

## **Annex A – Profile of IAP Members**



### **Mr Tan Chuan Jin**

Minister of State  
Ministry of National Development  
Ministry of Manpower  
Chairman, IAP

Republic of Singapore

MOS Tan Chuan-Jin served in the Singapore Armed Forces (SAF) for nearly 24 years before retiring in 2011. Commissioned at Sandhurst, he has held various appointments in the SAF, including Commander Singapore 3<sup>rd</sup> Division and Commander Training and Doctrine Command.

When the Indian Ocean Tsunami struck on Boxing Day 2004, Mr Tan led the SAF's relief effort to Meulaboh, Aceh in Indonesia. Despite the uncertainty and scale of the crisis, they brought in emergency relief to stabilise the situation in the critical period after the tragedy.

As Chairman of the Executive Committee, Mr Tan was responsible for organising National Day Parade 2009.

In May 2011, Mr Tan was elected as one of the Members of Parliament for the Marine Parade Group Representation Constituency. He was then appointed as Minister of State for National Development and Manpower.

Mr Tan was awarded the SAF Overseas Scholarship to read Economics and graduated with a BSc (Econs) from the London School of Economics (1992). He also holds a Master of Arts in Defence Studies from King's College London (1999) and a Masters in Public Management from the Lee Kuan Yew School of Public Policy, National University of Singapore (2008).



**Hawazi Daipi**

*Senior Parliamentary Secretary for Education and Manpower*

*Co-Chair, IAP*

*Republic of Singapore*

Mr Hawazi Daipi is the Senior Parliamentary Secretary for Education and Manpower. A Member of Parliament since 1996, Mr Hawazi currently chairs the Tripartite Committee on Work Life Strategy and the Tripartite Committee on CPF and Work Related Benefits for Low-Wage Workers.

Apart from public administration, Mr Hawazi has broad experience in education, journalism and union work. He works as a teacher from 1978 to 1983 before joining Singapore Press Holdings as a journalist. When he left journalism in 1997, Mr Hawazi was Berita Harian's Special Assistant Editor. He then joined the National Trades Union Congress (NTUC) for five years where he was Director of the International Affairs Department and Executive Secretary of four unions.

In 1996, Mr Hawazi was elected as a MP for the Sembawang Group Representation Constituency (GRC) and has been re-elected in the GRC in 2001, 2006 and 2011. At the community level, Mr Hawazi is Chairman of the Malay Language Council, Singapore and has been Chairman of Sembawang – Nee Soon Town Council since 2003.



**Dr. Walter Eichendorf**

*Deputy Director General  
German Social Accident Insurance  
(DGUV)*

*President, German Road Safety Council  
(DVR)*

*Germany*

Dr Walter Eichendorf had his university education in Bochum and Bonn (physics and mathematics). He was research staff member at the European Southern Observatory (1980-1983) in Geneva, Munich and Chile. At HVBG, he was the head of statistical department from 1983-1989, director of public relations 1989-1998, deputy director general since 1998. Since 2007, Dr Eichendorf is the deputy director general of the German Social Accident Insurance (DGUV) and director of DGUV's prevention division.

In addition Dr Eichendorf was responsible for a number of large international projects, e.g. the European Year for Safety and Health at Work, Germany's Federation for Safety and Health At Work (BASI) and project manager for the thematic area 'Future of Work' at EXPO 2000 in Hanover. He also is involved in a number of management and advisory boards of national and international prevention institutions. Since 2003 he is Vice President of the Research Section of the International Social Security Association (ISSA), since 2007 member of the international organizing committee of ISSA and ILO for the OSH World Congress and since 2011 Vice President of ISSA's Prevention Culture Section. He is the chairperson of the ISSA/ILO/DGUV OSH world conference to be held 2014 in Frankfurt. Since 2009 Dr Eichendorf is President of the German Road Safety Council (DVR).



