Dear Members,

I am delighted to be the Chairman of Hong Kong Branch (2010~2011). It is quite exciting for me to serve the Branch and to work with a team of dedicated and professional Executive Committee members towards the same goal of uplifting professionalism of occupational safety and health (OSH) in Hong Kong.

IOSH is the largest OSH professional institution in the world, IOSH(HK) is the largest OSH professional institution in Hong Kong, we are the only OSH institution for granting Chartered Membership status, all of these are indeed compelling. But all of these should not be any cause of complacency. We should work in coherence to ensure sustainable development and continuous improvement for staying in a competitive position. To this end, I count very much on the support from each of you.

In this term office, I would like to focus our services to members in three major areas, they are:-

1. Organize more OSH seminars and technical visits with high quality and professional standards to members;
2. Promote and uplift professional status of IOSH in Hong Kong and actively recruit more new members through various channels;
3. Build up strong connection and relationship with corresponding professional bodies in Mainland China and Macau.

Your participation drive the growth of IOSH and are indeed the key to success. Equally important, we are quite willing to learn feedback and comment from you to ensure our services are meeting your needs.

I look forward to seeing you all in the coming activities.

Vincent Fong
Chairman of Executive Committee (2010-2011)
IOSH (Hong Kong)
Value, Vision and Mission of the Institution

We have had remarkable successes over the past couple of years. In order to refine and sustain our success factors, we have established our Strategy Map for 2010 to 2011 for raising the profile of health and safety of our Branch in Hong Kong and mainland China, uplifting health and safety standard in various industries and increasing membership and achieving membership satisfaction. With your support, we have every confidence that we will continue to build a safe, healthy and sustainable community in Hong Kong.

If you have any comments on our Strategy Map, please contact us at mailbox@ioshhongkong.com
# Introduction of New EC Members

**Executive Committee of IOSH (Hong Kong) Branch for Year 2010/11**

<table>
<thead>
<tr>
<th>Chairman</th>
<th>Hon. Advisor</th>
<th>Hon. Advisor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ir Vincent P Fong</td>
<td>Mr Alexander Chan Chung-shing</td>
<td>Mr Philip Ng Mau-cheong</td>
</tr>
<tr>
<td>Mr Alexander Chan Chung-shing</td>
<td>Mr Philip Ng Mau-cheong</td>
<td>Mrs Helen Chan Wai-fun</td>
</tr>
<tr>
<td>Mr Philip Ng Mau-cheong</td>
<td>Mr Sammy KM Wan</td>
<td>Mr Sammy KM Wan</td>
</tr>
<tr>
<td>Mr Sammy KM Wan</td>
<td>Ms Helen Chan Wai-fun</td>
<td>Mr Samuel Ng Wing-hong</td>
</tr>
<tr>
<td>Mr Cheung Wai-lung</td>
<td>Mr David Wong Kin-kwok</td>
<td>Mr Samuel Ng Wing-hong</td>
</tr>
<tr>
<td>Mr David Wong Kin-kwok</td>
<td>Dr Li Chi-moon</td>
<td>Mr Li Chi-moon</td>
</tr>
<tr>
<td>Dr Li Chi-moon</td>
<td>Mr Richard Tse Wing-ning</td>
<td>Mr Richard Tse Wing-ning</td>
</tr>
<tr>
<td>Mr Richard Tse Wing-ning</td>
<td>Mr LAM Chi-sing</td>
<td>Mr LAM Chi-sing</td>
</tr>
<tr>
<td>Mr LAM Chi-sing</td>
<td>Mr Bosco Chan Tsz-yan</td>
<td>Mr Bosco Chan Tsz-yan</td>
</tr>
<tr>
<td>Mr Bosco Chan Tsz-yan</td>
<td>Mr Chu Chun-wah</td>
<td>Mr Mr Rex Yu Kin-wai</td>
</tr>
<tr>
<td>Mr Chu Chun-wah</td>
<td>Mr Chu Chun-wah</td>
<td>Mr Rex Yu Kin-wai</td>
</tr>
<tr>
<td>Mr Chu Chun-wah</td>
<td>Mr Chu Chun-wah</td>
<td>Mr Rex Yu Kin-wai</td>
</tr>
<tr>
<td>Mr Chu Chun-wah</td>
<td>Mr Chu Chun-wah</td>
<td>Mr Rex Yu Kin-wai</td>
</tr>
<tr>
<td>Mr Chu Chun-wah</td>
<td>Mr Chu Chun-wah</td>
<td>Mr Rex Yu Kin-wai</td>
</tr>
</tbody>
</table>

The following Honorary Advisors are offering their invaluable advice to the Executive Committee of Hong Kong Branch: Mr Alexander CS Chan, Mr Philip MC Ng and Ir Jonathan F Chung.
Accreditation of IOSH Membership as Equivalent to Green Card

Subsequent to the lengthy communication and negotiation with Labour Department, IOSH Hong Kong Branch was granted the accreditation for its members to have equivalent qualification of the Mandatory Basic Safety Training Certificate (commonly known as “Green Card”) under Section 6BA(2) of the Factories and Industrial Undertakings Ordinance. Details of the accreditation and relevant administration procedures for applying the equivalent green card will be communicated to all members separately.

