion of information and communications network utilization and information protection.

4. Role of Construction Managers

In the Republic of Korea, public officials who manage construction projects are in charge of inspecting and paying for completed construction work, processing civil complaints, procurement of materials

such as reinforced concrete, land compensation and safety management, all of which are procedures required by law. In the past, the construction manager was directly responsible for overseeing the project. However, since the collapse of Sungsu Bridge and Sampoong Department Store, two major construction accidents in Seoul, the law was amended such that all construction projects worth over KRW 20 billion must hire an independent supervisor, thereby reducing the manager's authority in construction supervision. Yet, the manager is not relieved of all responsibilities in the case of a construction accident since he or she must be in charge of selecting and overseeing the independent supervisor.

5. Civil Complaint Response System

The Republic of Korea has an advanced e-government system that enables most work to be processed online. Most office work is conducted through an administrative portal. Once an official complaint is received, the civil complaint officer forwards it through the internal network to the general affairs manager of each division, who then assigns the complaint to the official in charge of the matter. The portal also has a notification feature that informs responsible officials of any complaints received. There are two types of complaints: those submitted directly on-site and the more general ones submitted online. The time it takes to process complaints depends on the matter at hand, but a response must be given to the petitioner within five working days. Responding to formal complaints is the most important component of an official's job, and is therefore constantly monitored by the division of audit or civil complaint supervision. Any official who fails to comply may face sanctions. Most public officials view the handling of complaints as one of the most important elements of their job description, and handle them with utmost care and effort.

6. Various Audit and Regulatory Functions

Since the city carries out many large-scale construction projects, they are audited and regulated by multiple organizations. SMG's own Audit and Inspection Department, as well as the Board of Audit and Inspection, conduct regular audits. The Ministry of Labor, SMG's Technology Evaluation Office, the Ministry of Land, Transport and Maritime Affairs and the Planning Department are in charge of regulating technology and safety compliance.

II. One-PMIS

1. System Development and Management

The construction Project Management Information System (One-PMIS) and the Subcontract Payment Monitoring System (sPMS, or 'Daegeum E-Baro' in Korean) are the two main tools of CCS. One-PMIS was developed to prevent corrupt practices in the construction industry and replace the traditional methods of hand-written and face-to-face documentation with a more efficient electronic project management system that builds on Korea's advanced ICT industry.

One-PMIS, in the beginning, was PMIS, C-PMIS, and T-PMIS. PMIS was developed in 2000 as a management system for the city's railroad construction projects. C-PMIS was developed to manage the Infrastructure Bureau's projects in 2004, and was expanded to district-level projects in 2007.

Integration of these separate systems was completed with the development of One-PMIS in 2012, whose operation was assigned to a dedicated division under the General Construction Department.

One-PMIS underwent a three-phase development process: In phase 1 all systems were managed separately by different units, in phase 2 the systems were integrated, and in phase 3 the system's functions were upgraded. In phases 1 and 2, the system's main utility was to report on construction progress using basic ICT, while in phase 3, a variety of new features were developed including the integrated management of completed project documents and blueprints, and the portfolio management of construction technicians, thanks to the system's information linkage with other related organizations.

In 2012, the management of One-PMIS was assigned to a dedicated team of officials with backgrounds in administration, computing and civil engineering within the General Construction Department which is at the very top of the organizational structure.

The One-PMIS operation team regularly hosts internal executive management consultations where select delegates from relevant organizations gather to make decisions on such matters as reporting itemization or the degree of information disclosure, as requested by user demand.

2. Key Features of One-PMIS

a) Construction Report Management

Construction sites with an independent supervisor are required by law to file daily, weekly and monthly reports, as well as reports on schedule delays. The direct on-site face-to-face reporting of the past has been replaced by the subcontracting company uploading site photographs and entering details on the required equipment and material estimates on PMIS, which are then approved by the board of supervisors. This practice keeps unnecessary in-person meetings to a minimum and helps realize a paperless office environment.

b) Web Camera Installation

Another way to eliminate unnecessary face-to-face contact and improve work efficiency for construction managers is to adopt a web camera system that eliminates the need to visit a construction site in person for safety and completion inspections, instead allowing for in-office monitoring of the site via live feed on PMIS.

c) Safety e-TV

In spite of every effort to keep construction sites safe, in compliance with relevant laws such as the Construction Safety Act, there are always various degrees of safety hazards. An ongoing safety training program is required to maintain awareness and prevent such risks. To this end, One-PMIS is connected to a TV monitor at the construction site displaying real-time safety and health notifications, such as weather-related accident prevention and emergency measures, as well as crisis response manuals for various emergency scenarios.

d) Document and Blueprint Storage and Management System

The law requires that the contracting department should store all documents and blueprints of completed construction projects, including documentation of design modifications. Many of these documents and blueprints go missing, however, as they are scattered in different departments and organizations, making it impossible to adequately deal with potential safety hazards. Blueprints are now more systematically managed, as past documents and blueprints are scanned and stored, and documents for current or planned constructions are uploaded in PMIS.

e) Integrated Safety Inspection Management System

There is a close link between safety and corruption at the construction site. SMG places the utmost priority on managing safety in and around construction sites and is doing its best to prevent any safety hazards. The Integrated Safety Inspection Management System is designed to provide a systematic tool for safety management and related measures by prescribing in detail the responsibilities of the safety manager, project manager, supervisor and subcontractor.

f) Soil Bank System

Construction sites produce a large amount of soil and sand. Landfill work for a dam project requires more soil, while an underground reservoir project generates an extra amount. Schedule delays and unnecessary increase in buying costs occur at construction sites that fail to find a steady supply of soil. Other sites need to pay additional costs to discard the extra soil produced. The Soil Bank System facilitates the trade of soil among SMG construction sites.

g) Project Portfolio Management System

The Project Portfolio Management System categorizes information on past SMG constructions by project, contractor and expert involved. Site managers can share information, not only on their own projects, but on all SMIH projects. The system also features a function to register and manage the records of construction workers who were released for violating safety rules such as the requirement to wear a helmet or safety belt.

3. Key Features of the Construction Informer (“Allimi”)

a) How it works

The Construction Informer System (“Allimi” in Korean) filters information worth disclosing to the general public among all other information produced by One-PMIS, or transmitted from other related systems to One-PMIS, and displays it on its website with the aim to bring transparency to the construction administration processes and guarantee the citizens' right to know. On the ground, all construction sites have a dedicated notification panel installed within the site perimeter containing information on the project's name, schedule, manager's name and contact information.

The information items disclosed on the Construction Informer website include a construction overview, contract status, implementation status, site photographs, list of stakeholders, and

background information. However, SMG discontinued the former web camera service on June 29, 2015, following a decision by the Personal Information Protection Commission (affiliated to the President's office) that live casting a construction site risks violating the privacy of the workers.

When a daily construction worker belonging to a site registered with the Construction Workers Mutual Aid Association (CWMA) retires by becoming self-employed or a regular employee, or by changing trades, he or she can claim a severance grant from the CWMA headquarters or a local branch. The Construction Informer marks all CWMA-affiliated construction sites in the overview section of its website to facilitate the workers' grant claiming process.

The weekly report and the details of the next phase of the work schedule that the subcontractor uploads on One-PMIS for reporting to the supervisor and construction manager are disclosed to the public on a detailed work description page of the website. The page provides detailed information on the current and following weeks' work so that residents can learn about the construction to be performed in their neighborhood.

Information provided by the contractor on the status of the project contract and the contracted amount is revealed on the contract and implementation status pages of the website. Before the various systems were fully integrated into PMIS, the subcontractor had to enter each occurrence manually, causing omitted or incorrect entries being displayed. Today, with links to the G2B system which manages information on contracts, and the 'e-HoJo' system which contains information on implementation, citizens can enjoy a faster and more accurate information service.

Photographs of the work in progress that are displayed on the website constitute the most effective tool to help users see what has been happening and what changes are to be expected on the ground. The disclosed photographs are from the One-PMIS daily work log entries.

The stakeholder overview page aims to bring accountability to the construction site by disclosing in detail the name, job title and organization of the employees at all levels including the contractor, supervisor, and subcontracting company.

b) Positive Outcomes of Allimi

- **Full Disclosure of Construction-Related Information**

Delays in work schedule and design modifications are significant changes in any construction work. The work schedule is an important promise made to the citizens. All schedule delays are entered in One-PMIS with an attachment explaining the reason for such a delay. Also, design modifications which cause changes in subcontracted amounts are also notified and supported with expert opinions explaining the changes. Any construction-related document produced through the internal electronic approval system is disclosed, with the exception of confidential information on public biddings or matters still under discussion.

Information generated from the One-PMIS safety management system is displayed on the Construction Informer website, where users can see the date, number and cause of penalties contractors have received as a result of safety monitoring and evaluations. Citizens can also search

information on workers' safety violations and learn about the name of the department and company in charge, the date and details of the violation and the resulting penalty. These information disclosures are part of an effort to put an end to poor construction work and establish a culture of safety at all work sites.

- **Active Public Communication**

The Construction Informer website contains a menu titled 'Ask the Assistant Mayor.' Residents can file complaints, inquiries and proposals regarding construction work performed in the city. So far, a variety of submissions have been made from complaints about noises from night time and weekend work to inquiries about future work schedules and reports on overdue wages, all of which have been answered within a week. Users can send feedback voicing their opinions anytime, anywhere since the system is also linked to popular social network channels such as Facebook and Twitter.

III. Recommendations for Corruption Prevention in the Construction Industry

The following three are key to reducing corrupt practices in the construction industry: First, all stakeholders including the lead construction company, contractor, supervisor and subcontractors must share information in real-time. Real-time information sharing means that stakeholders are able to cross-check each other. Sharing documents and information on materials used at work sites, design modifications, and quality and safety management in real-time may help uproot the risk of corrupt practices.

Second, it is important to keep unnecessary direct contacts among stakeholders to a minimum. When hand-written documents and in-person visits are used to seek approvals and permissions, inappropriate relationships may develop between the subcontractor, supervisor and contractor over private gatherings or dine-outs. Minimizing unnecessary personal contacts among stakeholders can be an important means of eliminating corruption.

Lastly, it is crucial to have the information disclosed to the citizens. The real-time and accurate provision of construction information can strengthen the community's monitoring of the administrative processes and build a culture of accountability and transparency in the management of construction projects since all participants are aware that information is open to the public.

IV. Lessons Learnt for Other Countries

The success of any anti-corruption construction policy depends on the decision-maker's willingness to push it forward. The policy and system work best when his or her will is based on a firm understanding of what constitutes a corrupt construction practice and its implications for the country and its citizens. This is because the will and intention of the decision-maker is key in determining how the whole organization, including those in charge of the development and operation of the system, will adapt to the changes in the work environment.

To get the system up and running, dedicated teams in charge of development and operation are required, and they must be at the top of the organizational chain of command. Without a centralized chain of command, the policy may lose direction in the midst of development and operation with decisions left inconclusive due to the lack of consultation between the system designer and developer. The organization in charge of the development and operation of the system should be higher than any other in the management hierarchy. The system is not just a computing tool that facilitates efficient administrative processes; it must possess the power to lead a new process and enforce members of the organization to get accustomed to the new work environment. It is also preferable to assign accountability to the organization's audit and inspection division, or the management and planning division or the budgeting division that directly deals with the demands of the highest decision-maker.

Identification of the corruption chain and systematization and standardization of the anti-corruption process is required. The type of corrupt practices in construction differs from country to country. Collusive bidding, the use of inadequate materials, and the appropriation of materials are well-known examples of corruption. Since these practices are linked with the structure of each country's construction industry, an accurate understanding of the country's industry structure and the resulting corruption chain is the first step in the fight against corruption in construction. Key to the effective elimination of corrupt practices is the establishment of a systematic and standardized electronic anti-corruption process.

The efficient operation of a new system is as, if not more, important than its initial adoption. Many strategies may be necessary for the development of a system. Equally required is a plan for sharing the latest real-time information among relevant organizations and keeping an efficient and sustainable management system for the stored data. Without an efficient data management plan, the system will soon be flooded with unmanaged and inconsistent data which may cause it to fade away as an untrustworthy and irrelevant management system.

In the early stages of adoption, citizens and stakeholders will make various system-related demands. Once the system is completed, some stakeholders may retract their demand for a specific feature, their needs may change, or some functions may not be used as much as anticipated. Therefore, it is wise to take enough time, review carefully, and adopt features one by one starting with those most in need.

The Seoul Metropolitan Government's Project Management Information System (One-PMIS) for a Corruption-free Construction Administration

Sung Yeoub Kim

Executive Director, Business Division, Bolim Information System Corp.

The construction industry has reached a new turning point with larger and more complex projects, lowered trade barriers, and speedy advances in information and communication technology (ICT). The industry has somewhat lagged behind trends in information technology, the staple in today's competitive strengths, but is now faced with both crisis and opportunity. Both the government and the private sector are eager to invest in ICTs for the construction sector to find new ways to face challenges.

The establishment of the Project Management Information System (One-PMIS), a pioneering development effort of the Seoul Metropolitan Government (SMG), is a strategic and information oriented project that provides an internet-based electronic work process along with a tool to collect and store real-time information to eliminate corrupt practices in the construction industry, the root cause of low-quality construction work, and to help the Seoul Metropolitan Infrastructure Headquarters (SMIH) acquire the status of a corruption-free construction administrative agency.

I. Rationale for the Development of One-PMIS

1) Market Changes and Heightened Competition

The new environment includes heightened technology competition due to larger-scale construction projects, a more globalized construction industry with the opening-up of the domestic market, and the growing level of sophistication in construction project management, as well as a shift in the focus of project management from practice/experience to process/system.

2) Advances in Construction Industry ICT

There is a growing need for the adoption of an information management process based on a standard classification system and the establishment of an electronic information exchange system to bring systematic management to the handling of construction project information.

3) Demand for a Corruption-free Administrative Process

There is an increased demand for more transparency, citizen engagement, and disclosure of information in the construction administrative process, especially through the adoption of system based construction project management to tackle the corrupt practices in construction, the major cause of many shoddy construction projects.

4) Maintaining and Strengthening the Position of the Best Specialized Agency in Construction Administration

SMIH needed to integrate all construction technologies and expertise, consolidate the organization's status as a specialized administrative agency in charge of the construction and maintenance of the Seoul Metropolitan Government's public infrastructure, and improve its competency to face the new trends in the construction market head on.

5) Need for the Establishment of a Comprehensive Project Management System

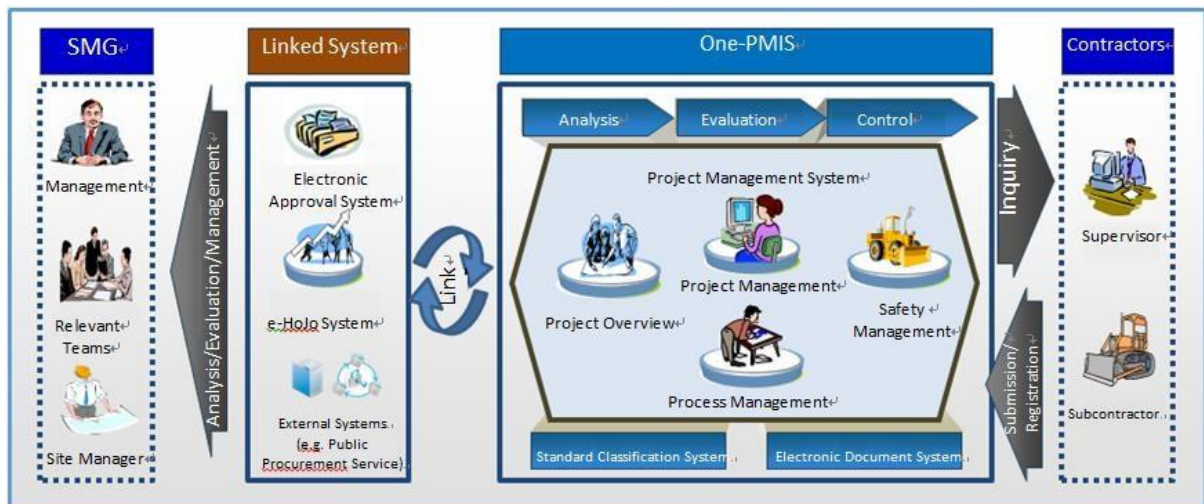
Project management based on old practices and experiences, and the absence of standard processes contributed to the lack of a systematic tool for comprehensive analysis and evaluation, a situation which required the establishment of and shift to a more extensive project management system.

II. Overview and Components of One-PMIS

The Project Management Information System (PMIS) facilitates the analysis, evaluation and control of various construction projects by managing all of the information produced throughout the project life cycle of planning and survey, engineering, construction, and follow-up management.

SMG's One-PMIS is an integrated management system for the city's transparent administrative process of handling project-related affairs, and was built as the optimal tool for the city's work environment. Based on the basic concept of a PMIS, the system consists of a standard classification system, a project management system, an electronic data exchange system, and a Construction Informer ("Allimi" in Korean) to disclose information to the public.

[Figure 1] Concept of One-PMIS

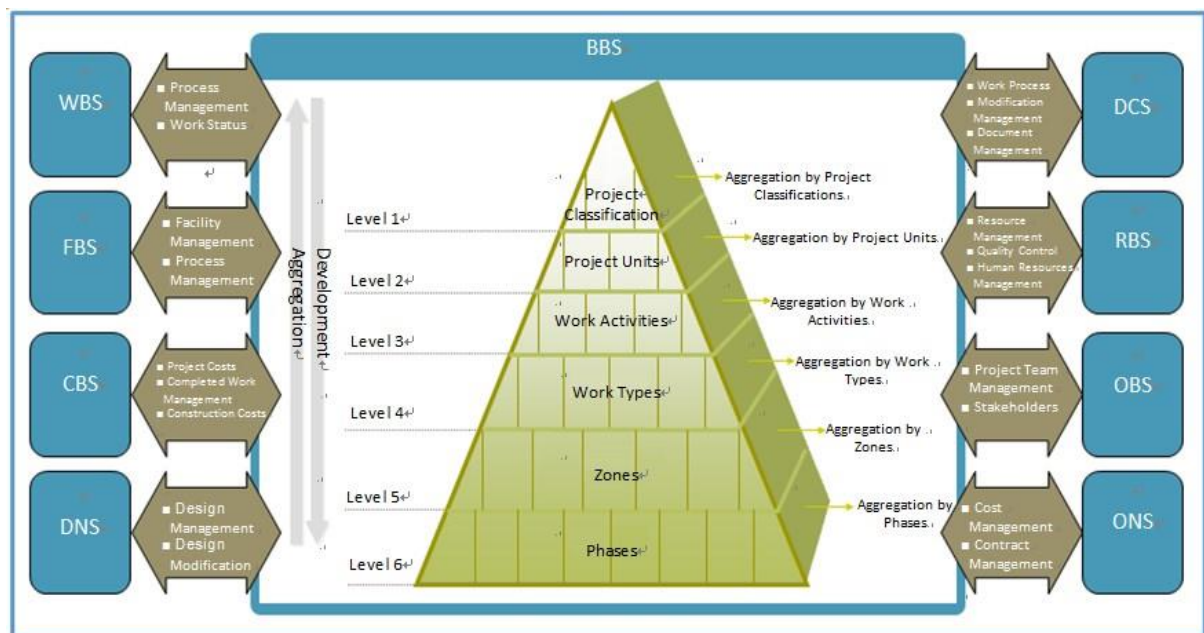


1. Standard Classification System

A standard classification system is the basis of any construction information system. It assigns unique codes to all the categories of information produced throughout the execution of a project by classification criteria and purpose.

The standard classification system for construction projects consists of a business classification system ('BBS') that defines the overall scope of the project, a work classification system ('WBS') that assigns codes to all work activities of a project, a document classification system ('DCS') that assigns management codes to documents and data, and a resource classification system ('RBS') for the personnel, materials, and equipment that each work requires. The whole system operates around BBS.

[Figure 2] Standard Classification System



2. Project Management System

SMG's One-PMIS is a comprehensive project management system designed and built to fit the city's administrative process and environment. The system's functions include a project overview, process management, reporting, safety management, electronic document/design management, and an extensive search.

a) System Overview

Sharing information with the Public Procurement Service's G2B system, One-PMIS can provide an efficient tool for the management of contract information and real-time monitoring of work sites through its project team management feature and on-site web camera feeds.

b) Process Management

Process management provides tools for the management of the planned schedule and work progress along with site photographs and deployed resources to secure the timely execution of each project work unit.

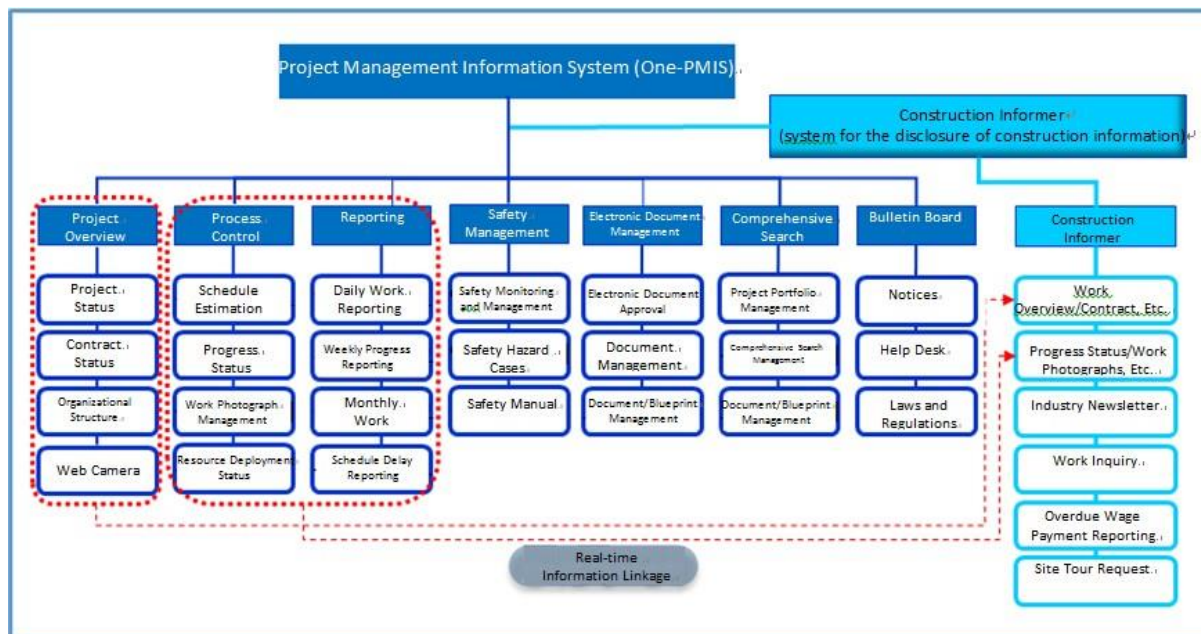
c) Reporting

- Via a reporting system between the contractor and the subcontractors, this facilitates the submission of daily, weekly, and monthly progress reports, whose data is checked against the planned schedule time-table to produce work performance information.
- Behind-schedule projects can be reported on the delayed schedule reporting system for cause analysis and resolution management.

d) Safety Inspection Management System

The safety management feature helps sharing information to prevent safety hazards by managing and integrating all safe inspection reports prior to construction work and forwarding safety hazard cases and safety manuals to all project participants.

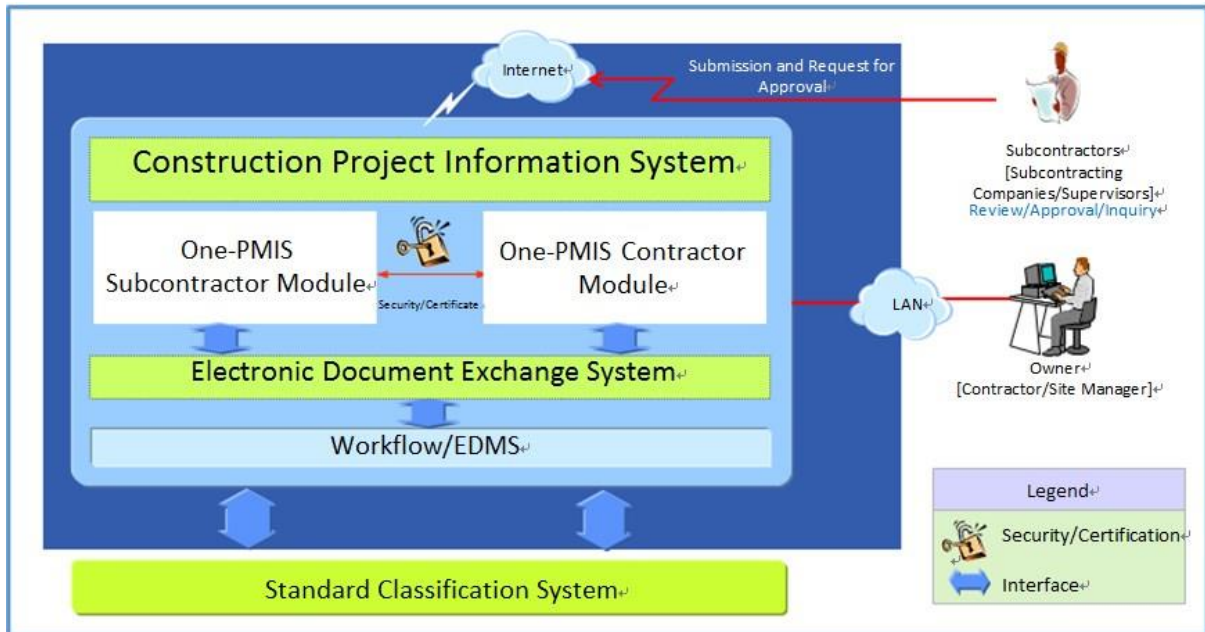
[Figure 3] Project Management System



3. Electronic Document Exchange System

A support system for a quicker and paper-free work process by facilitating the online transmission of documents in digital format between SMG and those carrying out the project.

