

### **NOVEMBER, 2013**

## **ECDL FOUNDATION NEWSLETTER**

#### **HIGHLIGHTS OF THIS EDITION**

Development Organisations to work Together to Bridge the Digital Divide in Developing Countries

ICDL Asia Signs a new MoU with Singapore Workforce Development Agency

# WELCOME TO THE NOVEMBER 2013 ISSUE OF THE ECDL FOUNDATION NEWSLETTER.

### ECDL / ICDL IN ACTION AROUND THE WORLD



## DEVELOPMENT ORGANISATIONS TO WORK TOGETHER TO BRIDGE THE DIGITAL DIVIDE IN DEVELOPING COUNTRIES

ECDL Foundation and Computer Aid International have signed a landmark agreement to bring effective use of computer hardware and software within the reach of some of the poorest communities around the world.

Computer Aid International sends refurbished computers from the UK to more than 100 developing countries for use in village schools, universities and underdeveloped towns. ECDL Foundation will enable students to gain the globally recognised ICDL qualification, providing them with the skills to enter the employment market or to create their own micro-business.

This collaboration agreement was signed at the ICDL Africa Forum in Nairobi, which was attended by 120 delegates from across Africa, keen to learn how to bring more computers and training in IT skills to their communities. Read more

#### singapore workforce development agency

## ICDL ASIA SIGNS A NEW MOU WITH SINGAPORE WORKFORCE DEVELOPMENT AGENCY

Following a successful collaboration for the past three years, ICDL Asia has signed a new Memorandum of Understanding (MoU) with Singapore Workforce Development Agency (WDA) for another five years. Both parties will continue implementing the ICDL programme together among the Singapore workforce, through the alignment of ICDL standards with Singapore's Employability Skills Framework.

All the ICDL Base, Standard and Advanced modules will be available at WDA's approved training organisations, and Singapore residents will receive subsidies of up to 95% of the course fee. To date, around 70,000 candidates have benefited from the collaboration. The new MoU represents Singapore government's commitment to improving the digital literacy and productivity among the workforce, as well as the government's confidence in the value of the ICDL programme.

#### **INDONESIAN MILITARY APPROVES ICDL**

The Indonesian Military has approved ICDL training for Military Officers.

Currently the number of Indonesian Military personnel stands at 470,000 members and more than ten percent of these are Military Officers. The Indonesian Military comprises of three Military Academies; the Army Academy, Naval Academy and Air Force Academy as well as several training centers across Indonesia.

In the first week of December, ICDL Indonesia will formally introduce ICDL and will train fifty Military Officers ranking from Major to the Brigadier Generals, from across the three Military Academies. Upon successful completion of this, ICDL will then be implemented across the whole Indonesian Military.

#### ECDL NETHERLANDS AND PRINCE CONSTANTIJN LAUNCH NEW ECDL

On the 13 November, Prince Constantijn, Head of Cabinet to the Digital Agenda Commissioner, Neelie Kroes launched New ECDL in the Netherlands. The event took place in the World Trade Centre in the city of Rotterdam at the annual education fair. The fair was organised by 'Kennisnet' the public educational organisation which supports and inspires Dutch primary and secondary schools and vocational institutions in the effective use of ICT. The prince's support of New ECDL acknowledges the continued work by ECDL Netherlands to develop candidates' digital skills through training and certification and highlights New ECDL as a forward-looking and flexible digital skills certification that allows candidates/individuals to develop their computer skills to their own requirements.

## ICDL PROMOTED AT THE 43RD ROSHD INTERNATIONAL FILM FESTIVAL IN IRAN

ICDL Iran sponsored the 43rd Roshd International Film Festival which ran from October 25 to November 1 in Tehran. The festival is one of the most important scientific and educational events in Iran which shows and celebrates the films created in the fields of science, education and children's training. This year, 1,532 films were sent by professional and amateur directors in Iran and forty eight other countries around the world.

ICDL was promoted by ICDL Iran at the beginning of every film at the festival as well as in all printed materials which supported the event.

