

Specification of Competency Standards
for the Information & Communications Technology Industry
Unit of Competency

Functional Area - Operations Management

Title	Coordinate the development of Human to Machine (H2M) interface
Code	107984L5
Description	This unit of competency applies to development personnel in the DMT (digital Media Technology) profession. Human to Machine (H2M) interface is the hardware and / or software which allows the operator or engineer to control and monitor the machine functions. This UoC concerns competencies and knowledge in coordinating the development of H2M interface especially for interactive media projects, in the capacity of a project leader.
Level	5
Credit	3
Competency	<p>Performance Requirements</p> <p>1. Knowledge for coordinating the development of H2M interface</p> <ul style="list-style-type: none"> • Realise the philosophy and guidelines of the organisation towards interactive media projects development • Comprehend related budget and resources allocations • Possess deep understandings on: <ul style="list-style-type: none"> ○ Human interactions with their environment ○ Awareness of the psychology of interfaces designing ○ H2M techniques used to provide control and status for automated systems, etc. • Master popular tools and means for H2M interfacing, including but not limited to the followings: <ul style="list-style-type: none"> ○ Electronic display such as a video computer monitor ○ Touch screen computer ○ Touch panel ○ Push button panel ○ Indicating light ○ Interfaces which can be controlled with the mind, etc. • Possess excellent communication and interpersonal skills for dealing with various stakeholders, such as: <ul style="list-style-type: none"> ○ Management ○ Software developers ○ Resources suppliers / controllers ○ End-users, etc. • Possess the personal traits of a competent project leader, such as the abilities to: <ul style="list-style-type: none"> ○ Manage multiple projects simultaneously ○ Devise solutions for challenges in an uncertain environment ○ Communicate both orally and in writing effectively, etc. <p>2. Coordinate the development of Human to Machine (H2M) interface:</p> <ul style="list-style-type: none"> • Conduct a detailed analysis of the requirements and nature of the H2M interfacing in concern, such as: <ul style="list-style-type: none"> ○ For presentation and control ○ For dialogue and information processing ○ For information preprocessing ○ As user model ○ As application model, etc. • Work out the scale and costs for development and ensure availability of manpower and resources

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	<ul style="list-style-type: none"> • Identify, select and deploy appropriate input and output devices for the designated H2M interface development tasks • Tackle the challenges for the H2M interfacing design, and ensure that the interfaces will be: <ul style="list-style-type: none"> ○ Functional ○ Accessible ○ Pleasant / user-friendly for using ○ Logical, etc. • Ensure proper outcomes at completion of the H2M interface development, including: <ul style="list-style-type: none"> ○ Accomplishment of all agreed upon deliverables ○ Meet general requirements in time, budget and quality ○ Fulfil special requirements such as taking care of stroke patients or people with severely restricted modes of communication, etc. • Act as the central point of contact and liaison for all issues related to the H2M interface development, with parties such as: <ul style="list-style-type: none"> ○ Senior management ○ Members of the development team ○ Outsourced personnel, if any ○ End users, if necessary • Coordinate all relevant follow-up activities, if any • Prepare reports about the completed development tasks for management's review, acceptance and further instructions <p>3. Exhibit professionalism</p> <ul style="list-style-type: none"> • Always devote fully to all activities related to the H2M interface development work in concern • Always perform the coordination tasks in an objective and fair manner, and balance the interests of all parties including the organisation, employees and end users
Assessment Criteria	<p>The integrated outcome requirements of this UoC are the abilities to:</p> <ul style="list-style-type: none"> • Complete the coordinate tasks for H2M interface development within time and budget constraints; and • Ensure the quality of all deliverables and meet all prescribed requirements
Remark	