[Figure 4] Electronic Document Exchange System



a) Electronic Document Management

Using electronic documents during the execution of a construction project can increase efficiency in the work process and save costs by eliminating the storage space required for paper documents, as well as allowing for permanent storage of the documents.

b) Electronic Approval

The establishment of an online approval system can minimize face-to-face contact between contractor and subcontractor, thus contributing to a more transparent construction administration and a more efficient and timely work process.

c) Completed Work Blueprint Management

The system requires the final blueprints of any project to be registered in the system before proceeding to the post-management phase, which can be useful for future maintenance of the construction structure.

4. Construction Informer

Construction information stored in SMG's One-PMIS is made available to the public in real-time and in its entirety on a GIS platform.

[Figure 5] Construction Informer System (“Allimi”)



a) Work Status

The current status information of any work performed by SMG can be accessed on the system's GIS platform, including real-time information on the work overview, contract status, implementation status, project background, list of participants, and site photographs to realize a transparent construction administration process.

b) Complaint Management

To promote citizens' engagement in the process and make sure that their feedback is reflected in the execution of city projects, SMG provides work site tour applications, “Ask the Director”, overdue wage payment reporting, and notification bulletin features.

c) Mobile Service

All information provided on the Construction Informer system can be accessed at all times via mobile devices.

III. System Setup, Training and Maintenance

1. Project Organization and Implementation Schedule

a) The organization in charge of contracting a project consists of a consulting committee, a working level support team, and a project managing team. The project managing team is comprised of a construction project affairs manager and an ICT affairs manager. The project execution team consists of quality experts with experiences in PMIS development.

b) One-PMIS was launched after a 12-month setup period, during which the standard classification system was finalized, the main system was developed, pilot testing was conducted, and user training was carried out.

2. System Maintenance and Operation Support

a) User training for One-PMIS focused on user-oriented practical exercises. SMG is running a monthly training program and provides special programs whenever the system re-opens, modifications are made, or new features are added. Contractors also need to have some of their personnel participate in the system's development process for the transfer of related technologies.

b) Continued maintenance is a prerequisite to successful system examination and emergency response. The entire operation support team ensures user support through the operation of a call center, offering remote support service, and providing online manual service.

IV. Suggestions for the Successful Adoption of the System

1. Phased System Development

a) In the case that the development of a full system equipped with all the necessary functions through a single project is not possible, the next best option would be to complete it more gradually. In phase 1, the system (Ver.1.0) may only have a construction informer feature that is used in managing the information on the overall status of each project, which will be provided to the project manager as well as to the general public.

b) In phase 2, the system (Ver.2.0) may have additional features such as a PMIS through which the contractor can key in and manage information and be linked to the construction informer system so that the information is available to project managers and residents.

c) In phase 3, subcontractors will be able to upload information directly in the fully-functional system (Ver.3.0), just like SMG's current One-PMIS, which is then reviewed and approved by the contractor. The system will become a real-time, cooperative project management tool that provides construction information service to the public.

2. Proposals for Successful System Development and Operation

- a) A standard classification system is a prerequisite for the development of any system. Its adoption is required to ensure that standardized information is used during project execution. A maintenance system must be in place to support the operation and a year-round training program should be available to increase user engagement. Project costs must be paid and project performance must be evaluated based on the system specifications. Legislative support is also required for the promotion of system utilization. A managerial meeting can be a useful platform for decision making where system specifications can be presented.
- b) When building a PMIS, the system must be contractor-oriented, with which the organization's various projects can be analyzed, evaluated, and controlled through a comprehensive and systematic management process. Double entries must be screened using information sharing and linkages. The system should be able to prevent any duplication of work and provide a user-friendly experience.
- c) Successful system development and its smooth operation can be achieved by mobilizing personnel and outside experts who have the knowledge, experience, and implementation skills in various areas including system development, operation, construction projects, and ICT.

V. Benefits of One-PMIS

1. Ensures efficiency and transparency in construction administration

- a) Breaks away from the traditional method of experience- and practice-centered project management and construction administration processes and employs a new electronic work process with the adoption of an information system, while contributing to the innovation of construction technology and the elimination of corrupt practices in construction administration;
- b) Brings efficiency and consistency to the work process and eliminates work duplication with a new unified information management system based on a standard classification system;
- c) Shifts to a comprehensive project information management system to reduce work schedules and project costs, thus contributing to better-quality construction


2. Offers consistency and speed in the work process

- a) Saves on administrative costs and improves productivity with the adoption of a paperless information exchange and automatized work process;
- b) Quickly searches relevant project information for a speedier and more efficient work process;
- c) Achieves process integration by linking the new system to relevant information networks.

3. Provides a tool for information sharing and exchange, enhancing the organization's competitive strengths in project management

- a) Maximizes the organization's processing competency in construction projects by ensuring an infrastructure networked with related organizations and other information systems;
- b) Eliminates corrupt practices by reducing face-to-face interactions to a minimum with the use of the electronic document exchange system and enhances speed and competitiveness in the work process, thus contributing to the government's e-government policy;
- c) Meets the challenge of growing international competition in the construction industry and improves the quality of the organization's customer service through the adoption of an efficient electronic document exchange system.

SMG's Sub-Contractor Payment System and Electronic Human Resources Management System for Construction Workers



Subcontract Payment Monitoring System (sPMS or “Daegeum E-Baro” in Korean)

Jong Youl Hong
Paycoms CEO

I. The Korean Construction Industry

1. General Contractor-Specialized Contractor Relationship

In Korea, public construction projects are rarely carried out by the public agency or developer’s direct employment of workers and purchase of construction equipment and materials. Instead, contractors employ a general contractor. In the case of large-scale construction projects, the general contractor, rather than undertake the project on its own, further employs multiple subcontractors, or specialized contractors, to carry out specific construction tasks.

The actual work of building structures or bridges, for example, is carried out by the specialized contractors. They are the ones to lease construction machinery and equipment, purchase materials, and employ workers.

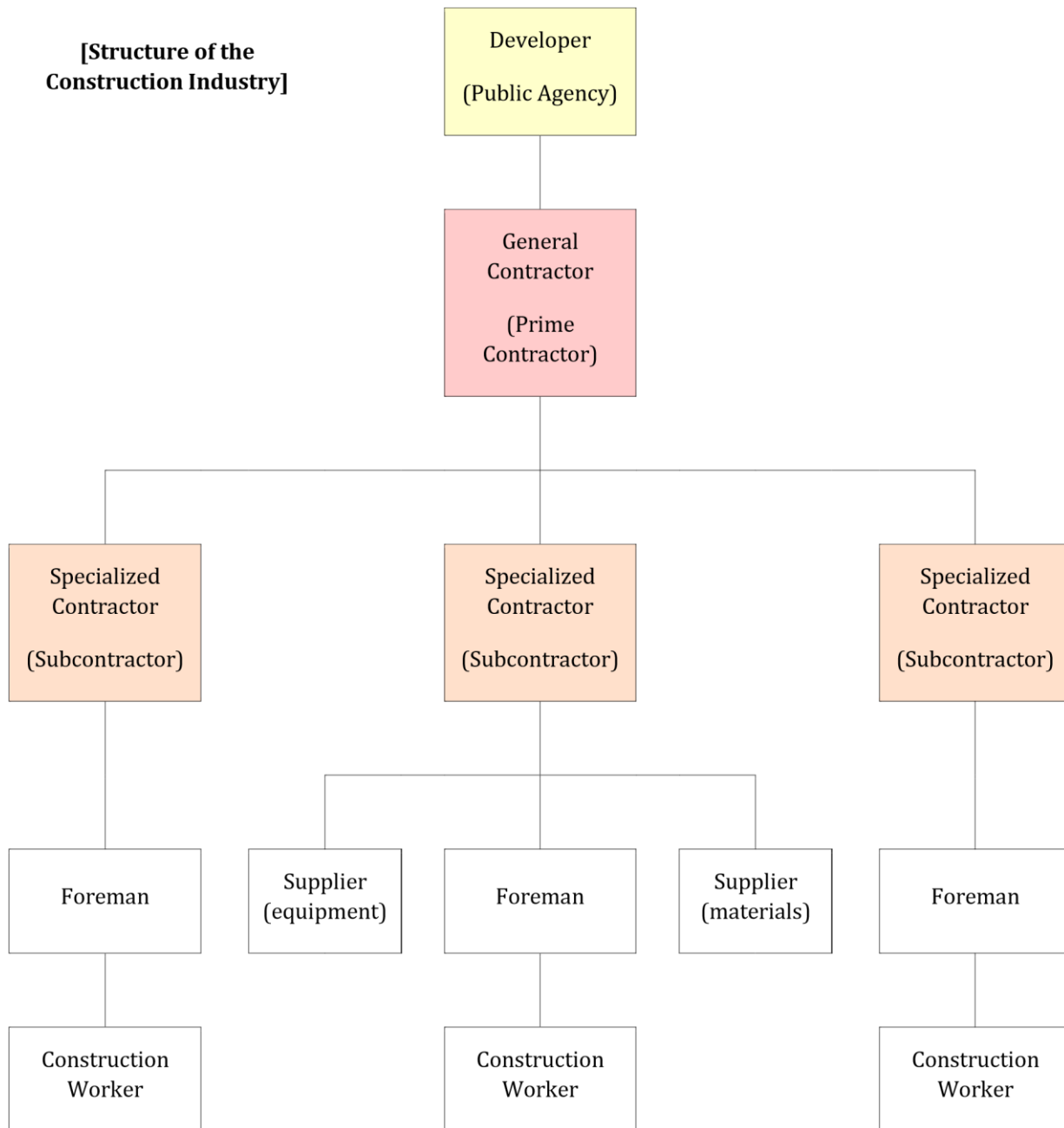
The role of a general contractor is to oversee the overall progress of the project including quality management, schedule management, and processing of engineering modifications. In Korean, therefore, general contractors and specialized contractors are called 'wondogeup upche' (prime contractor) and 'hadogeup upche' (subcontractor), respectively.

2. Structure of the Construction Industry and Cost Payment Process

There is a work process chain in the construction industry with the developer (public agency) at the very top, followed by the general contractor (prime contractor), then the specialized contractors (subcontractors), all the way down to the suppliers of equipment and materials and construction workers.

Payments for the construction costs are also made along this chain: from the developer (public agency) to the general contractor (prime contractor), to the specialized contractors (subcontractors), to the equipment and material suppliers and construction workers. In order for wages to be paid by the developer and delivered to construction workers, the process must go through the general contractor and the subcontractors.

[Structure of the Construction Industry]



3. Overdue Payments

The multi-layered, top-to-bottom structure of the construction payment system is at fault for a variety of problems. The most serious problem is that some of the labor costs paid by the government agency are not properly delivered to the final recipients, the construction workers. There are several reasons for this problem, among which a situation where a specialized contractor files for bankruptcy due to financial difficulty. Unlike general contractors, specialized contractors are small-size companies that operate within tight financial constraints and are exposed to the constant risk of default. When a

specialized contractor goes bankrupt, all the suppliers of equipment and materials, and the construction workers that the company has hired for the work have their payments delayed.

4. Impact of Overdue Payments on Socially Disadvantaged Groups

Most suppliers of construction equipment and materials run very small businesses. Most construction workers are also in difficult financial situations. Therefore, a delay of just a few months in payments can lead to bankruptcies and financial hardships. As a last resort, some unpaid construction workers have even chosen to protest against their employers on top of a tower crane. Putting their lives on the line to get their due payments is not just an act of protest but a desperate struggle against social injustice.

II. Overview of SMG's sPMS

1. Need for an Improved Payment Process

The ones that suffer the most from this unreasonable structure are the hard-working construction workers. No society can call itself fair if someone who has worked so hard under the scorching sun on a dangerous construction site cannot even get paid. Such a society would not advance.

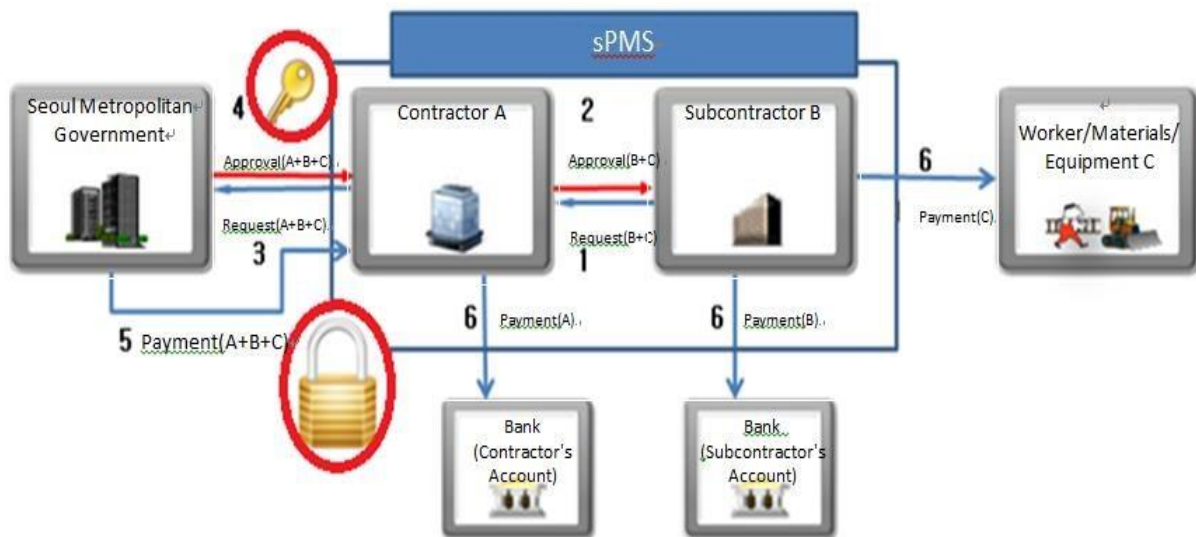
2. Political Will and Leadership

The Seoul Metropolitan Government (SMG) fully understood the need to come up with a fair and functional construction payment system to ensure that all construction workers are paid for their work. The city has struggled to find ways to reduce the pain of unpaid workers. SMG wanted to wipe the tears away from financially-vulnerable workers and their families by ensuring that all projects are paid for. One of the most ardent supporters for finding a solution to this problem was the Mayor of Seoul, Mr. Won Soon Park, who has shown a special interest in the socially disadvantaged, such as workers, senior citizens, low-income families, child-headed families, and people with disabilities.

3. Adoption of a Unified Payment System

SMG has been devising an integrated system to ensure that construction workers receive their share of the project costs. A mechanism was required to prevent the appropriation of project funds or project costs paid by the public agency in the process of being transferred to the final recipient via the general contractor and subcontractors. To this end, a new system was implemented whereby the total project cost was divided and paid directly to each recipient including the general contractor, subcontractor, supplier, and construction worker, thus preventing involvement in each other's payment processes.

III. Features of sPMS (or “Daegeum E-Baro” in Korean)



In order to ensure that SMG’s payment to the general contractor is properly distributed to its subcontractors and workers, payments are made to a special sPMS account that is blocked from any other transactions, and all project funds are managed through sPMS.

1. A subcontractor makes a request to the general contractor for the payment of each item (equipment and material costs and labor).
2. Once all requests are approved by the general contractor, they are submitted to the project developer (public agency).
3. After checking for any irregularities, the developer (public agency) approves the payment requests item by item for the general contractor, subcontractor, equipment and material supplier, and the workers.
4. The developer (public agency) makes the payment for the total project to the general contractor's sPMS account (In the case of an amount to be paid directly to a subcontractor, a separate payment is made to the subcontractor).
5. The general contractor, subcontractors, equipment and material suppliers, and labor providers can only withdraw amounts designated and approved by sPMS.

IV. sPMS Adoption Process

1. Enactment of the City Ordinance

The system was developed as early as in November 2011. However, the system was not very popular at first: it was new, required training, and only meant extra work for many people. More people began to complain about the inconvenience, questioning the new system's usefulness. Monthly training programs were provided and directions were given to everyone involved in the project payment process to little effect. A measure had to be taken to promote this tool among all stakeholders involved and prevent it from becoming obsolete.

The most effective measure was to enforce its usage. In October 2013, SMG enacted a city ordinance that required the use of sPMS for the payments of all work contracts issues by the city for construction work lasting 30 days or more. The ordinance required sPMS to be used to make payments for most construction projects with only a few exemptions (e.g. projects lasting less than 30 days). Thanks to this powerful piece of legislation, sPMS started being widely used in a short period of time.

2. Cooperation from General Contractors

General contractors voiced complaints about using sPMS because the system's limit on the withdrawal of funds made it impossible to use construction funds interchangeably among different projects. Some contractors refused to utilize the system, citing that not being able to channel project funds to other uses would lead them into financial crisis.

SMG convinced them otherwise, explaining the potential benefits of paying subcontractors and workers on time. In the worst case scenario, if payments were delayed, construction workers would go on strike and suppliers would refuse to supply equipment and materials needed for the work. The whole construction would come to a halt. A delayed schedule would increase the costs, which would only result in less revenue. With determination, the city successfully convinced the general contractors of the benefits of breaking away from this vicious cycle, winning their cooperation in using sPMS for the cause of promoting social justice.

3. Cooperation from Banks and Financial Institutions

SMG's policy of eliminating overdue payments and the development of sPMS were made possible by the full cooperation of financial institutions. Linking sPMS with the bank systems was key to the success of the entire system since partner banks were in charge of handling all project payments. Financial institutions promised their commitment to social responsibility and full cooperation with SMG's policy to protect the socially disadvantaged. To contribute to this cause, banks even waived fees for the opening of new sPMS accounts and transfers from other banks.

Only two banks initially partnered with SMG for the launch of the system in October 2011, with more participating as sPMS gained approval from the general public. Currently, 10 banks operating at the national level are providing financial services via sPMS.

4. Contribution from Venture Businesses

Developing a sound system was key to the success of SMG's policy to eliminate overdue payments. Building a system that can navigate through the complex payment structure of construction projects with a withdrawal-limiting function was no easy task. Developers of such a system needed expertise in all areas including public project disbursements, banking systems, and experience at the work sites. Without detailed knowledge of this structure, building a proper system was a big challenge.

Fortunately, SMG was able to find the right company to take on the task of developing the perfect tool for the policy. One of the venture businesses that had applied for the job had the previous experience of developing a patented "Subcontractor Payment Verification System" in 2010. SMG signed a contract with the company, expecting that building on the previous experience would decrease the time necessary to develop sPMS.

Due to limited funds available for sPMS development, SMG could only pay a small amount to the venture company. Still, the project was in line with the company's business purposes and expected it to become profitable as more local governments came to adopt sPMS. The company signed on to the project in April 2011.

The venture company completed the system in November 2012 and filed the patent application for the resulting technology. The development was a success thanks to the hard working employees at the partner company.

V. Success Factors and Results

1. Increase in Users

Developed in November 2011, sPMS began its full operation in 2012. The number of annual users among construction workers increased 81 times from 854 in 2012 to 69,584 in 2015 (as of September 2015) with the total number of users up 27 times from 3,512 in 2012 to 96,639 in 2015 (as of September 2015).

<sPMS Users (2012 – September 2015)>

	Construction Workers	Equipment Suppliers	Contractors	Subcontractors	Total
Total	159,857	37,477	20,975	5,114	223,423
2012	854	71	2,289	298	3,512

2013	23,921	3,272	5,175	936	33,304
2014	65,498	16,881	5,695	1,894	89,968
As of Sept. 2015	69,584	17,253	7,816	1,986	96,639

The number of users has increased since the enactment of the ordinance requiring the use of sPMS for project payments in October 2013. One of the lessons learnt was that no policy can succeed without proper legal support. Although the ordinance as it is in effect today requires the use of sPMS for project payments, it does not have any provision regarding non-compliance. Once a proper penalty mechanism is in place, more companies are expected to utilize the system.

2. Benchmarking by Other Government Institutions

The media has been reporting on the benefits of sPMS for the last few years. sPMS was benchmarked by many government agencies and local governments including the Ministry of National Defense, the Public Procurement Service, Korea Hydro and Nuclear Power, Korea Rail Network Authority, and the Jeju Special Self-Governing Province Administration, and have developed and are operating similar systems such as the 'Subcontractor Protection System,' and 'Clean Pay System'. Thus, sPMS has served as a model to many sister systems being used under different names.

The Clean Pay system was developed in January 2013 by a private software company and has been adopted by about ten public agencies including the Ministry of National Defense, K-water, and the Jeju Special Self-Governing Province. The Public Procurement Service developed its own Subcontractor Protection System in December 2013, which is being used in more than 100 government agencies. Korea Rail Network Authority, a public agency, will be introducing its 'Overdue Pay E-zero' system, to be completed this year, at all of its work sites. These systems may have different names, but all are based on the single model of sPMS. Each of these systems demonstrates the impact of sPMS on today's e-payment system in Korea.

3. Legislation to sPMS Nationwide

As sPMS gained traction in the construction industry, the National Assembly also took notice of the need to promote the system at the national level. In April 2015, assembly members proposed a revised Act on the Use and Promotion of Electronic Procurement that requires the use of an electronic system (similar to sPMS) in subcontractor management. The law is pending in the Assembly's Strategy and Finance Committee and is expected to pass during its plenary meeting in late December this year. Once the law is enacted, beginning in 2016, all government entities will need to use a payment system similar to sPMS.

VI. Recognition of sPMS

1. Awards

The system won the 2013 United Nations Public Service Award in the Anti-Corruption Clean Construction System category. It was the world's first electronic construction management system to win the Public Service Award in one of the main categories ('Anti-corruption in Public Service'). The system also won first prize at the 2013 Korea IT Innovation Awards hosted by the Ministry of Science, ICT and Future Planning. These accolades represent outside recognition for SMG's efforts to protect the suppliers of equipment and materials and construction workers who are disadvantaged in the construction value chain.

2. User Satisfaction Survey

A user satisfaction survey was conducted in August 2015. The study found that the system had been highly effective: 90 percent of the respondents said that the system was effective in preventing delayed payments, and 98 percent were in favor of its adoption. All user feedback including complaints gathered from the survey is being used to improve the system.

Complaints and Suggestions Filed
① More training programs on sPMS usage (video training preferred)
② More outreach to improve public awareness of sPMS
③ Sanctions on non-users of sPMS (penalty)
④ Improved customer call center (e.g. unfriendly call responses, long wait to be connected)
⑤ More user-friendly interface

VII. Avenues for Improvement

1. Tougher Penalties for Non-compliance

As far as non-complying contractors are concerned, SMG plans to levy penalties such as suspending payments and limiting their participation in future project bids. The use of sPMS is being encouraged by suspending any contractor who breaches their contracts by intentionally avoiding the system altogether or entering inaccurate records of their right to participate in project contract bids for up to three months pursuant to the local contracting law.

2. Enactment of Related District Ordinances

SMG also plans to enact district ordinances that require the use of sPMS. Since none of Seoul's 25 districts has such an ordinance in place so far, construction contracts offered by the districts have not used sPMS. The lack of such ordinances leads to the system's lower usage rate in district-level construction work. Through close consultations, SMG plans to have all of its districts enact ordinances requiring the use of sPMS. As of November 2015, five districts have already started the legislation process, and another 15 plan to begin soon. SMG plans to convince the remaining five to do the same.

3. Rigorous Training and Promotion

SMG plans to improve public awareness of sPMS by producing and distributing a video user manual and inviting experts to visit local districts to offer training services.

For further promotion, a promotional video is being planned to be featured in Seoul's various webcast programs (e.g. 'Sotong Bangtong', 'Video SMG News', 'Seoul in My Hands') and social media channels (e.g. YouTube, Facebook). Other more traditional forms of media such as posters, banners, and electric billboards will also be used to inform citizens about the benefits of the system and how payment delays can be reported.

4. Call Center and One-on-One Education

The number of calls requesting information has increased as more people have started using the system. These increased inquiries have made calling SMG nearly impossible for users wanting to file complaints about the system. Too many inquiries also contributed to lukewarm or inappropriate responses from call center employees.

The city plans to improve its call center service and reduce calls by distributing more video user manuals.

SMG also has a plan for a new call center with a better automated response system, and will offer expert customer response training to its employees so as to eliminate complaints about unfriendly responses.

