

COURSE OVERVIEW HE0851
Certified Incident Investigator

Incident Investigation & Reporting
(NFPA, OSHA, API, ISO & ANSI Standards)

Course Title

Certified Incident Investigator: *Incident Investigation & Reporting (NFPA, OSHA, API, ISO & ANSI Standards)*

Course Reference

HE0851

Course Duration/Credits

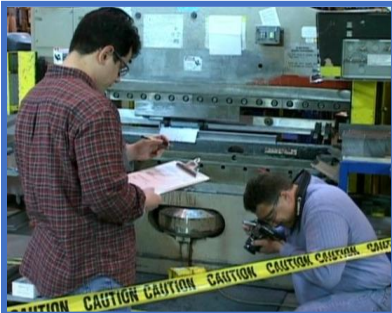
Five days/3.0 CEUs/30 PDHs

Course Date/Venue

Session(s)	Dates	Venue
1	February 04-08, 2024	Club B Meeting Room, Ramada Plaza by Wyndham Istanbul City Center, Istanbul, Turkey
2	May 05-09, 2024	Al Aziziya Hall, The Proud Hotel Al Khobar, Al Khobar, KSA
3	August 04-08, 2024	Boardroom 1, Elite Byblos Hotel Al Barsha, Sheikh Zayed Road, Dubai, UAE
4	November 04-08, 2024	Fujairah Meeting Room, Grand Millennium Al Wahda Hotel, Abu Dhabi, UAE



Course Description



This practical and highly-interactive course includes various practical sessions and exercises. Theory learnt will be applied using our state-of-the-art simulators.

Incident investigation and reporting describe the process and responsibilities for internal reporting of HSE incidents which occurs in company's operational area or related to company's activity. A high percentage of incidents are caused by human error and lack of proper training. The number of such incidents may be greatly reduced by thorough investigation of incidents, establishing root causes, implementing effective corrective and preventative actions. This course is designed to introduce the attendees to established methods, of achieving this in a structured and proven manner.

This course is designed to provide participants with a comprehensive knowledge and skills on the techniques and procedures for incident investigation and reporting. It covers the incident and accident investigation process and the related company's procedures; the common causes of incidents and the various types of incident to investigate; the incident investigation techniques; the link between investigation and risk assessment, framework for incident investigation and analysis; and the analyses and commutate data.

The root cause analysis presented in this course is designed for use in investigating and categorizing the root causes of events with safety, health, environmental, quality, reliability and production impacts, although the exercises and case studies used in this course are predominantly those having safety and health impacts.

OSHA Incident [Accident] Investigations: A Guide for Employers (2015) will be used as guidance document provides participants with a systems approach to identifying and controlling the underlying or root causes of all incidents in order to prevent their recurrence. NFPA 921 will also be used to set the bar for scientific-based investigation and analysis of fire and explosion incidents.

By the end of the course, participants will be able to employ incident investigation to identify true root causes; recognize the root cause analysis, intermediate and root cause of incidents, cause tree analysis, fault tree analysis and events and causal factors analysis; carryout various strategies to ensure the organization learns from safety failures; employ structured data collection, investigating, interviewing and story boarding; apply applicable accident investigation procedures and investigate accidents and incidents in a professional manner; develop conclusions and recommendations; illustrate company's HSE incidents reporting flow diagram; and perform proper incident reporting.

API RP 585, Pressure Equipment Integrity Incident Investigation, recommended practice will be used as case study during the course in addition to API Investigation Tiers and Root Cause Analysis

Course Objectives

Upon the successful completion of this course, each participant will be able to:-

- Get certified as a “*Certified Incident Investigator*”
- Apply and gain a good working knowledge on incident reporting and investigation
- Discuss incident and accident investigation process and define related company's procedures
- Identify the common causes of incidents and the various types of incident to investigate
- Prevent, report and apply incident investigation techniques
- Determine the link between investigation and risk assessment as well as the framework for incident investigation and analysis
- Collect analyses and commutate data
- Employ incidents investigation to identify true root causes
- Recognize the root cause analysis, intermediate and root cause of incidents, cause tree analysis, fault tree analysis and events and causal factors analysis
- Carryout various strategies to ensure the organization learns from safety failures
- Employ structured data collection, investigating, interviewing and story boarding
- Apply applicable accident investigation procedures and investigate accidents and incidents in a professional manner
- Develop conclusions and recommendations, illustrate company's HSE incidents reporting flow diagram and proper incident reporting
- Recognize OSHA Incident [Accident] Investigations, NFPA 921, API RP 585, and ISO 45001 standards