#### **ICDL COLOMBIA TO CERTIFY FIVE HUNDRED TEACHERS**

ICDL Colombia has signed an agreement with the Municipality of Medellin, through the La Escuela del Maestro and Vivero del Software community centre to certify teachers across the city of Medellin, in ICDL.

The process of certification will begin at the end of November and will certify five hundred Information and Communication Technology teachers, from public primary and secondary schools, as part of a program called 'ICT teaching laboratory'.

Teachers will be certified in eight ICDL modules (four base modules and four standard modules) reaching the ICDL Standard level. This will be the first step to certify all teachers in the city of Medellin, the second largest city in Colombia, before the end of the current government's term.

#### NATIONAL DIGITAL COALITION ESTABLISHED IN LITHUANIA

At the ICT 2013: Create, Connect, Grow conference in Vilnius (which was organised by the European Commission, the Ministry of Transport and Communications, and the Ministry of Foreign Affairs), a memorandum of cooperation regarding the creation of the National Digital Coalition in Lithuania was signed. The memorandum was also signed by Neelie Kroes, the Vice-President of the EC.

The National Digital Coalition was founded by ECDL Lithuania among 10 other Lithuanian institutions to promote digital skills in Lithuania.

The partners will invite other businesses, educational, public administration, non-governmental, and social companies, institutions, and organisations with similar goals to join their cause.

#### COMPUTER SOCIETY OF ZIMBABWE (CSZ) SUMMER SCHOOL 2013 – 'ICT – CREATING AFRICA'S QUANTUM LEAP'

ICDL National Operator, the Computer Society of Zimbabwe (CSZ), in conjunction with its ICT stakeholders held their annual summer school on 13-15 November 2013 in Victoria Falls. The theme of the event was 'ICT – Creating Africa's Quantum Leap'. The event focused on examining ways to maximise the impact of ICT on society and had a record attendance with 165 delegates present. The Ministry of ICT was represented by Mrs Beaullah Chirume.

Daniel Palmer, General Manager - ICDL Africa, delivered an informative presentation entitled 'Life-long learning – a cornerstone for development'. He highlighted how New ICDL facilitated life-long learning as a flexible computer skills certification via the ICDL Profile concept. He also cited global examples of the economic impact of having a workforce that continuously upskills. He paid tribute to the important contribution of the CSZ to the development of ICDL in Zimbabwe and Zambia, recognised most recently by the ECDL Foundation Best Practice Award 2013 in the Corporate/Private category, which they received in London earlier this year.

### ICDL ADVANCED MODULES LAUNCHED IN SUDAN AND YEMEN

Advanced Quality Assurance Systems (AQAS), ICDL National Operator in Sudan and Yemen, has conducted two ICDL Advanced module workshops in Khartoum and Sana'a. Ten candidates have successfully completed all four Advanced modules in Sudan, and fifteen candidates have completed the four Advanced modules in Yemen earning candidates from both territories the ICDL Expert certificate. ICDL Advanced module workshops will continue in both countries over the coming months.

AQAS has been a pioneer in launching ICDL modules in Arab countries. It was the first to launch the CAD certification in Jordan in 2007, and the first to launch the ICDL in Open Source Software in Sudan in 2011. Furthermore, it was the first ever to author ICDL in Braille format.

### UAE MINISTRY OF INTERIOR'S CHILD PROTECTION CENTER & ICDL GCC FOUNDATION DISTRIBUTE POCKET GUIDE ON CYBER SAFETY TO STUDENTS

**101** Tips on Cyber Safety

The UAE Ministry of Interior's Child Protection Center in cooperation with the ICDL GCC Foundation has distributed a free pocket guide to students across the UAE with the aim of educating students, parents and teachers about cyber safety. The handbook contains 101 tips on internet etiquette and the responsible use of various social media websites and smart technologies.

This pocket guide was prepared by the ICDL GCC Foundation and is endorsed by the Child Protection Center and the Abu Dhabi Systems and Information Centre (ADSIC).