Complaint Call Response I (manual)	Complaint Call Response II (manual)
<p>2 전화민원 응대요령</p> <p>☞ 전화예절</p> <ul style="list-style-type: none"> ● 시간과 나누는 전화응대 한 마디는 우리 기관의 이미지를 높이고 나의 이미지를 높일 수 있습니다. ● 전화응대는 복이길 잃는 민원당국입니다. 시민을 직접 대면하는 마음으로 친절하고 정확한 서비스의 이미지를 만들어 냅니다. <p>☞ 전화응대의 중요성</p> <ul style="list-style-type: none"> ▼ 오늘날 우리 생활에서 전화의 가치와 효용은 절대적이지만 수화기를 통해서만 하는 대화는 상대방 마음을 차가운 데서 소통하지 못 할까봐 상대 마음을 달랠 수 없습니다. 전화는 곧 서비스의 열매입니다. 할 수 있을 만큼 친절하게 되어 시민과의 인기가 좌우되고 좋은 결과를 위한 자세를 지켜야 하고 이를 위하여 어떤 마음의 뜻을 상대방에게 전달하는 것이 중요합니다. <p>☞ 전화응대의 3요소 역할</p> <ul style="list-style-type: none"> ▼ 화자의 행동권 ▼ 화자의 열정 ▼ 시민에게서 받은 열정 ▼ 행정 효과의 장구 <p>☞ 전화응대의 3요소</p> <p>☞ 전화응대를 잘하기 위한 열악하기 돕기 생각하기</p> <ul style="list-style-type: none"> ▼ 전화응대를 잘하기 위해서는 열악(Weakness) 등(Thinking), 열악(Thought) 대한 충분한 이해가 필요합니다. <p>☞ 열악(Weakness)</p> <ul style="list-style-type: none"> ● 열악: 어떤 일을 할 때의 약점 ● 열악: 어떤 일을 할 때의 약점 ● 열악: 어떤 일을 할 때의 약점 <p>☞ 열악(Thought)</p> <ul style="list-style-type: none"> ▼ 어떤 일을 할 때의 약점 ▼ 어떤 일을 할 때의 약점 	<p>상황 별 전화민원 응대요령</p> <p>♥ 단계별 전화응대 요령</p> <ol style="list-style-type: none"> 1. 전의사 및 자기 소개 ▼ "안녕하세요. 0000-0000 (내 일) 국 지점 인사 형(여)입니다." 2. 열이 없거나 불만 후 수신 시 ▼ "안녕하세요. 0000-0000 (내 일) 국 지점 인사 형(여)입니다." 3. 열정 및 공감 ▼ "네, 그러합니다? 잘 부탁드립니다." 4. 다른 직원에게 전화연결 할 때입니다 ▼ "네, 어떤 일을 도와 드릴까요? 0000-0000 (내 일) 국 지점 인사 형(여)입니다. 0000-0000 (내 일) 국 지점 인사 형(여)입니다. 0000-0000 (내 일) 국 지점 인사 형(여)입니다." 5. 다른 직원에게 전화연결 할 때입니다 ▼ "다른 직원에게 전화연결 할 때입니다. 0000-0000 (내 일) 국 지점 인사 형(여)입니다. 0000-0000 (내 일) 국 지점 인사 형(여)입니다. 0000-0000 (내 일) 국 지점 인사 형(여)입니다." 6. 메모전송 ▼ "안녕하세요. 0000-0000 (내 일) 국 지점 인사 형(여)입니다." 7. 지류 전달 시 ▼ "지류 전달 시, 업무상 내용으로 지류 배포 확인이 필요합니다. 확인 후 다시까지 전달드립니다." 8. 시민 의견제언 시 ▼ "의견은 꼭 받아들이고 있습니다. 업무상 가능한 부분은 반영할 수 있도록 하겠습니다." 9. 추가 문의사항 확인 ▼ "혹시 더 궁금하신 사항 있으신가요? 최대한 빨리 도와드리겠습니다." 10. 마무리 인사 ▼ "안녕하세요. 좋은 하루 되세요."

5. System Improvement

SMG plans to improve sPMS features to provide easier user access. The uploading function will be upgraded for more user-friendly data entry, with the addition of automatic notification for logins via mobile text and e-mail. Other user-friendly features will continue to be added, including access to some of the system's functions via mobile devices.

Seoul's Electronic Human Resources Management System for Construction Workers (E-HRM) to Achieve Anti-Corruption at Construction Sites

Young Jun Jang

Construction Management Division Official, Seoul Metropolitan Infrastructure
Headquarters

I. Definition of Construction Worker

The position of a construction worker in the Korean legal system is defined as a counterpart to the construction manager: an employee who is in charge of manual work at the construction site. As a group, construction workers are often considered to be among the lower ranks of the social ladder, earning a low average wage or total income. Unlike workers in other areas, their monthly wage is calculated on a work-day basis and the way severance grants are assessed and paid is different. Construction workers' severance grants payments are made by the Construction Workers Mutual Aid Association (CWMA), a government agency.

II. Rationale: Background for the System Development

The practice of manually writing down labor records for construction workers whose wages are work-day based tends to be done inaccurately. For some time, the Seoul Metropolitan Government (SMG) had recognized the need to tackle fraudulent practices at their root, suspecting the possible intentional omission of work records and appropriation of funds being committed by construction companies. CWMA had also struggled to come up with a solution to prevent companies from not reporting some of the severance payments made to their workers. To this end, SMG and CWMA worked together to adopt a new Electronic Human Resources Management System for Construction Workers (E-HRM).

III. Functions of E-HRM

The benefits of E-HRM include a Radio Frequency Identification (RFID)-based employee clock in/clock out management system, and a personal bank-affiliated electromagnetic ID card (credit or debit card function) issued to construction workers. Employees can swipe the card on readers while clocking in and out for work to ensure an accurate and transparent record of their daily labor.

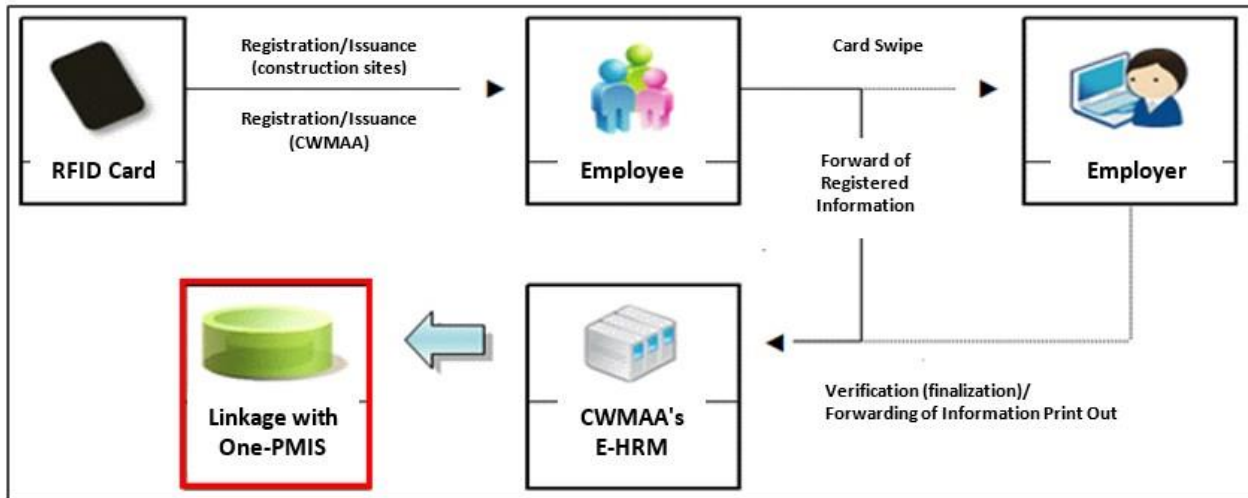
CWMA developed a new E-HRM system that can create a database that includes the personal information of registered workers, their labor records, and information on all the construction sites they worked on. SMG, for its part, decided to run the pilot operation of E-HRM at its new construction project sites. As part of this joint effort, CWMA's E-HRM and SMG's One-Project Management

Information System (One-PMIS), the city's construction information management system, are now interlinked to operate in sync.

SMG's One-Project Management Information System (One-PMIS): In operation since 2012

SMG's technology-based and systematic construction process management system, with real-time database sharing of construction information.

[Operation Flow of E-HRM]



IV. Expected Outcome of E-HRM

There have been concerns over the premature adoption of E-HRM voiced by some construction companies, citing that construction workers' employment conditions and working environment have been under the radar for a long time. Still, a bold decision was made in order to eradicate corruption at construction sites and improve transparency.

SMG and CWMA signed an MOU to conduct a series of E-HRM pilot programs in three of Seoul's construction project sites and to link in real-time their construction management systems (One-PMIS and E-HRM).

A task force was put together for a thorough preparation of the E-HRM project, which was implemented beginning September 1, 2015.



Signing of MOU



Construction Workers Swiping their RFID Cards

V. Expected Benefits

Computing labor information directly from tagged RFID cards will ensure accurate labor records required to calculate construction workers' severance grants. The database used to identify the contractors' exact labor expenses will serve as accurate and transparent documentation, and will help prevent disputes over delayed wage payments. It will also help eliminate one of the sources of illegal practices in the construction industry by keeping in check any deliberate omission of labor records and the subsequent temptation to appropriate funds.

In conclusion, the prevention of on-site fraudulent practices and the promotion of transparency across the construction industry can only be achieved through the establishment of a sound severance grant system made possible through the participation of the employees themselves.

[Screenshot of Real-time Electronic Labor Records]

공정보고현황 < 근로자이력조회

근로자이력조회

사업명 : [] 사업선택 직종명 : [] 찾기 업체명 : [] 찾기
 근무일자 : 2015-09-15 ~ 2015-09-15 근무자명 : [] 현재 근무중인 근로자 검색 초기화

> 사업현황 > 근무현황 > 소속업체별 근무현황

사업명	소속	이름	생년월일	연락처	직종명	이력일시
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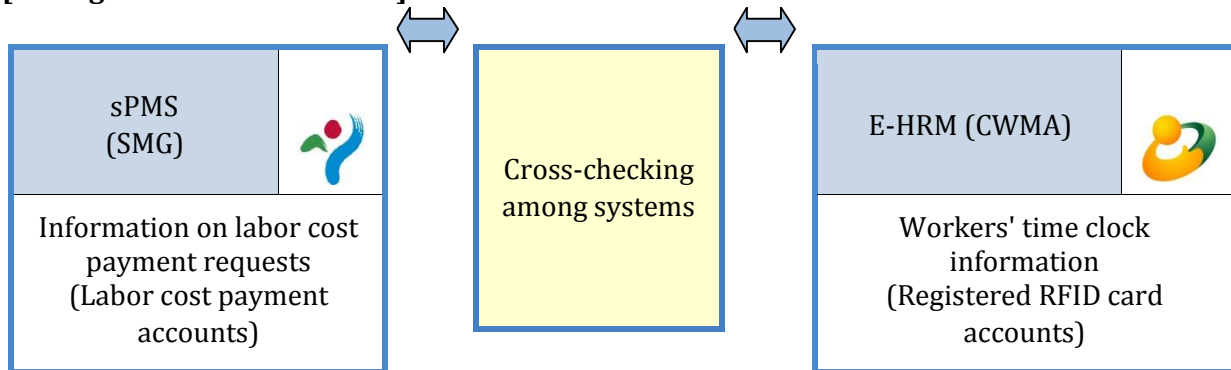
VI. Linkage with the Subcontract Payment Monitoring System (sPMS)

A project is being carried out to link E-HRM with the Subcontract Payment Monitoring System (sPMS or 'Daegum E-Baro' in Korean). By linking the two systems, the developer will have access to a powerful tool to tangibly verify contractors' requests for labor cost payments, which was previously impossible. With this innovative system, it is possible to screen false or omitted information by crosschecking the entries of contractors' labor cost payment requests in sPMS and the actual time clock records in the E-HRM database.

SMG's Subcontract Payment Monitoring System (sPMS): In operation since 2012

Korea's first item-by-item verification system (completed works, materials, equipment, labor) for expense payments for Seoul's construction projects

[Linkage of sPMS with E-HRM]



VII. Success Factors Benchmarking Potential of E-HRM

The close collaboration between the central government agency (CWMA) and SMG has led to the success of the project, and being able to guarantee construction workers their own severance grants has been a motivating factor. In addition, the system offers the contractors simpler ways to manage construction workers' time clock records and to file for severance expenses. Legislation regarding the implementation of E-HRM is currently being worked out.

As mentioned above, in the Republic of Korea, most construction workers are categorized as disadvantaged blue collar workers earning low wages. The group shows a low percentage of credit card holders with a substantial number of workers not even qualifying to have a card issued due to bad credit ratings. The adoption of a bank-affiliated RFID card system with a credit or debit card function is meant to help boost the group's credit card ownership. Workers may think lightly about a lost RFID card ID when it has no payment function. They may also lend it to others to swipe it for them illegally.

To increase the bank card ownership rate further, a debit card option (as opposed to a credit card option) was provided to construction workers with bad credit ratings.

The card ID uses RFID technology for easy time-clocking. The technology is not new, and has been used in many countries for decades, thus making its adoption easy in most countries around the world.

The system could also be easily deployed in any country with an Internet network since the card time recordings are transmitted to the system server through cable Internet.

Thus, not many countries are likely to face technical barriers that would prevent the implementation of such a system. However, since transparency has been lacking in the employment practices and working conditions for construction workers, cultural improvements and government policies to make the process more transparent will be necessary for the success of the new system. The Seoul Metropolitan Government will continue its efforts to advance this cause.

The Government's implementation of E-HRM is at the heart of these commitments.

Status of Special Contractors' Subcontractor Payment System Utilization

Sang-Koo Cho

Director, Department of Support Policy, Korea Specialty Contractors Association (KSCA), Seoul Metropolitan City Branch

I. Introduction

Korea has 38,000 specialty construction companies. Specialty construction in Korea relates to professional construction fields. Specialty construction workers who are members of KOSCA require technical expertise, and do their best to gain expertise in their fields. KOSCA was established in 1975 to represent the specialty construction companies. It has 16 branches located in major cities and 18 councils for each type of work.

1) Seoul Metropolitan Government's Subcontractor Payment Monitoring System (sPMS)

While companies had reservations about the system when it was first introduced, the users of the new system have experienced many advantages. Construction workers have also enjoyed the economic stability stemming from receiving payments regularly, which also enhanced trust in special contractors at construction site. Since SMG's sPMS is directly linked to the existing financial and accounting system of SMG and the companies, its utilization is more convenient and effective as well.

2) Status of System Utilization

At the end of June 2015, 865 constructions which is worth 998 billion 348 million KRW (approx. 862 million USD) utilized "SMG's Subcontractor Payment System". This account for 88% of SMG's entire construction, and 97% of entire price of supply, which are 980 cases, 1029 billion 309 million KRW (approx. 887 million USD).

It can be concluded that utilization of SMG's own subcontractor payment system has stabilized. Other national and local government bodies, public organizations, as well as the private sector companies have benchmarked the sPMS and have adopted a similar system for their own operations. Given the positive impact of the sPMS, the Korean government is now deliberating a draft law that would mandate all government institutions (including public organizations) to adopt and use a subcontractor payment monitoring system, similar to that of SMG.

Such high utilization rate of SMG's sPMS can be compared to that of the Subcontract Protector' system of Korea's Public Procurement Service (PPS) operating since January 2014. PPS's system enables the government to identify and process online workers' wages and subcontractor's machinery costs as established in public contracts. However, this system is not automatically linked to the financial and accounting system of PPS and of the users, and therefore utilization from the users' perspective has been more challenging. During the first half of 2014, only 0.2% of total constructions registered in Korea's Online E-Procurement System (KONEPS) utilized this 'Subcontract Protector' system. This

increased to 0.6% in the latter half of 2014. In the first half of 2015, the utilization of the system accounted for 0.9%, an increase of 0.3% but still less than 1%. <Source: Public Procurement Service>

3) Positive Effect of sPMS from the Users' Perspective

Using SMG's sPMS, specialty contractors report that they themselves also benefit from not receiving penalties from overdue subcontract payments or unpaid wage issues. They also observed that sPMS contributed to eradicating unfair construction customs and established an environment for fair public contracting.

In a recent interview study, users of sPMS identified that simplifying the payment procedure (i.e. reducing paperwork) was key in achieving efficiency in the subcontractor payment system. Since sPMS enabled online-payment of subcontracts and real-time verification of payments, along with the creation of a prime contractors' receiving bank account without a withdrawal function, it is now possible to monitor whether subcontract payments were made according to schedule. The system also expedited the payment reaching the subcontractors—it now takes only 1-2 days.

4) Private Systems Being Developed

Given the positive effect of SMG's system, some of the bigger construction enterprises started to develop and utilize their own private payment monitoring systems.

One private system in particular is now being used by several companies. It is more user-friendly, and shows high compatibility with Microsoft programs, which simplify data uploading and data revision. However, there are concerns of 'private information protection' since the workers need to upload their private information in the system, and the private system safety itself is also questionable. Another challenge exists with system users' fee. During the wage transaction, subcontractor payment system will issue 'commission' for every worker which puts economic burdens on the special contractors. Thus, special contractors tend to prefer government subcontractor system over private subcontractor payment system which incurs higher user costs.

5) Suggestions for Further Improvement

At the same time, there are some areas which can be further improved. Users of SMG's sPMS note that the User Interface (UI) can be updated and its functions be simplified, for the system to become more user-friendly. They further suggest that SMG provides notification features to accurately inform them of the subcontract payment schedule and provide more efficient file uploading features to reduce redundant data inputs. Lastly, they recommend that all the subcontractor payment systems in various government and public institutions be linked and, even better, integrated.

Part II. Experiences around the World:

Initiatives and Lessons Learnt in Promoting Public Construction Transparency



Open Contracting: Transforming Procurement with Open Data & Citizen Engagement

Lindsey Marchessault

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Governments spend vast sums of money every year on deals to build infrastructure, deliver goods, and provide services to their citizens. Public procurement is where taxpayers' money gets converted into tangible products that citizens care about: schools, roads and hospitals.

Therefore, it is critical that public contracts should be fairly awarded and offer good value-for-money. When government and business meet, rules need to be clear and deals open to the public.

Unfortunately, the OECD, the European Commission, and others agree that public contracting is the government activity most vulnerable to wastefulness, mismanagement, inefficiency, and corruption. And, only 6% of 86 countries surveyed publish open data on government contracts. This is bad for business, bad for communities, and lethal for public integrity. In the construction sector, the result is often poor infrastructure and in the worst case collapsing bridges and schools.

Open contracting provides publicly accessible, timely and comparable data on the planning, procurement, and implementation of public contracts. This data allows citizens and business to engage with government on monitoring these important projects. Through integrating feedback, government becomes accountable. This process can unlock innovation once it becomes routine.

How do you open public contracting?

Open Contracting involves government and nongovernment actors working together to initiate the following steps:

1. Assessing the transparency and accountability of the current procurement and contract management system;
2. Enabling the timely and routine publication of key documents and structured open data about the planning, procurement, and implementation of public contracts;
3. Facilitating the engagement civil society, business, and government actors in the use of open contracting data;
4. Linking open contracting data to other relevant data sets (like budget, aid, and spending).

The ultimate goal of these activities are to achieve value for money for government; provide fair and competitive access to opportunities for businesses, to detect and deter fraud and corruption; and to ensure high quality service delivery outcomes from the contracts.

In specific sectors, open contracting approaches can be aligned with multi-stakeholder initiatives such as the Construction Sector Transparency Initiative (CoST) and civic engagement around Open Contracting yields maximum results when coupled with an effective public feedback redress mechanism.

Open Contracting in Practice

Ukraine's Multistakeholder Open Contracting Reform 'ProZorro'

In Ukraine several civil activists and procurement experts decided to gather together following the Maidan revolution and in the midst of the Ukraine conflict to make sure scarce resources are spent most effectively. Together they formed a public private partnership called the ProZorro initiative to pilot a new open procurement open source software.

This new pilot procurement system launched in February 2015, and is based on the Open Contracting Data Standard as a key tool for structuring and analyzing contract data. Any document and any information related to public procurement (annual plans, tender notices, tender documentation, bids, decisions of evaluation committees, contracts and their implementation, payments etc.) is open and freely accessible online.



ProZorro has also developed a tool to monitor the performance of the procurement system using the open data (bi.prozorro.org). The results have been impressive: Within the first 3 months, US \$1.5 million in public budget was saved (averaging about 12% savings). Competition increased to an average of 3 participating bidding companies per tender.

South Africa Public Sector Supply Chain Management Reform

South Africa has embarked on an ambitious public sector reform agenda targeting improved efficiency, effectiveness and integrity of its supply chain management system. In support of this important initiative, the World Bank Public Integrity and Openness team collaborated with the Open

Contracting team and the GIZ South Africa Governance Support Programme to work with the Government of South Africa to identify how enhanced transparency and stakeholder participation could enhance this reform agenda.

The result of the collaboration was an in-depth assessment of the procurement system conducted in partnership with the Office of the Chief Procurement Officer of the National Treasury. The assessment looked at the national development planning priorities, the legislative framework, systems and structures, and spoke with practitioners and stakeholders in private sector and civil society to get an understanding of the tough challenges that were undermining the efficiency and integrity of the system. The assessment team generated a series of solutions aimed at harmonizing legislation, building capacity of practitioners, raising public awareness, and adopting digital and open data solutions.

The Government of South Africa has subsequently identified several priority activities:

- Developing and prescribing a public disclosure framework that governs transparency within the SCM process. This should result in institutionalising disclosure.
- Prescribing that all information in the bid process be disclosed publicly. This includes bid committee reports, minutes and contracts.
- Improving the accessibility of information. All information will be housed on the OCPO's website. All government entities will be required to publish information on their respective websites in line with a public disclosure framework prescribed by the OCPO.
- Improving the quality of information and encourage its strategic use.
- Creating an environment conducive to stakeholder participation in the different stages of the SCM process.
- Building the capacity of the private sector, civil society and relevant stakeholders to take part effectively in enhancing transparent public SCM.

For more information about South Africa's plans, please see the landmark [2015 Public Sector Supply Chain Management Review](#).

Open Contracting at the Municipal level: City of Montreal, Canada

Following a series of procurement corruption scandals centered around the municipal construction industry, in 2015, the City of Montreal began publishing open data related to municipal contract awards. The files are pulled from municipal financial systems and published on the open data portal of the city (<http://donnees.ville.montreal.qc.ca/>). In addition, the city launched a public portal: <http://ville.montreal.qc.ca/vuesurlescontrats/> as a visualization tool to view the contracts and grants awarded by the City of Montreal since 2012 in a simple and user friendly way (with the ability to filter by sector).

The system has an API that automates queries for citizens who want to conduct their own analysis with the data (<http://ville.montreal.qc.ca/vuesurlescontrats/api/>). The API documentation is also available in the Open Data Portal (<http://donnees.ville.montreal.qc.ca/dataset/contrats-etsubventions-api/>).

Slovakia Publication of Government Contracts

Slovakian law was overhauled in response to the 2011 update of the EU Procurement Directives and the concern over high profile public procurement scandals. Major reforms included:

1. The introduction of e-procurement, in which dissemination of tenders, tender documents, the submission of bids and the publication of notification of awards is done publicly through a single portal;
2. The introduction of reverse auction mechanisms for procuring goods and services
3. Mandatory publication of all public contracts on a centralized online government contract repository.

In the Slovak Republic, Act No. 546/2010 Coll. supplementing Act No. 40/1964 requires all public contracts, with certain limited exceptions, to be published online. To avoid secret contracts, any unpublished contracts are declared to be unenforceable. The Government Public Procurement Office manages Slovakian procurement rules. This office maintains a register of procurement documents and operates the procurement portal, which is called EVO (<http://www.zmluvy.gov.sk/>).

Opening up the information makes it possible compare contractors and look at patterns across cities and institutions. The NGOs TI-Slovakia and Fairplay Slovakia maintain an online Open Contracts website built off the procurement data scraped and structured from public sources (<http://www.otvorenezmluvy.sk/>). Having data available in these formats has enabled TI-Slovakia to conduct broader analyses than were previously possible.

Mexico's 'Social Witness' Program

In Mexico, since 2004, the federal government of Mexico has required the involvement of “social witnesses” in public bidding for goods, works, and services over a certain threshold value. Since 2009, participation of a social witness has been mandatory in procurements valued at more than \$23 million for goods and services and US \$43 million for public works. Non-government organizations and individuals may be selected as social witnesses by the Ministry of Public Administration. Their function is to propose strategies for improving transparency, impartiality and compliance with the legal framework, and must issue an alert if they detect any irregularities in the course of the procurement. At the conclusion of the procurement proceedings, the social witness issues a publicly available statement including observations and, as appropriate, recommendations. The statement is posted on the government’s central procurement website and in the file of the tender.

The “Social Witness” program is the result of an initiative of the NGO Transparencia Mexicana to facilitate the participation by civil society as external observers in public procurements. Originally, social witnesses participated as a result of guidelines issued by Ministry of Public Administration in 2004. The guidelines stipulated that the Ministry keep a registry of individuals and nongovernmental organizations which may participate in all stages of a procurement conducted by any institution of the Federal Public Administration in Mexico.

According to Transparencia Mexicana, the Social Witness program has significantly reduced the costs of public contracts and has increased the number of bidders participating in the procurement process in Mexico.

