

立法會
Legislative Council

LC Paper No. CB(1)248/17-18
(These minutes have been seen
by the Administration)

Ref : CB1/SS/13/16

Subcommittee on Waterworks (Amendment) Regulation 2017

**Minutes of third meeting held on
Tuesday, 27 June 2017, at 9:00 am
in Conference Room 3 of the Legislative Council Complex**

Members present : Hon LEUNG Che-cheung, BBS, MH, JP (Chairman)
Dr Hon Helena WONG Pik-wan (Deputy Chairman)
Hon Andrew WAN Siu-kin
Hon SHIU Ka-fai
Dr Hon YIU Chung-yim

Member attending : Hon LEUNG Kwok-hung

Member absent : Hon Alice MAK Mei-kuen, BBS, JP

[According to the Judgment of the Court of First Instance of the High Court on 14 July 2017, LEUNG Kwok-hung, Nathan LAW Kwun-chung, YIU Chung-yim and LAU Siu-lai have been disqualified from assuming the office of a member of the Legislative Council, and have vacated the same since 12 October 2016, and are not entitled to act as a member of the Legislative Council.]

Public Officers attending : Agenda item I
Development Bureau

Mr Vitus NG
Principal Assistant Secretary (Works) 3

Water Supplies Department

Mr WONG Chung-leung, JP
Deputy Director

Mr Horace LEE
Senior Engineer/ Legislative Review (2)

Mr Edmond LAU
Senior Mechanical Engineer/ Material Control

Mr Chan Kin-hung
Mechanical Engineer/Legislative Review

Mr Terry KUNG
Mechanical Engineer/Material Control

Department of Justice

Miss Selina LAU
Senior Assistant Law Draftsman

Miss Wendy HO
Government Counsel

Clerk in attendance : Mr Derek LO
Chief Council Secretary (1)5

Staff in attendance : Ms Wendy KAN
Assistant Legal Adviser 6

Mr Fred PANG
Senior Council Secretary (1)5

Ms Michelle NIEN
Legislative Assistant (1)5

I. Meeting with the Administration

- (LC Paper No. CB(1)1193/16-17(01) — List of follow-up actions arising from the discussion at the meeting on 20 June 2017
- LC Paper No. CB(1)1193/16-17(02) — Administration's responses to issues raised at the meeting on 20 June 2017
- LC Paper No. CB(1)1193/16-17(03) — Written questions of Dr Hon Helena WONG Pik-wan
- LC Paper No. CB(1)1045/16-17(01) — Marked-up copy of the Waterworks (Amendment) Regulation 2017 prepared by the Legal Service Division)

1. The Subcommittee deliberated (index of proceedings in the **Appendix**).
2. The Subcommittee completed the section-by-section examination of the Chinese text of the Waterworks (Amendment) Regulation 2017 (L.N. 81)("the Amendment Regulation").

Proposed amendments

3. The Subcommittee deliberated the amendments proposed by Dr Helena WONG which were tabled at the meeting. After deliberations, the Chairman put to vote one by one two proposed amendments to the Amendment Regulation in respect of the following:

- (a) water heaters sold, installed or manufactured for the purpose of human consumption of the drinking water; and
- (b) water pumps used in inside service.

(Post-meeting note: The wording of the proposed amendment for water heaters in 3(a) above was set out under item no. 6 in the amendments proposed by Dr Helena WONG and was issued to members vide LC Paper No. CB(1)1221/16-17(02) on 27 June 2017. The wording of the proposed amendment for water pumps in 3(b) above was issued vide LC Paper No. CB(1)1221/16-17(03) on 27 June 2017.)

4. The Chairman declared that members agreed with the two proposed amendments above. Mr SHIU Ka-fai requested to put on record that he abstained from voting. The Chairman said that he would move a motion on behalf of the Subcommittee to propose the two amendments in the Amendment Regulation.

(Post-meeting note: With the concurrence of the Chairman and after clarification and confirmation from Dr Helena WONG, the legal adviser to the Subcommittee prepared a draft proposed motion on the two proposed amendments to be moved by the Chairman of the Subcommittee on behalf of the Subcommittee to amend the Amendment Regulation. The wording of the draft proposed motion which was on regulating wall-mounted dispensers and booster pumps, i.e. originally referred to as "water heaters" and "water pumps" in the proposed amendments respectively at the meeting, was issued to members vide LC Paper No. CB(1)1253/16-17(01) on 3 July 2017.)