According to Major General Nasser Lakhraibani Al Nuaimi, "The welfare of children has always been of paramount importance to the Ministry of Interior, which strives to support local and international efforts to protect children from various forms of abuse. The distribution of the guide is a significant step towards supporting government efforts to educate youths on the potential risks of the internet and social media channels".

#### ICDL ASIA ACCREDITATION PARTNER IN THAILAND PARTICIPATES IN MINISTRY OF EDUCATION WORKSHOP ON DEVELOPING STANDARDS FOR EDUCATION SOFTWARE

Plan-IT consultants, ICDL Asia accreditation partner in Thailand, participated at a workshop hosted by the Thai Minister of Education, Dr. Wichit Srisa-an and chaired by Dr. Kitti Limskul, vice Minister of Education. Plan-IT shared their experiences with delegates on the certification of IT standards, particularly in relation to the challenges of setting standards and certifying those standards. It was proposed to delegates that educational software should meet defined standards of reliability, accuracy, multi-platform, after sales service and stability – or RAMAS. A draft framework for evaluation of software was presented to delegates for discussion.

Plan-IT has been asked to provide more details and to attend future committee meetings.

#### **EUROPE'S LEADERS PRIORITISE ICT SKILLS**

Heads of State of the European Union (EU) discussed the digital economy and e-skills at the last EU Council on 24-25 October. In a dedicated thematic session, EU leaders proposed concrete steps to improve digital skills, such as using part of the European Structural and Investment Funds (2014-2020) for ICT education, support for retraining, and vocational education and training in ICT. They also discussed the need for a higher degree of integration of digital skills in education, from the earliest stages of school to higher education, and for tackling skills mismatches by using the newly developed classification of European Skills/Competences, Qualifications and Occupations (ESCO).

#### **EUROPE CODE WEEK**

Europe celebrated coding and programming during the Europe Code Week on 25-30 November. The objective was to connect individuals, groups, organisations, and companies, who are able to help more people experience the joy of coding. Europe Code Week is an initiative of the Young Advisors group which is working closely with Neelie Kroes, the European Commission's Vice-President in charge of the Digital Agenda for Europe.

### FOR DISCUSSION



Let's start with a simple question: Which one of the following can not be hacked?

- Airplane
- Pacemaker
- Gas pipeline
  - Linkedin mobile app

You probably know the answer with grim inevitability. Yes, none of the above are safe from hacking.\*

Cyber security is no longer something your nephew deals with on your PC every three months, or the sole territory of the IT guy in your office. Every second headline these days is a version of "New cyber security threat is greatly concerning governments/SMEs/universities/users".

A recent hack on software juggernaut Adobe brings more bad news. Adobe develops such software as Abode Reader, Photoshop and InDesign, and a successful hack during the summer led to 38m encrypted user passwords being stolen. Now we've learnt that source code was also stolen, making it possible for criminals to hack users' machines through vulnerabilities in the software, as The Financial Times reported in chilling detail. So how worried should we be?

"It's true that attacks are sometimes on a very big scale," says Marina Cabrini, a computer scientist working for AICA in Italy.

"But in situations like the Adobe attack, or the PlayStation network outage, the single user cannot do much – it's the big company's responsibility to take adequate measures for securing their data, and the data of their customers that is stored in their systems. Even if you worry, the only thing you can do is maybe use a pre-paid credit card for online purchases."

Marina is one of the consultants on the development of the ECDL syllabus, and worked on the creation of the IT Security module, along with other experts in the security field, three years ago.

Back then, growing concern from the public and growing sophistication in malware, led ECDL Foundation to believe a specific course on IT Security was required. Companies in particular were keen that their employees get IT Security certification because, as Marina puts it, "the main threat for the computer is between the chair and the keyboard".

Symantec lists (at time of writing) 23,904,359 current viruses or threats on its virus definition file. Every month, about 160,000 threats are added to the list. So how could a module devised three years ago protect against malicious threats that haven't been invented yet?

"Instead of targeting specific vulnerabilities of specific operating systems and/ or devices, we focussed on the basic concepts of security", explains Marina. "The idea is that people would be trained not only in knowing that a virus can infect a computer via an e-mail, but why a virus would infect a computer, and which information is so valuable that a virus should try to steal it."