Nepal Pilots Open Contracting in Key Infrastructure Sectors

In Nepal, Development Gateway, Open Government Partnership and the Open Contracting Partnership have joined to support Nepal's Public Procurement Monitoring Office structure and map contracting data from development projects in roads, power and local infrastructure.. By visualizing this information, it was possible to engage a wide range of stakeholders about how to leverage the data for better planning and decision-making. The open contracting principles are now being incorporated into the office's policies and technology. Significant challenges remain. Too often, it is impossible to trace money from development projects to procurement outcomes. The problem persists because there is no unique identifier that links contracts with projects in Nepal.

European Digital Whistleblower Project

The aim of DIGIWHIST ("The digital whistleblower") research project is to address these problems with innovative open data tools which make public spending more transparent, understandable and accountable.

In the course of 2016, Digiwhist will develop and release an extensive database containing public procurement data from 34 European countries and the European Commission itself. It will do so following the Open Contracting Data Standard, while also extending it with a range of further collectible and relevant variables. As European countries don't yet publish according to the Standard, Digiwhist will map country publication practices and design an open data tool translating current diverse data formats into a single standard format.

The public procurement data will be linked to company information, such as owners and profitability; public organisation data, such as deficit or number of employees; and political officeholder data, such as asset declarations. Using this 'big data' database, the project will generate a set of risk indicators or proxies for key aspects of corruption, collusion, transparency, and efficiency.

However, the project also aims to go from the world of 'Big Data' to the rich local knowledge of those who directly experience procurement projects— and their results. Digiwhist will bring the largescale data and risk indicators together with stakeholders' local knowledge. This will be done through a set of national portals and web applications in each national language, enabling citizens and companies to directly add supplementary local information to every contract. Therefore, it will be possible to evaluate micro-level tendering information on e.g. extremely tight bidding deadlines, while having information on the winner companies' political connections; while combining these with information from the ground on the appropriate or unsatisfactory fulfilment of a given contract such as local photos evidencing the low quality of construction, e.g. potholes or missing parts.

Resources

Open Contracting Assessment Methodology

The methodology describes how to assess existing systems against the principles and standards of open contracting to determine baselines and to generate recommendations for action planning. To date, versions of this assessment have been applied in South Africa, Vietnam, Indonesia, Moldova, and Mexico.

Open Contracting Global Principles

The Principles reflect norms and best practices from around the world related to disclosure and participation in public contracting.

Open Contracting Data Standard

The Open Contracting Data Standard (OCDS) is an open data schema to publish machine-readable data and documents related to planning, procurement (tender & award), and implementation of public contracts. The standard is based on analysis of user needs and best practices. It is a tool to guide publishers to producing data that is useful for value for money analysis, fraud detection, enhancing competition, and performance monitoring.

Open Contracting Guide for Practitioners (English) (Spanish) (French) (Mongolian)

The World Bank Institute hosted a Book Sprint that brought together 17 experts from around the world to co-create an open contracting guide for practitioners by practitioners. The book contains four sections: Introduction and Framing, How to Do It, Reflections, Risks, Sustainability and Lessons” and a conclusion that includes a glossary of terms and a list of resources.

Contracting Partnership

The Open Contracting Partnership helps stakeholders to open up government contracting and deal making through disclosure, data and engagement so that the huge sums of money involved are spent, honestly, fairly and effectively. We are a silo-busting initiative collaborating across governments, businesses, civil society and technologists. We work across sectors and along whole process of government contracting to use the power of open data to save governments money and time, deliver better goods and services for citizens, prevent corruption, and to create a better business environment for all.

Transparency and Open Data Initiatives in Ukraine's Infrastructure Projects: Ukraine Is Changing

Mr. Oleksii Sobolev

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General Public Information Disclosure Legal Framework in Ukraine

Open Data Website: Data.gov.ua

Two main laws:

1. Law On Information (1992) establishes a universal right to free access to information, its use, sharing, storing, protecting and securing, except when information is classified as confidential, secret or for internal use only; The obligation of government agencies to create special units responsible for ensuring access to information.
2. Law on Public Access to Information (2011, crucial amendments passed in 2015) introduces procedures for ensuring the universal right for public access to information produced by authorities at different tiers, as well as by other providers of publicly significant information in machine readable format (2015 amendments).

The history of information disclosure laws in Ukraine clearly shows that implementation is the key:

While the Law on Public Access to Information has been passed in 2011 its application has been sporadic and not systematic with every governmental body applying its own judgement to the level of information disclosure. Such actions naturally provoked multiple conflicts between the state and civil society, investigative journalists, etc.

2015 amendments significantly enhanced the law, adding description of open data and clarifications as to what type of data should be proactively disclosed, by whom and when.

The amendments have also introduced a concept of a unified open data portal implemented in the form of data.gov.ua website. These amendments were developed and lobbied by civil activists. The website was developed by the activists of SocialBoost with donor help and later transferred to the government.

A by law, the Cabinet of Ministers decree on open data technical standards, lists over 300 datasets that should be released within the next 6 months. There is a separate government body administering these activities: State Agency on E-governance. The agency is currently managing the website.

Transparency of General Budget Expenditures

Open Budget Website: edata.gov.ua

Regulation:

Law on Transparency of Public Funds Use (2015) - stipulates that all information on use of budget funds should be disclosed at per transaction level on a separate website.

Implementation is in “work in progress” stage:

As the government was heavily lobbied by civil society, the law was fairly quickly implemented by the Ministry of Finance in the form of the edata.gov.ua website. Existing IT system in the Ukraine’s Treasury significantly added to the success of the implementation.

Different municipalities applied the law to local budgets. For example, Kyiv budget is already online: new.kievcity.gov.ua/#a-obudget. The website was developed with zero government funding through donor financing.

Both websites are in a test mode at the moment, gradually increasing functionality but already providing information on millions of transactions. However, the usage of this information by different stakeholders so far has been limited, both because of the relative novelty and lack of significant big data infrastructure in Ukraine.

State Procurement Transparency

Open Procurement Website: bi.prozorro.org

The area is under regulated:

Law on Performing Public Procurement (2014) - Standards and requirements for all procuring entities as for organising procurement process for above threshold procurements (above \$200’000). No regulations for procurements below this threshold.

Two distinct stages of implementation: pre and post-revolution:

Implementation of information disclosure in public procurement until recently has been poor. While a single website for all above threshold procurements was established back in 2008 www.tender.me.gov.ua, it still lacks API and most of the information is presented in non-machine readable format (pdf). Until 2015 there was almost complete absence of information on below threshold state procurements (approximately 50% of all state procurements).

In partnership with civil society, business developed a new e-procurement system: Prozorro, which currently is being used by the government to increase transparency of below threshold procurements. The system's development until its current stage was relatively cheap (\$35’000) and was financed by online tendering platforms. Further development costs are estimated at \$150’000, part of which is covered by donor grants. Launched in February, Prozorro is currently running in test mode but

already generating significant savings (cumulative \$16m as of November 2015). All information on tenders in Prozorro is open to the public. There is a convenient business analytics module bi.prozorro.org

Transparency Initiatives of the Ministry of Infrastructure of Ukraine

Reasons:

In its current form the Ministry of Infrastructure acts as a holding company for over 250 state owned enterprises (SOEs) with annual revenue above \$3bn, being one of the country's biggest holdings in terms of assets under management. The resources of the Ministry overseeing such complex operations as of Ukrainian Railways, Roads, Post, Ports etc. are limited. The Ministry employs 256 people and has annual budget under \$2m.

The Ministry is also limited in its means to coordinate the enterprises. SOEs operate in over regulated, over politicized and bureaucratic environments with changes happening only after significant civil and political pressure. Civil society is very supportive of reform efforts but usually lacks information.

Courts and state prosecution in Ukraine have not been reformed yet and are considered widely corrupt, inhibiting anti-corruption efforts. In 2015 a special analytical team of the Ministry has identified 15 most widely used corruption schemes employed by the SOEs. 8 of them could be eliminated or significantly reduced with transparency initiatives (e.g. significantly different sales prices to different customers, inflated procurement prices, overstocking, etc.) The Ministry, armed with the recent changes to the Law on Public Access to Information, is pushing for a complete information disclosure transparency of all SOEs under management.

Case: Open Data

The Ministry has carried out a data audit of information inside the Ministry and its SOEs. As a result 50 of the most interesting datasets have been identified and added to the Cabinet of Ministers decree on open data implementation. Several of these datasets (i.e. historical procurement information and approved SOE budgets) have been published on the Ministry's website.

A demand study was also carried out to prioritize the efforts releasing the datasets. An important finding of the study was low awareness among the public about the information that was already online.

Another problem identified during the data audit was that the information has been stored across vastly different IT systems in various SOEs, some storing it only in paper format.

The study also found that the capacity of SOEs was also very different, some having dedicated departments, others lacking even basic understanding of information management.

To solve these issues the Ministry, together with business, developed a prototype of a cheap (implementation for 40 biggest SOEs costs under \$20'000), easy to use reports consolidation IT system. The system is web based, looks like a regular MS Excel spreadsheet and requires almost no special training to use it. The system is in implementation stage as of November 2015. If this project

is successful the system will be scaled up to SOEs coordinated by other ministries and other government bodies.

Construction Sector Transparency Initiative (CoST) Ukraine

Background:

The main area of public construction in Ukraine is road construction.

The main challenges:

- lack of trust among stakeholders;
- lack of financing;
- problems with long term planning in project financing;
- outdated and depleted infrastructure;
- lack of transparency in public construction projects;
- planning, procurement, implementation and control is done by a single government agency - Ukravtodor;
- unsystematic contractors payments, accumulation of large amounts of debt due to contractors;
- lack of IT systems in state project management

In such an environment any reforms require heavy cooperation between the government, civil society and business. Simple disclosure will not be enough. The three main principles of CoST: disclosure, assurance and multi-stakeholder cooperation provided a great mechanism to solve these issues.

Another case of pre and post-revolution implementation:

Ukraine has joined CoST in 2013 through a memorandum between CoST International Secretariat and Ukravtodor. However, not much happened until 2015.

In 2015 a multi-stakeholder group was established consisting of representatives of the government, business (both users and constructors of road infrastructure) and civil society, complemented by the World Bank consultants.

Since then the group has drafted disclosure and assurance manuals, 18 months budget and a work plan, applied and won a grant from CoST International Secretariat, signed a memorandum between the Ministry, Ukravtodor, CoST Ukraine and International Secretariat, chose 4 pilot projects to test the processes, identified a host organization and is due to elect a National Secretariat Director.

The initiative will be vastly scaled up in 2016 after pilot stage to other ministries and governmental bodies.

Lessons Learnt and Recommendations for Overseas Implementation

Legal Framework Is Important but Implementation Is the Key

Good laws can be badly implemented if we consider the cases of Law on Public Access to Information and CoST. However, good implementation is possible where no regulations are in place as the Prozorro e-procurement system demonstrates.

Success Comes Out of Civil Society, Government and Business Cooperation

Almost every successful project in open data has been championed by civil society, but didn't scale up until government involvement. Later such projects get transformed into formal regulations as with the Law on Public Access to Information and e-procurement law that should be voted on by the Parliament later. Such cooperation is crucial in building trust among stakeholders.

Low Cost IT Systems Developed by Civil Society Could be Turned into Government Portals

As the cases of data.gov.ua, Prozorro e-procurement and report consolidation systems show, a development of a nationwide IT project does not have to cost millions of dollars and is quite enough for large scale implementation. The funding could be sourced both from business and from donors.

Capacity Training Is Very Important

Open data is very new and there is not only a lack of capacity among civil servants but also among business, civil society and general public. Simple disclosure will not yield any result without people actually using the information. There is a need for training at all levels of government, business and NGO sectors. Capacity building is also very needed at the local level.

Promoting Transparent Public Procurement in Thailand

Jiravat Limkhaewprasert

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Background

Corruption in connection with public procurement constitutes a significant risk factor and represents, besides its demoralizing implications, excess costs, inefficiency and distortion of the competitive environment with severe consequences for the fundamental functions of a society. The 2015 Corruption Perceptions Index (CPI) of Transparency International shows that Thailand holds the 85th position among 175 countries.

Other international governance and risk indicators demonstrate a similar gloomy picture on the integrity status despite the fact that the global competitiveness score is comparably good. A survey from 2010 indicates that the presence of irregularities in public procurement is high and actually has deteriorated over time. Risks to integrity in the procurement process are rife in procurement in Thailand because of the large amounts at stake and the interface between the government and the private sector.

There have been many efforts to mitigate the corruption on public procurement both at the policy level in the form of law issuing that governs public procurement and at the operation level by employing the monitoring measures such as Integrity Pact (IP), Construction Sector Transparency Initiative (CoST) and Extractive Industries Transparency Initiative (EITI) on public procurement, construction projects and extractive industries, for example.

Integrity Risk Assessment in Public Procurement in Thailand

Corruption in connection with public procurement constitutes a significant risk factor and in 2014, UNDP, in collaboration with the Office of the Public Sector Development Commission (OPDC) and the Anti-Corruption Organisation of Thailand (ACT), conducted an integrity risk assessment in public procurement in Thailand building on internationally recognised methodologies from the UNDP and the World Bank. Other key partners involved are the Comptroller General's Department (CGD) of the Ministry of Finance, the State Enterprise Policy Office (SEPO). Accordingly, four key important risk areas were identified: i) bid collusion and bribery (kickbacks), ii) conflict of interest, iii) discretion, and iv) political interference.

- The methodology has included a series of meetings and interviews as well as a survey with key stakeholders of the public procurement system (policy makers, purchasers, private sector representatives, controlling bodies, international organisations, academics, state-owned enterprises, local governments, and NGOs) in addition to a review and analysis of relevant public procurement regulations, reports and statistics.

- A number risk mitigation measures have been proposed, including development of integrity risk indicator system (or a red-flag system), development of Guideline/Checklist and a special training and system on how to mitigate integrity risks in the public procurement process, and development of the reporting and statistical system on public procurement which addresses integrity aspects specifically.
- To enhance openness and integrity in public procurement, Thailand also needs i) a new policy framework to reform and modernise the public procurement system based on a revised set of priorities, which would include economic, integrity, environmental, and social goals, ii) adopt a coherent, sound and modern public procurement law covering all public sector entities, iii) support the professionalization and career development strategy of the procurement function, management and staff, including strengthening the credibility of the procurement profession.

The initial collaboration between UNDP and ACT has led to further support in the areas mentioned, and has paved way to a more systematic approach to support the reform efforts at the legislative, policy, and operational levels to fulfil the goals of “value for money” in public procurement with integrity.

The success of the project depends on the close collaboration among Office of the Public Sector Development Commission (OPDC) and United Nations Development Programme (UNDP) and other key partners as Comptroller General’s Department (CGD) of the Ministry of Finance, the State Enterprise Policy Office (SEPO).

Integrity Pact in Thailand

In 2011, Integrity Pact (IP) was first introduced to the government as a measure to promote transparency in public procurement by Anti-Corruption Organization of Thailand, in collaboration with The Institute of Director (IOD), and Transparency Thailand. However, it has not been successful until early of 2015 when the government has decided to request, as a pilot, the inclusion of integrity pacts in a number of large projects of national interest which is a welcomed initiative. Other key partners involved are the Comptroller General’s Department (CGD) of the Ministry of Finance and professional associations such as Thai Chamber of Commerce, the Federation of Thai Industries, Thai Bankers’ Association, to name just a few.

The Integrity Pact (IP) mechanism has been developed by Transparency International as tool to help governments, businesses and civil society to fight corruption in public contracting. It consists of a process that includes an agreement between a government or government agency (‘the authority’) and all bidders for a public sector contract, setting out rights and obligations to the effect that neither side will pay, offer, demand or accept bribes; nor will bidders collude with competitors to obtain the contract, or bribe representatives of the authority while carrying it out. The conditions and commitments shall be part of the tendering process and should be laid down in the tender documentation and declaration of integrity commitment to be signed by the public officials.

The tender submission form with the commitment shall be signed by the authorized person of the tendering firm and he/she is made responsible for the integrity pact. Independent observers, representing the public, appointed by independent body will be assigned to observe the procurement process of the procurement contract starting from the feasibility study, issuance of terms of reference, bidding process, until delivery or completion of the project.

Factors that contribute to the successful introduction of Integrity Pacts are:

Adaptability of Integrity Pact to be suitable to the circumstances

As there is concern that Integrity Pact will result in a delay of the project affecting the progress of the economy, it has been adapted to some legal settings to be flexible in its application, for example, the independent observers have no authority to issue a sanction to the project, but only to raise a red flag. The government agency owning the project has choices on whether to correct the process in response to the red flag raised or to continue with the process but have to explain to the public on transparency issue.

At the start, the Government has proposed 5 public procurement projects, worth approximately 31,252 M Baht or 893 M Dollars, from different ministries, as pilot projects to be monitored by Integrity Pact. In order to promote awareness of the measure, 15 more public procurement projects, worth approximately 11,935 M Bath or 341 M Dollars, from other ministries have been included, totaling it to 20 projects at the approximate value of 43,187 M Baht or 1,234 M Dollars, for the 2015 budget year. As for 2016 budget year, there are 12 public procurement projects, worth approximately 13,980 M Baht or 399 M Dollars that have already been registered to employ Integrity Pact as mechanism to promote transparency. (Exchange rate of 35 Baht to a dollar)

Good collaboration among private and public sectors

A great number of experience professionals from professional association have volunteered to be independent observers to work on the public procurement projects. Training program to provide knowledge on Integrity Pact, related laws and regulation to public procurement is developed and trained by The Institute of Director (IOD).

Strong support from the government

It took 5 years for Integrity Pact to be employed as a mechanism to promote transparency in public procurement by the government. Without strong political will to fight against corruption by the government, there is slim chance that Integrity Pact be implemented. The government has set up Anti-Corruption Cooperation Committee, under the Ministry of Finance, to facilitate and follow up the progress of all public procurement projects employing Integrity Pact.

Laws that help strengthening implementation of Integrity Pact, CoST and EITI

- A draft of Public Procurement law has been approved by the cabinet on Tuesday, July 7, 2015. Currently, there is no public procurement law but a legal system based on government regulations, plus SOEs own regulations. With such a regulatory approach there are risks of fragmentation instead of coherence, weak enforceability and coverage, lack of legal certainty for the bidders, insufficient protection for procurement staff, and opportunities for unjustified exemptions and discretion. The regulatory framework does not reflect international legislative models, such as the UNCITRAL Model Law on Public Procurement, the Government Procurement Agreement (GPA) under the WTO and the European Directives on public procurement. The new Public Procurement Law will constitute a standard operation framework to be used by all state agencies. It will focus on disclosure of information to the public to ensure transparency and fair competition. It will improve both integrity and value for money.
- Amendment of the Official Information Act, B.E. 2540
- The issuance of The Licensing Facilitation Act (the Act), which became effective on July 21, 2015, aims to make obtaining government licenses easier. The Act is the first of its kind in Thailand. The Act works by promoting three core principles of good governance: reducing officials' discretionary authority; increasing transparency; and creating accountability. It is part of a broader government trend to address corruption in Thailand.

Construction Sector Transparency Initiative (CoST) and the Extractive Industries Transparency Initiative (EITI) in Thailand

Thailand recently submitted its application to join the Construction Sector Transparency Initiative (CoST), which is designed to strengthen the public construction procedure to be more transparent. The Royal Thai Government is working with the CoST secretariat and other stakeholders on a capacity building project to support implementation of CoST in Thailand.

Alongside this, the Extractive Industries Transparency Initiative (EITI) is being introduced in the petroleum and mining industries to provide transparency and to address environmental concerns.

Enhanced Transparency through the Information and Monitoring System for Works and Supervision Contracts: SISOCS

Evelyn Hernández
Manager, CoST Honduras

Introduction to CoST Honduras

Honduras joined the Construction Sector Transparency Initiative (CoST) on July 2014, with the main goals of deliver good quality infrastructure projects at lower cost, and increase predictability of outcomes.

A Multi Stakeholder Group (MSG), integrated by 9 members representing equal voice of public sector, industry and civil society, lead CoST national programme which includes activities that support government agencies to allow public access to reliable and detailed construction project information.

CoST Honduras also oversees the validation and interpretation of information disclosed by government agencies and build the capacity of the target audiences to understand what the information means to them.

With this information CoST Honduras empowers stakeholders (citizens, media, and oversight agencies) to raise challenges over poor performance, perceived mismanagement, or corruption. Where possible, they can demand better project outcomes, savings, and more effective and efficient governance systems for delivery.

In the application letter the Government of Honduras announced its first 3 disclosure commitments under the CoST Infrastructure Data Standard (IDS) explaining that this process would be completed using the Information and Monitoring System for Works and Supervision Contracts (SISOCS), a tool recently designed and ready for implementation.

Background on SISOCS designing

With resources from a World Bank credit, in 2013, the Government of Honduras decided to design the SISOCS, aiming to disclose information of road infrastructure projects. SISOCS was conceived as one a series of measures included in the Governance and Anticorruption Plan of the Ministry of Infrastructure and Public Services (INSEP).

At that time INSEP, the SISOCS owner, appointed 2 external consultants to deliver the system: one for the conceptual and operational model and the other for the technical development. Both of them were commissioned to produce a system that could meet several stakeholders' needs and requirements such as:

- To strength internal control from management, planning and administrative units;
- To function in an interactive way with the institutional transparency portal, the national procurement system (HonduCompras), and the road complaint system (SMQ);
- To comply with the Transparency and Access to Public Information Law;
- To follow the CoST Infrastructure Data Standard;
- To promote citizen engagement through an open data approach.

In order to respond to the challenges on SISOCS development, several consultation and validation meetings were held ensuring friendliness, usability and good performance among internal and external users. The designing process, as indicated, took almost 18 months (March 2013-October 2014).

SISOCS as a tool to enhance transparency

SISOCS is defined as a tool by which road public entities disclose relevant information on project planning, procurement processes, work and supervision contracts and their modifications, until the final evaluation and work reception (See Figure 1).

Through SISOCS, the physical and financial progress of road projects can be visualize according to indicators defined in the planning period and external users can also get a summary containing basic information such as contract management, timeline, pictures, and geographic location.

The screenshot shows the SISOCS website interface. At the top, there is a navigation bar with the SISOCS logo and links for 'Inicio', 'Módulo Ciudadano', 'Manual', 'Informes', 'SMQ', and 'Login'. Below the navigation bar, there is a 'Ciudadano' section with a navigation menu containing tabs for 'Planificación del Programa', 'Planificación del Proyecto', 'Invitación y Calificación', 'Adjudicación', 'Contratación', and 'Gestión de los Contratos'. Underneath, there are sub-tabs for 'Inicio de Ejecución', 'Avances', 'Desembolsos y Montos', 'Gráficos', and 'Mapa'. The main content area displays project details in a structured layout:

- Código:** PMRC-641-0000000001
- BIP:** 001400071200
- Sector:** Sector Infraestructura
- Descripción:** MEJORAR LA CALIDAD DE LA ADMINISTRACIÓN Y LA RED DE CARRETERAS DEL RECEPTOR, MEJORAR LA GOBERNABILIDAD Y LA CAPACIDAD ADMINISTRATIVA DE LAS CARRETERAS EN SOPTRAVI Y EL FONDO VIAL.
- Fecha de Aprobación:** 29/04/2008
- Fecha de Recepción:** 29/12/2013
- Nombre del Programa:** SEGUNDO PROYECTO DE RECONSTRUCCION Y MEJORAMIENTO DE CARRETERAS
- Ubicación del Programa:** Francisco Morazan, Yoro, Danlí, Comayagua, Copán.
- Costo Estimado:** 48,600,000.00
- Moneda:** Dolar
- Sub-Sector:** Sub sector Vial
- Propósito:**
 - Construcción de obras
 - Mantenimiento rutinario
 - PAVIMENTACION
 - Rehabilitación

Below the project details, there are two tables:

Datos del Funcionario		Fuente de financiamiento			
Nombre: Walter Noe Maldonado	Teléfono: 222-55585	Fuente de financiamiento: Banco Mundial (BM)	Monto: 48,600,000.00	Moneda: Dolar	Tasa: 18.90
Puesto: Director de Carreteras	Entidad: Dirección General de Carreteras (DGC)				
Correo: uebm2011@yahoo.com					

At the bottom of the main content area, there is a button labeled 'Ver información de respaldo'.

Figure 1. A screen shot of the website: Project cycle information classified in different windows

Accessing disclosed information

Having access to SISOCS by external users is easy. Just clicking www.insep.gon.hn/sisocs and it is found a Honduras map or a text box (similar to Google), to look for the information by location or related words (See Figure 2).



Figure 2. A screen shot of the website: Citizens search options

Once external users have access, all project cycle information in chronological order can be visualize and all support documents can be downloaded.

Using disclosed information

Once the Government of Honduras accomplished the first disclosure commitment (13 road projects funded by international development institutions), CoST proceeded to review the levels of transparency reached (See Figure 3).