Applicable Codes & Standards

This course is based on the following Codes & Standards: -

- NFPA (National Fire Protection Association) 921 Standard: This standard provides guidelines for fire and explosion investigations, including procedures for evidence collection and analysis, and guidelines for determining the origin and cause of a fire or explosion.
- OSHA (Occupational Safety and Health Administration) Standards: OSHA provides guidelines for employers to follow in the event of a workplace incident. The guidelines include reporting requirements, investigations, and corrective actions to prevent future incidents.
- API (American Petroleum Institute) RP (Recommended Practice) 754: This standard provides guidelines for process safety performance measurement, including incident investigation, root cause analysis, and corrective action implementation.
- ISO (International Organization for Standardization) 45001 Standard: This standard provides guidance for establishing and maintaining an Occupational Health and Safety Management System (OHSMS). It includes guidelines for conducting incident investigations, analyzing root causes, and implementing corrective actions.
- ANSI (American National Standards Institute) Z16.2 Standard: This standard provides a framework for conducting incident investigations and includes guidelines for reporting and analysis.

Who Should Attend

This course provides an overview of all significant aspect and considerations of incident investigation and reporting for managers, team leaders, engineers, superintendents, supervisors and those in-charge of incident investigation or reporting.

Training Methodology

All our Courses are including **Hands-on Practical Sessions** using equipment, State-of-the-Art Simulators, Drawings, Case Studies, Videos and Exercises. The courses include the following training methodologies as a percentage of the total tuition hours:-

- 30% Lectures
- 20% Practical Workshops & Work Presentations
- 30% Hands-on Practical Exercises & Case Studies
- 20% Simulators (Hardware & Software) & Videos

In an unlikely event, the course instructor may modify the above training methodology before or during the course for technical reasons.

Accommodation

Accommodation is not included in the course fees. However, any accommodation required can be arranged at the time of booking.

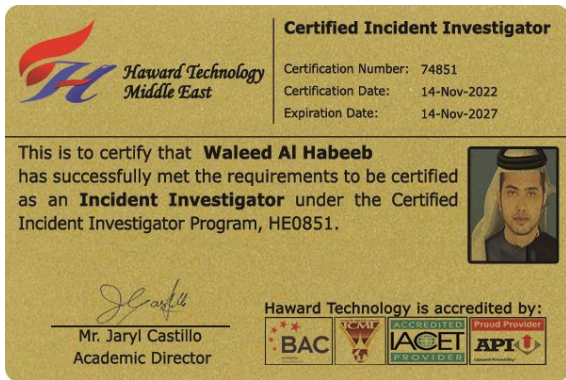
Course Certificate(s)

- (1) Internationally Wall Competency Certificates and Plastic Wallet Card Certificates will be issued to participants who completed a minimum of 80% of the total tuition hours and successfully passed the exam at the end of the course. Successful candidate will be certified as a "Certified Incident Investigator". Certificates are valid for 5 years.

Recertification is FOC for a Lifetime.

Sample of Certificates

The following are samples of the certificates that will be awarded to course participants:-



- (2) Official Transcript of Records will be provided to the successful delegates with the equivalent number of ANSI/IACET accredited Continuing Education Units (CEUs) earned during the course.

* Haward Technology * CEUs * Haward Technology * CEUs * Haward Technology * CEUs * Haward Technology *



Haward Technology Middle East

Continuing Professional Development (HTME-CPD)

CEUs

CEU Official Transcript of Records

TOR Issuance Date: 14-Nov-22

HTME No. 74851

Participant Name: Waleed Al Habeeb

Program Ref.	Program Title	Program Date	No. of Contact Hours	CEU's
HE0851	Certified Incident Investigator	November 10-14, 2022	30	3.0

Total No. of CEU's Earned as of TOR Issuance Date **3.0**

TRUE COPY



Jaryl Castillo
Academic Director

Haward Technology has been approved as an Authorized Provider by the International Association for Continuing Education and Training (IACET), 2201 Cooperative Way, Suite 600, Herndon, VA 20171, USA. In obtaining this approval, Haward Technology has demonstrated that it complies with the ANSI/IACET 1-2013 Standard which is widely recognized as the standard of good practice internationally. As a result of their Authorized Provider membership status, Haward Technology is authorized to offer IACET CEUs for programs that qualify under the ANSI/IACET 1-2013 Standard.

Haward Technology's courses meet the professional certification and continuing education requirements for participants seeking Continuing Education Units (CEUs) in accordance with the rules & regulations of the International Association for Continuing Education & Training (IACET). IACET is an international authority that evaluates programs according to strict, research-based criteria and guidelines. The CEU is an internationally accepted uniform unit of measurement in qualified courses of continuing education.

Haward Technology is accredited by











P.O. Box 26070, Abu Dhabi, United Arab Emirates | Tel.: +971 2 3091 714 | E-mail: info@haward.org | Website: www.haward.org

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Certificate Accreditations

Certificates are accredited by the following international accreditation organizations: -


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The International Accreditors for Continuing Education and Training (IACET - USA)

Haward Technology is an Authorized Training Provider by the International Accreditors for Continuing Education and Training (IACET), 2201 Cooperative Way, Suite 600, Herndon, VA 20171, USA. In obtaining this authority, Haward Technology has demonstrated that it complies with the **ANSI/IACET 2018-1 Standard** which is widely recognized as the standard of good practice internationally. As a result of our Authorized Provider membership status, Haward Technology is authorized to offer IACET CEUs for its programs that qualify under the **ANSI/IACET 2018-1 Standard**.

Haward Technology's courses meet the professional certification and continuing education requirements for participants seeking **Continuing Education Units (CEUs)** in accordance with the rules & regulations of the International Accreditors for Continuing Education & Training (IACET). IACET is an international authority that evaluates programs according to strict, research-based criteria and guidelines. The CEU is an internationally accepted uniform unit of measurement in qualified courses of continuing education.

Haward Technology Middle East will award **3.0 CEUs** (Continuing Education Units) or **30 PDHs** (Professional Development Hours) for participants who completed the total tuition hours of this program. One CEU is equivalent to ten Professional Development Hours (PDHs) or ten contact hours of the participation in and completion of Haward Technology programs. A permanent record of a participant's involvement and awarding of CEU will be maintained by Haward Technology. Haward Technology will provide a copy of the participant's CEU and PDH Transcript of Records upon request.

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British Accreditation Council (BAC)

Haward Technology is accredited by the **British Accreditation Council** for **Independent Further and Higher Education** as an **International Centre**. BAC is the British accrediting body responsible for setting standards within independent further and higher education sector in the UK and overseas. As a BAC-accredited international centre, Haward Technology meets all of the international higher education criteria and standards set by BAC.

Course Instructor(s)

This course will be conducted by the following instructor(s). However, we have the right to change the course instructor(s) prior to the course date and inform participants accordingly:



Mr. Ahmed Mady is a **Senior HSE Consultant** with over **40 years** of field experience. He is well-versed in the areas of **Environmental Management System (EMS)**, **Management System Auditing**, Occupational Health, Safety & Environment (**HSE**), **Environmental & Waste Management**, Environmental Management & Technology (**EMT**), **Environmental Pollution & Control**, Environmental Impact Assessment (**EIA**), **Waste Management & Environmental Protection**, **HAZMAT**, **HAZCOM**, **Accident & Incident Investigation**, **Emergency Response**, **Hazard Recognition**, **Hazard Assessment**, **Risk Control**, **Risk Monitoring Techniques**, **Radioactive Chemicals**, **Emergency Procedures**, **First Aid & PPE**, **MSDS**, **Chemical Hazards**, **Chemical Monitoring & Protection**, **Chemical Spill Clean Up**, **Strategic Planning**, **Security Management**, **Crisis Management**, **Environmental Awareness**, **Search & Rescue Operations**, **HSE Management**, **Risk Analysis Evaluation & Management**, **Security Operations Management**, **Investigation & Security Surveying**, **Security Crisis Management**, **Corporate Security Planning**, **Strategic Analysis**, **Strategy Selection & Implementation**, **Security Policies & Procedures**, **Logistics Management**, **Systems Analysis & Design** and **Organization Procedure Evaluation & Auditing**.

During his service, he had been tasked as the **Chief Information Directorate** of the **Ministry of Civil Aviation** and the **Chief Engineering Analyst, On-Scene Commander (OSC) & Incident Commander (IC)** in the **Air Force** and was responsible for a team of engineers supporting all engineering studies, modifications, aging studies and maintenance analysis. Being a **Board Member** of the **Aviation Information Technology Center**, he holds control of the overall strategies and procedures for the ministry, contracting for major IT projects, supervising all IS activities in the aviation sector and ensuring quality and success of delivery. He had likewise served as the **Commander** of the **Air Force** and had worked closely with the **Logistics Computer Center** wherein he gave out direction on **Operational & Tactical Logistics Planning** and **Strategic Military Logistics** to numerous high ranking officials, and at the same time **commanding flying Air Force maintenance squadron logistics field activities**. Mr. Ahmed retired in the service as a **Major General**.

Earlier in his career, Mr. Ahmed had occupied several challenging roles with several large Logistics companies as their **General Manager**, **Maintenance Engineer**, **Systems Analyst**, **Training Branch Chief**, **Systems & Communication Engineer**, **Computer Programmer** and **Logistic Instructor**. Moreover, he has worked as the **Project Manager** contracted by **KNPC** for the year 2014-2016 in delivering **Certified Programs** for **Kuwaiti Contractor Employee** (Electrical, Mechanical & Pipefitting, Welding & Fabrication, Process Operator, Instrumentation & Control). Further, he has travelled all over Europe, Asia and the Americas joining numerous conferences and workshops with the **Ministry of Foreign Affairs** and international companies such as **IBM**, **System Science Corporation (SSC)** and **International Air Transport Association (IATA)**.

Mr. Ahmed has a **Bachelor** degree in **Mechanical Engineering**. Further, he has gained **Diplomas** on **Civil Aviation Engineering**, **Islamic Studies** and **Information Systems & Technology**. Moreover, he is a **Certified Internal Verifier** by **City & Guilds Level 4 Certificate** in **Leading the Internal Quality Assurance of Assessment Processes & Practice** and **Certified Assessor** in **Level 3 Certificate in Assessing Vocational Achievement** under the **TAQA Qualification (Training, Assessment & Quality Assurance)**, a **Certified Internal Verifier Level 2 & 3 NVQ Processing Operations: Hydrocarbons** by the **British City & Guilds**, a **Certified Internal Verifier/Trainer/Assessor** by the **British Institute of Leadership & Management (ILM)** and a **Certified Instructor/Trainer**. Further, he has delivered various trainings, workshops and conferences worldwide.

Course Fee

Istanbul	US\$ 6,000 per Delegate + VAT . This rate includes Participants Pack (Folder, Manual, Hand-outs, etc.), buffet lunch, coffee/tea on arrival, morning & afternoon of each day.
Al Khobar	US\$ 5,500 per Delegate + VAT . This rate includes H-STK® (Howard Smart Training Kit), buffet lunch, coffee/tea on arrival, morning & afternoon of each day.
Dubai	US\$ 5,500 per Delegate + VAT . This rate includes H-STK® (Howard Smart Training Kit), buffet lunch, coffee/tea on arrival, morning & afternoon of each day.
Abu Dhabi	US\$ 5,500 per Delegate + VAT . This rate includes H-STK® (Howard Smart Training Kit), buffet lunch, coffee/tea on arrival, morning & afternoon of each day.

Course Program

The following program is planned for this course. However, the course instructor(s) may modify this program before or during the course for technical reasons with no prior notice to participants. Nevertheless, the course objectives will always be met:

Day 1

0730 – 0800	<i>Registration & Coffee</i>
0800 – 0815	<i>Welcome & Introduction</i>
0815 – 0830	PRE-TEST
0830 – 0900	<i>Introduction to Incident Investigation</i>
0900 – 0930	<i>Principles of Accident Investigation</i>
0930 – 0945	<i>Break</i>
0945 – 1030	<i>Benefits of Accident Prevention</i>
1030 – 1120	<i>Company's Related Definitions/Procedures</i>
1120 – 1230	<i>Common Causes of Incidents</i>
1230 – 1245	<i>Break</i>
1245 – 1320	<i>Company's Definitions for Incidents, Near Misses, etc</i>
1320 – 1420	<i>Types of Incident to Investigate</i>
1420 – 1430	<i>Recap</i>
1430	<i>Lunch & End of Day One</i>

Day 2

0730 – 0830	<i>Preventing Incidents</i>
0830 – 0930	<i>Reporting Incidents</i>
0930 – 0945	<i>Break</i>
0945 – 1030	<i>Incident Investigations</i>
1030 – 1120	<i>Investigation Techniques</i>
1120 – 1230	<i>Accident Reporting & Scope of Investigation</i>
1230 – 1245	<i>Break</i>
1245 – 1330	<i>Accident Investigation Process using ISO 45001 Clause 10.2</i>
1330 – 1420	<i>Stages of Accident Investigation</i>
1420 – 1430	<i>Recap</i>
1430	<i>Lunch & End of Day Two</i>

Day 3

0730 – 0830	On Site Investigation Process
0830 – 0930	The Link between Investigation & Risk Assessment
0930 – 0945	Break
0945 – 1030	Framework for Incident Investigation & Analysis
1030 – 1120	Root Cause Analysis
1120 – 1230	Identifying Intermediate & Root Causes of Incidents using OSHA Incident [Accident] Investigations: A Guide for Employers
1230 – 1245	Break
1245 – 1330	Cause Tree Analysis
1330 – 1420	Fault Tree Analysis
1420 – 1430	Recap
1430	Lunch & End of Day Three

Day 4

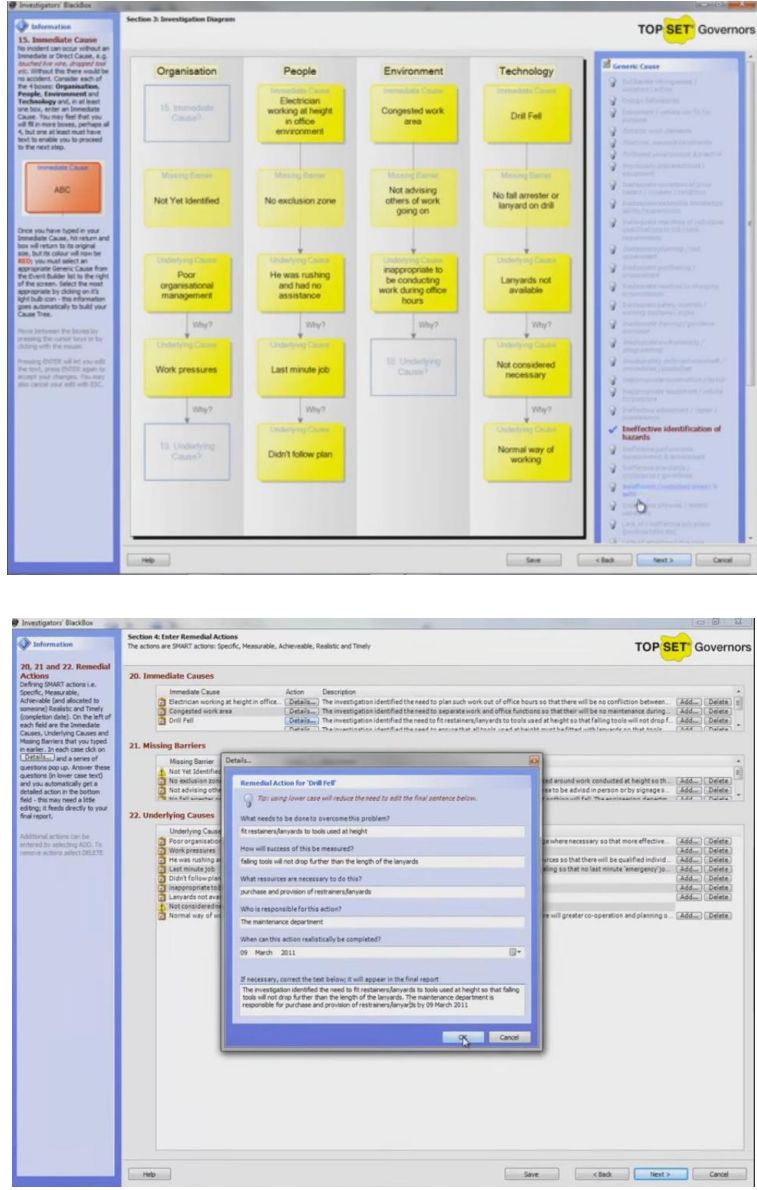
0730 – 0830	Basic Competencies of Human Factors
0830 – 0930	Events & Causal Factors Analysis
0930 – 0945	Break
0945 – 1100	Data to Include in Investigation Reports
1100 – 1230	Structured Data Collection
1230 – 1245	Break
1245 – 1330	Investigating Incident using ISO 45001 Step 1: Preserve & Document the Scene • Step 2: Collect Information • Step 3: Determine the Root-causes • Step 4: Implement Corrective Actions • Step 5: Feedback to Person(s) Reporting the Incident
1330 – 1420	Witness Interview Techniques
1420 – 1430	Recap Using this Course Overview, the Instructor(s) will Brief Participants about the Topics that were Discussed Today and Advise Them of the Topics to be Discussed Tomorrow
1430	Lunch & End of Day Four

Day 5

0730 – 0830	Storyboarding, ISO 45001 Incident Reporting & Investigation Procedure Template
0830 – 0930	Developing Conclusions & Recommendations
0930 – 0945	Break
0945 – 1030	Company's HSE Incidents Reporting Flow Diagram
1030 – 1120	Reporting Incidents on My HSSE
1120 – 1215	Practical Exercise on Root Cause Analysis (Examples of Incidents and Workshop to Investigate a Sample) using NFPA 921 of Fire & Explosion Incidents
1215 – 1230	Break
1230 – 1300	Practical Exercises & Case Study using API RP 585, Pressure Equipment Integrity Incident Investigation & Recommended Practice
1300 – 1315	Course Conclusion
1315 – 1415	COMPETENCY EXAM
1415 – 1430	Presentation of Course Certificates
1430	Lunch & End of Course

Simulator (Hands-on Practical Sessions)

Practical session will be organized during the course for delegates to practice the theory learnt. Delegates will be provided with an opportunity to carryout various exercises using the simulator “BlackBox simulator”.



The image displays two screenshots of the BlackBox Software Tool interface. The top screenshot shows 'Section 3: Investigation Diagram' with a flowchart identifying causes across four categories: Organisation, People, Environment, and Technology. The bottom screenshot shows 'Section 4: Enter Remedial Actions' with a table of SMART actions and a pop-up window for defining remedial actions for a specific cause.

Section 3: Investigation Diagram

Organisation	People	Environment	Technology
15. Immediate Cause?	Immediate Cause Electrician working at height in office environment	Immediate Cause Congested work area	Immediate Cause Drill Fell
Missing Barriers	Missing Barriers	Missing Barriers	Missing Barriers
Not Yet Identified	No exclusion zone	Not advising others of work going on	No fall arrestor or lanyard on drill
Underlying Cause Poor organisational management	Underlying Cause He was rushing and had no assistance	Underlying Cause Inappropriate to conducting work during office hours	Underlying Cause Lanyards not available
Why?	Why?	Why?	Why?
Work pressures	Last minute job	16. Underlying Cause?	Underlying Cause Not considered necessary
Why?	Why?	Why?	Why?
16. Underlying Cause?	Underlying Cause Didn't follow plan		Underlying Cause Normal way of working

Section 4: Enter Remedial Actions

Immediate Cause	Action	Description
Electrician working at height in office	Details...	The investigation identified the need to plan such work out of office hours so that there will be no conflict between...
Congested work area	Details...	The investigation identified the need to separate work and office functions so that there will be no maintenance during...
Drill Fell	Details...	The investigation identified the need to ensure that all tools used at height must be fixed with lanyards so that tools...

Remedial Action for 'Drill Fell'

What needs to be done to overcome this problem?
 Restrain lanyards to tools used at height

How will success of this be measured?
 Falling tools will not drop further than the length of the lanyards

What resources are necessary to do this?
 purchase and provision of restraint lanyards

Who is responsible for this action?
 the maintenance department

When can this action realistically be completed?
 09 March 2011

BlackBox Software Tool

Course Coordinator

Kamel Ghanem, Tel: +971 2 30 91 714, Email: kamel@haward.org