



Tripartite Alliance for
Workplace Safety and Health

Overview of WSH Guidelines Inland/Inshore Commercial Diving

CDAS Webinar - 17 September 2021

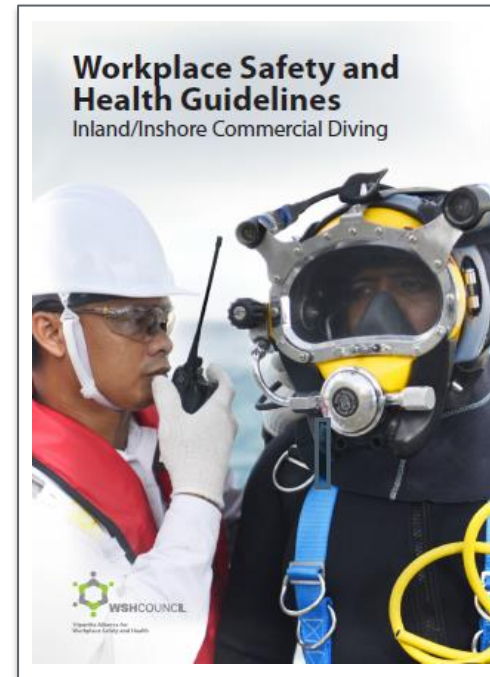
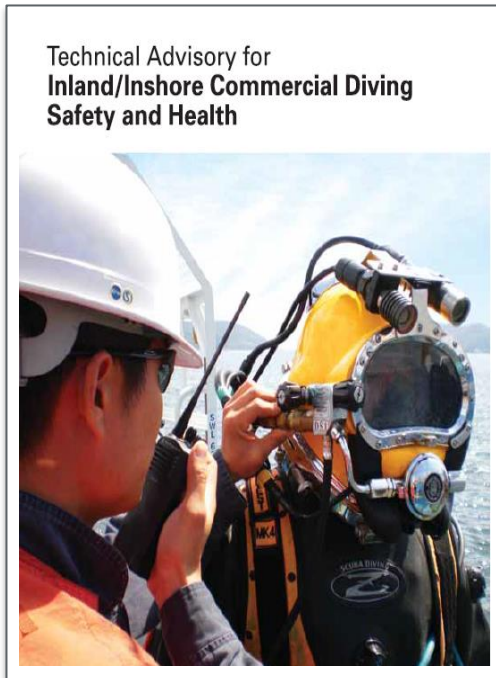


Outline

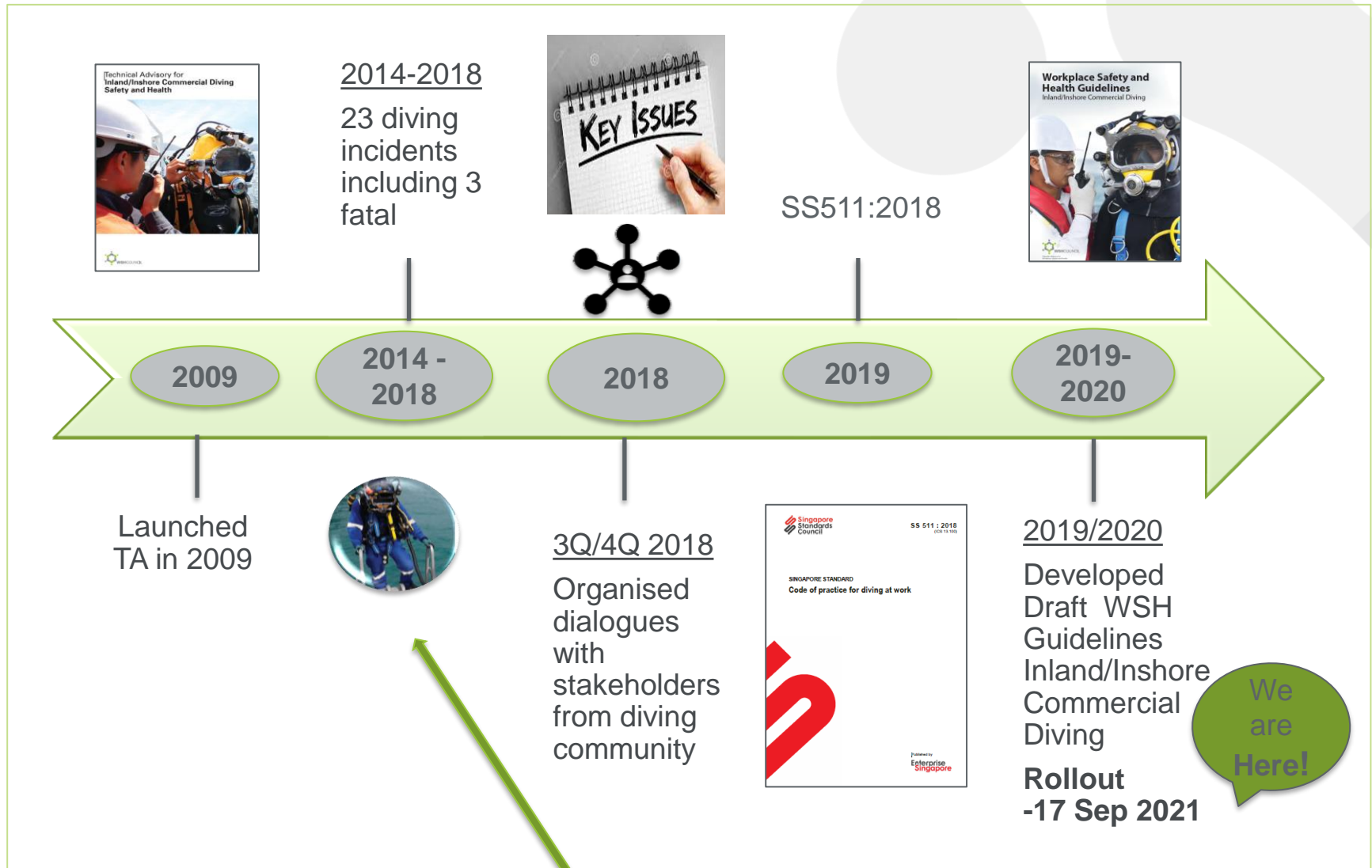
- Background
- Development of WSH Guidelines Inland/Inshore Commercial Diving
- Key Enhancements