So as well as an awareness of potential threats on a computer, candidates learn how these threats originate. That way, they'll know instinctively which situations could lead to potential danger.





Your personal files are encrypted!

The situations are countless. From opening emails from unknown senders, to using ATMs, selecting passwords, and posting personal information on social networks. If that sounds a bit paranoid, you might be right. But as Marina puts it, "in some cases paranoia is the only attitude that can help you". Attacks almost always involve some social engineering technique used to get the information needed to attack the systems. Protecting personal data is key Marina says; "recognise what you have that is valuable".

The module also includes a section on data management and backup techniques, which is even more significant now that data is increasingly saved on the cloud, and the rise of ransomware.

Ransomware (file-encrypting malware) has been around in various incarnations for years, but has intensified in recent months with the devastating CryptoLocker, which attacks Windows computers by encrypting both local and mapped network hard drives. Victims must pay a fee (a real ransom) within three days, or they'll lose their data.

The cost to businesses can be breath-taking. In the United States, the Kansas Braille Transcription Institute lost 12 years of work and expects to lose many contracts as a result. "You kind of feel like somebody broke into your building and stole everything that you have", manager Randolph Cabral told Kake.com. This is not an exaggeration – businesses should consider these threats on the same level of a burglary. Failure to prepare and prevent these attacks is like leaving the office window open with gleaming computer hardware packed with sensitive data inside.

"Awareness of the destructive potential of the attacks is quite non-existent among the general public, and sometimes among businesses as well", Marina says.

The annual cost of viruses to firms is \$67.2 billion a year in the US according to the FBI – and shortly after they devised that figure, FBI Director Robert Mueller became a victim of a phishing scam himself.

"Users are led to believe that nothing bad can happen if they make available their personal data on the internet. Why should I create malware to access someone else's computer to obtain their personal data and their credit card number, when all I have to do is follow the @NeedADebitCard channel on Twitter?"

@NeedADebitCard retweets all the pictures people post on the Internet of their new credit cards. It has to be seen to be believed.

You may not be so concerned that a careless FBI director or snap-happy Twitter user gets their bank details hacked.

But if there's a gas pipeline running under your house, a plane flying over it, or a medical device in your body, you might care whether the creators had sufficient training to protect these things against hacking.

The colleague who receives emails from you might feel the same way.

\*Security consultant Hugo Teso executed remote attack and hijack of commercial aircraft on virtual airplanes in a lab.

Forbes article from June 2012 was titled "Yes you can hack a pacemaker"

At Black Hat and DefCon computer security conference, multiple demonstrations showed how simple it is to hack energy systems.

LinkedIn's new mobile app has been called "a dream for hackers" because it redirects user's emails through Linkedin servers.

Find out more about our IT Security module.



### **INTERNATIONAL RESEARCH AND REPORTS**



#### EUROPEAN LABOUR FORCE DIGITAL SKILLS SURVEY – CAN THEY BETTER MATCH EMPLOYER NEEDS?

The publication last month of OECD's first skills survey of adults aged 16-65 emphasised critical weaknesses in the European labour force in the areas of literacy, numeracy and digital skills.

This survey of adult skills was designed to provide insights into the availability of some of these key skills in society and how they are used at work and at home. It directly measures proficiency in several information-processing skills – namely literacy, numeracy and problem solving in technology-rich environments.

By developing knowledge and competences geared to the needs of the labour market and upgrading European citizens' qualifications and skills, the EU aims to improve employment prospects.

#### **CLOSING THE DIGITAL DIVIDE SAVES LIVES**

According to 2013 World Disasters Report, released by the International Federation of Red Cross and Red Crescent Societies, the number of deaths caused by natural disasters globally last year was 90 percent below the average for the decade—down to 9,656 deaths as compared to 297,730 in 2004.

Admittedly, part of the difference was that the number of natural disasters were down worldwide, however, due to fast growing access to mobile broadband it is now much easier than ever to warn people that a catastrophic event is coming, easier to call for help, and easier for that help to call for back-up and supplies.