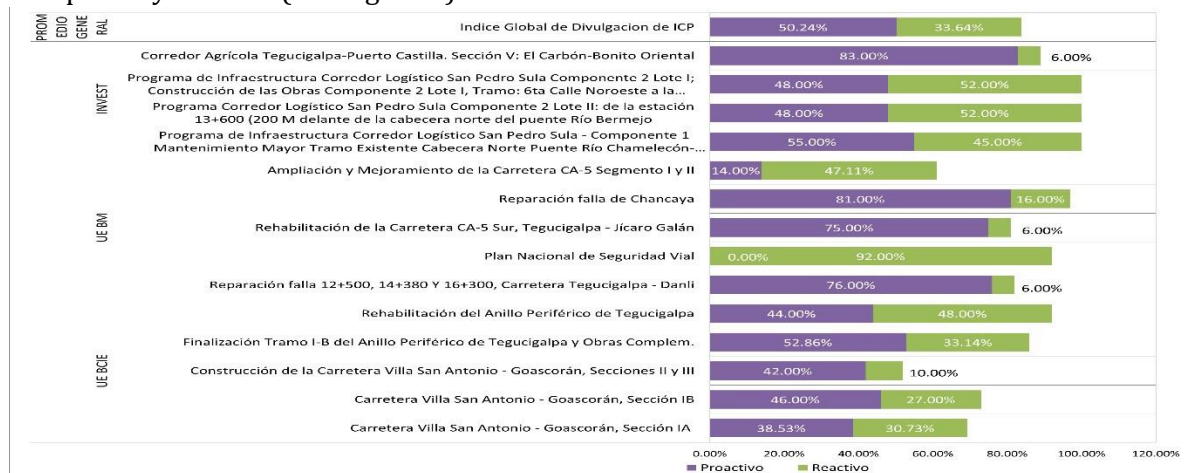


Figure 3. Transparency Index reach during CoST assurance process

As Figure 3 shows the purple area demonstrate transparency levels achieved, in the first measurement, due to what public entities "believed" they should be disclosing. The green area

represents transparency levels achieved, in the second measurement, as “indeed” they should be disclosing and effectively disclosed following the CoST IDS.

Until now, the Government of Honduras has fulfilled 2 of 3 commitments with the CoST initiative, and had disclosed information on to 138 road projects financed by external and national funds totalizing contracts amounts around 618.5 millions of dollars approximately.

Although SISOCS was initially designed for road projects, the executive decree, which creates it officially, envisaged that SISOCS would be progressively compulsory for all institutions part of the Productive Infrastructure Cabinet, and this is a reason why SISOCS requires now adjustments to work with all types of public infrastructure projects.

Lessons Learned from CoST designing and implementation

Participatory system design: It is very important to manage consultation and validation processes during a public system design, but it is also critical to handle expectations and timing. While designing SISOCS many changes occur after each consultation and validation meeting. Some of the key points raised by different stakeholders were even opposite and it was very difficult to agree in each one of them. The weak design of the participatory process retarded, more than expected, SISOCS final design and implementation.

Internal change resistance: At the beginning of SISOCS implementation there was resistance to change and to use a new tool. Also many public officials understood differently the conceptual model. They were well trained on the operational formats and processes but not on the aims of the system or the importance to disclose accurate and complete information. This is why the first assurance measurement reached only 50%.

Enhanced transparency: Despite all concern issues during design and implementation processes, SISOCS has proved to be an effective tool to increase and enhance transparency on road infrastructure projects. CoST MSG and its technical team validated this statement on the first assurance report and now it is important to draft a successful path to improve the system in an efficient and effective way.

Recommendations

Civic engagement: Any effort to increase and to enhance transparency is pointless if a wider public is not using disclosed information. So, it is recommended to develop the system in consultation with key stakeholders (with expectation and timing limits), but most important is to build a wider civic engagement that guarantees use of disclosed information. A strong public campaign should be implemented after the system is validated.

Internal users’ permanent training: As a new tool, SISOCS required several training workshops at different levels. Of course the operational process is important, but most of all it is critical to explain

the strategic approach and ensure understanding of the government general goals at management and technical level.

Strategic alliances: To improve a system in an effective way it is crucial to develop strategic alliances with other experienced partners to reduce the impact of the learning curve and to take advances of new complementary efforts and technology development.

Open Public Construction

Lorena Rivero del Paso

Director General of Performance Monitoring and Information, Ministry of Finance and Public Credit, Mexico

Open Public Construction as a fiscal transparency policy

The Fiscal Transparency Portal of Mexico was launched in 2011, as a policy to facilitate understanding of fiscal information to non-specialized public. It was built by the Government, in coordination with civil society organizations which helped define its first contents. As it started, therefore, its aim was for it to be a one stop shop where information would be accessible in both formats and language.

With the growth in interest on the topic, both by national and international actors, the contents expanded rapidly, creating a repository that was no longer suitable for the information architecture that was conceptualized in the beginning. As a result, the growth in contents was not paired with an equal growth in visitors and highly valuable information went constantly unnoticed.

Taking that into account, and considering new technologic developments, the renewal of the Fiscal Transparency Portal was planned. Its redesign would consolidate a true expenditures observatory by focusing the content, tools and functionality in citizen platforms and incorporate effective monitoring of public resources.

To define the new content and information architecture the main analyzed sources were:

- **Usage statistics** of the previous platform, measured with Google Analytics from the end of 2011;
- **Access to Information requests**, which are made through the institutional channels establish by the Access to Information Law;
- Inputs from Civil Society Organizations, both in formal and informal meetings;
- **Underused information** that was already in the site but was not generating enough interest compared with its perceived potential to enhance public participation and accountability, and
- Participation in **hackathons, data expedition** and other similar events as approximations of focus groups to detect interests and opportunities.

As a result of such analysis the new portal provides citizens, through interactive platforms, public documents and databases in an open format, information concerning the exercise of public resources and the performance of government programs, in a clear, simple and educational way.

Mexico is now one of the 24 countries, of a total of 102, which provide sufficient information to the budget, according to the Open Budget Index, released by the International Budget Partnership last September 9. According to IBP, Mexico is one of three countries in the world (along with Sweden and South Korea) to present citizen publication at all stages of the budget cycle, highlighting citizens' versions of the budget proposal, the enacted budget and year-end report. With the increase of information made available, Mexico increased 5 points rating with respect to the Index 2012 and went from place 22 to 16 in the global ranking.

Two of the main platforms included, each of which comes from different information sources, normativity and particularities are: central government investment projects, and local governments' investment projects.

Central Government Investment Projects

<http://www.transparenciapresupuestaria.gob.mx/es/PTP/Obra Publica Abierta>

What it is:

In this platform citizens can locate and track through a geo-referenced map (by state, address or zip code), programs and investment projects by the offices of the Federal Public Administration. In it, it is possible to:

- monitor both physical and financial progress of the investments projects,
- know the planned and modified amount assigned to any project,
- identify the administrator of the project, being able to contact them,
- download the cost-benefit analysis through which the Ministry of Finance approved the project,
- download the information of all the projects in open formats, in bulk, in order to enable any interested party to reuse the information and
- report irregularities in the progress of the project, which are addressed to the Ministry of Public Administration, the institution with power to act upon them.

How was it planned and implemented:

While creating the visualizations and web services to feed the platform might be one of the technical issues behind the implementation, some of the biggest challenges came before reaching that point.

The **first** of them was to determine the **optimal source of information**, given that, according to the target audience, objectives and approach, the details presented can be different. **Secondly**, the **guidelines to register an investment project were reformed** as well as the system in which it is done, in order to gather the necessary data in usable formats, including, for example, latitude and longitude.

Once the norm and internal systems were modified there is a **period of reporting and verifying information**. It should be taken into account that in the beginning some reporting mistakes might take place. After that the platform was **programmed and connected** to the internal systems for automatic updates.

Finally, the tool for **reporting irregularities was implemented**. Given the importance of this tool to empower citizens as a means of public participation to enhance accountability, it is still being improved.

Local governments' investment projects

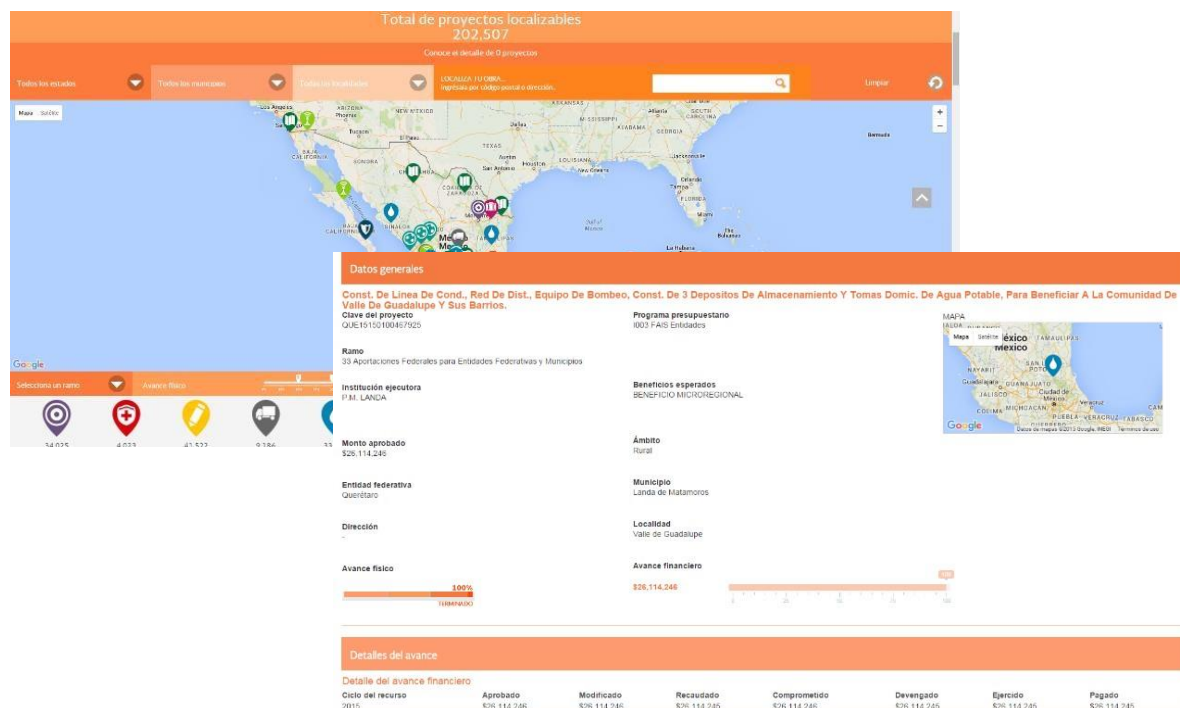
www.transparenciaprespuestaria.gob.mx/EntidadesFederativas

What it is:

This platform incentivizes the monitoring of federal resources transferred to local governments through an interactive map. It allows tracking of spending by local governments on over 220,000 projects. It includes:

- both physical and financial progress of the investments projects,
- the planned and modified amount assigned to any project,
- entity in charge of the development of the project,
- location of the project, and
- the information of all the projects in open formats, in bulk, in order to enable any interested party to reuse the information.

Though it might seem like a similar platform as the one implemented for the central government investment projects, the nature of the resources and therefore the source of information required a different process of implementation. It should be taken into account that Mexico is a federal system.



How was it planned and implemented:

With the reform of the General Accounting Law by the end of 2012, new guidelines for reporting financial information of federal resources transferred to local governments were issued. With this

opportunity in mind, the system in which information was reported was also modified and since its conception it **was designed to present the information in an accessible format and language through the Fiscal Transparency Portal.**

Throughout 2013 and first half of 2015, an intensive training program that included **more than 10,000 public officials** from the 32 states and 2,457 municipalities was introduced in order to standardize the information reported. Every **quarterly report**, all states and municipalities report the physical and financial progress of the projects, which is the input for the platform.

The implementation of this Platform, which is the most visited section of the Portal and most examples of actual use by civil society, has helped building an openness culture in the local level. As of now, the internal system for reporting is being modified again in order to **collect data of the contracts awarded to develop the investment projects as well as photos of its implementation.** This information will be available starting 2016 as part of the map and in open formats.

A new approach: Education Reform Program Platform

<http://www.escuelas.transparenciapresupuestaria.gob.mx>

What it is:

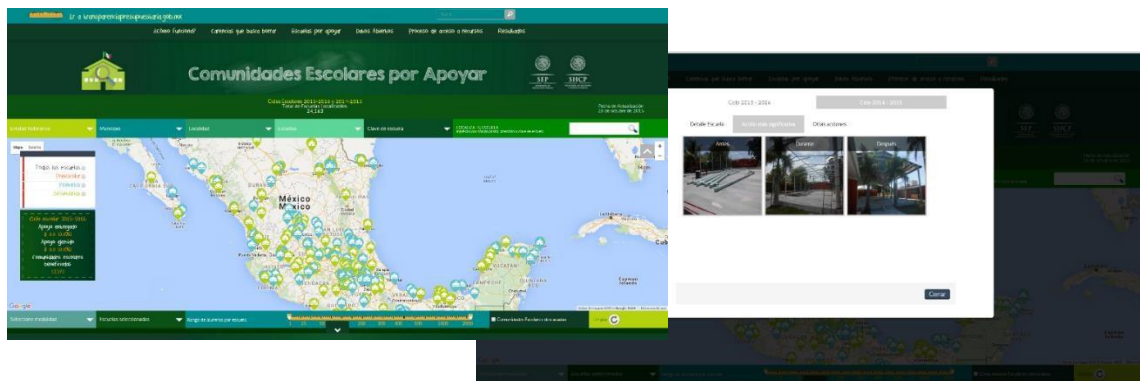
The Education Reform Program of the Ministry of Public Education is a new federal government program with approximately 460 million USD annually, which aims to reduce the infrastructure gaps between schools with public participation principles. Its innovative approach is that the parents and school principals conform a committee and receive the money assigned per institution directly to decide their priorities to improve the infrastructure.

Therefore, this interactive platform allows to monitor the construction of infrastructure in more than 20,000 public schools benefited from this program and which are in a state of high and very high backlog in their physical conditions (water availability, flooring material, availability of bathrooms, equipment and infrastructure on campus).

The platform contains:

- Procedure to access the resources if the school is subject to be benefited from the program,
- Infrastructure deficiencies of the school according to the census performed,
- Physical and financial progress,
- Exact location of the more than 20,000 schools that are being benefited from the program displayed in a map,
- Projects chosen per school, and
- Photos of the before, construction and results of the projects per school.

The platform also contains the external evaluations performed to the Program, which we deem of great importance.



Conclusion

As it can be noticed, while some common ground can be identified, there has not been an exact model of transparency used in all situations. Therefore, one of the most important lessons has been that each system needs to adapt to the nature of the information, target population and objectives in order for it to be effective.

Throughout the process, the technology used, as well as the process of collecting information has evolved. With this in mind it is important to consider that making information transparent can be an incremental process that allows to achieve more ambitious objectives with every phase. As could be seen, with each incremental phase in the platforms there has been a change of objectives that have gone from making information transparent and accessible, to encourage a two way street communication with citizens that actually enables public participation and accountability.

Finally, it is worth noting that projects such as this require an important background effort of training, regulating and developing that sometimes is not completely reflected in a public platform. Therefore, they are constantly changing and evolving efforts.

Zambia's Experience in Promoting Transparency and Accountability in the Construction Sector

Rueben Lifuka

Chairperson, Multi Stakeholder Group for CoST Zambia

Introduction

Zambia is a developing country of nearly 13 million people with the majority of the population living in the rural and peri-urban areas. The country has 10 provinces and 103 districts- it faces rapid urbanization rates currently estimated at about 45%. The country faces enormous social and economic challenges with a good number of the people seeking development that will better their standards of living. Zambia, was until 1991, a one party state dominated by the United Nations Independence Party (UNIP), the party of the founding father – Dr. Kenneth Kaunda. The return to multi-party democracy in 1991, brought with it a number of positive changes and particularly the upholding of rights and freedoms including the Freedom of Expression and Freedom of Association among others.

Multi-party democracy has also seen the opening up of the broadcasting airwaves and the general liberalization of the media. Today in Zambia, there are over 80 radio stations and the majority of which are Community Radio. Social media has grown exponentially and this is aided by a high rate of penetration of mobile phone technology both in the rural and urban areas. The return to multi-party democracy equally saw the rise of civil society organisations particularly governance and human rights organisations. Today, Zambia has a vibrant civil society, that is not only involved in providing welfare and relief services but implement social accountability projects which include budget tracking and public procurement monitoring.

Against this background, it is not surprising that Zambia has enormous infrastructure development needs. The current Government under the Patriotic Front (PF) Party, has prioritized infrastructure development and this desire is articulated in the Revised Sixth National Development Plan (R-SNDP), where it is confirmed that infrastructure development is the main anchor of all other development processes. Government has been investing in infrastructure in health, education, water, sanitation, hydro power stations, rail network and inter provincial and inter district roads. The PF government, which came into power in 2011, launched major road construction projects namely – Link Zambia 8000 – which is inter provincial road initiative intended to construct 8,000 kms of road, Pave Zambia 2000 – targeting to use innovative paving or cobblestone technology in paving roads and the L 400 – that seeks to construct and rehabilitate 400kms of roads in the capital city of Lusaka. Recently, Government announced a new initiative – C400- which is a project targeting to rehabilitate and construct 400kms of road in the Copperbelt region of Zambia.

Additionally, the Zambian government has invested in rehabilitation and expansion of two international airports and there is a Greenfield airport development that will be constructed soon. A total of 10 new universities and university colleges, are at different stages of development. Major

works in the form of Hydro power stations are underway, numerous public schools, health centres, hospitals and health posts, are being constructed, as well as bridges and canals in different parts of the country. Zambia is one big *construction site*. "In 2013, the Zambian construction industry contributed 24% to GDP, surpassing the mining sector which stood at 5%.

Problem of corruption and lack of accountability in the construction sector

Given the high volume and value of construction activities, there have been a number of allegations and actual incidences of corruption in the sector. It should be pointed out that the corruption in the construction sector is not a public concern that has started today. Reports from the Auditor General, as far back as 2009, indicated the existence of corruption and poor accountability in the sector. Anti corruption groups like Transparency International Zambia, have highlighted the problem of corruption in this area. Transparency International's 2011 Bribe Payers Index reported that construction and public works are perceived to have the highest level of bribery of any sector, higher than both the arms industry and the oil and gas sector.

Corruption may occur in the form of bribery, extortion, fraud or collusion. It can take place during any phase of a project, from identification through to operation and maintenance. The tender process is particularly sensitive to corruption risks. In relation to each phase of the works on any part of the road, works may be carried out defectively and the defects concealed. Such defects may include: improper excavation, laying of materials in insufficient depths and widths, use of unsuitable materials, defective embankment works, and defective surfacing. Approvals and certificates of payment for such defective works may be obtained through bribes or threats made to the certifier.

Bribes are in some instances, offered or threats made by suppliers to those responsible for recording site deliveries in order for false records to be made stating that materials of proper quality and quantity were delivered. Corruption in the sector has led to poor quality projects mainly due to limited finances as some the resources are diverted to pay bribes or the projects become too expensive to be executed as the cost of bribes is integrated into the tender bid documents. The real victims of this corruption are the ordinary people- the men and women who live in squalor in rural and peri urban areas and who hope for a better living standard.

Key Players in the Construction sector

The National Council for Construction (NCC) is a statutory body set up under the National Council for Construction Act No 13 of 2003. NCC was established as a direct consequence of the National Policy on Construction Industry, initiated and approved by Government in 1995. This body has the responsibility of providing for the promotion, development, training and regulation of the construction industry in Zambia. NCC is mandated to register contractors and affiliated professionals involved in the construction industry.

As of 2012, there were 3,887 registered contractors across six grades with Grade 1 category being the highest and handling mainly large projects and Grade 6 as the lowest category for contractors

involved in small projects and rehabilitation works. In 2012, there were 155 foreign contractors registered and most of these were in the Grade 1 category – representing about 4 percent of the total registered contractors in this category. However, this 4 per cent handles more than 80 percent of the total spendings in the construction industry. There are various reasons for this state of affairs, including limited capacity among local contractors. However, this dominance of foreign contractors, has raised perceptions of bribery and collusion among this group and indeed there are some of these contractors who have been investigated for corruption allegations. It should be stated nonetheless that there are equally a number of local contractors who have faced similar allegations and some have even been blacklisted.

Policy and Legal Framework

Zambia is not short of good policies and laws to promote transparency and accountability in the construction sector. What is in short supply is the political willingness to clean up the sector by adequately supporting law enforcement agencies. Weak enforcement of laws and regulations, lies at the heart of the challenges that the sector faces.

The various pieces of legislation that have been put in place to combat corruption and other illegal activities in public procurement in Zambia include the Anti-Corruption Act No. 3 of 2012, the National Council for Construction Act of 2003, and the Public Interest Disclosure (Protection of Whistleblowers) Act No. 4 of 2010. The Penal Code Act, CAP 87 is the principal legislation prescribing penalties for crimes and criminalizing certain practices relating to procurement of infrastructure in Zambia. The Public-Private Partnership (PPP) Act of 2009.

The Public Procurement Act No. 12 of 2008 and the Public Procurement Regulations of 2011 govern public procurement in Zambia. The objectives of the Public Procurement Act of 2008 are to: (i) ensure transparency and accountability in public procurement; (ii) regulate and control practices in public procurement in order to promote - integrity; fairness; and public confidence. The Act also provides for the total decentralisation of procurement whereby procuring entities will be responsible for all their procurements without referring to any other body. Under this Act, the Zambia Public Procurement Authority (ZPPA) does not participate in the procurement of goods, works or services but plays the role of a regulatory body in public procurement. Other provisions of the Public Procurement Act that a procuring entity shall, after the commencement of a contract with the successful bidders, inform all other bidders that their bids have not been successful and shall give reasons for the decision. Further, the Act provides that a bidder or supplier who is aggrieved with a decision made by a procuring entity may appeal against the decision to the ZPPA.

Other laws promoting transparency and integrity

Zambia has in place a Parliamentary and Ministerial Code of Conduct Act which regulates the actions and conduct of Cabinet Ministers and Parliamentarians. It is under this law that named officials who include the Republican Vice President, are required, on an annual basis to submit a declaration of assets and liabilities. These declarations are made to the Chief Justice and stakeholders like Transparency International Zambia, have argued that these declarations are cosmetic as there is no

verification by the Chief Justice who is simply a custodian of records. This defeats the purpose of such declarations which include monitoring of any illicit enrichment. However, it should be said that the Parliamentary and Ministerial Code of Conduct Act has been invoked in the immediate past where interested citizens and organisations moved the Chief Justice to constitute Tribunals to investigate allegations of impropriety by Cabinet Ministers.

Other laws in place which seek to promote integrity include the Anti Money Laundering law, and the Financial Intelligence Act. Zambia does not have an Access to Information law- however, there is a draft Bill which government has been considering for a while. The PF Government, during the election campaign of 2011, promised to enact the Access to Information law at the earliest opportunity. This has not happened as yet and partly it is a reflection of the hesitancy of serving Government to open themselves to scrutiny. The argument from Government is that they do not have the infrastructure in place to handle demands for information from the public on a variety of issues.

Measures and Initiatives to promote transparency and integrity in public procurement

A number of initiatives and measures are in place although some of these are in their formative stages, while some are not performing as expected for a variety of reasons including poor funding and limited political support. An overview of these measures and initiatives is herewith provided.

Construction Sector Transparency Initiative (CoST) Zambia

The Construction Sector Transparency (CoST) initiative is an international multi-stakeholder programme designed to achieve greater transparency and accountability in the public construction sector. The aim of the initiative is that governments and consumers "get what they pay for". The programme is designed to achieve greater transparency and accountability in the public construction sector through disclosure to the public of 'Material Project Information' (MPI) at all stages of the construction project cycle, from the initial identification of a project to its final completion. CoST was piloted in seven countries under the direction of National Multi Stakeholder Groups set up for the purpose. The seven countries were Ethiopia, Malawi, Philippines, Tanzania, UK, Vietnam, Zambia. The pilot was initially for two years from 2007 to 2009/10. This initiative continues to be implemented in a number of countries including new ones that were not initially part of the pilot phase.

CoST comprises two components: the disclosure of MPI on a sample of selected construction projects; and a structure to provide a framework within which all stakeholders, including civil society, can engage effectively. The core disclosures relate to the key project information during: the tendering phase; at contract award; and through to final completion, together with significant changes during project execution. Disclosures relating to earlier phases in the project cycle are important, since difficulties that arise during contract execution may have their origins in these stages. Disclosures are envisaged on a sample selection of projects to ensure that CoST is manageable and practicable.

In Zambia, the Multi Stakeholder Group comprises the following:

- **Professional Bodies** – Zambia Institute of Architects, Association for Small and Medium Scale Building and Engineering Contractors, Law Association of Zambia
- **Civil society** - Transparency International Zambia, Civil Society for Poverty Reduction (CSPR),
- **Government Agencies** – National Council for Construction, Anti-Corruption Commission, Zambia Bureau of Standards, Zambia Public Procurement Authority, Auditor General’s Office, Ministry of Works and Supply

CoST Zambia has undertaken a number of activities to promote the initiative, trained media and civil society and launched a few Assurance Reports. However, CoST Zambia at the moment lacks the financial and technical resources to roll out more of its programmes and there is a process of reorganization and repositioning going on.

