

## Cyber and E-Crime attacks on the UK Tax Systems

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**Chris Harrison** 

**Director Operations HMRC** 

**Criminal Investigation** 

# Why attack HMRC systems?

- HMRC is attractive as an on-line fraud target
- Unlike other financial institutions we have no account balances
- HMRC has no overdraft limits or finite value to each customer account
- We are theoretically an inexhaustible source of funds



# How do these attacks take place?

- Use of Malware such as Zeus or Gozi
- Phishing using false HMRC web page
- HMRC assist by focussing in on key dates
- The attack is not on the HMRC system
- Tax agent attack



# Gozi Trojan – this is what a "spoof" HMRC site looks like

HM Revenue & Customs	Online Services  HMRC home   Contact us   Help
Welcome to HMRC Online services	
Existing users	New user
Please enter your User ID and password, then click the 'Login' button below.  Please note: Fields are not case sensitive.  User ID:  Digital Certificate user  Lost User ID? Lost password? Lost or expired Activation PIN?  If you have lost both your User ID and password please contact the HM Revenue & Customs (HMRC) Online Services Helpdesk.	To register for online services please click the Register button below.  Register  Digital Certificate user  Frequently Asked Questions (FAQs) Computer requirements View a demo of HMRC's services Registration and Enrolment process
News	
20 May 2010 PAYE: Avoid late filing penalty for your 2009-10 Employer A	Annual Return urn you may still be able to avoid being charged a late filing
	and incentives for paying by an approved electronic metho the HMRC website then following the 'Legal conditions' lin
<b>VAT Online - Update</b> If you are trying to download the PDF version of your VAT displayed, please see our <u>quidance</u> .	Return and submission receipt but a blank page is being
HMRC Bank Accounts Set your payments to go to the new HMRC hank accounts	



### Is the threat real?

# **Operation Redbone - Facts and Figures**

- Over 2000 UTRs used to submit claims (some supplied via email from the Ukraine)
- Over 500 bank accounts set up to launder proceeds.
   Amount stolen: estimated £4.7 million with £3.5 million stopped/ payments identified
- 11 Defendants found Guilty with sentences totaling 47 years
- Several further operations ongoing



#### Is the threat real?

A convicted ITSA and online banking fraudster (left) poses with associates, possibly in Georgia





## Is the threat real?





### **How valuable are HMRC Credentials?**

Intelligence shows that criminals are increasingly aware of the value of acquiring HMRC information

• On international/Eastern European forums **HMRC credentials** (primarily agent credentials) have risen in value:

November 2009: \$10



February 2011: \$40

• While the online value of stolen **credit card details** has fallen:

November 2009: \$6



February 2011: \$3

• US\$4000 bounty offered to first person to 'hack' HMRC systems



# How much are HMRC losing to cyber/e-crime?

- Unknown Recent illustrative estimate\* of ITSA fraud losses of £113 million p.a.
- Evidence of criminals 'testing' other HMRC regimes, such as VAT,
   Corporation Tax and Stamp Duty Land Tax
- Banks have faced cyber enabled frauds since 2004 and have seen a 400% increase in losses since then, despite introducing increased fraud prevention tools and techniques
- \* Based on an extrapolation over 12 months of infected computers, potentially compromised credentials and average fraudulent repayment losses