5. The Subcommittee noted that by a resolution passed at the Council meeting of 14 June 2017, the scrutiny period of the Amendment Regulation had been extended to 12 July 2017 and that the deadline for giving notice of motion to amend the Amendment Regulation would be 5 July 2017. The Chairman would report the deliberations of the Subcommittee to the House Committee at its meeting on 30 June 2017.

Follow-up actions to be taken by the Administration

- Admin 6. The Administration was requested to provide the following information:
- (a) written response to the amendments to the Amendment Regulation proposed by Dr Helena WONG which were tabled and discussed at the meeting (LC Papers No. CB(1)1221/16-17(02) and CB(1)1221/16-17(03)), having regard to the Subcommittee's discussions/decisions at the meeting;
 - (b) with respect to the concern whether the Water Supplies Department's Technical Committee on Plumbing had the knowledge and expertise in ensuring the quality and safety of drinking water, the composition/membership of the Water Supplies Department's Technical Committee on Plumbing;

- (c) regarding Dr Helena WONG's concern about electroplating material on wetted surface of water taps (item no. 9 of her written questions in LC Paper No. CB(1)1193/16-17(03)), how the Administration ensured that the industry would follow the relevant standards (including but not limited to Australian Standard AS 4020) governing the plumbing materials/components for use in contact with drinking water such as taps or valves; and the guidelines issued/to be issued by the Administration for laboratories to follow in this regard; and
- (d) details of the Administration's guidelines on cleansing of fresh water tanks/storage cisterns in buildings, and existing and proposed measures/mechanism to ensure the compliance with the guidelines.

(Post-meeting note: The Administration's response was issued to members vide LC Paper No. CB(1)1235/16-17(02) on 29 June 2017.)

II. Any other business

- 7. There being no other business, the meeting ended at 12:28 pm.

Council Business Division 1
Legislative Council Secretariat
22 November 2017

**Proceedings of third meeting of the
Subcommittee on Waterworks (Amendment) Regulation 2017
on Tuesday, 27 June 2017, at 9:00 am
in Conference Room 3 of the Legislative Council Complex**

Time marker	Speaker	Subject(s)	Action required
Meeting with the Administration			
002500 – 002709	Chairman Dr Helena WONG Administration	<p>Discussion on the Administration's response (LC Paper No. CB(1)1221/16-17(01)) to questions submitted by Dr Helena WONG on 20 June 2017 (LC Paper No. CB(1)1193/16-17(03))</p> <p>In response to Dr WONG's enquiry, the Administration explained the need for adding chlorine in drinking water.</p>	
002710 – 003158	Dr Helena WONG Administration	<p>Dr Helena WONG expressed concern whether the Water Supplies Department ("WSD")'s Technical Committee on Plumbing had the knowledge and expertise in ensuring the quality and safety of drinking water.</p> <p>The Administration agreed to provide information on the composition and membership of the Technical Committee on Plumbing after the meeting.</p>	The Administration to follow up as stated in paragraph 6(b) of the minutes.
003159 – 004259	Chairman Dr YIU Chung-yim Dr Helena WONG Administration	<p>Dr YIU Chung-yim expressed concern about the lack of a mechanism to check whether suppliers of plumbing products and materials complied with the standards specified in the legislation. He considered that the Administration should take the opportunity to introduce a mechanism to proactively conduct tests on materials for potential risks and hazards.</p> <p>Following up her written question on the standards of the materials used for water taps submitted on 20 June 2017 (i.e. question 1 in LC Paper No. CB(1)1193/16-17(03)), Dr Helena WONG enquired how the Administration enforced compliance with the standards on plumbing materials promulgated in the Waterworks Regulations (Cap. 102A) ("WWR").</p>	