Electronic Government Procurement (E-GP) system

The Zambia Public Procurement Authority (ZPPA) in 2015, launched the Electronic –Government Procurement (E-GP) which is the use of Information & Communication Technology by government in conducting their procurement relationships with suppliers for the acquisition of goods, works and consultancy services required by the public sector.

This e-procurement system will intended to reduce malpractices and improve efficiency in monitoring bids and contracts. Interested bidders, will be able to submit their offers from anywhere in the world through the ZPPA website. Bidders will have automated compliance validation during bid submissions. The system is expected to curb corruption because it will reduce face-to-face transactions and there will be anonymity of bidders until bids are opened.

The e-GP is still in its formative stages and there is still a lot of work ahead. The poor Internet connectivity in Zambia, may serious hamper the good intentions of this system. Further, e-GP does not address the limited capacity of suppliers of goods and services and neither does it address the high cost of borrowing which in some cases forces some contractors to find dubious means of undertaking projects including over pricing of materials and bribing of officials and consultants to certify shoddy works. The e-GP is a good start but should be complemented by other measures and initiatives.

Project Registration

The National Council for Construction, has initiated a programme requesting all construction projects to be formally registered with them. This will build a database of projects both public and private and will enable cost comparisons to be made and provide information where malpractices do occur. Again this is a project still in its initial stages and there is a lot still to be done.

Regular publication of contract information

The Roads Development Agency is a government agency mandated to oversee the design and construction of public roads in Zambia. This is the agency that procures services for road construction and it is also responsible for the implementation of the Link Zambia 8,000, Pave Zambia 2000, L400 and C400. The Roads Development Agency (RDA), regularly publishes information in the national media, highlighting the award of contracts for different roads and related works. Similarly, the RDA publishes this information on its website. A screen shot of this information is provided on the next page.

The challenge that has been noted by stakeholders is that while this disclosure of information is important and should ideally promote transparency and accountability, RDA should not confine itself to publishing contract sums at the point of award but should also publish the final project sum which should include the cost of variations if any and extra works. The argument is that some the abuses of public resources lie in these variations and extra works.

Philippine's Citizen Participatory Audit

Teresa Ty-Santiago

Commission on Audit, State Auditor IV, Philippines

"A priority program of the Commission on Audit (COA) that upholds the people's basic right to a clean government and the prudent utilization of public resources, founded on the premise that public accountability can prosper only with a vigilant and involved citizenry, for the promotion of transparency and effectiveness."

Commissioner Heidi L. Mendoza

The Commission on Audit adopted the audit approach where civil society organizations (CSO) are involved in the public audit process. The Citizen Participatory Audit (CPA)⁶, as it is called, is a key reform initiative of the COA. Its main objective is to promote greater accountability in government by enhancing government transparency through citizen participation in the audit process. Increased awareness of the citizenry redounds to a vigilant and involved citizenry.

Under the CPA, special audit teams, composed of COA auditors and "citizen auditors", are created to conduct value-for-money audits (performance audits) of selected government programs⁷.

Completed Projects

In 2012, the COA and the non-profit intermediary group - Affiliated Network for Social Accountability-East Asia and the Pacific (ANSA-EAP) - jointly undertook the first CPA. The two-year audit partnership was undertaken with fund support from the Australian Agency for International Development (AusAID). Sample projects implemented by the Department of Public Works and Highways (DPWH) and the Local Government Units (LGU) of Marikina City and Quezon City were selected as pioneer projects for audit⁸. The Typhoon Yolanda (Hainan) Disaster Relief Activities were likewise subjected to CPA in 2014.

On-going CPA Activities (2015)

Selected Farm to Market Roads (FMR) implemented by LGUs and the DPWH were chosen for CPA for Calendar Year 2015. This time, the World Bank (WB) provided technical assistance for the COA to introduce and use Geotagging in the CPA. Representatives of accredited CSOs within their respective regions, together with COA audit teams, were trained on the proper CPA procedures and geotagging. The training included inspection of infrastructure projects using geotagging; as well as report writing. As of this date, CPA teams from 10 out of 18 Regions had been trained. Some teams have already completed their audit; some are still completing them.

⁶ CPA is aligned with the global alliance Open Government Partnership (OGP)

⁷ Program - is comprised of multiple contracts/projects managed/coordinated as one unit.

⁸ The CPA Reports can be accessed through the COA's website: <http://www.coa.gov.ph/index.php/reports/citizen-participatory-auditreports>.

The WB has, likewise, provided assistance in the development of a *COA Camera* Application for android phones used by the COA CPA teams for taking geotagged photos of projects; and the *COA Geostore*⁹.

Lessons Learnt

The CPA is still at its infancy stage. It needs continuous improvement and innovation. We have yet to determine the degree of (fraud) deterrence as its direct effect although we believe it would be substantially effective. We still have to see a CPA report (made the basis of a fraud-audit report) have its day in court. There are other unforeseen circumstances that may challenge the idea. From the completed and on-going CPAs, however, we learned that a well-trained CPA team with a dedicated CSO will ensure the goals of the CPA.

1. CPA is proving to be an invaluable audit approach. Government contracting agencies cannot simply ignore the public eye in the implementation of projects.
2. CPA was begotten on the concept of citizen participation. Its success relies heavily on the interest and support of the citizenry.
3. We have varying feedbacks from the field that contribute valuable information, among others, to wit:
 - Citizen volunteers are now aware of the extent of government efforts to improve their lives. As members of CPA teams they have learned the basics of infrastructure projects, what to expect as end users and how to validate the correct quantity and quality of accomplishments.
 - Ideal team composition especially of citizen volunteers – For example some volunteers think this is another employment opportunity – to mitigate this, it is made clear in the memoranda of agreement that no honoraria are provided; that citizen participation is pure volunteerism.
 - Number and degree of partner (CSO) involvement/commitment - there is the need for more CSO involvement.
 - Type of support and logistics and Internet – transportation for the team to reach the project site; Internet access and availability of the proper gps/mobile phones for use in geotagging.
 - Competencies and Technology – we are still in the process of training the COA personnel and CPA teams to enhance their technical capabilities. This activity requires regular updates and reiterations.

⁹ *The Geostore* is a storage system being developed which will house data on a project's budget, procurement, contract, project implementation, and audit validation/inspection on hard infrastructure (e.g. re-greening, roads, clinics, buildings). It can be managed to enable data presentation and analysis for audit planning and decision-making. There are still issues to be addressed, however, such as technical and financial support needed to fully utilize this system.

4. As we are still in the learning stage of the CPA, we have not yet reached the level of sharing of data with the general public.
5. Sustainability of the Geostore
There are issues on the financial and technical support needed to operate the COA Geostore. The system's capacity needs to be increased in order to keep up with the increasing number of projects being audited. Information is currently stored in cloud storage and maintained by the service provider (Symph) that was commissioned by the WB.

The Philippine Government has a program called "The Open Data Philippines" that releases data sets in an online portal - data.gov.ph. We are looking into the possibility of using this portal for the sharing of CPA data with the public.

Public Construction Integrity in the Arab Region: Challenges and Opportunities

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The focus on democratic governance in the Arab region truly began to galvanize at the turn of the 21st century, with a number of reforms taking place at varying degrees across the region. However, a key component of democratic governance – anti-corruption – was not given adequate attention. A new direction began in 2008 with the establishment of the *Arab Anti-Corruption and Integrity Network* (ACINET), where, for the first time, a community comprising of Arab ministries and authorities working on anti-corruption across the region began to get together to exchange information, discuss policies and build capacities against corruption. This move built on the entry into force of the United Nations Convention against Corruption (UNCAC) in 2005, with to date, 20 out of the 22 Arab countries having ratified the Convention.

At first, anti-corruption efforts focused solely on awareness raising and capacity building on the UNCAC, and the impact on the ground was limited. 2011 saw historical events unfold, where several countries in the Arab region witnessed massive protests, mainly driven by youth, demanding political change and social justice. At the core of the voiced concerns of the youth was the issue of corruption. While this triggered some positive change in varying degrees in some countries, opening the door for the latter to embark on a path of transition; violent conflict erupted in others. Today, the overall situation in the Arab countries is volatile, with security emerging as a major concern.

To recap, following a first phase where anti-corruption efforts focused mostly on awareness raising and capacity building on the UNCAC and through ACINET, a second phase beginning in 2011 put anti-corruption at the core of the voiced concerns of the people and the subsequent reforms led by some Governments in the region. A third phase seems to now be shaping, focusing on a sectoral anti-corruption approach.

At the regional level, UNDP has engaged with a number of Arab countries to support initiatives to integrate transparency and accountability measures in specific sectors. These include sectors that deliver basic public services such as health and education, and sectors that generate revenue such as customs and real estate. A key sector UNDP is keen to engage in in the region is public construction, given the interest from stakeholders in this sector, the high corruption risks associated with it and the dramatic and sometimes deadly consequences this can lead to, as well as given its importance for the economy and sustainable development. More than 200 billion dollars are indeed annually invested in the construction sector in the Arab region¹⁰.

The main challenges facing public construction integrity in the Arab region can be summed up as follows. The key challenge is a lack of disclosure of related information, with no real incentive to do so. Weak controls, be they internal or external, are also at fault, coupled with high discretionary powers exercised by public servants working in related departments. Civil society monitoring for public construction integrity is weak, given the frail capacity of civil society in this regard, and the

¹⁰ The Arab Anti-Corruption Organization (2013), *Reforming the Construction Industry in the Arab Region*
International Workshop
for Public Construction Transparency
UNDP Seoul Policy Centre

lack of adequate avenues for such monitoring provided by Governments. Finally, the enabling legal framework, a key piece of the puzzle in the pursuit of a cleaner public construction system is also weak. Very few Arab countries have adopted access to information or whistleblower protection laws. In addition, conflict of interest laws are frail and public procurement frameworks are often cumbersome. As for the state of e-government in the region, it is disparate, ranging from seamless e-government in a number of Gulf countries to emerging in most countries, which poses a challenge for the adoption of measures that seek to provide more transparency and accountability in this sector.

Another key challenge for public construction integrity in the Arab region is the particularities posed by post conflict-settings, where reconstruction can provide an ideal setting for large scale corruption, due to a number of reasons. To begin with, the rule of law in such settings is weak, and so is the State's authority and capacity. Such situations also make for corrupt political sharing agreements, with a tendency to distribute the cake among "winners", and corruption being seen as becoming the cost of peace and reconstruction. In addition, there is a lesser focus on transparency and accountability during such times, as there is an urgency to build at any cost, creating almost a "legitimized" corruption, as the situation is seen to be a state of exception. In addition, there are massive inflows of funds that come in, be they from donors or large scale borrowing. And finally, the magnitude of projects involved also explains the high corruption risks associated with post-conflict settings. With real case scenarios having already unfolded in the past in the region, demonstrating the colossal impact corruption can have on reconstruction, it is of utmost importance to support the integrity of public construction in post-conflict settings to avoid having corruption become part and parcel of the state building and development process in the region.

Parallel to these challenges however lies a set of opportunities in the region. Oil revenues are decreasing, and as such, there is an overall incentive by Governments to pay attention to spending. At the same time, development needs are still high, and demands are strong for construction, especially for infrastructure. In addition, there is a now a bigger focus by civil society organizations and the media in the Arab region on transparency and accountability, with a more open and interactive space for them to engage and monitor related affairs. A key entry point to keep in mind is also the fact that a number of countries have adopted national anti-corruption strategies which include sectoral approaches for the fight against corruption. Finally, efforts are already under way to reform the enabling environment surrounding a clean construction system, with the support of UNDP and its partners, namely with regards to access to information, e-government and public procurement.

As such, a window of opportunity presents itself to support Arab countries in their efforts for making the public construction system cleaner and more transparent, benefitting from the networks and expertise UNDP has accumulated in this regard, as well as from the good practices and lessons learned from South Korea and the world.

Indonesian Procurement Reform and the Need for Better Procurement Data¹¹

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Introduction

Public procurement in Indonesia underwent comprehensive reforms following the adoption of Presidential Decree No. 80/2003, which was later replaced by Presidential Regulation (Perpres) No. 54/2010. The reforms cover procurement of goods, works, and services that use public funds irrespective of the size or value. The reform also established regulations for government agencies involved in the procurement process at all levels of the bureaucracy.

Two of the government agencies established as part of this reform were the National Public Procurement Agency (Lembaga Kebijakan Pengadaan Barang/Jasa Pemerintah - LKPP) and the procurement service units (Unit Layanan Pengadaan - ULP). The LKPP was established in 2007 under Presidential Decree No. 106/2007 and is responsible for developing policies related to public procurement in Indonesia and overseeing their implementation. However, LKPP does not undertake procurement operation directly. The function of conducting actual procurement is lodged with ULPs, established under Presidential Regulation No. 54/2010. The ULPs are mandated, at all levels of government, to create procurement plans, schedule and run tender competitions, prepare cost estimates, prepare contracts, and receive and respond to complaints and bidder appeals. ULPs do not have a mandate to monitor the implementation of works and services.

In 2012, as part of the reform, the ULPs at both national and sub-national levels were required to adopt an electronic procurement system (Sistem Pengadaan Barang dan Jasa Elektronik - SPSE) for processing of transactions. Presidential Decree No. 54/2010 mandated the use of the SPSE across all levels of government in Indonesia. SPSE handles the publication of contract opportunities, distribution of bid documents, submission of bids, evaluation of bidding submission, bidder rebuttal, and the publication of contract award winners. The adoption of e-procurement is an important step in increasing government contracting efficiency because it reduces processing time and decreases opportunities for collusive behavior.

Deployment of the SPSE is overseen by the electronic procurement service unit (Layanan Pengadaan Secara Elektronik - LPSE), which is a working unit established in the ministries and agencies at national, provincial, and local levels. At the publication of this report, a total of 627 LPSEs have been established, covering all 34 provinces in Indonesia and serving 731 government agencies (LKPP, 2015).

¹¹ This paper is largely based on the study commissioned by Hivos entitled "Open Contracting in Indonesia: A Scoping Study" written by Michael Canares, Josef Hardi, Glenn Maail, Eko Prasetyo, and Andreas Pawelke, with the support of Tim Davies and Carlos Iglesias. International Workshop for Public Construction Transparency UNDP Seoul Policy Centre

This paper would like to look into the priority information needs of interest groups, more particularly civil society organizations, media, and the business community and how these needs, when responded to, can be a foundational basis for procurement reform in the country. The paper is structured into four parts. The first part looks briefly into the challenges of e-procurement in Indonesia. The second part looks into the priority procurement data needs of interest groups while the succeeding section discusses the challenges faced in accessing them. Finally, the last part presents the implications regarding how these data needs can drive future procurement reforms in the country.

Challenges in Indonesia's E-procurement

The literature on e-procurement in Indonesia identified several hindering factors based on four categories suggested by Soekiman and Saputra (2010) and in line with studies in other countries (Croom & Brandon-Jones, 2005; Vaidya, et al., 2006). They include legal aspects (i.e. regulation, security); technical aspects (i.e. technological standard, information technology infrastructure, system complexity), institutional aspects: (i.e. benefit, cost, coordination/planning implementation strategy, culture, leadership), and human resources aspects (i.e. skill, motivation). Each of these barriers are discussed in detail below.

Legal Aspects

There are two aspects related to the procurement legislation and legal framework which hinders the implementation of e-procurement in Indonesia.

First, there is a lack of regulation. E-procurement regulation has undergone several amendments since issuance of Presidential Decree No. 80/2003. An assessment conducted by Transparency International - USA (TI-USA) and Center for International Private Enterprise (CIPE) identified several loopholes in current regulatory documents (Yulianto & Oeyoen, 2011). The current e-procurement regulation does not apply to all state-owned companies, particularly national oil and mining companies. The Presidential Regulation has no clear mechanism in handling complaints or protests. In addition, it has no clear sanctions for violation of the procurement procedures and lacks provision for monitoring of the procurement process.

In addition, there are conflicting regulations on e-procurement implementation (Nurmandi, 2013). Theoretically, Presidential Decree No. 80/2003 and Presidential Regulation No. 54/2010 and the subsequent amendments (Presidential Regulations No. 70/2012, No. 172/2014, and No. 4/2015) take legal precedence over other legal documents on public procurement. However, these don't have the status of a law (Buehler, 2012). Hence, other laws, ministerial decrees, and regulations continue to exist.

For example, although Presidential regulation applies to all levels of government, the procurement by state-owned energy company, Pertamina, is still governed by the Law on State-Owned Enterprises. Similarly, the Ministry of Public Works (Kementrian Pekerjaan Umum - KPU) runs a separate procurement system under the law on construction (Yulianto & Oeyoen, 2011). In addition, decentralization policies implemented in Indonesia in the early 2000s have led to different regional procurement regulations issued by provincial and district governments that often contradict the national regulations. The existence of these conflicting regulations has resulted in different

interpretations of the law, and subsequently hindered enforcement of the regulation by local officials (Siahaan & Trimurni, 2014).

Second, security of e-procurement implementation is related to data confidentiality and transaction security. Lack of faith in transaction security and potential loss of confidential information often leads to a lack of trust in the systems (Hasiholan, 2011). In their survey conducted among suppliers in all regencies in the Province of Lampung, Soekiman and Saputra (2010) found that security is the third most important barrier in the implementation of e-procurement.

In order to guarantee the security of the e-procurement system, LKPP established a cooperation with the State Cryptography Agency (Lembaga Sandi Negara - LSN) that authorizes, monitors, and issues digital certificates for the SPSE system managed by LPSE. All information submitted to the SPSE system including user name, password, and other data are encrypted and can only be opened by authorized users and procurement officers. An assessment of the effect of this new arrangement on the security issues earlier identified is not yet available.

Technical Aspect

Technical barriers include technological standardization, information and communication technology infrastructure, and complexity of the SPSE system.

Technological standardization includes system type, functionality, architecture, security technologies, and systems interface (Setyadiharja, et al., 2014). Standardization of the e-procurement system enables creation of a single application system and reduces customization costs (Hasiholan, 2011). Furthermore, standardization also ensures compatibility between the e-procurement system and other systems like banking or tax systems (Sacks, et al., 2014). A common technical platform guarantees easy linkages among these different systems, including the use of common vocabularies to label the data. Nurmandi (2013) provides an example from a study in Riau Island Province where, because of a lack of standardized and joined up data, a blacklisted company was still able participate in project bidding.

At present, there are several e-procurement applications implemented by the government. In addition to SPSE, the KPU also runs a separate system on procurement. Similarly, the extractive sector including oil and gas has a different mechanism for procurement activities. The existence of different technological standards among these different systems also hinders interoperability and further development (Soekiman & Saputra, 2010).

The differences in IT infrastructure readiness across Indonesia have been suggested as a reason eProcurement implementation gaps at the sub-national level (Nurmandi, 2013). These variations include lack of bandwidth support, poor computerized system, and lack of connectivity. Obviously, lack of IT infrastructure readiness creates crucial control and monitoring problems. Because the number of LPSEs has increased tremendously since the enactment of Presidential regulation No. 54/2008, the quality of IT infrastructure also determines efficiency of e-procurement process. Siahaan and Trimurni (2014) reported an improvement in the number of biddings per month after an upgrade of the IT system at several LPSEs in North Sumatra Province. A similar case was also

observed in Riau Island Province (Setyadiharja, et al., 2014) and the Special Region of Yogyakarta (Nurmandi, 2013; Wahid & Sein, 2014).

E-procurement is a complex system where various institutions and conflict of interests are regulated through the standardization of procedures (Thai, 2001). Hence, complexities of the e-procurement system rely on the integration between human institutions and technical systems (Wahid & Sein, 2014). Implementation of the SPSE system by LKPP and LPSEs has been criticized by several local governments for lack of adaptability with the local institutional structure (Sacks, et al., 2014).

Similarly, complexity of the system is also becoming a concern to the bidders. The lack of accessibility on the part of suppliers often leads to inappropriate market mechanism (Soekiman & Saputra, 2010; Nurmandi, 2013). Bidders often complain regarding LKPP's standard operating procedure that often ignores local conditions. For example, bidders complain about delays in the submission of tender documents especially in contexts where access to internet limits bidder's ability to complete the submission process (Siahaan & Trimurni, 2014).

Institutional Aspects

Limited appreciation of e-procurement benefits, both tangible and intangible, also hinders e-procurement implementation. The tangible benefits include cost saving and lead-time efficiency while intangible benefits include process improvement and organizational benefits (Hidayanto, et al., 2012). While previous studies in procurement has shown that costs in integrating electronic processes in procurement exceeds its benefit (Soekiman & Saputra, 2010), procuring entities, local governments included, should be convinced that e-procurement is worth the investment.

Investments related to e-procurement include capital and operational expenditures. Capital expenditures cover a high proportion of the total expenditures because they include the cost of equipment and other necessary technical infrastructure. However, the sustainability of e-procurement implementation depends on the availability of operational capital. Due to limited budget, several local districts have reported having low capabilities of funding for operations and maintenance (Siahaan & Trimurni, 2014; Wahid & Sein, 2014)

Integration of the e-procurement system requires a well-defined coordination and implementation strategy. Several issues have been identified in the Indonesian context. Most system integrations were not planned properly leading to a lack of organizational preparedness (Sadikin, 2008; Buehler, 2012). Improper planning also caused problems in integrating e-procurement into the existing bureaucratic fiscal system (Soekiman & Saputra, 2010).

However, there have been efforts to push towards more transparency in the procurement process. Internally, the Presidential Regulation No. 54/2010 prescribes suppliers and government officials to sign an "integrity pact", which is a "vow to prevent and not to engage in collusion, corruption and nepotism in the procurement of goods/services" (CIPE, 2011, p. 36). Externally, CSOs are involved in the monitoring of the procurement system, although their role remains limited. Until now, there are no clear provisions in the regulation that would authorize CSOs to participate as an observer in the procurement process (CIPE, 2011). As a result, civil society monitoring is still ineffective, particularly in the provincial and district levels where resources are limited (Buehler, 2012). In addition, there is

still a need to build a close relationship between CSOs and private sector to support adoption and implementation of codes of conduct and internal anti-corruption measures.

Like any governmental reform, e-procurement requires strong political leadership and commitment. A study by World Bank shows that integrity and capacity of the mayor/regent is strongly associated with the success of e-procurement reforms (Sacks, et al., 2014). However, lack of motivation and interest among local officials have contributed to several e-procurement failures in Indonesia (Nurmandi, 2013).

Human Resources Aspects

Limited knowledge and skills in information technology, among providers and users of procurement data, have been identified as one of the most critical issues preventing sustained implementation of e-procurement. The Presidential Decree No. 80/2003 requires certification of government officials involved in public procurement. However, there is no such requirement for suppliers. Most suppliers lack a solid understanding of procurement regulations and practices and this affects their attitudes towards e-procurement. For example, most suppliers are reluctant to involve in a public tender with tight price competition (Soekiman & Saputra, 2010).

Despite these challenges, procurement reform in Indonesia is increasingly making contracting processes more transparent and accountable. Businesses begin to trust in the e-tendering processes while civil society organizations make use of procurement data to uncover irregularities. Government compliance with procurement regulations have significantly increased and overall contracting climate has improved. These challenges, however, point to the amount of work required to ensure that Indonesia gets value for money for its contracting activities. Undoubtedly, better contracting data is necessary to see whether these reforms are progressing as expected and measure how contracting processes are taking shape.

Procurement data needed by interest groups and their uses

There are at least six major stakeholders engaged/potentially engaged with procurement data – the government itself, academia (which includes universities, research institutes, and training centers), civil society organizations (CSO), including watchdogs and advocacy organizations, international non-government organizations (INGO), including donors, media, and businesses.

We use the major classifications above as basis to conduct an online survey of procurement stakeholders. A total of 64 respondents were identified to whom an online survey was sent. However, only a total of 21 respondents replied to the survey. Given the same effort used to contact, follow-up, and encourage respondents to complete the survey questionnaires, CSOs and academia are the ones with high response rates. Response rates for the groups are 53% and 40%, respectively while media has 29% and INGOs 25%.

The nature of operations of the organizations surveyed largely affects their level of interest in contracting data. For example, a few identified respondents who were called to remind them of completing the survey responded that they are not really interested in government contracting data, as their work is more on urban planning and governance, or that they are no longer focused on government contracting in their transparency advocacy work. A few others did not see the value or

importance of looking into contracting data, even when they too are prospective bidders for government contracts.

Of the 21 respondents, only 67% reported being interested in procurement data. However, when asked whether they were interested in particular data sets, the majority (86%) of the respondents said they were. Table 6 shows the data that respondents expressed interest in.

Procurement Data	%	Rank
Government tenders	86%	1
Details of future procurement plans	86%	1
Details of who won government tenders	81%	2
Details of who bid for government tenders	81%	2
Details of contracts government entered into	76%	3

Table 1. Level of Interest on Procurement Data

Figure 1 below shows that most respondents are interested in data related to the procurement of goods and services related to service delivery. This includes, among others, procurement for the delivery of basic services as education, health, and agriculture. There was virtually no interest in land data amongst those we surveyed. For those who indicated “others” in the responses, one respondent indicated interest in data related to disaster management; all others did not specify.