Background: From TA to WSH Guidelines

- The revised WSH Guidelines developed in 2021 shall replace the Technical Advisory for Inland/Inshore Commercial Diving Safety and Health (TA) which was developed in 2009.



Background: Timeline



All these incidents are **preventable** with proper dive planning and adherence to safe work procedures.

WSH Guidelines Inland/Inshore Commercial Diving

Objectives

- Review the TA on safe diving operation (2009)
- Align with SS511:2018 Code of Practice for Diving At Work

Formation of working group

- Consists of members from regulatory bodies (e.g., MPA, MOM), commercial diving companies, association, unions, freelance divers, training provider and educational institution.
- Conducted rigorous review with inputs from public consultation for consideration.

Key enhancements/changes

S/N	TA (2009)	WSH Guidelines Inland/Inshore Commercial Diving (2021)	Rationale
1	Diving Supervisor is required to record all communications with the diver and maintain the recording for at least 24 hours	<p>3.4.1 Diving Supervisor</p> <p>Maintain communications with the diver(s) at all times and record all communications throughout the entire duration of the dive... subjected to a minimum duration of 48 hours.</p>	<ul style="list-style-type: none"> Improve diver communication with diving supervisor. Align with SS511:2018, Code of Practice for Diving at Work
2	Brief mention of dive team size and the need of diver tender for every diver in water.	<p>3.4.7 Dive Team Size</p> <p>Elaboration on the dive team composition with added illustrative figures for <u>5-men</u> and <u>7-men</u> dive teams for diving operation in different situations.</p>	<ul style="list-style-type: none"> Clear illustration facilitate resource planning for assigned task(s). Align with SS511:2018, Code of Practice for Diving at Work