“A closer look at risk”

CS Chan MSc, CFIOSH, RSO

Introduction

The picture on the left shows beautiful rocks under a pretty blue sky. While I am enjoying sightseeing, due to my profession, I often ask myself a question, is there any risk around? Will the rocks have a risk of rolling down? The perception of risk is quite subjective, and we normally consider risk to be greatest when we have no direct control or understanding of the situation.

What is risk? What does the term ‘risk’ mean to you? To me, risk means uncertainty as its outcome involves uncertainty. It is something that might happen in the future, NOT in the present. The state of ‘at risk’ can be regarded as the state of uncertainty. Take driving a car as an example. Driving involves a risk of getting a traffic accident. The risk is present because uncertainty is present. You don’t know the outcome (accident or no accident) until the driving process ends. When the outcome is known, uncertainty disappears. In other words, a transfer from an initial state of uncertainty (risk of driving) to a state of certainty (the outcome) has occurred. If the outcome is an accident, it is regarded as an undesired event (a fact), not as a risk which no longer exists.

In general, risk involves the likelihood of occurrence of an event that will have an impact on objectives. The impact could be positive or negative. Positive impact means gain while negative impact means loss. In this respect, risk is generally divided into pure risk and speculative risk.
Pure risk is concerned with the likelihood of occurrence of an undesired event (loss if it happens or no loss if it doesn’t), and speculative risk is concerned with the likelihood of occurrence of an event that either gain or loss is possible. Investment risk is an example of speculative risk while safety and health risk is an example of pure risk. For the remaining part of this paper, I will focus on safety and health risk.

**Safety and health risk**

Safety and health risk is caused by the presence of safety and health hazard which has a potential to cause harm. What are the types of hazard under the category of safety and health? As a general reference, the Health and Safety Guide of The Hong Kong Polytechnic University can be referred to. The Guide in its section “Risk Assessment (Version 1.1, 2004)” provides quite a comprehensive checklist of 15 types of hazard including human factors. They are: (1) moving parts of machinery, (2) dangerous equipment, (3) working at height, (4) transport, (5) access, (6) ergonomical, (7) electricity, (8) chemicals, (9) fire and explosion, (10) particles and dust, (11) radiation, (12) biological, (13) environmental, (14) organizational, and (15) the individual.

Proper risk control can help prevent accidents, but cannot guarantee 100% of no accident occurrence as any changes might happen in connection with the risk being taken, and that’s why regular monitoring is essential. On the other hand, an accident might not happen even if there are no control measures as there may be some lucky people. Having said that, don’t try your luck – an accident can kill and you won’t have a chance to learn from it when it happens. Will you take such a risk?

Although the risk outcome implies uncertainty, the likelihood of occurrence can be assessed through analysis of the available information (such as history of accidents, existing control measures, legal requirements, research findings). If more information can be provided, risk analysis will then be more reliable and accurate and further away from guessing. Risk assessors play a very important role here, and so they must be competent enough (professional knowledge and experience) and be as objective as possible in the analysis. Figure 1 illustrates the relationships between hazard, risk, uncertainty, accident and loss. Obviously, the probability of loss (PL) lies between 0 and 1. Uncertainty (and thus risk) does not exist if PL = 0 or PL = 1. For PL = 0, it means hazard has been eliminated resulting in no related risk and thus no loss, and we should then focus on regular monitoring. For PL = 1, it means risk taking has resulted in an accident (and loss too), and our action is of course accident investigation for the purpose of preventing recurrence of similar accidents. For PL > 0 & < 1, it means risk exists and may lead to an accident, and our action is accident prevention (i.e. risk control) to avoid loss.
Hazard

Risk

Likelihood of accident, i.e., probability of loss (PL)

- If PL = 0 (no uncertainty)
  - No risk: Hazard has been eliminated, thus no related risk & loss.
  - Action: Regular monitoring

- PL: > 0 & < 1 (uncertainty)
  - At risk: Hazard exists, thus likelihood of accident & loss.
  - Action: Accident prevention

- If PL = 1 (no uncertainty)
  - No risk: Risk no longer exists; accident has occurred resulting in loss.
  - Action: Accident investigation

Figure 1: Relationships between hazard, risk, uncertainty, accident and loss

The total cost of accidents can affect a company’s annual running costs, which means a direct drain on profits. The impact is even more serious for a company having a low profit margin policy. Low profit margin means greater sales are necessary to cover the accident costs, and thus the company needs to pay much more attention and make a greater effort in preventing accidents.