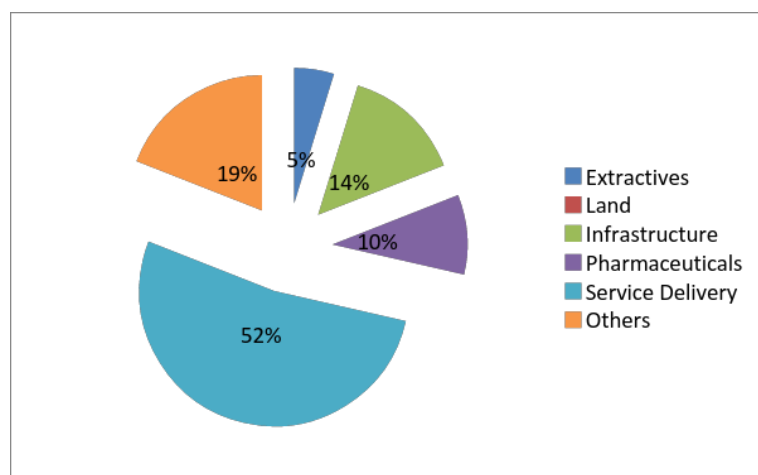


Figure 1. Sector Data that Users are Interested in

The primary reason why respondents are interested in procurement data is transparency. Other reasons identified as important by some respondents is to allow the private sector to compete for contracts and so that government will achieve value for money in its procurement activities. But the nature of motivation largely differed across sectors. Table 2 below shows these differences:

Sector	Nature of Motivation/Interest
<ul style="list-style-type: none"> CSO 	<ul style="list-style-type: none"> To monitor government policies To observe the implementation of the procurement process To advocate for certain policy reforms.
<ul style="list-style-type: none"> INGO 	
<ul style="list-style-type: none"> Business 	<ul style="list-style-type: none"> To participate in the bidding process
<ul style="list-style-type: none"> Research/Academia 	<ul style="list-style-type: none"> To measure the performance of government agencies To conduct research
<ul style="list-style-type: none"> Media 	<ul style="list-style-type: none"> To undertake investigative reporting on key select cases To make news reports

Table 2. Motivations of Users in accessing government data

Almost all (95%) of the survey respondents have used government procurement data but for different purposes. The majority used government data to foster transparency and accountability within government (See Figure 5) while a significant number has also used them for monitoring purposes. As expected, business sector respondents use contracting data to participate in bidding processes.

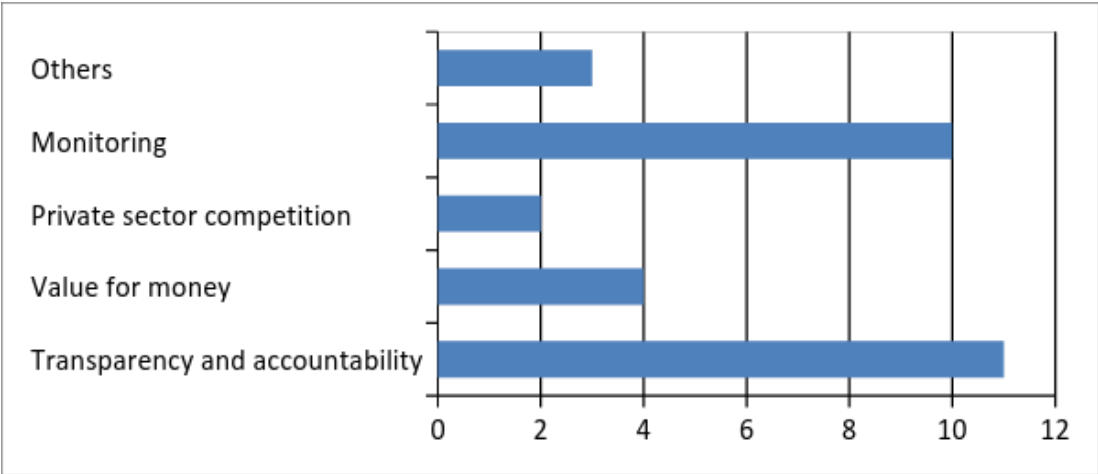


Figure 2. Uses of Government Procurement Data

Challenges in accessing and using government procurement data

Among the users of contracting data, only Indonesia Corruption Watch (ICW) expressed that they do not have challenges in accessing data because they have an MoU with LKPP where any data needed by ICW for their analysis can be accessible via secure channel connected to LKPP system. For all others, the challenges in accessing data and utilizing government procurement data can be summarized into three distinct categories – technical, political, and capacity.

	Access Challenges	Utilization Challenges
Technical barriers	Internet speed Server downtime Lack of standards in technical infrastructure	Document format Size of documents Volume of documents
Legal/political challenges	Intentional non-disclosure by government Slow response to FOI requests	Non-disclosure of historical data Selective provision of addendum information
Capacity gaps (human resource/institutional)	Lack of knowledge of users of government systems High cost of accessing procurement information	Technical language Low utilization of online systems

Table 3. Challenges in accessing and utilizing government procurement data

Technical barriers to data access refer to several aspects. It includes lack of speed in accessing the data, downtime of the server, and standardization in technical infrastructure. In some cases, only verified providers are able to access tender documents uploaded in LPSE website. Regarding utilization, users find it difficult to conduct analysis because documents are provided by sources either in hard copy or PDF. Also, these documents consist of several pages that converting them to reusable format takes a long while. Also the volume of documents to access is daunting. In Jakarta city government alone, there are more than 50,000 procurement packages in a year.

Political challenges refer to intentional non-disclosure by government of sensitive information or the lack of a comprehensive procurement policy. For example, one think tank director argues that access to information regarding small-budget projects is relatively easy, but not for projects involving large amount of money. Also, as earlier indicated in the section on data availability, several documents containing data that are important to analyze procurement activities such as contracts are not available and filing FOI requests to access these is a lengthy and cumbersome process. This, together with a complicated bureaucracy, with different rules governing procurement, makes access to and use of critical procurement documents difficult. Indonesia Corruption Watch, for example, alleges that tender addendum information is sent only to select bidders leading to the disqualification of others. Also, one bidder complains regarding their inability to use historical data.

Political barriers hinder publication of contracting data online. For example, while Indonesia already has SPSE, not all procurement is done through the system. According to ICW, only around 30% of procurement is done online. Thus, if a user would like to analyze procurement data and uses online data, he/she will not be able to get the full picture of Indonesian procurement practices.

Capacity gaps refer to information gaps between government and users of procurement data and also the capacity of users to access online information. One bidder, for example, initially expressed that they find it difficult to predict upcoming procurement. They were told that they can look at these information using SIRUP. They acknowledged that they did not know that the government publishes RUPs online.

Also, searching or monitoring bidding announcements in each SPSE requires high investment in terms of time, people and resources. Only well-resourced organizations can have the time to devote

resources to monitoring procurement information. In the case of businesses, for example, bidders assign specific persons just to access and monitor LPSE information on upcoming procurements, and they only focus on specific agencies. For organizations that would like to monitor contracting data, they may not have the kind of resources that businesses do. This is probably the reason why for an organization like Indonesia Procurement Watch (IPW) with seven staff, they focus only on high value procurements in their investigation. To be able to cover the 17,827 e-purchase and 135,669 e-tender transactions in 2014, there should be more organizations like IPW analyzing procurement information.

Using procurement documents and even the SPSE is also difficult at times, especially when documents use highly technical language. To navigate across the different laws, policies, and regulatory frameworks that govern procurement transactions is already difficult that it requires intensive study especially for those organizations advocating for procurement transparency and reform. This difficulty is accentuated by the fact that procurement documents use technical language a certain degree of expertise and familiarity.

Finally, as earlier indicated, technical infrastructure prohibits more efficient access and use of procurement data. For example, LKPP reports that SPSE implementation is significantly challenging in East Indonesia due to lack of access to the appropriate technical infrastructure. Suppliers also report that they fail to bid through the SPSE because of low internet connection preventing them from completing on-time bid submission. Also, procurement advocacy groups, including the media, need more technical tools so that they will be able to maximize use of currently available data in their analysis.

Based on a collective analysis of the results of the research on the demand side, we can say that on the part of the users, there is lack of awareness regarding what open data contracting is. However, there is high degree of interest in open contracting, especially because of the expressed barriers in accessing and utilizing governance information. Figure 8 below shows the details of this analysis.

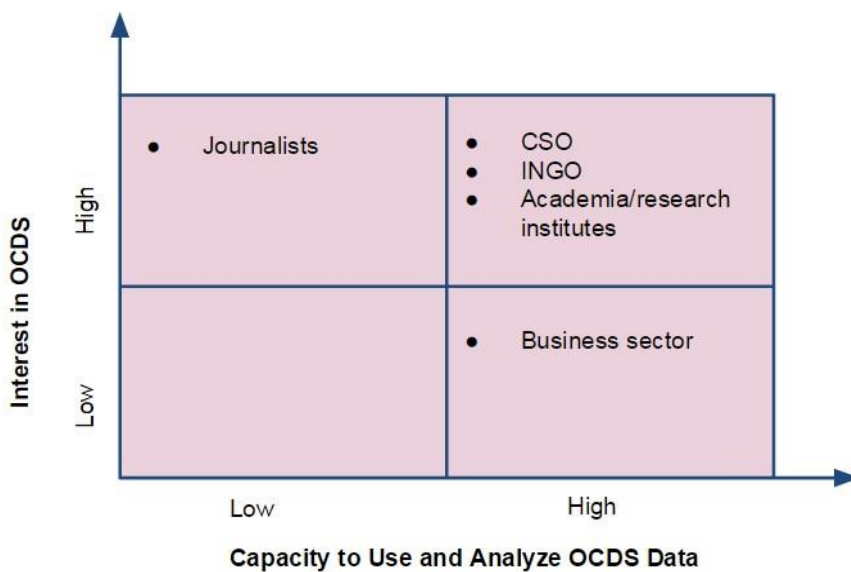


Figure 3. Mapping Interest versus Capacity

Interest in contracting data is high in CSOs, especially those engaged in fiscal transparency work. Highly specialized agencies or user organizations like Indonesia Corruption Watch, Indonesia Procurement Watch, and Publish What You Pay Indonesia, also have high level of capacity to access, analyze, and effectively use open contracting data. However, this may not be necessarily true for all CSOs engaged in fiscal transparency work in Indonesia. Perkumpulan IDEA in Yogyakarta for example, which is engaged in budget advocacy work expressed high interest in open contracting data but admits low capacity in understanding contracting information.

INGOs on the other hand also expressed high interest in contracting data and exhibits high capacity to use the same. But interest, in this case, is largely determined by the INGO's mandate. For example, MCA Indonesia, a trustee organization with both government and civil society representatives sitting at its board, has procurement modernization as one of its priority agenda, thus its high level of interest in and capacity to use contracting data. However, humanitarian Street Map Indonesia, despite its high level of capacity in data analytics, is not interested at all in working with contracting data.

The business sector has resources at its disposal to take advantage of the information that can be derived from open contracting data. However, its interest is only specific with regards to certain types of data and not with all types of data that can be produced out of OCDS. Unlike CSOs, that are often concerned with data involving all stages of procurement, the business sector are only concerned with data associated with the announcement of tender and the tendering process itself. These information, regardless of whether open or not, is what they are after. However, providing them in open formats would make their search for bidding announcements more efficient.

The journalists are very interested in open contracting data. However, their skills are limited in terms of accessing and analyzing procurement these. Alliance of Journalists Indonesia for example, is interested in transparency issues surrounding procurement but lacked the skills in data journalism. Some are even not technologically-savvy. However, journalists are also constrained by article deadline issues. They need to produce specific articles for a beat they are assigned to. According to some of them, news articles derived from procurement data are not easy to generate and require more time. This is one of the reasons why most procurement-related news are related to corruption stories or new developments in the procurement system. If ever there are news related to procurement data analysis, these reports on those that organizations like Seknas Fitra, Publish What You Pay Indonesia, IPW, or ICW were able to generate.

Implications of these data needs in procurement reform

A review of Indonesia's procurement process including its e-procurement systems indicate that the data that interest groups need are generated on a regular basis. It is not a question therefore of data availability, but a question of data quality, and access by citizens.

For example, interest groups would like to know the links between government plans and procurement activities, so that they will able monitoring budget spending. However, LKPP does not release the budget document and link it to the procurement activities. The SIRUP system only provides a snapshot entry related to the budget source (i.e., national budget or local budget), the budget year, the account number and the allocated amount. Other documents as procurement plans

(e.g. general procurement plan, work and project plans) are not made publicly available as well. For those who would like to know whether government achieves value for money by selecting the supplier with the bid which is most favorable to the government. However, data on shortlisted firms and evaluation reports are not available. The public only has access to winning bids (announcements only) and for the bidders which lost, complaints and resolutions are only available to the complainant and not to all registered users of SPSE. Again, it is not that these documents are not available, they are just not made available to those who need it, thus the impression on the part of civil society that the government is not willing to disclose. For those who use the Freedom of Information Act to request the data, they were met with non-response or serious delays.

While e-procurement has initially fulfilled its promise of efficiency, documents generated during the procurement process are not used to enhance public fiscal transparency. This is the reason why, as indicated by key users of contracting data, they find contracting practices in Indonesia as not significantly open because of two reasons. First, not all contracting activities are conducted online. Thus, only those that are conducted through SPSE leave an online trace and a high degree of being proactively disclosed. Secondly, for those contracting activities done online, most of the documents, as indicated in, are not publicly available. Much more is the case for procurements conducted offline.

So what does this mean for procurement reform?

First, the Indonesian Government should commit to a regime of procurement transparency by ensuring that procurement data and documents currently held are proactively published. The barriers currently preventing such wider publication need to be more fully explored to inform a strategy in this area. The government can start with the disclosure of procurement data that are prioritized by citizens. This will essentially answer concerns regarding data accessibility.

Second, the current plan of the Indonesian government to consolidate procurement legislation is critical to ensure that all procurements are routed through the same platform and are governed by the same standards. This is particularly true for procurement in large value contracts of state-owned companies in the oil and mining sector, as well as procurement of public works that do not go through the current e-procurement system. This will address the need for sectoral data on extractives as well as public works procurement.

Thirdly, better monitoring of procurement compliance, especially at the sub-national level is necessary. Research on the barriers to compliance is essential so that it will determine government's intervention, especially in strengthening local institutions and building local capacity.

But these reforms at the government need to be complemented with significant investments in building the capacity of procurement data users. Assuming that government discloses critical procurement data proactively, capacity of data users needs to be strengthened so that they are able to analyze, make meaning of, and use data to ensure that governments become more transparent and accountable. Investments are also required in ensuring that citizens become more procurement aware – that leakages and corruption can happen at the procurement of goods and services and that monitoring procurement is not just the responsibility of government officials and civil society organizations, but also of citizens who see the roads and bridges are being built, or are recipients of medical and education services.

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Kampala Capital City's Construction System

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Introduction

Kampala Capital City was established under Act of Parliament, KCC act 2010 to administer the city on behalf of the central Government. The Act transformed Kampala from a Local Government entity to a Central Government Agency represented to Cabinet under the Minister responsible for Kampala and Presidency. KCCA operates 10 directorates with a vision of KCCA is to transform Kampala into A vibrant, Attractive and Sustainable City.

The mandate of the Directorate of Engineering and Technical Services is to plan, manage and develop the functional design and infrastructure (including the land and buildings) of the City.

Procurement of Construction works

Works, services and supplies are procured under the Public Procurement and Disposal Act (PPDA), 2015. This act allows KCCA to procure for works by; open bidding (domestic/international), selective bidding and by Force on Account (includes using in house resources such as labor and equipment). Works include construction, rehabilitation and maintenance of roads and buildings.

Type of contracts awarded under the Act

These include;

- Works contracts for construction or maintenance
- Design and build contracts
- Supervision/ consultancy services contracts

The Procurement Process in Uganda

The procurement cycle in itself is a check mechanism that is intended to create transparency in the procurement process. The Procurement process has inbuilt checks from the bidding stage to the award stage.

1. Bidding process

- Procurement begins at the stage of bidding, at this stage the procedure of bidding is laid down and provided to all prospective bidders and all bidders are entitled to all and similar information regarding the bidding process.
- Bids are opened in the presence of all bidders and any clarifications that are to be made, are made in the presence of all bidders, if any request for clarification is sought by a bidder in writing, a reply to such a request is sent out to all bidders □ The entire bidding process is meant to create transparency

2. Evaluation

- The procedure of evaluation is stated in the bid and known to all bidders at the time of bidding it is the same procedure that is followed to evaluate bids
- After pronouncing best bidder, all bidders are informed and given a copy of the best evaluated bid notice with reasons provided for their failure.
- All bidders are called for a debriefing meeting to inform them of the reasons for their failure and to seek any clarifications
- Any bidder who is not satisfied with the process has a right to lodge an administrative review to the Public Procurement and disposal of Public Assets Authority an independent public body responsible for regulating public procurement entities.

3. Contracting

- The terms of the contract are always clear and always put in the bidding document so the successful bidder is not ambushed and coerced into unfair contract terms.

At all stages the process is clear and intended to create a transparent procurement process.

Management of contracts

Contracts are managed by in house Project Managers or by consultants depending on the level of competences needed to manage the contract. The contract Managers are responsible for the supervision of works in order to achieve projects within the time allocated, within budget, scope and intended quality. The Project Manager is also responsible for providing reports (monthly and quarterly) on the works and manages contractor claims.

Role of Civil Society in Enhancing Transparency in the Construction industry

Civil society is a reliable partner in the public delivery of goods and services. For them to perform their due role they need access to critical information. Under the Open data principle, some data should be freely available to everyone to use, republish without restrictions from copyright, patents or other mechanisms of control.

People's trust in their leaders and institutions will be enhanced as a result of increased information access. It encourages public participation in issues affecting them. An informed citizenry is an asset to any country. It destroys the culture of secrecy where corruption has been known to thrive.

Article 41, Constitution of the Republic of Uganda, 1995. *“Every citizen has a right of access to information in possession of the state or public body, except where the release of the information is likely to prejudice the security of the state or interfere with the right to privacy of any other person.”*

This constitutional provision is also reinforced with the Access to Information Act 2005, and internationally, with the Universal Declaration of Human Rights 1948 and the International Covenant on Civil and Political Rights.

Increased access to contract information strengthens the civil society role in monitoring government performance and ensuring Value For Money (comparing BoQs with actual work done) for all public works.

The need to know basis that is promoted under the charter of human rights: citizens will be able to know what is due to them limits information accessibility, however this was addressed with the whistle blower Act that has helped to identify inconsistencies in public works that are now the subject of law. CSOs can therefore help simplify certain information into user friendly versions for the locals needed to improve service delivery, comparing available information with actual status on the ground and assist in litigation where information provided is not in line with what is on ground or even where accessibility to such information has been denied to the public

Challenges

Some of the major challenges that remain include the following:

- Poor contractors with minimal work experience, poor finances and with a habit of falsification of documents such as ownership of equipment, finances and work experience.
- Reliance on consultants to supervise works leading to poor quality works and poor project management.
- Conflict between the politicians and the technical staff on the priorities
- Corruption showcased by the contractors and the supervising engineers soliciting for favours and bribes respectively. This has led to failure of contracts.
- Poor planning of works leading to delays in procurement, contract claims and variation of contracts
- Conflict between KCCA and the public (clients) over proposed or ongoing works due to poor communication.
- Constraining legal environment such as the Official Secrets Act
- Culture of secrecy and applauding the corrupt
- Failure to interpret certain information e.g. bidding document is a very technical form that requires specialised skills that are yet to be developed in civil society
- Inaccurate information from some government agencies (MoE, UNRA)
- Late release of some information because of bureaucracy

Way forward on corruption

Based on our reflections of these opportunities and challenges, critical elements for increased transparency in the public construction sector in Kampala City would include the following:

- Lobby government to join the open data initiative
- Carrying out of due diligence before awarding of contracts
- Punishment of corrupt officials
- Blacklisting of poor and corrupt contractors
- Collaboration between government and CSOs in information sharing should be encouraged
- CSOs need to be open as well
- Government audits on compliance with relevant legislations should be done more regularly, especially where information is supposed to be availed proactively.
- Institute and mainstream the Multi-Agency Action Forums as a platform to encourage dialogue between contractors, civil society and government agencies.

Role of Civil Society in the Use of Open Data

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Open Data

Open Data is the idea that some data should be freely available to everyone to use, republish without restrictions from copyright, patents or other mechanisms of control.

Why is open data needed?

People's trust in their leaders and institutions will be enhanced. Open Data also encourages public participation and discussion as an informed citizenry is an asset to any country.

An atmosphere of disclosure and free access to data greatly contributes to destroy the culture of secrecy where corruption has been known to thrive.

Enabling Legislation

There are several pieces of enabling legislation in Uganda. Article 41 of the Constitution of the Republic of Uganda adopted in 1995 states that *"Every citizen has a right of access to information in possession of the state or public body, except where the release of the information is likely to prejudice the security of the state or interfere with the right to privacy of any other person."*

In addition to this, there is the "Access to Information Act 2005", the "Universal Declaration of Human Rights" and the "International Covenant on Civil and Political Rights" as pieces of legislation facilitating the development of open data.

Role of CSOs in Open Data

The role of CSOs in establishing Open Data is important. CSOs can monitor government performance and value for money (VFM) by comparing bill of quantities (BoQ) with the actual work done. Also, CSOs can promote human rights by disseminating information to citizens, enabling them to know what they are entitled to.

In addition, CSOs often act as whistle-blowers where inconsistencies are discovered as in the case of UNRA compensation in Hoima.

For the Open Data available to the citizens, CSOs can help simplify information into user friendly versions for the locals by improving service delivery mechanisms. CSOs also litigate when information is denied to the public and push governments into joining the open data initiative.

Challenges faced by CSOs in accessing data

CSOs often face several challenges in accessing data. For example, laws like the Official Secrets Act, a culture of secrecy, failure to correctly interpret certain information, inaccurate information reported by some government agencies (MoE, UNRA) and the late release of information due to excessive bureaucracy and the inclusion of secrecy provisions in contracts.

What needs to be done?

So, what should be done to ensure Open Data for All? Collaboration between government and CSOs in information sharing should be encouraged. Open Data is not just for governments, CSOs need to be open as well. Government audits on compliance with relevant legislations should be done, especially where information is supposed to be released proactively.

Geo-Tagging: An Innovative Tool to Enhance Transparency and Supervision of Development Projects

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Introduction to the Philippine Rural Development Project

The Philippine Rural Development Project (PRDP) is a six-year national project that aims to establish a modern, inclusive, value-chain oriented, and climate resilient agriculture and fisheries sector. PRDP aims to integrate science-based tools for national prioritization of public resources. Likewise, it aims to deepen governance, transparency and accountability mechanisms at all stages of the program cycle. It also intends to operationalize a local level convergence platform among related national and line agencies and other stakeholders (private sector, civil society, producers, and academe).

With its slogan “Enabling Communities, Expanding Opportunities”, PRDP’s development objective is to increase rural incomes and enhance farm and fishery productivity in the targeted areas. This will be achieved supporting smallholders and fishers to sustainably increase their marketable surpluses, and by improving access to markets.

The project is jointly funded by the World Bank, the National Government and the Local Government Units.

Background on the Institutionalization of Applied Geo-Tagging Tool (AGT)

The current administration of the Department of Agriculture (DA) has instituted Institutional Reform Agenda (IRA) which includes criteria-based infrastructure development. The PRDP has adopted relevant tools/innovations, which will contribute to the DA’s overall drive to institutionalize a criteria-based infrastructure development including standards and protocols across its programs and projects such as the use of the Applied Geo-tagging Tool (AGT).

Developed under the Mindanao Rural Development Program (MRDP), the AGT has been enhanced and adopted under the PRDP as a critical tool for ensuring transparency and good governance in the identification, preparation, implementation and monitoring of rural infrastructure and enterprise development investments pursued by the Project in targeted areas.

The implementation of development programs particularly in Mindanao during the implementation of The Department of Agriculture’s (DA) Mindanao Rural Development Program (MRDP) was confronted with many challenges ranging from perceived corruption, site inaccessibility, difficult monitoring and evaluation activities. Over the years, MRDP has learned the ropes of how to positively effect change in the community and solve the perennial problems on project monitoring, validation and evaluation by successfully practicing AGT or simply geo-tagging.

AGT has become an integral requirement in all phases of the project cycle from subproject identification, validation, procurement, supervision and operations and maintenance. Geo-tagged

photos are required as part of subproject proposal preparation, procurement activities, and request for issuance of No Objection Letter (NOL). AGT is seen as an innovative strategy that serves as a facility that is competent and technologically advanced in addressing the identified implementation constraints of MRDP as well as in strengthening its established transparency mechanism. It increases good governance by avoiding fraud in the identification, preparation, approval and delivery of various facilities to support the agriculture and fishery sector.

What is Geo-tagging?

Geo-tagging, also called geo-location is the process of associating geographical identification metadata to digital resources (e.g. photos, websites, SMS). The metadata usually consist of latitude and longitude coordinates, which can pinpoint any place on the planet with a high degree of precision, but they may also include altitude, camera heading direction, author, data, time, and place. AGT combines basic engineering review tools and supervision experiences with location based digital technologies, such as free Geographic Information System (GIS) shape files, Global Positioning System (GPS) and Geo-tagging. This allows viewing of a sub-project on its actual location site, monitoring its physical progress and seeing its total developmental impact on the community by displaying its access, links, and influence areas.