**John L. Henshaw, MPH, CIH**

*Senior Vice President  
Managing Principal Industrial  
Hygienist, ChemRisk, LLC*

*United States of America*

John Henshaw is a health and safety professional with over 35 years' experience in industrial hygiene, safety, environmental health, and quality assurance. He is currently Senior Vice President & Managing Principal - Industrial Hygiene and Safety for ChemRisk, LLC, a consulting firm that specializes in industrial hygiene, exposure assessment, safety, human and ecological risk assessment and risk analysis of consumer products, contaminated sites, pharmaceuticals, and medical devices. Prior to joining ChemRisk, Mr. Henshaw was President of Henshaw and Associates, Inc., a successful consulting firm specializing in occupational safety and health issues. He also served as the Assistant Secretary of Labor for the Occupational Safety and Health Administration (OSHA) from August, 2001 through December 31, 2004. Prior to becoming the OSHA administrator, he served as Director of Environment, Safety, and Health for Astaris LLC, a joint venture between Solutia and FMC Corp., and, prior to that, he held similar positions at Solutia, Inc. and Monsanto Company in St. Louis, Missouri.

Mr. Henshaw specializes in the areas of industrial and environmental health and safety, historical state-of-knowledge regarding workplace safety and health, workplace monitoring and exposure assessments, and other environmental health issues. Mr. Henshaw will also head the new Center for Occupational Health and Safety Sciences (COHS) within ChemRisk. This new global center of excellence at ChemRisk will focus on providing a wide variety of occupational health and safety consulting services to clients around the world, including: industrial hygiene and occupational safety consulting, health and safety program management, exposure assessments and reconstructions, executive leadership training and coaching, and occupational safety and health litigation support. This new Center will team with industrial hygienists, safety professionals, engineers, toxicologists, physicians, and other scientists at the forefront of advancements in their fields to provide ChemRisk clients with the most scientifically advanced, ethical, and professional service possible in the occupational health and safety sciences.



**Park Doo Yong**

*Professor  
Graduate School of OSH  
Hansung University*

*South Korea*

Dr Park Doo Yong is currently professor at the School of OSH, Hansung University, Korea.

Dr Park was the Director General, Occupational Safety and Health Research Institute in Korea. Dr Park has 20 years of working experience with close involvements in the areas of Industrial Health and Occupational Safety and Health. In the last 10 years he has been with the Hansung University as an Assistant Professor and subsequently a Professor of Industrial Health.

Dr Park is the Vice-President of the Korean Industrial Hygiene Association. He has been the Committee member for the Presidential Advisory Committee for Accident Injury Prevention as well as the Advisor to the Minister of Labour in Korea in 2007. Currently he is a member of the Advisory Committee in the Ministry of Administration and Social Security.

Since 2000, Dr. Park has written or co-written 21 papers related to Occupational Safety and Health. He has also authored and co-authored published materials relating to Environment and Health Management, Occupation Health, Industrial Hygiene and Occupational Health Practices from 2002.



***Michele Patterson***

*Michele Patterson  
President, International Association of Labour  
Inspection (IALI) and  
Executive Director, SafeWork SA  
Department of the Premier and Cabinet  
South Australia*

*Australia*

Ms Patterson has played a prominent role in occupational health and safety (OHS) in Australia at both State and National levels for over 25 years, representing two Australian states (New South Wales and South Australia), on numerous national boards and working parties on OHS standards and issues. Michele is currently South Australia's representative on Safe Work Australia, and Chairs the national Committee responsible for producing Australia's National Model OHS laws.

Ms Patterson's career in OHS commenced with her appointment in South Australia as the first female Inspector of Industrial Safety in the early 1980's.

Since then, Ms Patterson has served as head of the OHS inspectorate in New South Wales (Australia's largest state), and is currently Executive Director of SafeWork SA in South Australia, responsible for managing both the OHS (Safe Work) and Industrial Relations (Fair Work) Inspectors in that State.

In June 2011, Michele was re-elected for a third three-year term as President of the International Association of Labour Inspection (IALI) and was previously the Vice President from 2002. In her term as President, Michele has worked for global representation by expanding regional involvement in IALI membership and activities and IALI now has more than 100 member countries. She has organised (together with the host countries), the first and second IALI conferences in Asia (Macao and Beijing), the first IALI conference in North America (Toronto), the first IALI conference in the Pacific region (Adelaide), and conferences in Lisbon, Banja Luka and Azerbaijan. Many other joint IALI conferences throughout the world now feature regularly on IALI's calendar (eg countries of the Baltic, SE Europe, North Africa, Dusseldorf, China and Vietnam).

