



དཔལ་ལྷན་འབྲུག་གཞུང་། རབས་རྟོག་ལྷན་ཁག

ROYAL GOVERNMENT OF BHUTAN
MINISTRY OF WORKS AND HUMAN SETTLEMENT
THIMPHU: BHUTAN

Construction Industry Solutions to Innovation and Improved Technology

MoWHS.PPD-50/2018/ 3958

Dated: 7th June 2018

To:

(Refer the list of addressees)

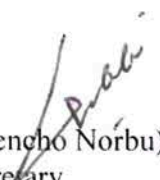
Subject: **Resolutions of the 9th Works and Human Settlement Conference**

Excellency/Dasho/Sir/Madam,

Following the circulation of the draft of the Resolutions of the 9th Works and Human Settlement Conference for comments and suggestions and upon receipt of a few comments and suggestions which have been duly incorporated, the Ministry of Works and Human Settlement is pleased to forward the final Resolutions of the 9th Works and Human Settlement Conference.

The Ministry reiterates its commitment to follow up through all the resolutions for implementation and/or undertaking—immediately or otherwise, to ensure that the decisions made on the discussions held and the concerns expressed are fully taken into account and acted upon.

Sincerely yours,


(Chencho Norbu)
Secretary



དཔལ་ལྷན་འགྲུག་གཞུང་། འབམ་རྟོག་ལྷན་ཁག

ROYAL GOVERNMENT OF BHUTAN
MINISTRY OF WORKS AND HUMAN SETTLEMENT
THIMPHU: BHUTAN

"Construction Industry. Solutions to Innovation and Improved Technology"

Addressed to:

1. Hon'ble Zhabtog Lyonpo, MoWHS, Thimphu
2. Thrompons, Dzongkhag Thromdes of Thimphu, Phuentsholing, Gelephu and Samdrup Jongkhar
3. Director, Department of Roads, MoWHS, Thimphu
4. Director, Department of Engineering Services, MoWHS, Thimphu
5. Director, Department of Human Settlement, MoWHS, Thimphu
6. Director, Directorate Services, MoWHS, Thimphu
7. Director, Construction Development Board, Thimphu
8. Dzongkhag Engineering Sector, 20 Dzongkhag Administrations
9. Dzongkhag Municipal Sector, 16 Dzongkhag Administrations
10. Chief Planning Officer, Policy and Planning Division, MoWHS, Thimphu

Ministry of Works and Human Settlement

THE NINTH WORKS AND HUMAN SETTLEMENT CONFERENCE

RESOLUTIONS

**8-11 MAY 2018
MONGAR**

Preamble

Seeking to understand the challenges in infrastructure development and maintenance and to confront them with appropriate measures to ensure sustainable development of infrastructure;

Aware that there are gaps in both institutional and professional capacities as well as in policies and strategies to develop and maintain infrastructure;

Recognizing that the nation will embark on a new era of planned development from the 12th Five-Year Plan onwards with the local governments being charged with greater responsibilities of plan implementation, including infrastructure development;

Acknowledging the importance of having sound policies and strategies in infrastructure development and maintenance to ensure that there is proper coordination in all stages of planning, development and maintenance of infrastructure by all the key players at both national and local levels;

The 9th Works and Human Settlement Conference was held on the theme “**Strategies to Maintain Infrastructure**” from 8 to 11 May 2018 in Mongar. A total of 137 engineers, architects, and urban planners from the Ministry of Works and Human Settlement, the Dzongkhags, and the Dzongkhag Thromdes attended the Conference.

A separate pre-conference of Dzongkhag and municipal engineers was held on 7 May 2018 on infrastructure asset management and the recommendations there from were submitted to the Conference for deliberation and consideration.

Relevant to the sub-themes, a total of nine presentations were made during the two-day pre-conference held on 8 and 9 May 2018. Based on the deliberations, discussions and the recommendations made, the Conference adopted a total of 18 resolutions.

The main-day Conference was held on 11 May 2018.

The resolutions adopted during the 9th Works and Human Settlement Conference—and under the three sub-themes—are as given hereunder.

A. Sustainable Planning and Development of Infrastructure

Objectives

1. Learning the various approaches of sustainable human settlement planning and infrastructure development to ensure sustainable living.

2. Being able to understand Integrated Approach to Settlement Planning to reduce on duplication of effort and resources.
3. Understanding the various challenges of human settlement planning and infrastructure development.
4. Ensuring that policies and strategies for human settlement planning and infrastructure development are able to confront the challenges.

The Conference noted that planning and development of infrastructure will need to be undertaken on a sustainable basis and through an integrated approach, providing for proper planning, consultation and development of infrastructure.

The following resolutions on the sub-theme “Sustainable Planning and Development of Infrastructure” were adopted:

1. The Conference directed the Policy & Planning Division to further deliberate and discuss the draft National Construction Industry Policy with the relevant stakeholders, including the private sector before submission to the Gross National Happiness Commission.

Action: **PPD**
Timeline: **June 2018**

2. The Conference recommended the Ministry of Works and Humans Settlement to continue to promote the Integrated Approach to Settlement Planning and directed the Department of Human Settlement to develop a strategy paper to enhance public participation during consultations on and ownership of settlement development plans.

Action: **DHS**
Timeline: **August 2018**

3. Facilitated by the Directorate Services, the Conference recommended the strengthening of capacities of engineers, architects and planners based on the competency and parenting frameworks.