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		<p>The Administration advised that –</p> <ul style="list-style-type: none"> (a) the Water Authority ("WA") had set up a general acceptance ("GA") system on plumbing materials. The supplier would submit to WA test report issued by an accredited laboratory that proved the proposed plumbing material conformed to the relevant standards in aspects required by WWR. WA would check and verify the test reports prior to granting GA; (b) to strengthen the control of plumbing materials, WA had enhanced the system by imposing a five-year validity period of GA. To further enhance the conformity of plumbing products with GA requirements, WSD would launch a surveillance programme for GA products; and (c) as regards BS EN 200:2008 for taps which stipulated that "all materials coming into contact with water intended for human consumption shall present no risk to human", material supplier would have to demonstrate it via chemical composition testing against relevant metallic standards for metals and BS 6920:2014 for non-metallic materials. 	
004300 – 004814	Chairman Dr Helena WONG Administration	<p>Dr Helena WONG enquired how WSD ensured that the plumbing products and materials actually used in waterworks in construction projects were those previously approved by the Administration. She called on the Administration to put in place a system for effective monitoring and checking compliance in the trade.</p> <p>The Administration advised that –</p> <ul style="list-style-type: none"> (a) prior to the commencement of plumbing works, the Licensed Plumber ("LP") was required to submit a full list of all plumbing materials to be used in the plumbing works for approval by WA. During the interim/final inspections, WA would conduct random check to ensure that the plumbing materials used were those approved by WA; 	

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		<p>(b) to further enhance the conformity of plumbing products with GA requirements, WSD would launch a surveillance programme for GA products; and</p> <p>(c) whilst the Administration attached great importance to ensuring quality and safety of drinking water, it was also necessary to avoid imposing undue burden on the trade and property owners.</p>	
004815 – 005224	Chairman Mr SHIU Ka-fai	Mr SHIU Ka-fai expressed concern about the cost of complying with the various increasingly rigorous requirements and standards on plumbing materials and fittings.	
005225 – 005404	Chairman Dr Helena WONG	Dr Helena WONG expressed views about the importance of safeguarding drinking water safety by regulating plumbing materials and fittings properly and adequately.	
<p><u>Section-by-section examination of the provisions of the Waterworks (Amendment) Regulation 2017 (L.N. 81 of 2017) [LC Paper No. CB(1)1045/16-17(01)]</u></p>			
005405 – 012217	Chairman Dr Helena WONG Administration	<p>Discussion on regulations 20(2) and 25(2) as amended by L.N. 81 of 2017</p> <p>Dr Helena WONG elaborated the rationale of the amendments which she intended to propose in respect of regulations 20(2) and 25(2) (i.e. items 1 and 3 in LC Paper No. CB(1)1221/16-17(02) which set out a number of amendments proposed by Dr WONG and was tabled at the meeting) and expressed views that –</p> <p>(a) WA should be suitably constrained in exercising his powers under the proposed regulations 20(2) and 25(2); and</p> <p>(b) in exercising his powers, WA should ensure that his decisions would result in water safety and water supply efficiency being not adversely affected.</p>	

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		<p>The Administration advised that –</p> <p>(a) it agreed in principle that the matters proposed to be stated in the proposed regulation 20(2)(a) and 20(2)(b) of WWR, namely, the efficiency of the fire service or inside service in which the pipe or fitting was installed in providing a reliable and adequate supply of water and the quality of water, were the two factors that WA would consider in exercising the respective powers under the proposed regulations 20(2) and 25(2); and</p> <p>(b) it would propose amendments to that effect.</p>	
012218 – 012729	Chairman Dr Helena WONG Administration	<p><i>Schedule 2</i></p> <p><i>Part 1 Pipes and Fittings</i></p> <p>Dr Helena WONG expressed concern that cast iron would easily rust in water pipes.</p> <p>The Administration advised that –</p> <p>(a) it would propose amendments to delete the provisions related to cast iron pipe from the legislation as cast iron pipe was no longer used in the market due to its comparatively brittle nature;</p> <p>(b) these were paragraphs 1, 3 and 4 in Part 1 of Schedule 2, and second sentence in paragraph 9 of Part 4 of Schedule 2; and</p> <p>(c) there was no need to delete the provisions related to cast iron fitting as cast iron was still a suitable material for making the body of a fitting which was internally lined and was not in direct contact with water.</p>	
012730 – 012839	Chairman Dr Helena WONG Administration	<p>In response to Dr Helena WONG's enquiry about the adoption of specifying stainless steel of grading 304 or better as material for pipes in paragraph 20 of Part 1 of Schedule 2 as amended by L.N. 81 of 2017, the Administration advised that it was based on consultation with the trade.</p>	