IALI's strategic focus for this period has been on developing alliances through regional cooperation and Michele has led IALI's role as a catalyst for the development of regional cooperation agreements resulting in, since 2008, formal arrangements including the Sofia Agreement 2008, uniting South East Europe, Azerbaijan and Ukraine; the North African Alliance of Labour Inspectors 2010 uniting the Maghreb countries; the Halong Bay

Recommendation, 2010, on cooperation in labour inspection throughout ASEAN countries; and the Moscow Declaration, 2011, uniting the CIS countries of Eastern Europe.

Building a professional foundation for Labour Inspection through development and implementation of IALI's Global Code of Integrity for Labour Inspection; and promoting influence through demonstrating and measuring the effectiveness of Labour Inspection activities are Michele's two other key priorities as President of IALI.

Michele is also a member of Singapore's International Advisory Panel on OHS. She has a range of academic qualifications, including a Masters degree from Harvard University, Boston, USA.



**Professor Jorma Rantanen**

*Chairman of the Board, University of Jyväskylä, Finland*

*Former President, International Commission on Occupational Health*

*Finland*

Dr. Jorma Rantanen is a professor and specialist in occupational health. He served as the Director General of the Finnish Institute of Occupational Health, FIOH, for 30 years since 1973. He has experience in practical occupational health services, and occupational medicine, in toxicology research and in the development of regulations for OHS in Finland and internationally.

Dr. Rantanen has worked as an expert for WHO, ILO and EU in drafting international strategies, programmes and regulations. He was one of the key contributors to the ILO instruments on Occupational Health Services, the WHO Global Strategy on Occupational Health for All and WHO Global Action Plan on Workers' Health. Most recently Dr. Rantanen has produced the WHO/ILO/ICOH approach for Basic Occupational Health Services, BOHS, written the guidelines and supported the practical implementation of BOHS in all continents.

He has over 30 years' experience on programmes for occupational health in developing and transitory countries in Africa, Asia, Central and South America, China and Eastern Europe, including the Russian Federation, Baltic and Balkan areas. After his retirement from the FIOH, Dr. Rantanen has carried out evaluations of universities and research institutions. He has planned new governance models for Finnish Universities and Polytechnics, evaluated Government research institutes and Government funded research programmes for Finland, UK and USA. Dr. Rantanen serves currently as elected Chairman of the Board of University of Jyväskylä, Finland.

He has served as the Board member of ICOH and was elected President of ICOH for the tenure 2003–2006 and 2006–2009. Professor Rantanen has been awarded with several international and national honours by Governments and Scientific Communities.





**John Spanswick, CBE FCIQB**

*Non Executive Director of the Health & Safety Executive (HSE)*

*United Kingdom*

John has worked in the Construction Industry for over 40 years starting with Bovis as a management trainee. He progressed through various management positions, and was involved in many landmark projects that helped to establish Bovis's reputation. John became Chief Executive of Bovis Lend Lease's UK and European business in 2000. In 2005 he became BLL Group Chairman, and retired from the Company in 2011.

John Spanswick is a Non Executive Director of the Health & Safety Executive where he has a key role helping to integrate and promote the Construction Industry's participation in the development and delivery of the Board's strategy and programmes. He was previously Chairman of the Strategic Forum Health and Safety Group, and Chairman of the Major Contractors Group in the UK..John holds a number of non-executive positions with UK and US Companies.

In 2007 John received a CBE for services to Construction Industry and Health and Safety.



### **Jukka Takala**

- *Secretary General of the International Panel for Working Life*
- *Adjunct Professor at the Centre for Safety Management and Engineering at Tampere University of Technology, TUT, Finland*

*Finland*

Dr. Jukka Takala is an Adjunct Professor at the Tampere University of Technology, TUT (Finland) and the Secretary General of the International Panel for Working Life, IPWL. He has served the European Union as the Director of the European Agency for Safety and Health at Work, a position he held for five years until 15 September 2011. He was also the Head of the Coordination of all 32 EU Agencies in 2010-11.

Dr Takala joined the International Labour Organisation (ILO) as Chief Technical Adviser and Expert in OSH in Nairobi (Kenya) in March 1978 and then in Bangkok (Thailand) in June 1983. He held various positions in the ILO, including Chief of ILO's International OSH Information Centre (CIS) in September 1986; Chief of the Safety and Health Information Services Programme in January 1994 and Chief of the OSH Branch in June 1996. From 1 October 1999 to 15 September 2006, he was Director of the InFocus Programme on Safety and Health at Work and the Environment (SafeWork) of the International Labour Office. In that position he was in charge of setting up international law and supervising the implementation of existing Conventions, Recommendations and Resolution, such as Convention 81 on Labour Inspection, C 155 on Occupational Safety and Health, Convention on the Promotional Framework on Occupational Safety and Health and the process leading to the Globally Harmonised System of Classification and Labelling of Chemicals, GHS.

Dr. Takala also worked in the metal industry and as an academic from 1968 to 1973. Prior to joining the ILO, Dr. Takala was served the Government of Finland first as an Inspector, followed by posts of Safety Engineer, Chief Engineer and Chief of Machine Safety Bureau in the Occupational Safety and Health Administration of the Ministry of Social Affairs and Health and the Ministry of Labour in Finland.

He holds a MSc in Mechanical Engineering, and a Doctorate in Engineering (D.Sc. Tech.) from the Tampere University of Technology (Finland).

## **Annex B – Information on 1<sup>st</sup> and 2<sup>nd</sup> IAP Meetings**

### **About the International Advisory Panel for WSH**

The International Advisory Panel (IAP) for WSH was formed in 2006. It allows Singapore to tap on the expertise and advice on international experts on strategies to reduce the national workplace fatality and injury rates. The roles of the IAP include:

- Advice on significant trends and developments in industrial practices that would impact on WSH in Singapore;
- Share approaches to WSH challenges in other countries that might guide Singapore's WSH development; and
- Critique WSH standards, practices and the regulatory regime in Singapore and provide advice on possible improvements to bring WSH standards in Singapore to the level of leading edge country leaders.

### **1<sup>st</sup> IAP Meeting – 31 October to 2 November 2006**

- i. **“WSH 2015 – A Strategy for Workplace Safety and Health in Singapore”**. The 10-year national blueprint mapping out the strategies and measures that need to be put in place to achieve Singapore's target of halving work-related fatalities to 2.5 per 100,000 workers by 2015 was discussed
- ii. **“Implementing WSH 2015 for Construction Industry”**. The WSH plan outlining the specific areas of work to improve WSH standards in the Construction Industry was presented.

### **2<sup>nd</sup> IAP Meeting – 30 October to 31 October 2008**

- i. **“Building WSH Competencies in Singapore”**. The proposals to train and equip all levels of the Singapore workforce with the appropriate WSH skills and capabilities, and to develop the institutions required to support the provision of such training was laid out.
- ii. **“Improving Workplace Health Management in Singapore”**. Singapore's management of workplace health issues and proposes various strategies to tackle different types of workplace health hazards and improve workplace health outcomes was reviewed

**REPORT OF  
THE 3RD MEETING OF THE  
INTERNATIONAL ADVISORY PANEL  
FOR WORKPLACE SAFETY AND HEALTH  
17 NOVEMBER – 18 NOVEMBER 2011**

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## INTRODUCTION

2 In 2006, the Minister for Manpower appointed a panel of international experts to sit on an International Advisory Panel (IAP) for Workplace Safety and Health (WSH), as part of initiatives to improve WSH standards and outcomes in Singapore. The terms of reference of the IAP are to:

- a. Advise on significant trends and developments in industrial practices that would impact on WSH in Singapore;
- b. Share approaches to WSH challenges in other countries that might guide Singapore's WSH developments; and
- c. Critique WSH standards, practices and the regulatory regime in Singapore and provide advice on possible improvements to bring WSH standards in Singapore to the level of leading edge country leaders.

3 Two IAP meetings (2006, 2008) and a progress review (2010) have been held and they have contributed significantly to the advancement of WSH standards and outcomes in Singapore. Recommendations from the IAP played a significant role in the formulation of the national strategy for WSH (WSH2018) in 2008 and the establishment of the WSH Institute (WSHI) in 2011.

## THIRD IAP MEETING

4 The third meeting of the IAP was convened from 17 November to 18 November 2011 at the Goodwood Park Hotel, Singapore. The meeting was attended by all seven IAP members (see list of IAP members at Annex). At the meeting, the IAP deliberated on the state of WSH developments in Singapore and its progress since the IAP last met. The IAP also discussed the following two strategy papers, which were jointly developed by MOM, WSH Council (WSHC) and WSHI.