The table below gives you a better picture about the relationship between the profit margins and the sales necessary to cover the loss caused by accidents:

<table>
<thead>
<tr>
<th>Profit Margin</th>
<th>1%</th>
<th>2%</th>
<th>5%</th>
<th>10%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales to cover accident cost of $10,000</td>
<td>$1,000,000</td>
<td>$500,000</td>
<td>$200,000</td>
<td>$100,000</td>
</tr>
<tr>
<td>Sales to cover accident cost of $100,000</td>
<td>$10,000,000</td>
<td>$5,000,000</td>
<td>$2,000,000</td>
<td>$1,000,000</td>
</tr>
</tbody>
</table>

Obviously, accident prevention plays an important role in maximization of a company’s profit. In this regard, the risk control measures adopted must be cost-effective enough.
**Consequence and Likelihood**

Although risk is not an absolute and measurable entity, it still needs to be assessed for the purpose of identifying the unacceptable risks so that appropriate risk control measures can be taken. Risk is assessed in terms of a combination of the consequence of an accident (hazardous event) and the likelihood of its occurrence. Mathematically, it can be expressed by a simple equation: “Risk = Consequence (C) x Likelihood (L)”, which shows a linear function of C and L, i.e. these two factors carry equal weight implying the following linear relationship:

“High Consequence (HC) x Low Likelihood (LL) = Low Consequence (LC) x High Likelihood (HL)”

However, the above relationship may not reflect the real situation. Frequent minor accidents (low consequences) are usually more acceptable than occasional major accidents (high consequences) which can cause fatalities and create major business problems. Thus, in analysis of risk, it is reasonable that the factor ‘C’ should carry a bit more weight than that of ‘L’, and so even if the calculation shows the same risk rating for both situations (i.e. HC x LL = LC x HL), I would regard “HC-LL” as a risk requiring the first priority action while “LC-HL” as a risk for the second priority action if we don’t have enough resources to deal with them at the same time.

**Predictability**

Besides consequence and likelihood, another factor that can be helpful in risk analysis is ‘predictability’ which means ease of detecting impending failure. High predictability can help reduce the likelihood of occurrence of an accident because of its easier detection before failure occurs, and vice versa. Take a lifting hook as an example. The hook is usually made of mild steel because of its high ductility (thus high predictability). If the hook cannot withstand the weight of the load it carries, its deformation (i.e. elongation) will appear first and this indicates an immediate need for replacement of the hook. High predictability makes timely replacement possible, and thus accidents can be avoided. Therefore, in assessing the likelihood of occurrence of an undesired consequence, the factor ‘predictability’ should be considered besides the risk control measures.

The picture below shows a horse pulling a tram. Was the horse capable of doing the job? In my observation on the day of picture taking, it was so far so good – the horse was seen capable of pulling the tram steadily along the rails at a safe speed although it was full of people, and there were railings around the top of the tram to prevent people from falling. The horse’s capability is easily predictable. If incapable, the horse will be reluctant to move forward and will whine. Having said that, don’t wait until the horse whines. Prevention is better than cure, and so overloading must be avoided.
Reduction of risk

Based on the components of risk, there are three fundamental ways of risk reduction: (i) reducing the consequence, (ii) reducing the likelihood, and (iii) reducing both the consequence and likelihood. For example, fencing an open manhole would reduce the likelihood of people falling into the hole, wearing a safety helmet would reduce the severity of head injury if an object is falling down, and wearing ear protectors in a noisy environment would reduce the risk of hearing loss in terms of both the consequence and likelihood. Of course, the best way of risk reduction is to eliminate, if possible, the related hazard. If the risk is of high consequence & high likelihood and we are not able to reduce it to an acceptable (or tolerable) level, we should avoid the risk or transfer it to the other parties who are competent to deal with it.

Talking about acceptable risk and tolerable risk, what is actually the difference between them? BS 8800:2004 states the difference clearly:

“Acceptable Risk is the risk that is regarded as insignificant either as it stands, or as a result of risk controls. Tolerable Risk is the risk at a level that can be accepted provided risk controls are implemented to reduce risk as low as is reasonably practicable, i.e. reduced to the point where it can be shown that costs (in terms of time, money and/or effort) of further risk reduction would be disproportionate to the further benefits.”