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012840 – 013339	Chairman Dr Helena WONG Administration	<p>Members noted that paragraph 23 of Part 1 of Schedule 2 provided that non-metallic materials and products for use in contact with water intended for human consumption must comply with the relevant requirements in BS 6920 series.</p> <p>Dr Helena WONG proposed to add "lubricants, silicone sealing rings, elastomers sealing rings, etc." to paragraph 23 of Part 1 of Schedule 2 (i.e. item 4 in LC Paper No. CB(1)1221/16-17(02)) in order to enhance the clarity of the provision for the compliance by the trade.</p> <p>The Administration clarified that:</p> <ul style="list-style-type: none"> (a) as BS 6920 series included the testing of materials and parts such as lubricants, silicone sealing rings and elastomers sealing rings, it was not necessary to add them to the regulation; and (b) BS 6920 series applied to all non-metallic materials and products for use in contact with water intended for human consumption and other non-metallic materials and products in other parts of Schedule 2. <p>After discussion, the Administration agreed to propose an amendment to add a note after paragraph 23 of Part 1 of Schedule 2 to annotate its scope of application.</p>	
013340 – 013524	Chairman Dr YIU Chung-yim Administration	<p>In response to Dr YIU Chung-yim's enquiry, the Administration clarified that the English word "and" between the words "BS143" and "1256" in the Chinese version of paragraph 13 of Part 1 of Schedule 2 was part of the name of the set of relevant requirements as provided in both the English and Chinese versions of L.N. 81 of 2017.</p>	
013525 – 014034	Administration	<p><i>New Part 2 Taps and Valves</i></p> <p>The Administration advised the following:</p> <ul style="list-style-type: none"> (a) in paragraph 1 of Part 2 of Schedule 2 "Draw-off taps and stop valves that are not of the ordinary screw-down pattern must be capable of resisting a pressure of at least 1,600kPa." Pursuant to BS EN 200:2008, the testing pressure of a draw-off taps that was not of the ordinary screw-down pattern was 	

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		<p>1,600kPa while the working pressure of which was 1,000kPa; and</p> <p>(b) considering that the requirements were also set out in relevant prescribed standards in paragraphs 14 to 19 of Part 2 of Schedule 2, the Administration would propose to repeal paragraph 1 to avoid ambiguity.</p>	
014035 – 015119	Chairman Dr Helena WONG Administration	<p>Discussion on the Administration's response (LC Paper No. CB(1)1221/16-17(01)) to questions submitted by Dr Helena WONG on 20 June 2017 (LC Paper No. CB(1)1193/16-17(03))</p> <p>Dr Helena WONG expressed concern about instances of excessive nickel found in samples collected from water which had contact with some copper alloy taps and queried why the Administration had not included more stringent standards for taps in L.N. 81 of 2017.</p> <p>The Administration advised that –</p> <p>(a) the standard for water tap, BS EN 200:2008, stipulated that "all materials coming into contact with water intended for human consumption shall present no risk to human". As such, the wetted surface of a water tap intended for human consumption should not have coating/electroplating material; and</p> <p>(b) even if there was such coating/electroplating material, the trade would be requested to demonstrate that such material posed no health risk to human. WSD accepted the method proposed by some suppliers to carry out metal leaching test for nickel and chromium. If coating was found on the inside surface of a tap, the tap would be required to comply with Australian Standard AS 4020.</p> <p>The Administration agreed to provide information on how it ensured that the industry would follow the relevant standards (including but not limited to Australian Standard AS 4020) governing the plumbing materials/components for use in contact with drinking water such as taps or valves; and the guidelines issued/to be issued by the Administration for laboratories to follow in this regard.</p>	<p>The Administration to follow up as stated in paragraph 6(c) of the minutes.</p>