Dive team configurations



Figure 1: 5-men team with one diver

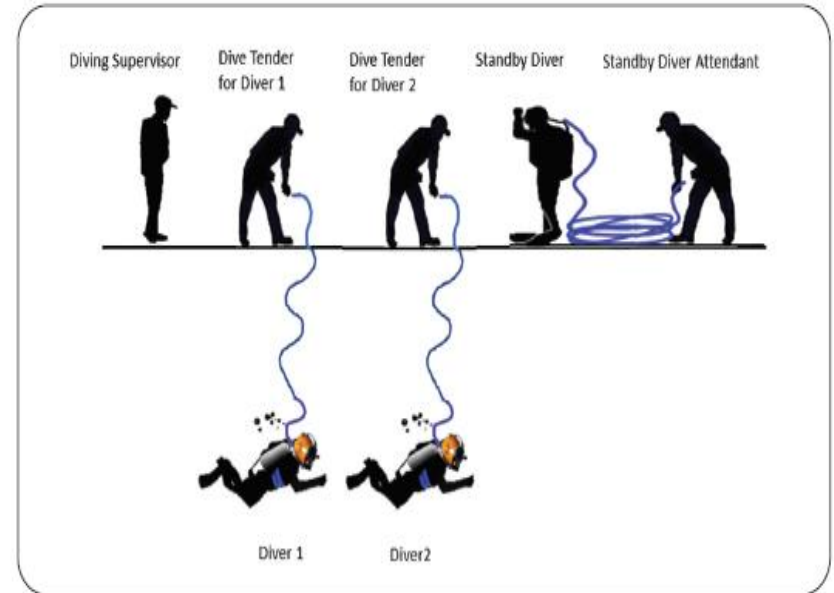


Figure 2: 7-men team with two divers

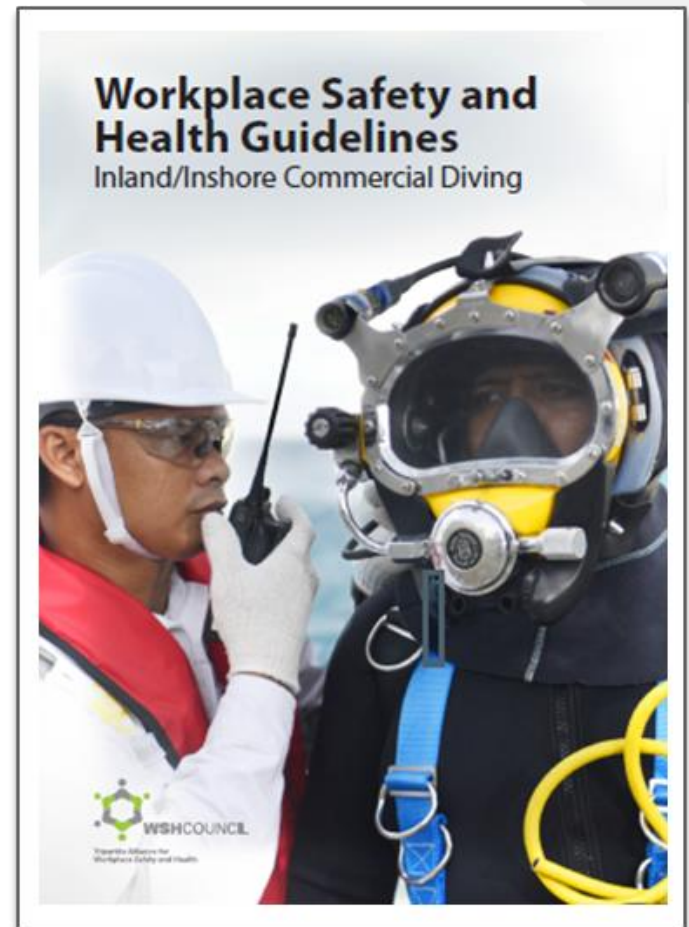
Credit: Courtesy from Hydropro Private Limited

S/N	TA (2009)	WSH Guidelines Inland/ Inshore Commercial Diving (2021)	Rationale
3	No mention of diver breathing air to comply with quality standard.	<p>4.3.3 Low Pressure (LP) and High Pressure (HP) Air Compressors</p> <p>Diver air quality to meet <u>BS EN 12021</u> certification.</p> <p>4.3.1 Air Cylinders</p> <p>Include the need for air cylinders to undergo periodic test and maintenance schedule in line with <u>SS639:2018 (Part 1)</u> requirements (Annex C - Recommended Equipment Periodic Test and Examination Schedule)</p>	<ul style="list-style-type: none"> Enhance breathing air quality for safety of divers based on acceptable standards Aligned with SS511:2018, Code of Practice for Diving at Work.
4	Elements of risk assessment (e.g. hazards, risk control) were included in various sections. No systematic approach of risk management and process was mentioned.	<p>6 Risk Management (New)</p> <p>Continuation on the common commercial diving hazards identified in Section 5, this section includes Risk Management plan and process with coverage on:</p> <ul style="list-style-type: none"> Steps involved in Risk Assessment Risk evaluation using 5x5 risk matrix Suggested risk control measures for the common hazards using hierarchy of controls 	<ul style="list-style-type: none"> Aligned with Code of Practice on WSH Risk Management. Allow diving contractor to equip with a rigorous risk management plan as part of dive project plan for a safe dive operation

S/N	TA (2009)	WSH Guidelines Inland/Inshore Commercial Diving (2021)	Rationale
5	<p>Dive team members should possess First-Aid training and certification which is valid for a 3 year period and refresher training would be required.</p> <p>Note: No mention of dive medical first aid training for divers</p>	<p>7.1 Dive Operations Planning</p> <p>Training and competencies of dive team</p> <ul style="list-style-type: none"> Divers are required to attend the dive medical first aid and all dive team personnel shall be trained and qualified in Occupational First Aid certification (OFAC), subjected to a two-year refresher or equivalent 	<ul style="list-style-type: none"> Update of OFAC to 2-year validity Reinforce the need for dive medical first aid training with alignment to SS511:2018 requirements

WSH Guidelines for Inland/Inshore Commercial Diving

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www.tal.sg/wshc/Resources



Thank you