Finally, I wish to reiterate the importance of regular monitoring. Even if the residual risk (i.e. risk after treatment) becomes acceptable or tolerable, regular monitoring is necessary in order to ensure the control measures adopted are updated whenever necessary to deal with any changes that might happen. Effective control cannot be exercised over any system unless its performance is monitored regularly. Through regular monitoring, we can minimize uncertainty and have a better understanding and control of the risk.

REFERENCES

## Professional Development Activities

Here are major professional development activities we organized to our members in the past quarter.

<table>
<thead>
<tr>
<th>Date</th>
<th>Activity</th>
<th>Relevant Photo</th>
</tr>
</thead>
<tbody>
<tr>
<td>26 Mar 10</td>
<td>Occupational Safety and Health Seminar on Heat Stress Problems in Construction Site</td>
<td></td>
</tr>
<tr>
<td>29 Apr 10</td>
<td>Occupational Safety and Health Seminar on Behavioural Safety Motives of Professional Drivers</td>
<td></td>
</tr>
<tr>
<td>11 May 10</td>
<td>Occupational Safety and Health Seminar on A Brief Comparison on Legislative Requirements of Safety and Health in Construction Industry between the HKSAR and the Macao SAR</td>
<td></td>
</tr>
<tr>
<td>14 May 10</td>
<td>Technical Visit on Occupational Safety and Health - Iron &amp; Steel Group Co. Ltd. (Guangzhou Steel Enterprise Group)</td>
<td></td>
</tr>
</tbody>
</table>
Other Activities by the Executive Committee

As a professional institution, IOSH(HK) was invited to participate in the following panel and meeting to duly express our professional advice on behalf of our members.

<table>
<thead>
<tr>
<th>Date</th>
<th>Activity</th>
<th>Hosting Organizer</th>
</tr>
</thead>
<tbody>
<tr>
<td>27 Mar 10</td>
<td>Participated in safety workshop in determining practical measures in improving safety standards in construction industry</td>
<td>Hong Kong Occupational Safety and Health Association</td>
</tr>
<tr>
<td>13 May 10</td>
<td>Participated in joint meeting with Labour Department regarding registered safety officers revalidations and recognition of professional development</td>
<td>Society of Registered Safety Officers</td>
</tr>
</tbody>
</table>
A. **Members in Hong Kong Branch**

As of mid June 2010, we have a total of 801 members currently registered in the Hong Kong Branch. The breakdown of membership categories is as follows:

- FIOSH (Retired), 1, (0.1%)
- Grad. IOSH, 95, (11.9%)
- Tech. IOSH, 44, (5.5%)
- FIOSH (Retired), 1, (0.1%)
- CFIOSH, 24, (3.0%)
- Affiliate, 114, (14.2%)
- CMIOSH, 523, (65.3%)

B. **Membership Talks**

In order to sustain the steady growth of membership numbers in Hong Kong Branch, membership talks are organized from time to time for students who are studying in various professional courses leading to IOSH membership. Recent talks were organized at the Open University of Hong Kong and The Hong Kong Polytechnic University.

C. **Membership Mentor Program**

Mentor Program has been successfully implemented since November 2007 for the purpose of helping Graduate & Affiliate Members to become Charted Members by providing one-to-one discussion, coaching and feedback exercises for the mentees. New batch of mentor program will be launched in the next few weeks. In order to facilitate the recruitment of a new batch of mentees, an introductory seminar will be organized in coming September. Interested members should keep an eye on the membership communication.

D. **Membership Communication**

From time to time, members receive e-mails from the IOSH Headquarters showing title of “Connect Diary: Your Branch and Group events”. By opening up the e-mail, members will be able to view the updated events that are planned and organized by respective branch.
In early 2009, the IOSH official website has been revamped with dedicated webpage assigned for individual branch of the Institution. Since then, the previous website of Hong Kong Branch has been closed and redirecting all membership communication via the IOSH Headquarters website – Connect /Connect Diary

Members should make himself / herself familiar with the new IOSH website in order to learn all upcoming events and any development new activities of the Hong Kong Branch. For dedicated website, you can click on the following link: <http://www.iosh.co.uk/branches/hong_kong.aspx>
Same as in the past, the Hong Kong Branch is publishing a local Newsletter to enable the members to keep abreast of the latest development and activities of the Branch. The production of the newsletter was interrupted for a while and we are committed to resume the publication with the formation of the new Executive Committee. The composition of the Editorial Board is as follows:

- Ir YM Poon
- Mr Alex Tse
- Mr CS Chan
- Mr David Wong
- Mr Sammy Wan
- Ms Amy Tsoi

It is our target to publish this newsletter at an interval of every 4 months, and we welcome any feedback and suggestions in making the Newsletter a success.