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015120 – 015939	Chairman Mr LEUNG Kwok-hung Administration	<p>Mr LEUNG Kwok-hung expressed the view that the Administration should state in the legislation the specifications of plumbing materials clearly and in detail so that suppliers and vendors at large know how to comply with the legislation. The Chairman enquired about how WSD enforced requirements for waterworks under the legislation.</p> <p>The Administration advised that –</p> <ul style="list-style-type: none"> (a) it was difficult to draw up exhaustive specifications for every plumbing product or material; (b) WA had set up a GA system on plumbing materials. Before approving plumbing materials, WA required submission of test reports issued by accredited laboratories that proved the proposed plumbing material conformed to the relevant standards in aspects required by WWR; (c) WA held regular meetings with members of the Technical Committee on Plumbing (including a representative from the accredited laboratories who was well aware of the requirements conforming to WWR) to, inter alia, formulate the testing criteria of the plumbing materials. The suppliers would follow the testing criteria of a plumbing material and submit to WA test report issued by an accredited laboratory. WA would check and verify the test report prior to granting for GA to such a plumbing material; and (d) BS EN 200:2008 for taps stipulated that "all materials coming into contact with water intended for human consumption shall present no risk to human". As such, material suppliers would have to demonstrate the compliance with it via chemical composition testing against relevant metallic material standards for metals and BS 6920:2014 for non-metallic materials. 	

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015940 – 020354	Chairman Dr Helena WONG Administration	<p>Citing the case of nickel-chromium plating found on the inside surface of water taps, Dr Helena WONG considered that the Administration should pay more efforts in ensuring that the standards of plumbing materials were made widely known to the trade.</p> <p>The Administration has advised that WA would issue a guideline on the necessary testing to demonstrate compliance of water taps with regard to electroplating material on their wetted surface to the accredited laboratories, as well as relevant stakeholders in the plumbing industry, for reference.</p>	
020355 – 020959	Chairman Dr Helena WONG Administration	<p><i>Schedule 2</i></p> <p><i>Part 2 Taps and Valves</i></p> <p>Dr Helena WONG proposed to add a new paragraph after paragraph 21 of Part 2 to specify the requirements for non-metallic materials and products for use in contact with water that might be covered but have not been mentioned in this Part (i.e. item 5 of Dr WONG’s proposed amendments in LC Paper No. CB(1)1221/16-17(02)).</p> <p>The Administration advised that –</p> <ul style="list-style-type: none"> (a) paragraph 23 of Part 1 of Schedule 2 provided that non-metallic materials and products for use in contact with water intended for human consumption must comply with the relevant requirements in BS 6920 series; and (b) it agreed to propose to add a note at the end of paragraph 23 of Part 1 of Schedule 2 to make clear that standard BS 6920 series mentioned in that paragraph were also applicable to all non-metallic products for use in contact with water intended for human consumption in Part 2 and Part 3 of Schedule 2. 	

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021000 – 021759	Chairman Dr Helena WONG Administration	<p><i>Part 3 Cold Water Cisterns</i></p> <p>Dr Helena WONG enquired whether the Administration would add a note in L.N. 81 of 2017 that the requirement that non-metallic materials and products for use in contact with water intended for human consumption must comply with the relevant requirements in BS 6920 series applied to non-metallic materials in Parts 2, 3 and 4 of Schedule 2.</p> <p>The Administration advised that –</p> <ul style="list-style-type: none"> (a) as stated in paragraph 23 of Part 1 of Schedule 2 on pipes and fittings, all non-metallic materials and products for use in contact with water intended for human consumption must comply with the relevant requirements in BS 6920 series; (b) it would propose an amendment to add a note after paragraph 23 to make it clear that standard BS 6920 series mentioned in the paragraph were also applicable to Parts 2 and 3 of Schedule 2; and (c) items covered under the remaining parts of Schedule 2 were not for use with water intended for human consumption. <p>Dr Helena WONG expressed concern about how adequately the cleansing of fresh water tanks or storage cisterns in buildings was regulated.</p> <p>The Administration advised that –</p> <ul style="list-style-type: none"> (a) pursuant to regulation 7 of WWR, a registered consumer should be responsible for keeping an inside service clean while the responsibility for keeping clean any part of an inside service which was a communal service should be that of a registered agent. In this regard, the custody and maintenance of the communal service, including the cleansing of the water tanks/storage cisterns, were usually undertaken by a property management office who was acting as the registered agent of a building; 	<p>The Administration to follow up as stated in paragraph 6(d) of the minutes.</p>