- i. **“Building progressive and pervasive WSH culture in Singapore”**. The paper outlines our strategies for building a progressive and pervasive WSH culture in Singapore including: (i) Creating a conducive environment for WSH culture to thrive; (ii) Building capabilities for WSH to evolve; and (iii) Sustaining the momentum for WSH culture building
- ii. **“Creating and Enhancing WSH Knowledge in Singapore”**. The paper articulates the strategic outcomes of the WSH Institute and outlines its key strategies in the areas of (i) informing policies and strategies; (ii) creating WSH solutions for businesses; and (iii) transforming and nurturing capabilities of leaders and professionals

The IAP also visited a key construction project (Gardens by The Bay) in Singapore to understand how key safety initiatives such as Design for Safety, Behavioural Based Safety and Safety in Innovation, contributed to its good safety outcomes.

5 The IAP commended Singapore for the great strides made in improving WSH standards since the reform of the WSH framework in 2005. The IAP noted that in the short span of 6 years, Singapore has put in place comprehensive infrastructures and measures to raise WSH standards and awareness and had successfully brought down fatality rates to a new low of 2.2 fatalities per 100,000 workers in 2010.

6 While Singapore has done well, the IAP cautioned that it may be difficult for Singapore to continue to progress at the same pace. As WSH standards in Singapore has reached a level comparable to many developed nations, it will be typical to see a slowdown in the progress, as further gains become more challenging to achieve. The IAP encouraged Singapore to press ahead with its WSH strategies with vigour given the increased challenges.

7 The IAP concluded that the establishment of the WSH Institute will complete the foundations of Singapore's WSH framework. The next step is to build a strong occupational safety and health culture amongst all stakeholders, including stakeholders in the more vulnerable sectors, so that they can help propel Singapore into the next stage of WSH reform and sustained progress. Singapore must also continue to maintain its robust enforcement framework, along with education, training and other services, as this will continue to play a key role in Singapore's overall WSH strategy. It is within this context that the IAP made the following recommendations:

## **KEY RECOMMENDATIONS**

### Recommendation 1: Increase focus on Occupational Health issues

8 The concept of healthy working life can impact life expectancy and public health. As Singapore's population ages and life expectancy increases, it becomes increasingly important to protect the health of workers even while they are young, so that they can work without impairment throughout their lives. In this regard, it is critical that Singapore increases its focus to continually improve occupational health standards and develop occupational health services through the collaboration of the Ministry of Manpower and the Ministry of Health.

9 The IAP advised that Singapore should continue to explore better ways to gather evidence including occupational health indicators and performance statistics. These will serve as a foundation for early intervention measures to improve occupational health standards. These measures should focus on preventive and precautionary solutions as occupational diseases often have long latency periods and it will be too late to react after an occupational disease becomes evident. Singapore should also focus on building up occupational health professionals to support the identification and mitigation of occupational health risks and prevention of occupational diseases and work related disorders. These initiatives will lead to a reduction in sickness away from work and improve worker well-being, workability and productivity.

### Recommendation 2: Encourage businesses to fully buy-into "vision zero"

10 The IAP commended the WSH Council's efforts to encourage businesses to pledge for zero accidents. However, the panel expressed concern that pledging alone may not be sufficient to bring down accident and fatality rates. Business leaders must demonstrate through visible behavioural change, their commitment to the prevention of all incidents that result in impairment. They must buy-into and share the vision of zero accidents and zero harm, and work towards this vision with concrete action plans.

## ***Creating and Enhancing WSH Knowledge in Singapore***

### Recommendation 3: Establish a risk observatory for Asia

11 Evidence-based information is crucial for both policy making and establishing good practices. Based on recent achievements, the IAP recommended that Singapore works towards becoming the leading centre in Asia in terms of identifying existing, and newly emerging risks in occupational safety and health and addressing their root causes. To achieve this aim, the Institute could establish a risk observatory to proactively identify emerging areas of concern and to improve the timeliness and effectiveness of preventive measures. When establishing the risk observatory, the IAP highlighted the importance of establishing strong networks with other local and overseas partners to build on existing efforts and tap on their domain expertise. The risk observatory should also study international trends and not just focus on Singapore or Asia, as risks which emerge overseas may subsequently appear in Singapore.