Action: **DS**
Timeline: **August 2018**

4. The Conference urged the Planning and Policy Division in consultation with other Departments to provide policy directives to take up integrated infrastructure planning by all local governments so that overlaps or duplications are minimized.

Action: **DHS, DES, and PPD**
Timeline: **September 2018**

5. The Conference recommended the Construction Development Board to continue the capacity development programs for the contractors and their employees, as well focusing on contract and procurement management, construction management, and quality management to enhance professionalism in construction industry.

Action: **CDB**
Timeline: **June 2018**

6. The Conference recommended the Construction Development Board in consultation with the Ministry of Works and Human Settlement to review the Standard Bidding Documents and submit the recommendations to the Ministry of Finance for consideration.

Action: **CDB**
Timeline: **September 2018**

B. Asset Management Practices and Challenges

Objectives

1. Understanding the existing practices in infrastructure development and maintenance and explore options to improve.
2. Being able to gain proper understanding of infrastructure development and maintenance practices and challenges.
3. Strengthening the capacities of all key stakeholders to confront the challenges of infrastructure development and maintenance.

Infrastructure—not as a part, but the sum of national wealth—will need to be created, built, acquired and maintained in the present and in the future. Given that there are challenges to build and maintain quality infrastructure, the Conference discussed the various infrastructure asset management practices and challenges confronted.

The following resolutions on the sub-theme “Asset Management Practices and Challenges” were adopted:

1. The Conference directed the Policy and Planning Division to provide provisions in the National Construction Industry Policy to recognize contributions of institutions and professionals in the construction sector/industry.

Action: **PPD**
Timeline: **June 2018**

2. The Conference directed the Department of Engineering Services to review the functional capacities of the Dzongkhag municipalities and recommend a standard and minimum set of equipment for each Dzongkhag municipality by end of 2018.

Action: **DES and DS**
Timeline: **December 2018**

3. The Conference directed the Department of Engineering Services to develop and adopt standards, manuals and standard operating procedures (SOPs) for maintenance of urban and rural infrastructure for implementation in the 12th Five-Year Plan and to secure adequate maintenance resources.

Action: **DoR, DHS, DES and DS**
Timeline: **December 2018**

4. The Conference requested the Ministry of Works and Human Settlement to facilitate discussions with the Ministry of Finance on the revision of charges and fees of municipal services as per the Local Government Act, 2009.

Action: *DES and DS*
Timeline: *September 2018*

5. Recognizing the importance of database and management information systems, the Conference recommended the Ministry of Works and Human Settlement to assist the local governments to develop database and management information systems for all infrastructure assets, and the local governments to facilitate in updating of such database and management information systems (for e.g. Water and Sanitation Information System).

Action: *DES, DS, PPD and local governments*
Timeline: *December 2018*

6. The architects, engineers, planners and technicians require specific technical and professional skills and knowledge to deliver local governments' project outputs and outcomes. The Conference requested the Ministry of Works and Human Settlement to request the relevant agencies to provision for capacity development of the professionals providing services and working in sector-specific projects implemented at the local government levels.

Action: *DES, DS and PPD*
Timeline: *August 2018*

C. Sustainable Construction Technologies

Objectives

1. Understanding the various technological options and solutions that can be used for quality infrastructure development and maintenance.
2. Being able to promote the best technological options and solutions, including the use of locally sources construction materials for sustainable infrastructure development and maintenance.
3. Being able to understand and undertake proper preparations for disaster risk reduction through adoption of appropriate technological solutions.

To enable the sustainable growth and development of infrastructure, adopting and promoting the use of sustainable construction technologies is deemed important. The Conference noted that there are numerous technological options and solutions that can be employed for infrastructure development and by the construction sector/industry, and that there must be efforts expended to employ the right technological solutions and techniques that will help the country build and develop quality infrastructure asset and their maintenance thereof.

The following resolutions on the sub-theme "Sustainable Construction Technologies" were adopted:

mj
1

1. Recognizing the issues of management and ownership of rural and urban water supply systems, the Conference requested the Ministry of Works and Human Settlement to resolve the issue with the Ministry of Health.

Action: **DES and PPD**
Timeline: **July 2018**

2. Recognizing the importance and advancement of technologies in infrastructure development, the Conference requested the Ministry of Works and Human Settlement to conduct and promote Research and Development (R&D) of the new sustainable and energy efficient technologies in collaboration with Royal University of Bhutan.

Action: **DES, DHS, DoR and DS**
Timeline: **12th FYP**

3. The Conference resolved that any new technology introduced in infrastructure development should go through a review process by the Ministry of Works and Human Settlement.

Action: **DoR, DES and DS**
Timeline: **12th FYP**

4. The Conference recommended the Ministry of Works and Human Settlement to mandate the undertaking of socio-economic impact assessments for all major infrastructure projects (at both national and local level) and the findings to be published for future consideration in planning and implementation of public infrastructure development.

Action: **DoR, DES and DS**
Timeline: **12th FYP**

5. The Conference requested the Ministry of Work and Human Settlement to develop capacity development plan to strengthen capacities of professionals and local artisans on construction technologies that are energy efficient and resilient to natural hazards and climate-change induced hazards.

Action: **DES and DS**
Timeline: **December 2018**

6. The Conference recommended that the Ministry of Works and Human Settlement to enhance the capacities of local governments and the relevant government agencies to undertake vulnerability assessments of all public infrastructure during the period of 12th Five-Year Plan.

Action: **DES, DoR and DS**
Timeline: **12th FYP**