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		<p>(b) WSD had published a "Fresh Water Plumbing Maintenance Guide" which described recommended practices for proper maintenance of inside service, including the steps and frequency for cleansing of water tanks; and</p> <p>(c) WSD implemented the "Quality Water Supply Scheme for Buildings - Fresh Water (Plus)" to promote proper maintenance of internal plumbing systems.</p>	
021800 – 023914	Chairman Dr Helena WONG Administration	<p><i>Part 4 Hot Water Inside Services</i></p> <p>The Administration clarified that –</p> <p>(a) the water heater provided under Part 4 of Schedule 2 referred to heater used for heating water which was not intended for human consumption; and</p> <p>(b) it would propose an amendment to make it clear accordingly.</p> <p>Dr Helena WONG considered that water heaters which were connected to inside service for water intended for human consumption should be regulated because –</p> <p>(a) these heaters were widely used in kitchens of restaurants, and pantries in schools, hospitals and offices; and</p> <p>(b) drinking water was often in contact with these heaters in very high temperature for long hours and was hence susceptible to contamination by harmful substances if, for example, the heaters were made of or contain inappropriate materials.</p> <p>The Administration advised that –</p> <p>(a) it had conducted a lot of publicity and public education including publication of leaflet and seminars to provide guidelines on the procurement and use of heaters used for heating drinking water;</p>	

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		<p>(b) it had issued guidelines to the local manufacturers and suppliers of the water heaters;</p> <p>(c) WSD had tested water heaters of nine common brands and the test result was satisfactory; and</p> <p>(d) in view of the low risk of water heaters and the complexities involved in regulating them, it would deal with water heaters in the coming holistic review of the Waterworks Ordinance (Cap. 102) ("WVO") and WWR.</p>	
023915 – 025159	Chairman Dr Helena WONG Administration	<p><i>Part 5 Flushing Apparatus</i></p> <p>Dr Helena WONG enquired about the reason that WWR did not set out standards for the parts or materials used for water pumps as they were in contact with water. She requested to put on record her concern that WSD did not specify standards for regulating water pumps.</p> <p>The Administration advised that –</p> <p>(a) there were wide variations among different types of water pumps and there was not a uniform set of standards for them;</p> <p>(b) WWR at present contained standards for a wide range of plumbing products or materials but did not specify the standards for water pumps as such; and</p> <p>(c) notwithstanding, it would in due course consider the need for incorporating in WWR plumbing items not currently regulated.</p>	
025200 – 032419	Chairman Dr Helena WONG Administration	<p>Discussion on the proposed amendment for water heaters as set out under item no. 6 of the amendments proposed by Dr Helena WONG and tabled at the meeting (LC Paper No. CB(1)1221/16-17(02))</p> <p>Members agreed that the Chairman should move a motion on behalf of the Subcommittee to propose the amendment in respect of water heaters in L.N. 81 of 2017.</p>	

Time marker	Speaker	Subject(s)	Action required
032420 – 033220	Chairman Dr Helena WONG Mr SHIU Ka-fai Administration	<p>Legislative timetable</p> <p>Discussion on the amendment for water pumps proposed by Dr Helena WONG and tabled at the meeting (LC Paper No. CB(1)1221/16-17(03))</p> <p>Members agreed that the Chairman should move a motion on behalf of the Subcommittee to propose the amendment in respect of water pumps in L.N. 81 of 2017.</p> <p>Mr SHIU Ka-fai requested to put on record that he had abstained from voting on the proposed amendments in respect of water heaters and water pumps.</p> <p>The Administration expressed reservation on the proposed amendments on water heaters and water pumps as they might be outside the scope of the Amendment Regulation. It declined to adopt them and advised that it would address them in the coming holistic review of WWO and WWR.</p>	