### Recommendation 4: Ensure sustainability of the WSH Institute through strong partnership with stakeholders

12 The WSH institute must be relevant for society. Therefore the IAP suggested that the institute should continue to work in close partnership with the Ministry of Manpower, WSH Council and the industry stakeholders from the upstream identification and prioritization of needs to the downstream communication and dissemination of knowledge and solutions. The IAP emphasized the need to garner strong support from tripartite partners to seek buy-in for research findings, to ensure that they are translated to practices on the ground. As research outcomes may not always be immediately evident, it is important for the Institute to formulate a communications plan to regularly update stakeholders on research developments and milestones. In the longer term, the Institute should also engage international stakeholders and researchers, and publish timely and relevant reports to provide the government, industry and other stakeholders with the latest trends, research outcomes and best practices. The WSH Institute must be able to show its relevance and value to the business community and the government, through a timely and effective evaluation process, which will help ensure the sustainability of the WSH Institute.

### Recommendation 5: Further build on framework to track WSH performance

13 The IAP noted that Singapore should continue to build capabilities to accurately track WSH performance so as to provide evidence-based intervention and engagement programmes.

14 The panel recommended that Singapore explore ways to build upon existing WSH performance evaluation capabilities and conduct in-depth studies to review existing national WSH initiatives, including enforcement and engagement programmes. Singapore could, in addition to existing lag indicators of WSH performance, identify, develop and track leading indicators of WSH performance, which would help Singapore formulate more preventive and less reactive WSH initiatives.

## ***Building Progressive and Pervasive WSH Culture in Singapore***

### Recommendation 6: Further WSH culture development to beyond the workplace

15 The IAP pointed out that culture transcends work-life boundaries. A person who prioritises safety and health in his daily life will similarly prioritise safety and health at work. It is therefore

important to complement efforts to develop WSH culture with efforts to develop safety and health culture beyond the workplace.

16 The IAP advised that safety and health values should be inculcated from young. Safety and health messages could be included in the educational curriculum of children, when they are more ready to accept new values and beliefs. Safety and health values inculcated from young would stay with the individual for life and naturally translate to a greater emphasis on safety and health when the individual enters the workforce.

#### Recommendation 7: Government to take the lead in WSH culture building

17 The IAP praised the efforts underway to make WSH a requirement in government procurement and to establish standards in health and safety which all government partners must comply. However, the panel felt that more could be done by the government to take the lead in WSH culture building. For example, culture building initiatives could first be implemented in all government departments. The initiatives and outcomes could be tracked and shared with industry so that they could be persuaded of the benefits.

#### Recommendation 8: Identify leaders to champion WSH culture building

18 The IAP agreed that leadership development was crucial to the building of a progressive and pervasive WSH culture in Singapore. On top of developing “official leaders”, who were management staff in an organisation, the panel suggested that Singapore also explore identifying “opinion leaders”, who might not necessarily be in positions of authority, but were able to influence their peers in the WSH movement.

#### Recommendation 9: Promote personal ownership of WSH outcomes

19 Without prejudicing the primary responsibility of employers to provide a healthy and safe working environment, it is essential to engage the workforce in health and safety issues and encourage them to take ownership of their own personal safety and health as well as that of others. To improve WSH outcomes, workers must be aware of risks and be able to contribute to the assessment of risks and take appropriate action. However, the panel cautioned that in the Singapore context, we would need to take into account the diverse nature of the workforce. This was especially so as foreign workers may have a different perception of what are acceptable risks. As such, outreach to these workers will be especially important.

### **CONCLUSION**

20 Singapore has made significant inroads into the improvement of WSH standards and performance, as envisaged in WSH 2018. This includes ensuring a safe and healthy workplace for everyone, and being a country renowned for best practices in workplace safety and health. The IAP commended Singapore’s continued efforts to share WSH best practices and communicate WSH commitments to other countries. These efforts will contribute to the success of the national culture strategy in the longer term

21 While continued progress will be challenging, it is timely and feasible for Singapore to enter the next phase. Singapore has positioned itself to make the next leg of its WSH journey and the IAP hopes that this set of recommendations will contribute to that effort. The IAP looks forward to the



adoption of its recommendations by the Singapore Government and their implementation by all stakeholders.