PRDP Experience in Using the Geo-tagging Tool

The AGT makes it possible for PRDP to manage its Sub-projects remotely or online using freely available location-based technologies.

Barely a year since the PRDP became effective (on December 3, 2014), almost eighty per cent (80%) of the Provincial Local Government Units (LGU) of the country have accessed the Project's assistance. This level of participation by the LGUs enables the Project to generate a huge portfolio (see Figure 1) to realize climate change resilient rural infrastructures (e.g. farm to market roads, bridges, communal irrigation system, trade centers and other).

Region	Number of Provinces	Number of Subprojects	Cost in Million Pesos
CAR	4	9	973.88
1	4	22	2,549.69
2	4	37	3,355.01
3	7	25	1,079.84
Sub-Total	19	93	7,958.42
4A	3	27	2,347.56
4B	3	17	1,300.19
5	3	22	2,087.52
Sub-Total	9	66	5,735.27
6	6	24	2,685.29
7	2	33	1,145.09
8	5	37	2,993.34
Sub-Total	13	94	6,823.72
9	3	22	1,541.48
10	4	38	1,992.39
11	4	23	1,508.79

12	4	52	2,244.66
13	4	22	1,120.98
ARMM	2	5	361.10
Sub-Total	21	162	8,769.41
Total	62	415	29,286.82

Table 1. Rural Infrastructure Current Portfolio

The question AGT helps answer is this: Is the right activity implemented in the right place? AGT maps out the precise location of subproject, its nearest route from the sub-project proponent LGU and its relationship to existing establishments or infrastructures and influence areas. It can be seen online using a freely available “Geographic Information Programs”.

Figure 1 below shows an example of a Road Network Plan. AGT helps the Department of Agriculture to enhance technical validity and greater transparency in planning and prioritization. This innovative tool assists the Local Government partners in the identification of appropriate interventions to targeted areas.



Figure 1. Example of a Road Network Plan

Subproject Supervision and Monitoring

AGT enhances project supervision, procurement, and citizen management in monitoring public investments. Roads will be mapped and project duplicates and overlaps could be verified; there will be evidence to the use of equipment; and material testing and quality control and progress monitoring will be reported online. Monitoring of construction (rehabilitation/concreting of roads) will also be made transparent which will promote holistic planning, transparency and accountability that will deepen the impacts and institutionalization of reforms within and outside the DA.

Integration to Procurement System Management

PRDP maintains a website (www.daprdp.net) that has undergone immense improvement since it was developed in 2013. The PRDP website has become a hub of relevant information about the profile and the status of the Project. The website is frequently updated to ensure that the Project management, World Bank, oversight agencies, partner LGUs and other interested groups and individuals access the necessary real-time knowledge about the Project.

The website allows uploading and downloading of relevant documents to allow easy access and better communication and collaboration amongst the stakeholders (See Figure 2).

No.	Name of SP	SP Location	SP Description	Published Date	Bid Opening	Download PBD	Philgeps Link	View in Google Earth
1	Construction of Lamiawan RCDG Bridge	PSO: Mindanao PSO Region: Davao Region (Region XI) Province: Davao Oriental Municipality: Caraga	Construction of a 75 linear meter in length and 5 linear meter in width single lane Reinforced Concrete Deck Girder crossing Lamiawan river.	February 28, 2014	March 31, 2014 09:00AM	Download	Open	View
2	Rehab./Concreting of San Luis – Tubod – Omgaling Farm-to-Market Road Phase-1	PSO: Mindanao PSO Region: Northern Mindanao (Region X) Province: Bukidnon Municipality: Malitbog	Rehab./Concreting of 2.4 kms road with 10 lin.m. Pipe culvert	February 24, 2014	March 26, 2014 02:00PM	Download	Open	View
3	Rehab./Concreting of Jct. Tomigbong - Larapan Farm to Market Road Phase-1	PSO: Mindanao PSO Region: Northern Mindanao (Region X) Province: Bukidnon Municipality: Malitbog	Rehab./Concreting of 1.7km road with 2.00 lin.m pipe culvert	February 24, 2014	March 26, 2014 02:00PM	Download	Open	View

Figure 2. A screen shot of the website: Procurement Notices and Monitoring Section

Part of the website feature is the Project Updates Section with a specific tab for Procurement Notices and Monitoring. In this section, prospective bidders can download the bidding documents for free. DA, LGU and bidders could also check whether the bid is linked with Philippine Government Electronic Procurement System (PhilGEPS). *Pertinent to Government Procurement Reform Act (GPRA) or Republic Act No. 9184 (RA 9184), the Philippine procurement system was rationalized and*

harmonized with international standards and best practices; PhilGEPS was established as a common portal for registration of suppliers and advertisement of bid opportunities.

The Procurement Notices and Monitoring has a section where contractors (who won the bidding) are required to upload the progress of the sub-project. One of the special conditions of the contract states that: *“the contractor is obliged to submit to the procuring entity’s representatives the kmz file of the geo-tagged progress photographs, taken at 50 meters-interval starting at km 0+000 of the contract (i) every 10th of the month commencing from the date of issuance of the notice to proceed until the contract is completed; and (ii) at the same time that the claim for payment is made and the statement of value of work is executed and submitted to the procuring entity.*

Failure of the contractor to comply with the above requirement may result to non-processing of the claim for payment.

Through this policy, the work accomplished by the contractors is monitored online by everyone interested in the information. The geo-tagged photos submitted confirms the existence of subprojects which can be viewed as a layer in Google Earth. It also confirms that the geo-tagged photos are satisfactorily congruent with the approved plans, site location and technical standards.

Adopting of the Applied Geo-tagging Tool by other National Government Agencies

On 28 July 2015, A Memorandum Circular was issued by the Secretary of Agriculture (Minister) to use the AGT in all programs and projects of the Department of Agriculture.

With the increasing recognition on the AGT, other National Government Agencies are likewise adopting the said tool. In the second half of this year, 2015, the DA (with a team from PRDP) provided an orientation on the use of AGT to other government agencies such as the Department of Public Works and Highways (DPWH), Department of Environment and Natural Resources (DENR), National Irrigation Administration (NIA), Department of Trade and Industry (DTI), Department of Social Welfare and Development (DSWD), Commission on Audit (COA), and Department of Agrarian Reform (DAR).

The DPWH also included AGT in their Project Monitoring System recognizing that the mapping of their project locations is important to promote monitoring and public transparency.

Challenges and Lessons Learned from the Implementation of AGT

At the beginning of the implementation of AGT, most of the contractors were not very happy about the policy because they got used to a very weak reporting system and also because it means that they are going to have additional tasks. However, with constant explanation of the benefits of the project by PRDP officials and staff, they are slowly appreciating the benefits of the AGT.

Introducing a new technology always entail a lot of work. Training must be given ample time and budget allotment proper understating of the technology is important. An Innovative project is something to be proud of and should be made known to all people through various forms of media.

Conclusions/Recommendations


The significance of having innovative tools such as AGT is that it ensures the proper documentation of projects, proving that they actually exist. The Philippines has experienced having “ghost projects” in the past and this tool is definitely a mechanism that would curb possible corruption in the infrastructure government services especially in the agricultural sector such as farm to market roads, potable water systems, post-harvest facilities, irrigations and bridges.


The Aquino administration vowed to follow a “Daang Matuwid” (straight path) which is a term used to describe a government free of perceived corruption in government services in the spirit of promoting good governance. Principles of transparency, accountability and citizen participation have been the beacon of the Daang Matuwid. Innovations such as AGT are small steps toward Rural Development. More than the actual services, AGT brought hope to the people.

Technology is the greatest gift to our generation. Let us make good use of innovative tools to bring better service to our constituents.


Info on Speakers



	Name	Won Soon Park	Nationality	Korean
	Position	Mayor of Seoul		
	Organization	Seoul Metropolitan Government		
	Contact Information			
Short Bio	<p>Won Soon Park received a bachelor's degree in history from Dankook University in 1974 and an International Law Degree from the London School of Economics and Political Science. From 1995 to 2002, he served as Secretary General for the People's Solidarity for a Participatory Democracy, a civil society organization working to promote popular participation in governmental decision making. He served as Executive Director of the Beautiful Store, a leading social enterprise in Korea, from 2002-2009. Won Soon Park was elected as Mayor in 2011 and again in 2014.</p>			


	Name	Anne Marie Sloth Carlsen	Nationality	Danish
	Position	Director		
	Organization	UNDP Seoul Policy Centre		
	Contact Information	anne.carlsen@undp.org		
Short Bio	<p>Anne Marie Sloth Carlsen took up her post as Director of the UNDP Seoul Policy Centre in January 2014. For the previous five years she served as Senior Policy Advisor in UNDP's Bureau for Development Policy in the Environment and Energy Group in New York, initially (2008-2012) on loan from the Danish Ministry of Foreign Affairs/DANIDA. Prior to joining UNDP, Anne Marie served as a diplomat of her native country, Denmark, for more than 20 years, holding different positions dealing with a number of substantive issues.</p>			


	Name	Jae-wan Lee	Nationality	Korean
	Position	Deputy Director-General, Development Cooperation		
	Organization	Ministry of Foreign Affairs		
	Contact Information			
Short Bio		<p>Jae-wan Lee has a B.A in Law from Korea University in Seoul. He earned an M.A in Law in 1998 at the University of Virginia and acquired a Ph.D. in Law at Korea University in 2003. He joined the Ministry of Foreign Affairs in 1991 and was appointed as Director of the Territorial and Oceanic Affairs Division in 2007. In 2009, he was designated as Director of the Ministry's Humanitarian Assistance Division. In 2013, he became the Minister and Consul-General of the Korean Embassy in the Republic of the Philippines and in 2015, he was appointed as Deputy Director-General for Development Cooperation for the Ministry of Foreign Affairs.</p>		


	Name	Patrick Keuleers	Nationality	Belgian
	Position	Director/ Chief of Profession		
	Organization	Governance and Peacebuilding Bureau for Policy and Programme Support, UNDP New York		
	Contact Information	patrick.keuleers@undp.org		
Short Bio		<p>Patrick Keuleers is the Director and Chief of Profession of UNDP's Governance and Peacebuilding Team in the Bureau for Policy and Programme Support. He brings over 30 years of experience in the field of governance, with assignments in headquarters, in Central and West Africa and in the Asia and the Pacific region, including support to crisis affected environments. Prior to joining the UN, he worked as a lawyer and for the Ministry of Finance in Belgium. Mr. Keuleers is a Belgian national and holds a Law Degree from the University of Leuven in Belgium.</p>		

	Name	Petter Matthews	Nationality	British
	Position	Executive Director		
	Organization	Construction Sector Transparency Initiative (CoST)		
	Contact Information	p.matthews@constructiontransparency.org		
Short Bio	<p>Petter Matthews is a built environment and international development specialist with over thirty years' experience. He is currently the Executive Director of the Construction Sector Transparency (CoST) initiative and Executive Director of Engineers Against Poverty. His work in international development began in 1989 as a Construction Manager for the Public Works Division of the Government of Tuvalu. Since then he has acquired degrees from the School of Oriental and African Studies and the London School of Economics and worked in more than 20 countries. This includes five years in South Africa (1993 – 1998) in which he provided technical and policy advice to the mass democratic movement on land and housing policy, local government restructuring and urban development. His areas of expertise include public policy, built environment, urban development, governance in infrastructure investment, anti-corruption, extractive industries and local content.</p>			

	Name	Jong Geon Kim	Nationality	Korean
	Position	Division Director Seoul Metropolitan Government(S.M.G)		
	Organization	Infra Structure Headquarters Construction Management Division		
	Contact Information	jgkim@seoul.go.kr (+82)-10-8328-2234		
Short Bio	<p>Jong Geon Kim is currently working as Construction Management Division Director, Seoul Metropolitan Infrastructure Headquarters. His responsibility is to strengthen integrity in construction-sites through developing CCS.</p>			

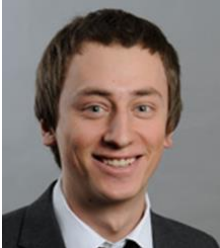
	Name	Jin Han Jeon	Nationality	Korean
	Position	Director		
	Organization	Right to Know Institute		
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Short Bio		<p>Jin Han Jeon has a M.A from Myongji University Records Management. He is a leader in the information disclosure movement on improving archival management condition in Korea, since 2002. In 2010, he introduced the case of the information disclosure movement in Korea to the University of Beijing.</p>		


	Name	Dae hyun Jong	Nationality	Korean
	Position	Deputy Director		
	Organization	Seoul Metropolitan Government		
	Contact Information	jdaehyun@seoul.go.kr (+82)-10-3262-1680		
Short Bio		<p>Dae hyun Jong is currently working as Deputy director in Seoul Audit & Inspection Commission, Safety Audit & Inspection Division. He previously worked in the Seoul Metropolitan Government Urban Planning Bureau.</p>		

	Name	Duck Hee Lee	Nationality	Korean
	Position	Deputy Director, Anti-Corruption Policy Division		
	Organization	Anti-Corruption and Civil Rights Commission (ACRC) of Korea		
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Short Bio	<p>Duck Hee Lee is currently deputy director of the Anti-Corruption Policy Division of the Anti-Corruption and Civil Rights Commission (ACRC) of Korea. He joined the ACRC in 2008 and has been responsible for the development of the national anti-corruption strategy, amendment of anti-corruption laws, and provision of anti-corruption advisory service ("integrity consulting") for public organizations. He was also in charge of the Integrity Assessment and the Anti-Corruption Initiative Assessment while serving at the Anti-Corruption Survey and Evaluation Division from 2011 to 2014. He studied public administration at Kyungpook National University.</p>			


	Name	Min Sook Hong	Nationality	Korean
	Position	Assistant Director/International Cooperation Division		
	Organization	Public Procurement Service(PPS)		
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Short Bio	<p>Min Sook Hong is currently working as an assistant director in the international cooperation division. Her responsibilities are to strengthen cooperation with international procurement agencies and coordinate international e-procurement conferences and workshops. Previous work experiences in international development include working at the African Development Bank and as a researcher at Ministry of Foreign Affairs.</p>			

	Name	Lindsey Marchessault	Nationality	Canadian
	Position	Senior Manager for Data and Engagement		
	Organization	Open Contracting Partnership		
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Short Bio	<p>Lindsey Marchessault is Senior Manager for Data and Engagement with the Open Contracting Partnership. Lindsey, who also worked for the World Bank, played a significant role in the launch of the Open Contracting Partnership and the development of the Open Contracting Global Principles and Data Standard. In her work, she engages with governments and other stakeholders to develop tools and implement strategies for better project outcomes through improved transparency and collaboration. She also manages the Open Contracting Data Standard Help Desk. Lindsey is a Canadian lawyer who has previously worked at the International Centre for Settlement of Investment Disputes, the World Bank legal department, and in private practice.</p>			


	Name	Oleksii Sobolev	Nationality	Ukrainian
	Position	Advisor to the Minister		
	Organization	Ministry of Infrastructure of Ukraine		
	Contact Information	alex.sobolev@gmail.com (+38) 0674428247		
Short Bio	<p>Oleksii Sobolev is an advisor to the minister of infrastructure of Ukraine. Before that Oleksii worked as a portfolio manager in Dragon Asset Management. He is a CFA charterholder and one of the directors of CFA Ukraine society and has 10 years of experience in financial analysis, audit and asset management. In the ministry of infrastructure Oleksii manages open data and transparency projects, including implementation of CoST Ukraine Initiatives.</p>			


	Name	Jiravat Limkhaewprasert	Nationality	Thai
	Position	Managing Director		
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	Short Bio	<p>Education:</p> <p>1981 – 1983 Assumption Commercial College</p> <p>1984 – 1987 Assumption University, Accounting Major</p> <p>1992 – 1994 Sasin Graduate Institute of Business Administration, Marketing Major</p> <p>Work Experience:</p> <ul style="list-style-type: none"> - Committee of Anti-Corruption Cooperation Sub-committee chaired by Director General of the Comptroller General's Department, Finance Ministry - SCG Cement and Building Material Co. Ltd. - SCG Trading Co., Ltd. 		


	Name	Evelyn Hernandez	Nationality	Honduran
	Position	CoST Honduras Manager		
	Organization	The Construction Sector Transparency Initiative (CosT) Honduras		
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	Short Bio	<p>Evelyn is a specialist in governance, anti-corruption, transparency, citizen participation and human rights. She is a member of the Research Group of Government, Administration and Public Policy (GIGAPP), with more than 17 years of experience in project management, monitoring and evaluation, team leadership, strategic planning, institutional reform, public policy and knowledge development. She has collaborated as a consultant in the public sector, national NGO's and international organizations such as the World Bank, the Inter-American Development Bank, UNDP and SNV in several Latin American countries.</p>		

	Name	Arnel V. De Mesa	Nationality	Filipino
	Position	Regional Technical Director for Region XI and National Deputy Project Director of Philippine Rural Development Project		
	Organization	Department of Agriculture		
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Short Bio	<p>Arnel V. de Mesa currently works at the Department of Agriculture (DA) as Regional Technical Director for Davao Region, National Deputy Project Director for the DA-Philippine Rural Development Project (PRDP), and as the Deputy Program Director of the DA-Mindanao Rural Development Program (MRDP). His main duties are to lead in the implementation of the Project's activities in the four (4) major components; (1) rural infrastructure; (2) natural resources management; (3) livelihood; and project management and training. He is also responsible for the preparation and development of policy strategies and procedures relative to the goals and objectives of the Projects, the translation of the development plan of the Project into operational policy procedures and the formulation of project guidelines, and many more.</p>			


	Name	Tae Hag Roh	Nationality	Korean
	Position	Manager, Infrastructure Headquarters Disaster Prevention Facility Division		
	Organization	Seoul Metropolitan Government		
	Contact Information	Jamesroh@seoul.go.kr 82-10-5691-4737		
Short Bio	<p>Tae Hag Roh is manager at Seoul Metropolitan Infrastructure Headquarters (SMIH), the agency responsible for public construction project for Seoul citizens. He is responsible for Project Management Information System and construction of Disaster Prevention Facility such as Pump Station, Deep Underground Tunnel. Prior to his role at SMIH, Roh was Manager at the Inspection Division for Yeongdeungpo.</p>			


	Name	Kim Sung Yeoub	Nationality	Korean
	Position	Executive Director Service Business Division		
	Organization	Bolim information System Corp		
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Short Bio	Kim Sung Yeoub studied civil engineering and computer engineering. He works in standardization consulting, PMIS build-up, technical assistance.			


	Name	Jong Youl Hong	Nationality	Korean
	Position	CEO		
	Organization	Paycoms		
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Short Bio	Jong Youl Hong's company is responsible for the system programming of the Payment Monitoring System.			


	Name	Young Jun Jang	Nationality	Korean
	Position	Manager, Infra Structure Headquarters Construction Management Division		
	Organization	Seoul Metropolitan Government		
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Short Bio	Young Jun Jang is in charge of managing the E-HRM System. (Electronic Human Resources Management System For Construction Workers).			


	Name	Sang-Koo Cho	Nationality	Korean
	Position	Department of Support Policy Director		
	Organization	Korea Specialty Contractors Association (KOSCA)		
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Short Bio	Sang-Koo Cho is a built road management specialist. Currently, he is the Policy Director for the Korea Specialty Contractors Association. He works to improve the specialty contractor's system.			

	Name	Lorena Rivero del Paso	Nationality	Mexican
	Position	Director General of Performance Monitoring and Information		
	Organization	Ministry of Finance and Public Credit		
	Contact Information	lorena_rivero@hacienda.gob.mx https://mx.linkedin.com/in/lorenardp		
Short Bio	<p>MSc in Law and Economics by the University of Bologna and the Indira Gandhi Institute for Development Research and LL.M by the University of Hamburg. Lorena started working in the Ministry of Finance in 2011 for the development of the fiscal transparency policies, where she has been in charge of the development of the Fiscal Transparency Portal, which includes several platforms related to transparency in expenditures, construction and open data. She is also in charge of the monitoring of government performance through objective indicators to encourage performance based budgeting. Architect of the Community of Practice of the Global Initiative for Fiscal Transparency (GIFT) presented in 2015. Her experience also accounts for the implementation and monitoring of International Anticorruption Conventions in the Ministry of Public Administration.</p>			


	Name	Rueben L. Lifuka	Nationality	Zambian
	Position	Chairperson		
	Organization	CoST Zambia		
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Short Bio	<p>Rueben Lifuka is the current Chairperson of the Multi Stakeholder Group for the Construction Sector Transparency (CoST) initiative in Zambia. He is also the Immediate Past Chapter President of Transparency International Zambia. He served for six years on the International Board of Transparency International. Rueben Lifuka is additionally the Board Chairperson of Build It International – a UK charity involved in the construction of community infrastructure including schools and health centres in Zambia. Rueben has an undergraduate degree in Architecture and a Master of Science in Integrated Environmental Management. He runs a Development and Environmental Management Consultancy firm in Lusaka Zambia called – Riverine Development Associates.</p>			

	Name	Teresa Ty-Santiago	Nationality	Filipino
	Position	State Auditor IV		
	Organization	Commission On Audit, Philippines		
	Contact Information	Technical Services Office, Commission On Audit +632 - 9319293 and +632 - 9327534		
Short Bio	<p>Teresa studied Bachelor of Science in Civil Engineering and took up Master in Business Administration as post graduate studies. A licensed Civil Engineer and a Certified Fraud Examiner. Has been with the Commission for more than 30 years and assigned to the Special Audit Office and Technical Services Office of the Commission. Undwent trainings on Government-wide and Sectoral Performance Audit sponsored by UNDP-COA-AusAid; attended seminar on Public Private Partnership conducted by K2B International held in Singapore sponsored by Asian Development Bank. One of the first certified fraud examiners from the Commission On Audit through the assistance of the USAID-MSI.</p>			

	Name	Karine Badr	Nationality	Lebanese French
	Position	Regional Project Analyst, Anti-Corruption and Integrity in Arab Countries		
	Organization	UNDP Regional Bureau for Arab States		
	Contact Information	karine.badr@undp.org		
Short Bio	<p>Karine Badr is an analyst working with UNDP's Regional Project on Anti-Corruption and Integrity in the Arab Countries. Before that she worked with the OECD on e-government issues in Arab countries. She holds a bachelors in political science and a Masters in International Affairs from the Sciences Po Paris University and has graduated from an exchange program from the School of Oriental and African Studies in London.</p>			

	Name	Michael P. Cañares	Nationality	Filipino
	Position	Regional Research Manager - Asia		
	Organization	World Wide Web Foundation - Open Data Lab Jakarta		
	Contact Information	michael.canares@webfoundation.org or michael@jakarta.labs.webfoundation.org		
Short Bio	<p>Michael Cañares is World Wide Web Foundation's Regional Research Manager for Asia stationed at Open Data Lab in Jakarta. He has more than ten years of research and development work experience at a progressive pace – from community-based project management to regional development with most of his work rooted mainly in Southeast Asia. He delves in different programmatic themes, such as health, child-focused development, natural resource management, financial management, forestry, economic development, and poverty reduction. Before joining the Lab, Miko taught for over ten years, served as a monitoring and evaluation specialist for infrastructure governance and local economic development, and managed various open data research projects in the Philippines.</p>			

	Name	Cissy Kagaba	Nationality	Ugandan
	Position	Executive Director		
	Organization	Anti Corruption Coalition Uganda		
	Contact Information	kagabac@accu.or.ug 0772628129/0755582800		
Short Bio	<p>Cissy Kagaba is a lawyer and the Executive Director of the Anti- Corruption Coalition Uganda (ACCU). Cissy has considerable wealth of experience in human rights and governance related issues having worked with the Uganda Human Rights Commission and litigated various rights violations against state and non-state actors. Cissy has served as a consultant, trainer and facilitator on a wide range of issues with various organizations such as MS- Denmark's Thematic Program Policy on Anti-Corruption in TCDC Arusha, She has evaluated the performance of Uganda's Accountability Sector , Trained local government officials in various districts of Uganda under the USAID LINKAGES PROGRAM, Faculty facilitator with International Law Institute. She is a regular analyst on governance issues with the print and broadcast media and also recognized as one of the 40 most influential women in Uganda in 2015.</p>			

	Name	Patrick Musoke	Nationality	Ugandan
	Position	Deputy Director, Strategy Management and Business Development		
	Organization	Kampala Capital City Authority		
	Contact Information	pmusoke@kcca.go.ug		
Short Bio	<p>Patrick Musoke is an economist a Chartered Accountant and Professional Balanced Scorecard Practitioner with over 20 years' experience in public service. He started off his career as a Tax Auditor in Uganda Revenue Authority and rose up to Manager Strategy Management in the revenue Agency. Later he was appointed as deputy director Strategy Management and Business Development in Kampala Capital City Authority where he has been charged with spearheading the development of the city strategy, promotion of innovative approaches to doing business. He is the coordinator of the development of the low carbon development and city resilience Strategy that charts a city's Low carbon Development Pathway. He is spearheading the Alternative financing mechanisms that include the city Bond.</p>			