<u>The Institution of Engineers, Singapore</u> <u>Proforma for Engagement of</u> <u>Design for Safety Professional</u>

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Disclaimer

- i. The Proforma presented below is for reference and guidance only, and it is <u>not</u> a mandatory requirement to adopt it.
- ii. The author and Institution of Engineers, Singapore bear no responsibility whatsoever for its adoption.

Background

The Workplace Safety and Health (Design for Safety) Regulations 2015 has come into operation in August 2016. Since then, many projects have benefited from it, with designs that are safer for site personnel to construct, for occupants to use, and for owners to operate. Also, a substantial number of DfS Professionals have been certified and registered under the Workplace Safety and Health Council (WSHC) listing of DfS Professionals.

The DfS Workgroup under the Institution of Engineers, Singapore (IES) Health & Safety Engineering Technical Committee (HSETC) has recently reviewed the effectiveness of DfS implementation. One of the areas examined is the scope of work specifications by the Developers (or their Appointees). It was found that the scope of work often varies significantly between different tenders, with some even deviate from the *Workplace Safety and Health Guidelines Design for Safety* published by the WSHC or the *Workplace Safety and Health (Design for Safety) Regulations*. Hence, they cause confusion for the bidders who sometimes have to make their own judgement in interpreting the scope of work. The adverse impacts are that the DfS Professionals might not fulfil the regulatory requirements, inefficiency in handling site safety matters due to mix-up of safety responsibilities, and inappropriate DfS consultancy fee quotations.

To help rectify the situation, the DfS Workgroup has developed a *Proforma for Scope of Consultancy Services for Engagement of Design for Safety Professional by Developers*. This proforma has been developed based on the following references:

- 1. Workplace Safety and Health (Design for Safety) Regulations, 2015
- 2. WSH Council, Workplace Safety and Health Guidelines Design for Safety, 2016

It provides detailed information on the roles and responsibilities of DfS Professional when engaged by Developers. It is aimed to preclude the common errors in scope of work specifications which could result in the aforementioned adverse impacts.

The proforma provided below may be used as it is. Should the Developer require the DfS Professional to perform additional duties on top of the regulatory requirements, although not recommended, such duties can be stipulated in an Annex section, if necessary.

It is also recommended that the Developer engage the DfS Professional directly rather than through another consultant or contractor. This way the DfS Professional can better represent the Developer who is at the top of the construction value chain, and hence has the greatest influence on the design for the project.

IES Proforma for Scope of Consultancy Services for Engagement of DfS Professional by Developers

Eligibility

The proposed Design for Safety (DfS) Professional shall be on the Workplace Safety and Health Council's list who have successfully completed the DfS for Professionals training course. He/she must be able to fulfil all their duties under the WSH (DfS) Regulations with due diligence.

<u>General</u>

The Design for Safety (DfS) Professional shall provide comprehensive service and perform the duties stipulated and implied in the following documents:

- 1. Workplace Safety and Health (Design for Safety) Regulations, 2015
- 2. WSH Council, Workplace Safety and Health Guidelines Design for Safety, 2016

Scope of Work

- 1. Providing briefing to the project team at the commencement of each GUIDE stage on DfSrelated information, such as its principles, methodology, roles and responsibilities of project personnel, and timing of DfS Review Meetings and follow-up reviews.
- 2. Convening DfS Review Meetings at relevant stages of the design to identify and eliminate or reduce, as far as reasonably practicable, foreseeable design risks to the safety and health of any person affected by the project. The DfS Professional shall organise these meetings and involve the Developer, Designers and Contractor.
- 3. Facilitating the design review process during the DfS Review Meetings with the Developer, Designers (permanent, specialist and/or temporary works where necessary) and Contractor (and Subcontractors where necessary) to address risks at source and plan for safe work.
- 4. Conducting the DfS Review Meetings at concept design, detailed design and pre-construction stages using the recommended GUIDE process in Ref. 2 or other agreed review process. Identified hazards shall then be transferred to a Design Risk Record Form. The DfS Professional shall determine when additional DfS Review Meetings are required.
- 5. Facilitating and promoting the process for Developer, Designers and Contractor to systematically identify and eliminate foreseeable design risks during the DfS Review Meetings. In the event that it is not reasonably practicable to eliminate a design risk, it shall be reduced to as low as reasonably practicable. When reducing a design risk, it shall be reduced at its source as far as reasonably practicable, and collective protective measures are preferred over individual protective measures.
- 6. Facilitating and promoting the DfS Review process such that the Developer, Designers and Contractor consider the people affected by the project, including people:
 - who carry out or are liable to be affected by construction work,
 - for whom the structure is a workplace, including individuals who maintain or clean the structure, or anything in or on the structure, or
 - who carry out or are liable to be affected by the demolition of the structure.
- 7. Facilitating and promoting the DfS Review process such that the Developer, Designers and Contractor consider the hazards and risks of maintaining the systems and equipment related to the project.
- 8. Compiling the minutes or notes for the DfS Review Meetings, where appropriate.
- 9. Maintaining a DfS Register containing documents generated through the DfS review process. It shall contain information and records arising from every DfS Review Meeting such as minutes of meeting, and Design Risk Record with design residual risks clearly indicated.

- 10. Issuing the DfS Register to the Developer, Designers and Contractor for their effective communication of the DfS-related risk information to individuals facing the risks, so that the individuals are aware of any identified risks that they ought to address, and the control measures, if available, to implement.
- 11. Updating the Developer on matters arising from DfS Review Meetings, where appropriate.
- 12. Monitoring the status of the action items in the Design Risk Record. Follow-up meetings should be conducted to address the identified hazards.
- 13. Making the DfS Register available for inspection when requested by a Workplace Safety and Health Inspector appointed by the Commissioner for Workplace Safety and Health during the course of the project.
- 14. Handing over the up-to-date DfS Register to the Developer at project completion, i.e. upon granting of Temporary Occupation Permit (TOP) by the Building and Construction Authority.
- 15. Providing advice to the Developer, Designers and Contractors on matters relating to DfS.
- 16. For the avoidance of doubt, the DfS Professional shall not be responsible for, or directly involved in, the safety and health at the construction site, nor shall the DfS Professional take over responsibilities of the Designers or Contractors.

<u>Annex</u>

[This Annex section is used, if required, for specifying any other work scope that is over and above the standard scope of services for the Design for Safety Professional outlined above. If not applicable, delete this section.]

The Design for Safety (DfS) Professional shall also perform the following duties:

