NATIONAL WARLINGENCE UNIX Plant Theft - The Real Truth PENT & AGRICULTURAL Plant & Agricultural National Intelligence Unit 2009/10 Annual Report

























Foreword

Welcome to the Plant and Agricultural National Intelligence Unit's first annual report.

October 2008 saw the start of operations of the World's first ever National Police unit dedicated to investigating thefts from both the Construction and Agricultural Industries.

Totally unique the formation of this unit was the culmination of one of the closest Police/Private Industry partnerships ever to have been undertaken.

Representatives of the UK Government, The Serious Organised Crime Agency, the Police, the Machinery Manufacturers, the Building and Construction companies, the Plant hire industry, and the Insurance companies have worked together, as one, with the express desire to reduce plant and equipment theft, and to reduce the impact of organised Criminal Networks, causing harm and loss within their environments and to the UK economy as a whole.

This report details the first year of the Specialist Unit, which is entirely funded by the Partners. It contains a most comprehensive and accurate record of the problem of plant theft and its effects.

The aim of this report is to provide Government, the Construction Industry, the Agricultural Industry, the Insurance Industry and Police officers throughout the Country, an overall picture of the criminal networks operating within the plant and machinery sectors. It details which type of equipment is targetted by these networks, which regional areas are the most likely to suffer thefts and scams and theft methods currently affecting the industry.

More importantly, learning from the above, the report includes advice and best practice that one can use to protect yourselves from the threat of plant theft.

The report reflects crime within the industry from the period October 1st 2008 to October 1st 2009. It has not been written for commercial advantage but as an example of how working together, with the Police Service in partnership plant theft can be beaten.

David Ainsworth

The ACPO lead on UK Vehicle Crime

&

Deputy Chief Constable of Wiltshire Constabulary





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Home Office

















Introduction

Plant theft has long been recognised by criminals as a low-risk high-gain exercise. For established criminal networks it has been relatively simple to steal construction equipment and farm machinery. These criminals have become so proficient and specialised that they are able to dispose of stolen goods easily without attracting the attention of either the Industry or the Police Service and are quickly able to turn their criminal activities into profit.

For many of these criminal organisations, stealing plant equipment is their primary source of income and the perfect commodity with which to trade for other illegal products, such as guns and drugs. Such is the ease to export plant equipment, few would ever know that the tractor leaving Dover today could be paying for the import of heroin tomorrow.

This report details the first year of operations of the new Plant and Agricultural National Intelligence Unit (PANIU), a specialist Police unit set up by the industries who suffer the most from plant and equipment theft.

This report will show the crime trends over the last year, the effect on the industry, the associated costs through loss and the efforts of the police to combat these organised criminal networks operating throughout the country. This report will also highlight some of the operational work conducted by PANIU, showing both the successes and the challenges being faced. Analysis of the thefts will be given as well as highlighting the hotspots and vulnerable plant types and concludes with giving prevention measures that have been designed with our partners to make the stealing of plant more difficult.



Executive Summary

Previously, plant theft was investigated in the same way as normal vehicle crime. A vehicle crime was seen as just a vehicle crime, whether it related to the theft of a small family hatchback or to the theft of £100,000 tractor or screening machine. Police frequently failed to recognise the significance or understand the implications to the industry of the loss of that machine. The delays to time sensitive construction projects, the 'on costs' of replacing that machine and hiring another, the insurance penalties, the loss of man hours and so on have real ramifications.

It was apparent that these criminal networks were causing extensive harm to the construction and agriculture environs with little penalty if caught.

The last two years, however, have seen dramatic changes in the way Police have engaged with the industry and are now actively joining the fight against plant crime.

Partnerships with the Plant Theft Action Group (PTAG) and the Construction Industry Theft Solutions (CITS) Board have resulted in three strategic directions:

- 1. The formation of the new Plant and Agricultural National Intelligence Unit (PANIU). This unit being an entirely industry funded police unit, created in an effort to combat organised crime, to direct operations and arrest those networks engaged in plant theft. Also, to monitor theft trends and to gather intelligence with an overall aim to reduce thefts within the construction and agricultural industries.
- 2. The promotion of the Construction Equipment Security and Registration Scheme (CESAR).

 This was designed to allow the average police officer on the street an easy way to identify any

 CESAR marked machinery 24 hours a day without the need for any specialist equipment.
- 3. The creation of 'best practice' document.

 Working together, the police / industry / Home office partnership have created best practice documents relevant for use by all parties to help design out crime and protect farms and construction sites from the threat of plant theft.



Stolen Hitachi ZX30 recovered by PANIU Felixstowe Docks Sept 09. Restored to owner without recovery charges or loss of insurance excess.























Established 1st October 2008

The Construction Equipment Association (CEA) and the Agricultural Engineers Association (AEA) together with the leading insurance companies in the UK have created a partnership with the police and funded this specialist unit within the Economic and Specialist Crime Command at New Scotland Yard. High among the priorities of PANIU is to gather and disseminate intelligence nationally to assist police in investigating criminal networks who steal plant machinery so that arrests and charges can be made and stolen machinery identified and recovered.

Why the need for PANIU?

Recent figures suggest that approximately £1.5 million of construction and agricultural plant and machinery was stolen in the UK every week. With reference to the theft of mini diggers alone, these accounted for losses of £20 million in 2007.

With even the smallest piece of plant worth many thousands of pounds, construction sites and farmyards are targeted by criminals to supply the demand for stolen equipment both in this country and abroad.

Recovery rates for stolen plant were, prior to 2008, running at just 5%. The majority of those recoveries were achieved as a result of the stolen equipment being fitted with vehicle tracking systems rather than by proactive policing. When compared to the recovery rate of approximately 50% for other types of vehicles, such as cars and motorcycles, it was apparent that more needed to be done within this sector to reduce theft and increase recoveries. It also highlighted how well organised plant theft criminals were and their proficiency at disposing of stolen property.

By exploiting the confusion on busy construction sites with probing attacks posing as contractors or by furtive entry to the farmyard in the middle of the night, each method exposing environmental weaknesses, can bring criminals significant gain. Alternatively use of disaffected employees or innocent road haulage companies to collect equipment and transport them to a handover point or point of export, the criminal can easily steal equipment.

These networks operate irrespective of police boundaries. Indeed they travel considerable distances to both steal and dispose of stolen property. This disguises the extent of the crime problem. With one criminal network possibly stealing numerous pieces of equipment overnight from a variety of locations, they never appear as a significant crime trend on one particular police area but scattered infrequently across numerous borders. These problems are magnified when equipment is moved across these borough and police boundaries, where jurisdictional and operational commitments cause further difficulties.

This problem can be highlighted using the Metropolitan Police area as an example. During every 24 hour period, approximately 100-120 vehicles get stolen from the streets of London every day. This figure is made up of cars, vans, lorries and motorcycles and other machinery but, on average, only one or two will be plant or agricultural machinery.

So, plant machinery theft for London is just 1-2% of total vehicle crime. But this is further diminished when the Police area i.e. London is then sub-divided into its 33 boroughs, with each borough suffering only an occasional theft. As a result, plant theft never appears as a major issue to that borough and, therefore, resources are directed at more pressing issues that effect day to day policing. However by looking at the problem nationally and adding up all of these thefts, one is made aware just how lucrative equipment theft suddenly becomes. It is apparent that, actually, patterns start to appear and that it is probably the work of a few highly organised teams stealing this equipment across the UK.

Responding to criticism from the industry regarding high theft rates and apparent lack of police resources dedicated to investigations, the Metropolitan Police Service highlighted the issues that affected police throughout the country whilst investigating plant theft.

The initial hurdles facing PANIU:

- The previous lack of any useable national database
- Difficulties with physical identification of specialist plant types and models
- Criminal networks operating within the arena were incredibly well organised
- No plant identification of equipment available to assist police at time of reporting theft
- Anomalies with the Police National Computer
- Equipment having little security (most machinery operated by one key across the entire range)
- Immobilisers / alarms not fitted as standard by the majority of manufacturers
- Plant equipment theft being ignored by police due to lack of specialist knowledge
- Little or no cross border enforcement by law enforcement agencies
- Minimal policing of UK ports for stolen vehicles or equipment leaving the country

The Metropolitan Police Service highlighted to the British Machinery Insurance Association (BMIA), who were bearing the majority of the loss of these thefts, that these syndicates could only be tackled by a concerted effort best done by the introduction of a specialist team to assist officers nationally. The suggestion was therefore put forward to create a funded unit, funded by both the insurers and from sales of the CESAR registration scheme. The top six insurers, Allianz Engineering, Aviva, HSB Engineering Insurance, NFU Mutual, RSA and Zurich agreed to the proposal and, consequently, PANIU began operations on the 1st October 2008.





















How does PANIU operate?

PANIU is based in London and is part of the Specialist Crime Directorate at New Scotland Yard. Staffed by two detectives and a researcher it also utilises the services of the Industry Liaison Officer and Detective Sergeant from the Stolen Vehicle Unit and the operational team. A Detective based at Southampton Docks is the first field intelligence officer to also be funded by the industry and has recently joined the team. It is anticipated the unit will continue to grow in strength as more funding becomes available from both the CESAR scheme and more insurers join the BMIA group who oversee the activities of PANIU.

PANIU's priorities are:

- 1. To assist the National Roads Policing officer and Borough officer with identification of stolen plant.
- 2. Intelligence-led proactive policing operations on identified criminal networks and identified offenders.
- 3. To collect and disseminate relevant intelligence nationally.
- 4. To maintain an accurate database of all relevant national machinery and equipment thefts and ensure data is correctly entered onto the PNC.
- 5. To work in partnership with auction sites, Internet sales sites and Port Authorities, conducting 'spot checks'.
- 6. Through the unit's Industry Liaison Officer, to give advice to manufacturers, owners and hirers on crime prevention tactics.
- 7. Raising awareness with Force Intelligence Units and local Police Boroughs through the units training officer, giving practical advice on Plant Identification.
- 8. Intelligence sharing with other Police Forces and partnership agencies such as Interpol, SOCA, DVLA, CPA, plant hirers etc.



PANIU is there to help both the industry and Police forces throughout the country. This ranges from the phone call from an officer requiring assistance in identifying a single piece of equipment to collating information and intelligence packages, handling covert intelligence sources and offering advice and assistance when dealing with major international criminal syndicates. As well as gathering, evaluating and disseminating intelligence, the unit also conducts proactive investigations using covert policing tactics, such as the deployment of undercover officers, decoy operations and surveillance.

PANIU officers are trained plant and agricultural machinery examiners and can examine 'suspect' equipment with a view to not only establishing the machines true identity, but also to prepare a supporting evidential package if required. The officers are trained in retro-fitting of the CESAR marking scheme and also qualified to operate and recover a large array of large and specialist industrial machinery.

PANIU also maintain an up-to-date Plant Machinery Identification Guide in both manual and DVD format, which is available to law enforcement agencies.

With the addition of other insurance companies joining the partnership, PANIU has been able to expand. A Regional Intelligence officer based at Southampton Docks has now joined the team and collates international movement of plant equipment and assists with recoveries from abroad and at dockside.



PANIU officers working in partnership with ACPO AVCIS officers Felixstowe March 2009 checking provenance of exports.



Stolen JCB bearing false identification recovered by PANIU officer Tilbury July 2009 waiting to be exported to Africa valued £30,000. Property recovered and returned without cost to Insurance company.

























First recovery for PANIU!. A Timber shredder stolen in London and recovered Poland, October 2008. Valued £200,000 and returned without recovery charges to insurance company.



PANIU officer searching for stolen property, Felixstowe September 2009. Mosa Generator stolen from Surrey value £3000 recovered without charge to loser.



PANIU recovery of stolen JCB 3CX, Iver, Bucks, June 2009. Value £25,000 and restored to owner prior to insurance claim with no loss of excess or any other additional charges.



Mccloskey trommel screener recovered by West Midlands Police as result of PANIU intelligence briefing April 2009 value £150,000. Recovered and restored free of charge to insurance company.



Recovered Bomag roller, stolen from Norwich that same morning. Roller recovered and returned to owner without cost.



Stolen JCB 803 recovered by PANIU Operation Lever Felixstowe Docks September 2009. Stolen four days prior. Valued £15,000 and recovered without loss of excess or recovery charges.



Stolen Cat Roller Felixstowe Docks August 2009 value £5000 Recovered and returned to owner without recovery fees.



International recoveries are now increasing now PANIU has become established. This machine was recovered in from international auction house in Rotterdam stolen from Yorkshire. Valued at £19,000 property was recovered to the Insurance Company without recovery fees.



This stolen John Deere 7930 tractor has been recovered in Poland and has now been returned to the losing insurance company. The crime network who exported it is now under investigation. Valued at £75,000 it has been returned without 'bounty' fees.























PANIU's officers are engaged in a variety of operations. Not only are they visiting auction houses, monitoring internet auction sites but they are frequently working alongside Ports Officers checking plant equipment destined for export. Given that a large percentage leaves our shores hidden in the back of curtainsider lorries PANIU regularly monitor and perform stop checks at all times of day and night at a variety of the UK ports.



Stolen plant stopped and recovered prior to export.



Hampshire officers with just three of the 62 telehandlers that were recovered in 2007/8 from Eastern Europe that had been stolen in the UK.

An example of a recent PANIU operational success

One of the biggest advantages of PANIU is that it can monitor criminal networks and assist police boroughs with intelligence and expertise. In October 2008, a suspect had been arrested in south east London on suspicion of handling stolen goods as a result of being found with stolen equipment in premises which he controlled. Very little evidence was available; however, unbeknown to the local officers dealing with him the suspect had been connected previously with stolen property recovered elsewhere. With intelligence and information, PANIU assisted with the case and obtained the necessary

evidence packages from the previous operations. When confronted with the overwhelming evidence against him the subject pleaded guilty. He was sentenced 3 ½ years imprisonment and served with a £780,000 confiscation order.



A small proportion of the stolen equipment recovered.

The PANIU database

Due to the difficulties Police have with recording specialist equipment and stolen plant on the Police National Computer (PNC), one of the first objectives of PANIU over the last year was the collection and cleansing of PNC data and the creation of a database which could be considered detailed and accurate.

For many years it was considered that the only accurate databases which maintained any interest in plant machinery were those who had a commercial interest in doing so, i.e. those who operated as 'bounty hunters', only finding equipment for return for a percentage of the value of that machine reaching, sometimes, as much as fifty percent of the value of the equipment.

Consequently, PANIU began populating their own database; collecting and cleansing data from all the forty-three Police Authorities as well as insurance company claim data and thefts reported directly by the industry to the unit.

Over the last year over 5,692 items of plant have been recorded stolen on the PANIU database. The average value for each piece of equipment is £10,000. Due to the immense number of reports PANIU only record equipment that is valued above £2000 and is of a size that is either self-driven or needs to be towed, such is its size.

The data is then passed to both the Serious Organised Crime Agency (SOCA) and Interpol, who circulate it to 187 countries around the World via the Interpol ASF system. The United Kingdom is the first country in the world to do this.

PANIU has, subsequently, become the international point of contact for investigations of plant theft for overseas Police enquiries. Being staffed by Police officers, PANIU is able to offer a 'Police to Police' service which allows full compliance with the National Intelligence Module intelligence and information systems with emphasis placed on tackling plant criminals and instigating intelligence-led operations.

When reviewing the 5692 reports placed on the database this year, specific analysis can be conducted. One such issue which has been highlighted is when comparing data recorded by police on our PNC systems with that from the insurance industry. As we receive large numbers of theft notifications from the insurers it was interesting to compare the difference between records held on the PNC against those claim reports we got from insurance companies.

Unfortunately, this highlighted a rather large discrepancy. When compared, less than 33% of all property shown as stolen in insurance claims forms had ever been reported correctly by police as stolen on the PNC. Therefore 67% of reports of stolen equipment made to police are therefore never circulated on PNC and those that are are frequently incorrect and need PANIU amending.





















The primary reason for this is that at the initial time of reporting a theft to Police, the owner/user does not furnish full and accurate identifying details for circulation on police databases. Unfortunately often a basic description is given of property stolen but no further details are then ever forwarded to Police.

PANIU is currently highlighting this and other problems to the National Police Improvement Agency (NPIA) so that changes can be implemented to assist officers to circulate plant correctly on PNC and more enquiries are made subsequently via follow up calls to the loser.

PANIU Database and the future

One of the largest challenges facing the new database was that, due to limitations on staff within the unit, the data could not be accessed 24 hours a day. However, after highlighting these disadvantages, the BMIA insurers approached the CESAR database operating company, Datatag, and from November 3rd 2009 the PANIU data will be available through the CESAR 24hr helpdesk. This will give Police and law enforcement agencies the ability to conduct both stolen equipment and CESAR registered equipment checks on a 24/7 basis.

Analysis of data

- Twelve items of equipment are stolen every day across the United Kingdom.
- Nearly 50% of plant equipment is stolen from just ten police force areas.
- A quarter of all plant theft occurs in just four police force areas (Metropolitan, Greater Manchester, Thames Valley and Avon & Somerset).
- A quarter of all thefts occur in the South East and Yorkshire/NE region.
- A quarter of all thefts concern the theft of a Mini or Compact Excavator.
- Nearly a fifth of all equipment stolen is manufactured by JCB.
- Seven manufacturers are ever present in each quarterly theft top ten (JCB, John Deere, Takeuchi, Kubota, Terex-Benford, Volvo & Massey Ferguson).
- Six different types of equipment are ever present in each quarterly theft top ten (Mini/Compact Excavator, Tractor, Dumper, Telescopic-Handler, Backhoe Excavator and Roller).
- 80% of thefts are made up of just ten different types of equipment.
- Tractors are the second most stolen piece of equipment.
- John Deere equipment records the biggest rise in thefts over the previous year.

- The five most stolen pieces of equipment are the JCB 3CX Backhoe Excavator, JCB 535 series
 Telescopic-Handler, Terex-Benford HD1000 Dumper and Kubota KX36 and Takeuchi TB125
 and TB016 Mini Excavators.
- The average recovery rate for non-CESAR secured equipment is 12%.
- The recovery rate for CESAR secured equipment is 28%.
- The total value of items recorded as stolen on the PANIU database stands at £50 million pounds.
- The PANIU database records the details of over 4,400 stolen pieces of equipment (reported Oct 2008 Sep 2009).
- 67% of insurance industry theft notifications to PANIU are not matched with a corresponding Police National Computer (PNC) circulation.

A fundamental element of PANIU's work is the production and distribution of its quarterly report, compiled which have identified theft hotspots and trends for police and industry partners. Data was sourced directly from the PNC Plant file and road registered file. The first quarterly report recorded 926 theft notifications. It was evident though that there were large amounts of equipment not circulated as stolen.

The following quarter coincided with the Christmas and New Year period and for that period the unit recorded 778 stolen items. The following period the figure stood at 980 reports. This later increase on the first reporting period was attributed to the fact that the unit was now receiving insurance company claim and theft data. The fourth reporting quarter (Jul-Sep 09) has recorded 1,094 theft notifications. The unit is confident that this increase is as of result of the supplementary notifications. It is therefore extremely likely that the fourth quarter's data provides the most accurate picture of equipment theft in the UK. The PANIU researcher is now also beginning to receive retrospective theft notifications from the insurance industry.

It is worth noting that it can often take some time for equipment to be circulated (if at all). Equipment not being circulated is often as a consequence of who actually has responsibility for reporting the theft to police. For example an item of equipment is stolen; is it the hirer, the hire company, the operator who finds it missing, the site foreman or the insurance company's job to report it? If everyone assumes its someone else's responsibility, you can quickly see how equipment fails to become circulated.

Analysis has been conducted only against the four sets of quarterly theft data. In total these four reports record 3,778 stolen items as opposed to the 5,692 actually recorded on the database. As previously noted, the difference is largely due to retrospective theft notifications reported to the unit following each published quarterly report.



















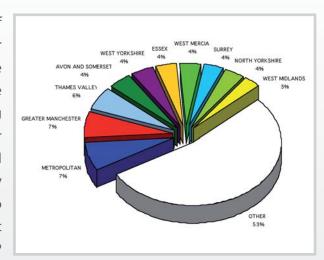




OCT-DEC 20	OCT-DEC 2008		1	JAN-MAR 2009			ì	APR-JUN 20	009			JUL-SEP 20	09	
POLICE FORCE	тот	%	RANK	POLICE FORCE	тот	%	RANK	POLICE FORCE	тот	%	RANK	POLICE FORCE	тот	%
AVON & SOMERSET	61	7%	1	GMP	67	9%	1	GMP	83	8%	1	METROPOLITAN POL	93	9%
METROPOLITAN POL	54	6%	2	THAMES VALLEY	58	7%	2	THAMES VALLEY	66	7%	2	GMP	81	7%
SURREY	45	5%	3	METROPOLITAN POL	51	7%	3	METROPOLITAN POL	64	7%	3	THAMES VALLEY	77	7%
GMP	45	5%	4	SURREY	41	5%	4	ESSEX	46	5%	4	WEST YORKSHIRE	71	6%
ESSEX	42	5%	5	AVON & SOMERSET	35	4%	5	SURREY	41	4%	5	ESSEX	46	4%
STRATHCLYDE	39	4%	6	WEST MIDLANDS	35	4%	6	KENT	38	4%	6	WEST MIDLANDS	45	4%
WEST MIDLANDS	38	4%	7	WEST MERCIA	27	3%	7	WEST YORKSHIRE	38	4%	7	AVON & SOMERSET	44	4%
KENT	35	4%	8	HAMPSHIRE	24	3%	8	WEST MERCIA	35	4%	8	NORTH YORKSHIRE	36	3%
SOUTH YORKSHIRE	32	3%	9	HERTFORDSHIRE	24	3%	9	AVON & SOMERSET	34	3%	9	SURREY	31	3%
LINCOLNSHIRE	32	3%	10	WEST YORKSHIRE	24	3%	10	WEST MIDLANDS	31	3%	10	CHESHIRE	30	3%
OTHER FORCE AREA	503	54%		OTHER FORCE AREA	392	50%		OTHER FORCE AREA	504	51%		OTHER FORCE AREA	540	49%
TOTAL	926	100%		TOTAL	778	100%		TOTAL	980	100%		TOTAL	1094	1009

Thefts by Police Force Area (4 Quarters)

Every day, approximately twelve items of equipment are reported stolen, with Greater Manchester Police (GMP), Metropolitan Police (MPS) and Thames Valley Police (TVP) occupying the top three positions for three of the four reporting periods. Whilst these positions are not unusual for large metropolitan forces it is extremely unusual for a force such as Thames Valley to be so highly placed. By head of population it is probably fair to state that TVP is currently the UK's equipment theft hotspot. In its defence it should be noted that TVP does 'police' one of the UK largest force areas.



Thefts by Force Area Oct 2008-Sept 2009

Displacement of crime has been very noticeable. After the first PANIU report was published in January 2009, certain Police forces concentrated efforts, especially with the Nationwide Operation Crassus. Avon and Somerset, South Yorkshire and Surrey Constabularies were Police forces who proactively engaged policing plant operators and transportation. As a result, subsequent thefts of machinery and farm equipment from these Police force areas reduced. It appears that those forces who did not engage then suffered the displacement crime.

Avon & Somerset (A&S) were the highest placed force for the first reporting period and Thames Valley Police did not feature in the top ten. Since topping the theft charts, A&S has shown significant reductions (due to known police activity) and are now placed further down the top ten.

Surrey has also gone from being a theft hotspot (third in 1st Q) dropping down a position each month to finally ninth for the last period. It is suspected that police activity in this force area over recent months has been largely responsible for displacement to TVP, as both forces' positions in the theft top ten have gone in opposite directions.

The same issue is evident with regard to South Yorkshire Police (SYP) & West Yorkshire Police (WYP) force areas. In the first reporting period SYP occupied ninth spot. WYP were not even placed in the top ten. In the first report South Yorkshire and Lincolnshire were identified as theft hotspots by PANIU. Since that report there has been significant police activity in this region targeting equipment thieves. As a consequence there has been clear and dramatic displacement into WYP. In every quarter since, WYP has risen steadily up the theft league where it now occupies fourth position.

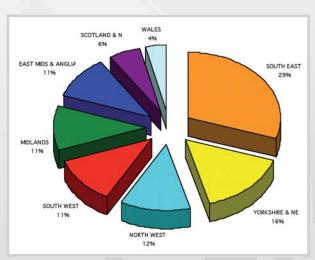
Both sets of displacement (Surrey to TVP and SYP to WYP) show what can be achieved following PANIU briefings. It also demonstrates the downside of forces not combining their resources to target what is level-two cross border crime.

West Midlands (WMP) is also a top ten ever-present force with Essex and WYP featuring in three out of four periods. West Mercia and Kent also feature in two of the four reporting periods.

OCT-DEC 20	800		JAN-MAR 2009			APR-JUN 20	009		JUL-SEP 20	JUL-SEP 2009			
REGIONAL CLUSTER	TOT	%	REGIONAL CLUSTER	TOT	%	 REGIONAL CLUSTER	TOT	%	REGIONAL CLUSTER	TOT	%		
SOUTH EAST	244	27%	SOUTH EAST	232	30%	SOUTH EAST	324	33%	SOUTH EAST	327	30%		
YORKSHIRE & NE	162	17%	YORKSHIRE & NE	89	11%	YORKSHIRE & NE	151	15%	YORKSHIRE & NE	197	189		
MIDLANDS	130	14%	MIDLANDS	86	11%	NORTH WEST	132	13%	NORTH WEST	140	139		
SOUTH WEST	123	13%	SOUTH WEST	90	12%	MIDLANDS	101	10%	EAST MIDS & ANGLIA	122	119		
NORTH WEST	90	10%	NORTH WEST	106	14%	EAST MIDS & ANGLIA	98	10%	SOUTH WEST	117	119		
EAST MIDS & ANGLIA	86	9%	EAST MIDS & ANGLIA	93	12%	SOUTH WEST	93	9%	MIDLANDS	97	9%		
SCOTLAND & NI	56	6%	SCOTLAND & NI	45	6%	SCOTLAND & NI	51	5%	SCOTLAND & NI	64	6%		
WALES	35	4%	WALES	37	5%	WALES	30	3%	WALES	30	3%		
TOTAL	926	100%	TOTAL	778	100%	TOTAL	980	100%		1094	100		

Thefts by Region Area (4 Quarters)

The South East is the UK's plant theft hotspot and despite the recession there appears to be a continuous road building and construction programme in the region. Allied with its proximity to many ports, it is somewhat inevitable that insecure equipment will be stolen. London in particular is home to a diverse population of Organised Criminal Networks (OCN's) intent on stealing equipment. These OCN's happily exploit the lack of level two policing to steal cross-border with many items destined ultimately for overseas. Eastern and Southern Europe have been identified as destinations of particular note this year.



Thefts by Region Oct 2008-Sept 2009

























OCT-DEC	2008			JAN-MAR 2	009			APR-JUN 2	009			JUL-SEP 2	009	
PLANT TYPE	тот	%	RANK	PLANT TYPE	тот	%	RANK	PLANT TYPE	тот	%	RANK	PLANT TYPE	тот	%
MINI/COMPACT EX	247	26%	1	MINI/COMPACT EX	212	27%	1	MINI/COMPACT EX	221	23%	1	MINI/COMPACT EX	256	23%
TRACTORS	129	14%	2	TRACTORS	106	14%	2	TRACTORS	133	14%	2	TRACTORS	159	15%
DUMPER	81	9%	3	DUMPER	80	10%	3	TELEHANDLER	96	10%	3	TELEHANDER	103	9%
TELEHANDLER	70	8%	4	TELEHANDLER	76	10%	4	RIDE ON MOWER	78	8%	4	GENERATORS	94	9%
BACKHOE EX	51	6%	5	BACKHOE EX	60	8%	5	GENERATORS	75	8%	5	COMPRESSOR	87	8%
ATTACHMENTS	45	5%	6	ROLLER	48	6%	6	DUMPER	67	7%	6	DUMPER	75	7%
FORKLIFT	45	5%	7	FORKLIFT	44	6%	7	BACKHOE EX	51	5%	7	BACKHOE EX	59	5%
ROLLER	28	3%	8	RIDE ON MOWER	22	3%	8	ROLLER	44	4%	8	RIDE ON MOWER	59	5%
COMPRESSOR	19	2%	9	EXCAVATOR	16	2%	9	FORKLIFT	40	4%	9	ROLLER	50	5%
EXCAVATOR	15	2%	10	COMPRESSOR	15	2%	10	EXCAVATORS	26	3%	10	ATTACHMENTS	38	3%
OTHER ITEMS	196	20%		OTHER ITEMS	99	13%		OTHER ITEMS	149	15%		OTHER ITEMS	114	10%
TOTAL	926	100%		TOTAL	778	100%		TOTAL	980	100%		TOTAL	1094	100%

OCT-DEC 2	800			JAN-MAR 2009			1	APR-JUN 2	009		1	JUL-SEP 2009		
MANUFACTURER	тот	%	RANK	MANUFACTURER	тот	%	RANK	MANUFACTURER	тот	%	RANK	MANUFACTURER	тот	%
JCB	210	23%	1	JCB	168	22%	1	JCB	188	19%	1	JCB	208	19%
TAKEUCHI	65	7%	2	TAKEUCHI	50	6%	2	JOHN DEERE	81	8%	2	JOHN DEERE	74	7%
KUBOTA	62	7%	3	BENFORD (TEREX)	49	6%	3	TAKEUCHI	65	7%	3	KUBOTA	59	5%
JOHN DEERE	47	5%	4	KUBOTA	48	6%	4	KUBOTA	62	6%	4	TAKEUCHI	57	5%
VOLVO	40	4%	5	JOHN DEERE	37	5%	5	BENFORD (TEREX)	40	4%	5	BOMAG	39	4%
MASSEY FERGUSON	30	3%	6	CATERPILLAR	30	4%	6	BOMAG	39	4%	6	BENFORD (TEREX)	39	4%
BENFORD (TEREX)	28	3%	7	THWAITES	30	4%	7	CATERPILLAR	31	3%	7	NEW HOLLAND	38	3%
MANITOU	27	3%	8	VOLVO	29	4%	8	MASSEY FERGUSON	25	3%	8	MASSEY FERGUSON	31	3%
THWAITES	26	3%	9	BOMAG	27	3%	9	THWAITES	24	2%	9	VOLVO	31	3%
NEW HOLLAND	18	2%	10	MASSEY FERGUSON	26	3%	10	VOLVO	23	2%	10	CATERPILLAR	28	3%
OTHER	373	40%		OTHER	284	37%		OTHER	402	41%		OTHER	490	44%
TOTAL	926	100%		TOTAL	778	100%		TOTAL	980	100%		TOTAL	1094	100%

Theft by Manufacturer & Type (4 Quarters)

Twenty per cent of equipment stolen in the UK relates to JCB products. The 3CX Backhoe Excavator is the UK's most stolen item (by model). It should, however, be noted that JCB's proportion of losses has dropped steadily from 23% in the first quarter to 19% in the fourth.

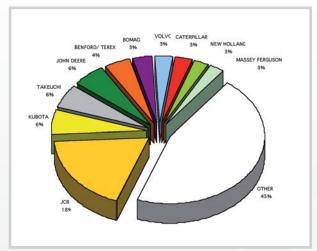
Another popular JCB product for thieves is the 535 series Telescopic Handler. Telehandlers are versatile items and their presence on building sites and farmyards increases every year. Significant numbers are stolen for export with Eastern Europe being a major destination.

John Deere products in the UK are mainly agricultural and their popularity has increased their theft position from fourth and fifth spot in the first and second quarters to occupying second spot for the third and fourth quarters. Demand from Eastern Europe is believed to be behind the increase in popularity for these items. Overall Tractors are the second most stolen item by equipment type occupying second spot throughout the whole all year.

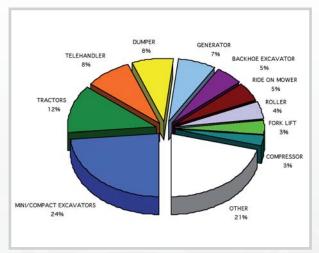
Takeuchi and Kubota products are largely in the mini excavator sector and they have over the year occupied positions in the theft top four. Kubota KX36 and Takeuchi TB016 and TB125 models are those most desired by thieves. Light and easily transportable with a 4x4 and a trailer, their thefts are

quickly and easily committed by both organised and opportunistic thieves alike. Also light and easily transportable and in the top five most stolen items is the Terex-Benford HD1000 dumper.

Just seven manufacturers are ever present in the four quarterly theft top ten; JCB, John Deere, Takeuchi, Kubota, Terex-Benford, Volvo and Massey Ferguson. Thwaites, Caterpillar, and Bomag are present for three of the four quarters and New Holland features in first and fourth quarter theft top ten.



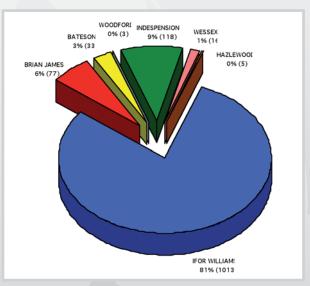
Thefts by Manufacturer Oct 08-Sep 09



Thefts by Equipment Type Oct 08 - Sep 09

Trailer theft

Although trailers are not plant items, they are inextricably linked to equipment and therefore equipment theft. PANIU maintain a separate database of non-HGV trailers. This database of trailers, records that in the previous twelve months 1265 of them were reported stolen, with over eighty per cent being manufactured by Ifor Williams. If trailer theft rates were applied to PANIU's database of stolen equipment, they would in fact account for twenty-five per cent of all stolen items.



Trailer Thefts Oct 08 — Sep 09























FINAL ANNUAL	TOTAL	*		FINAL ANNUAL	TOTAL'	*		FINAL ANNUAL	TOTAL*	*
PLANT TYPE	тот	%	RANK	POLICE FORCE	TOT	%	RANK	MANUFACTURER	TOT	%
MINI/COMPACT EX	1041	24%	1	METROPOLITAN POL	316	7%	1	JCB	818	18%
TRACTORS	544	12%	2	GMP	297	7%	2	KUBOTA	263	6%
TELEHANDLER	370	8%	3	THAMES VALLEY	268	6%	3	TAKEUCHI	260	6%
DUMPER	335	8%	4	AVON & SOMERSET	187	4%	4	JOHN DEERE	251	6%
GENERATOR	302	7%	5	WEST YORKSHIRE	186	4%	5	BENFORD (TEREX)	197	4%
BACKHOE EX	230	5%	6	ESSEX	173	4%	6	BOMAG	139	3%
RIDE ON MOWER	211	5%	7	WEST MERCIA	168	4%	7	VOLVO	137	3%
ROLLER	198	4%	8	SURREY	164	4%	8	CATERPILLAR	132	3%
FORK LIFT	151	3%	9	NORTH YORKSHIRE	160	4%	9	NEW HOLLAND	117	3%
COMPRESSOR	121	3%	10	WEST MIDLANDS	131	3%	10	MASSEY FERGUSON	114	3%
OTHER	924	21%		OTHER	2377	53%		OTHER	1999	45%
TOTAL	4427	100%		TOTAL	4427	100%		TOTAL	4427	100%

Final Oct 2008-Sep 2009 Figures*

Shown above are the theft top tens by equipment type, police force area and equipment manufacturer. These figures have been collated from the PANIU database final count of equipment theft notifications, rather than the combined count of quarterly figures.

The actual total of theft notifications from Oct 2008-Sep 2009 is 4,427 items of equipment without the 1265 reported trailer thefts. The combined total of stolen items derived from the quarterly reports is 3,778 items. The difference in the figures (649) is largely attributable to retrospective insurance theft notifications and crime allegations made to police outside of the quarterly counting period.

It should be noted that any graphs or tables within this document that bear the asterisk symbol are based on the final years count rather than the combined figure of each quarterly theft count.

When the trailer thefts are added to the equation the total thefts for the period October 2008 - September 2009 is 5692 items.

Criminal trends

Operations conducted by PANIU and Roads Policing officers throughout the country have highlighted a number of criminal trends.

Equipment is likely to be stolen and removed throughout the day with criminal gangs preferring to use low value 'end of commercial life' LGV's invariably with hiab-type cranes to facilitate the thefts. These



are chosen should the need to abandon them quickly arise.

However, a number of instances of entirely faked lorries and vans, painted at great expense, to represent large multi-national utility companies have been used by criminal networks to obtain entry to sites and remove equipment without suspicion as the photographs below



From the original theft, equipment is then often laid up in premises or yards (often without commercial landlords) to determine whether the plant is fitted with tracking equipment. If recovered at this stage the thief is unlikely to be traced. From then, the equipment is passed to the organised criminal syndicate. Hereon, the equipment is likely to be transferred to and transported in curtainsider and drop tail lorries and hidden amongst the normal commercial traffic on the UK road networks.

It is apparent that most of this equipment is being exported to other countries through UK ports, and, travelling amongst the normal freight, it poses very little risk of detection.

Export of genuine UK plant and agricultural machinery has also increased especially given the current Euro/Sterling exchange rate which makes UK plant attractive to European markets. Thus, it is easier to hide stolen plant amongst legitimate exports.



Ford Transit van recovered in south-east London in July 2009 that was responsible for a number of thefts throughout SE England. The vehicle livery was entirely fake and has never been owned by Hewden Plant.



Fake Clancy lorry painted to represent genuine vehicle. This vehicle has subsequently been recovered.



Home Office



















Current scams

Insurance companies, finance houses and plant hire companies have all been made aware of the increase that PANIU is seeing in relation to fraud and deception. Especially so over the last six months it appears that, maybe due to the current economic climate, the number of frauds has significantly increased.





had in its possession but now are claiming its loss; it could be property that the company has owned but has now either sold on or exported prior to claiming its theft. Arson claims are also on the increase. As a result PANIU records all machines seriously damaged by fire to protect from repeat claims on the same equipment with a number of different insurers.

In the finance sectors, PANIU is seeing an increasing number of criminal networks obtaining finance on high value machinery then exporting it and defaulting on payments. The unit has also seen nefarious means being used by companies wanting to raise finances to fund purchases of high value machinery. They secretly hire the same type of equipment from a hire company, change the identity plates and get the equipment viewed by the finance house in order to release the capital, against that machine. The equipment is then returned to its true identity and then returned to the original hire company. It's only some time later, after the company has disappeared, that the finance house realises that they have been duped. Unfortunately, investigating these claims is incredibly difficult as we are not aware as to whether genuine equipment has been exported or sold on or whether the equipment was a 'rung' machine and has never existed.

Plant hire companies will continue this year to see a rise in corporate hire fraud, especially as equipment becomes more secure. Plant hire companies must now protect themselves from the rogue hirer who provides false details and purchase order schemes must become the norm if hirers are to protect themselves from this type of fraud. PANIU has recorded numerous incidents whereby criminal networks have cloned the identity of genuine persons or utility companies and used these details when hiring equipment. Unfortunately, the provenance checks on the new client check out and equipment is released. Only some days later does it transpire that those details were false. PANIU recommends any new customer who is unknown to the hire company must be checked out thoroughly. Where the hirer is claiming to be from a utility company, PANIU suggests that machinery is not released without purchase order confirmation from Head Office.

The current economic downturn in the UK will continue to make the construction and agriculture sectors a challenging environment over the next few years and companies must become more diligent in order to protect themselves from theft.



Lack of corporate paintwork and CESAR markings made this mini excavator incredibly easy for the thief to disguise its true identity. Peeling off the company logos took minutes. PANIU finally identified the machine after considerable investigation. The loss of the machine valued at £24,000 cost the user in excess of £34,000 in compensation to the hire company.

Challenges and the future

Overcoming the theft of plant by corporate fraud

PANIU has been working with the Construction Plant Hire Association and the CESAR database to create a new Fraud Alert service for the industry. It is anticipated to be in service in early 2010 which will allow Plant Hire Companies, Finance Houses and Insurance companies to search the PANIU database for details of persons / companies that have been used in frauds and corporate hire thefts. This database will be accessed through PANIU which will allow companies to search details of persons/companies /addresses/ places and phone numbers used in fraud.



Stolen JCB 3CX hidden in line of genuine new vehicles awaiting to leave the UK for Africa.























Education of Police Officers regarding Plant theft

One of the challenges for PANIU is to highlight to police officers the effects of plant crime. A disadvantage of being such a small unit is the ability to provide National training for police in this specialist field. As a result from the 3rd November 2009 PANIU are to hold a series of National events in partnership with the Construction Equipment Association and the Agricultural Engineers Association together with CESAR. The first event will be to hold a National Conference at the JCB World Headquarters whereby police from around the country will be invited to attend to be taught how to deal with plant related matters.

This conference will then be followed by quarterly meetings each chaired by Regional chairpersons. These events will be held in the following regions, North East, North West, Midlands, South East, and South West. Later events for Northern Ireland and Scotland will follow.

Each meeting will be held at plant manufacturers premises as arranged by the CEA and AEA and will involve national intelligence meetings for police only followed by training sessions with the respective manufacturer regarding new products. In this way intelligence can be shared by officers throughout the country and officers given training on latest machines.

Lack of Specialist Equipment

PANIU together with other Police Services are currently equipping plant machinery with covert products for use in high crime areas. A variety of equipment will shortly become available to other Constabularies for use with decoy operations to be used to arrest organised criminal networks operating in their area.



Crime Prevention

The third PANIU objective, and some would say the most important, was to prevent the crime happening in the first place. To that end PANIU has been working with our partners designing out the crime.

This was done in four stages:

- 1. Firstly to promote the CESAR registration scheme. A scheme whereby plant equipment could be identified by any person without the need for detailed examinations or specialist equipment. (See separate chapter).
- 2. The partnership between PANIU with the British Machinery Insurance Association (BMIA) and the Thatcham Motor Insurance Research Centre to design standards for the future to encourage machinery manufacturers to manufacture secure products.
- 3. The partnership between PANIU and the Home Office and PTAG to create the HOSDB Plant Security Guidance Document.
- 4. The partnership with the CITS forum by working together to create the best practice documents for owners and operators site/farm security.

CESAR was the first joint project that involved the police working with the Construction industry. It was designed as a direct result of police highlighting the difficulties they faced when dealing with equipment theft.























The Police / PTAG Crime Strategies, CESAR and PANIU From Conception to Success

The Plant Theft Action Group (PTAG) was a Home Office advisory group who reported to the Government Vehicle Crime Reduction Strategy team. Its members are comprised from Construction and Utility companies, Equipment Manufacturers, the Police, leading Insurance Companies, Security Product Test Houses and other Industry bodies. PTAG have attempted to reduce the effect that organised criminal networks have on the Construction Industry.

In March 2006 the PTAG board met to discuss threats to the future construction sites given that the UK had just won the bid to host the Olympic Games in London in 2012. Time for a concerted effort to tackle plant crime was needed. A request to Police was made as to what was needed to increase the theft recovery rate of 5% and to prevent equipment being stolen.

In response, a report was submitted by the Metropolitan Police Service who highlighted the difficulties whilst investigating plant theft, which included lack of a dedicated national register, difficulties whilst identifying types and makes of plant machinery and a general lack of knowledge when it came to dealing with this particular avenue of vehicle crime.

The requirement was for an easy way for Police to be able to identify types and models of plant equipment from the roadside, a simple way for the normal street duty officer to identify a machine without the need to climb over the machine or specialist equipment to check its authenticity.

A proposal by the Metropolitan Police suggested that the introduction of a National registration and marking scheme supported by an accredited 24hr call centre would have a significant effect in reducing plant theft. This would allow all plant machinery to be marked and registered for easy identification.

A PTAG Working group then examined the possibilities of a National Plant Register and laid down an agreed set of criteria to which the industry could work with, which could be accepted and approved by both the Home Office and the Association of Chief Police Officers. This criteria was then published and tenders invited from specialist companies.

The Police stated that each machine be uniquely marked and then registered on a 24 hour database. In order to able to be approved by both the Home Office and Constabularies across the UK the company operating the database had to be accredited to a high degree and comply with ISO and loss prevention standards to a similar Government standard.

The criteria included:

- The company must operate a secure, compliant and experienced 24/7 call centre for Police enquiries.
- Each item of plant and machinery registered would be permanently fitted with at least two high visibility unique number plates.
- The ability to issue, produce and administer these secure unique tamper evident numbers plates.
- The company must be able to parallel register all appropriate machinery and equipment with the DVLA's Off Road Register (ORR).
- Company accreditation to ISO 9000:2000 and LPS 1224 standards, and ACPO and Home Office accreditation under the "Secured by Design" scheme.
- The marking and registration products must have been tested or approved by Thatcham or Sold Secure standards.
- The company must not operate any reward scheme or "bounty fee" basis for finding and identifying stolen equipment.
- The company must also operate an interactive website to allow instant on-line reporting of stolen equipment.
- Data to be held for Police/Home Office use only.

These criteria were necessarily strict as the Home Office and Police Service could not legally approve or endorse any company not meeting this specification.

PTAG decided to progress this idea and thus created a sub group from each of the industry's partners including manufacturer, plant hirers, utility companies, insurers etc. A tender document was then published within the open market for companies to tender. In excess of 20 high profile companies bid for the business. The company deemed most likely to be able to deliver the national scheme was unanimously voted by the PTAG board being Datatag ID ltd.

Datatag was awarded the contract in November 2006 and the Construction Equipment Association (CEA) took ownership of the scheme from the PTAG board.

Thus the Construction Industry now had an official database and handler appointed on behalf of the industry, rather than a number of previous self serving private database companies which were neither compliant and were only recording thefts only on a bounty reward scheme if recovered.

The scheme was named the Construction Equipment Security and Registration Scheme (CESAR) and the official launch was at the Construction Industry Theft Solutions conference at JCB HQ on January 23rd 2007 by Deputy Commissioner Tarique Ghaffur. The scheme went live on April 2nd 2007.























A machine registered with the CESAR database will be fitted with at least two tamper evident CESAR registration plates. These are affixed to equipment in prominent locations to be able to be seen at the roadside.

Each piece of equipment will have its unique identification details i.e. Vehicle Identification Number and engine numbers, make, model, colour, fuel type, vehicle category and registered keepers contact details entered onto the CESAR secure database.

At the time of registration CESAR also registers the full details of the plant machinery with the DVLA's Off Road Register if applicable. These vehicles will then subsequently receive a V5 Vehicle Registration Document from the DVLA. The purpose of this is so correct data is recorded at time of manufacture or source and as the DVLA and the PNC share datafields it is easier for police to correctly report an item stolen.

As well as each machine being overtly marked, they will also be covertly marked with CESAR/Datatag Security systems. These comprise identification technology including secure /uniquely coded micro chip embedded into the CESAR Registration Identification plate.

Secure radio frequency identification transponders (RFID tags) and microdots will also be permanently embedded elsewhere into the machine in items such as the machine operator's seat, the wiring loom and/or the cab and engine bay acoustic sound proofing etc making the system virtually impossible to remove.



(L-R; Chairman of PTAG Kevin Clancy, Ass. Comm Tariq Ghaffur, Chairman of Datatag Kevin Howells, Dep. Ch. Constable David Ainsworth)

CESAR Results – Successes and challenges

Since the scheme was launched in 2007 over 25,000 pieces of equipment have now been marked and CESAR is fast becoming the industry standard. The major plant manufacturers including JCB, Manitou, Merlo, Takeuchi, Doosan now fit CESAR as standard equipment on all UK machines.

In September 2009, the Agricultural Engineers Association (AEA) signed an agreement with the CEA to take CESAR on licence. It is anticipated that CESAR registration markings be fitted to all farm machinery as well as construction machinery and it is expected that most major agricultural machinery manufacturers will now start fitting CESAR from 2010.

The success rate for CESAR has been outstanding considering the short time since inception. Since April 2007 just 160 machines have been reported stolen that were CESAR registered. Given that this equipment is new, relatively high value and likely to be targeted especially by criminal networks this figure is surprisingly low.

The previous recovery rate for plant equipment that was not fitted with CESAR was widely reported to be less than 5%. The average recovery rate for other vehicles i.e. cars motorcycles lorries etc is approximately 50%.

Of the 160 CESAR registered machines that have been stolen 45 have been recovered by police. The recovery rate is therefore 28.1%, a significant difference. Whilst this figure is still low PANIU hope that as more and more equipment becomes fitted by the manufacturer as standard equipment, knowledge of the scheme will become widespread not only by police but the industry as a whole.



Two stolen JCB telehandlers valued £80,000 recovered prior to export easily identified by police officers as a result of CESAR markings in Hertfordshire in July 2009. Both machines returned to owners without cost.

The ease of identification makes the system so easy to highlight. Not only is equipment being recovered by Police but also by ordinary members of the public with no experience of plant equipment whatsoever. In late September 2009, a man walking in fields near Bradford came across a JCB telehandler parked in the corner of a field. Somewhat suspicious, he saw the CESAR registration plate and contacted Datatag. The CESAR database confirmed that the machine had been stolen a few weeks earlier. Police were informed and the machine recovered from its hiding place. The machine valued at £40,000 is now returned to the losing Insurance company with no recovery fees owing.























PANIU anticipate that, within a few years, the majority of plant equipment in the UK will be fitted with CESAR registration as standard. It is anticipated that machines without CESAR registration plates will actually attract the attention of police similar to a normal motor vehicle today driving down the road without any registration plates.

Criticism has also been made from certain circles against the CESAR tamperproof registration plates. Once removed it was claimed the machine lost its identity and would not be recovered by police. An example disproving this can easily be highlighted; in September 2009 in North London a nearly new JCB 8012 mini excavator was seen by police in suspicious circumstances. Realising a JCB machine of this age should have been fitted with CESAR registration plates, the officer then checked the VIN/PIN plates and saw they had been obliterated and the machine was seized on suspicion of being stolen. At Police premises, upon closer examination, it was recognized that the CESAR registration marks had been ground off. The machine was then scanned for its radio frequency identification tags and quickly a positive recognition was found. The CESAR database was consulted and within seconds the equipment was identified as being stolen from South London in November the previous year. The plant valued £12,000 was returned to its owner without cost.



Stolen JCB Telehandler value £40,000 found in Bradford October 2009 by member of the public whilst out walking .Finder contacted CESAR database and vehicle recovered without cost to the insurance company.



Another stolen CESAR registered telehandler recovery recovered by police prior to export.



Stolen JCB 8012 found North London September 2009. Note the scratched triangular panel behind door where CESAR registration plate ground off. Officer instantly identified equipment using RFID tags hidden within equipment. Machine valued at £12,000 returned to owner without cost.



"Stolen on a Sunday, found on Wednesday, back working on the Thursday". Another new dumper due for export to Jamaica recovered by PANIU. All corporate identity removed but found by shipper using the CESAR registration number to determine its theft.



JCB stolen in the UK tracked by Enigma tracking services to Dubai. CESAR registration markings removed but vehicle identified to Dubai authorities by covert rfid tags hidden in machine. Owner refunded the value of Vehicle with no 'finders fee' recovery charges.



If you saw this as a police officer, ports officer, or auction house what conclusion would you draw? Officers around the country are now becoming increasingly aware of CESAR and how certain models should have one. Like a motor car driving down the road without a number plate, it is anticipated that over the next few years, as more and more equipment is standard fitted with CESAR, any equipment seen without any such markings will draw more attention.

PANIU are now in processes of training UK police and highlighting the benefits of CESAR registration. There appears significant interest throughout Europe to also adopt the scheme. Both Interpol and Europol have received presentations and the European Rental Association, the association of plant hirers throughout Europe, have created a security committee purely to look at the ideas of implementing CESAR across mainland Europe.

It is anticipated over the next two years that CESAR registered property will become the norm with the majority of significant manufacturers fitting CESAR registration as standard. Since September 2009, the Agricultural Engineers Association has taken responsibility for CESAR within the Agricultural market, which will create drive and enthusiasm for secure equipment in that market.

As a result, a new CESAR registration marking has been designed specifically for smaller equipment such as groundcare machines, quad bikes and high value smaller equipment such as breakers.

Insurers have now mandated CESAR fitment as part of the new Thatcham 5 star security rating.

For more information please visit the website www.cesarscheme.org

CESAR Police Information Poster





CESAR Polish Police Information Poster























To prevent crime happening in the first place must be the desired position for all those in the plant market.

CESAR registration may be a deterrent, but it will not physically stop the theft of the equipment. It is a highly effective registration and identification system that allows equipment to be identified easily. Thus, it should be regarded as the minimum and most basic security feature.

To prevent the theft actually taking place means that equipment needs to be designed with security incorporated within the equipment. Unique keys, immobilisers, hydraulic locks, crank inhibitors etc., all need to be considered to stop the equipment being started or moved.

To that effect PANIU has formed a close partnership with the British Machinery Insurance Association and the Thatcham Vehicle Security Steering Group for Plant.

Together over the last year security standards have been written with which to encourage manufacturers to make equipment that is more resistant to theft. A series of standards have been agreed which has created the Thatcham 5 star rating system.

It is anticipated that from 2010 equipment manufacturers will be encouraged to engage with Thatcham to produce safer, 5 star rated, machines. The 5 stars are shown listed below with a star awarded for each category that the equipment is fitted.

The insurance industry will provide cheaper premiums and a reduction in insurance excess payments if machines have passed a security rating test. It is hoped that for Category A and B rated equipment, that a minimum of three star security ratings will become the norm.

	Stars	Functionality	Requirement
Mandatory	*	Vehicle Identification Number Registration Covert Markings	CESAR
Mandatory	*	Keys – a unique key for each vehicle. (This may be the immobiliser key)	Thatcham NVSA Accredited
Mandatory	*	Immobilisation	Thatcham Cat P2 Accredited
Optional	*	Perimeter security Cabs with lockable doors and windows;	Thatcham NVSA Accredited
Optional	*	After Theft System for Vehicle Recovery May include additional functionality such as	Thatcham Cat P5 Accredited

The recommended minimum star rating for standard fit security is below:

Category A & B Plant

Mandatory	*	Vehicle Identification Number Registration Covert Markings	CESAR
Mandatory	*	Keys – a unique key for each vehicle. (This may be the immobiliser key)	Thatcham NVSA Accredited
Mandatory	*	Immobilisation	Thatcham Cat P2 Accredited

Category C Plant

Mandatory ★	Vehicle Identification Number Registration Covert Markings	CESAR
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Thus any machine rated as an A/B category would require 3 stars as minimum security prior to sale. A Category C product i.e. a trailered compressor would only require the one star being CESAR. For more information on the Thatcham 5 star rating system please go to the website www.thatcham.org

PANIU/ Home Office Advice

PANIU officers have recently assisted the Home Office with the new security advice document titled 'Security Guidance for Agricultural and Construction Plant' which is a publication to assist manufacturers, industry and police prevent plant theft. It lists advice and best practice for the industry on protecting plant equipment.

A full version can be obtained at http://scienceandresearch.homeoffice.gov.uk/hosdb/publications/road-policing-publications or homeoffice.gov.uk

PANIU / CITS Construction Industry Theft Solutions Advice

PANIU has an officer which sits on the Board of Directors for the non profit making Construction Industry Theft Solutions. This forum is made up of a number of partners from the Police, the construction industry, the plant hirers, Thatcham, the insurance and the Finance industry who together have got together to create a best practice advice document.

This document is reproduced below for the use of both the construction and farming industry for advice in protecting both sites and equipment. It is also for use for Police crime reduction officers to assist giving advice regarding protection of sites and equipment.





















Construction Industry Theft Solutions Code of Practice

The construction industry suffers annual theft losses in excess of £500 million. Items of plant and equipment in daily use on sites are becoming increasingly more valuable and complex. Although the primary target of thieves is often plant, it is not uncommon for other materials to be stolen.

The potential for loss due to intruders or malicious persons will vary from location to location or type of development. Remote locations, poor perimeter security, presence of high value plant and equipment in the open all increase the probability of loss.

A risk assessment should be made of the location in terms of the ease of access to the plant / equipment. In most instances it will be a sensible and reasonable action to ensure that access to a site of operation is restricted and plant and equipment is equipped with appropriate measures to deter and prevent theft.

This Code of Practice has been developed to assist industry in undertaking a theft risk assessment, where words appear in brackets further information is available within this document and a suggested Methodology and Worked example have also been provided.

The physical location of the plant and equipment is of primary importance. To this end CITS have identified the following four Areas where plant and equipment may be located:

- Depot, In Transit, Controlled Construction Sites and Open/Exposed Sites and provided a framework to allow consideration of the:
- Physical Electronic and Human measures that can be deployed to deter and prevent theft.

Regardless of the outcome of any risk assessment process CITS strongly recommend that:

- 1. all driven [Category A and B] plant is either:
 - a. purchased new with a minimum 3 Star Thatcham Security Rating, or
 - b. retro-fitted with Thatcham approved vehicle identification registration, numbering and covert marking system* and Category P2/P3 Thatcham approved Immobilisers

- 2. all other items of non-driven Category C to F plant and equipment are where feasible protected by the measures detailed in 1b above or other suitable and sensible devices/measures which meet the most appropriate industry standards (e.g. those created by the British Standards Institute, The National Security Inspectorate and other recognised and trusted organizations in confirmation of their quality and integrity.
- 3. where plant is to be hired out, sensible and practical hiring procedures for authentication of customers are in force and audited at regular intervals in accordance with specific guidance provided by and available from The Construction Plant-hire Association.

"Should you not be able to comply with the above recommendation CITS would suggest that you contact your plant insurer to ensure that any security device or measure you have or intend to install is satisfactory to them"?

*CESAR Plant Registration Scheme

The following

Definitions of the Four Areas where Plant and Equipment may be located

Depot

A place where plant and equipment is securely stored when not in use or on hire.

In transit

A period of transportation between depots, controlled construction site or open/exposed sites.

Controlled Construction Site

An area in which construction operations are taking place with

- Secured perimeter
- Active access control
- · Secured outside of normal working hours.

Open/Exposed/Site

Where plant and equipment is present in an unrestricted area open to the public, e.g.

- Road side utilities
- Rail side
- Road side construction and maintenance sites





















Methodology to help assess the current risk protections for your plant and equipment

Example

A small builder with own plant storage yard which is left unattended at night who owns two mobile diggers and occasionally hires plant in.

Location		Resp	onse	
		Physical	Electronic	Human
Depot	CESAR Scheme Registration and Thatcham approved immobilisation for all driven Category A and B items	2.3m high perimeter fence — palisade or welded mesh. Single or double leaf gates of steel construction, anti lift hinges & fitted closed shackle security padlock used out of working hours.	NSI standard alarm with yard perimeter detection or monitored CCTV for yard	Lock up routine. Site visits out of hours Alarm monitoring. Response to alarm activation
Transit		Chains, padlocks 'Protective' parking Secure overnight parking area	Telemetric tracking system 'Geo-fence' system	Ensure plant is attended whenever possible. Plant not left at dubious unoccupied sites Key security / removal
Controlled Site		2.3m high perimeter fence — hoarding, palisade or welded mesh. Single or double leaf gates of steel construction, anti lift hinges & fitted closed shackle security padlock out of working hours. Steel security containers for smaller items & attachments Plant parked in secure area Protective parking	NSI standard alarm with perimeter detection or monitored CCTV for site Access control for pedestrians & deliveries	Lock up routine. Security guards or mobile patrols. Site visits out of hours Alarm monitoring. Response to alarm activation
Open Site		As close as possible to Controlled Site	Monitored alarm with perimeter detection or monitored CCTV for site	As close as possible to Controlled Site depending on size of open site

Standards Recommended for consideration as Control Measures

Depots

Access to the Depot should be controlled and the level and resistance of those controls will vary according to the level of risk associated with the area that the Depot is located in, the value of the assets kept there and the nature of those assets in terms of their relative portability. A combination of the following, Theft Prevention Measures should be considered:

- · Physical Theft Prevention Measures
- Electronic Theft Prevention Measures
- Human Theft Prevention Measures

Physical

Site

- Locks BS standard (padlocks to be security grade heavy duty closed shackle etc)
- Padlocking bolts
- Fencing (preferably palisade at least 2.3m high)
- · Razor wire
- · Gating to the same height as the walls
- Grills
- · Walls (at least 2.3m height)
- Chains (heavy duty)
- Bollards
- Containers
- Depot buildings
- Anti ram raid measures (including concrete blocks, high kerbs etc)
- · Anti climb measurers

Item

- Key security
- Chain / padlock small plant items together (or to a secure structure)
- Fit cab screens to plant
- Plant and machinery painted in corporate colors

Electronic

Site

- NSI/SSAIB Accredited alarms (to grade 3 standard)
- Remotely monitored CCTV (BS8418)
- Movement detectors linked to floodlighting
- Access control

Item

- CESAR Registration of all driven plant and machinery
- Immobiliser to Thatcham Category P2 / P3 standard

Human

- Protective positioning / parking measures
- Security Guards (NSI / Insurance Company approved)
- Supervision
- Inspection and audit responsibilities
- Event response























When plant & machinery is moved, there may be times when it is necessary to leave the property unattended and clearly this may create an opportunity for local thieves to take advantage of a transporter who is unfamiliar with the area and its risks. It is therefore important to consider the following Theft Prevention Measures to minimise this risk:

Standards Recommended for consideration as Control Measures

- Physical Theft Prevention Measures
- Electronic Theft Prevention Measures
- Human Theft Prevention Measures

Physical

Site

- Pre-plan secure parking areas for any stop-over's on route
- Ensure security of the destination during any protracted delivery period

Item

- Mechanical immobilisers
- Locks
- Chains
- · Batteries & Fuses removed
- Blocking high value items with low value ones
- Cab screens
- · Chain and padlock small items together

Electronic

Site

 See "Depot" for assessing appropriate electronic measures associated with secure parking or secure destinations

Item

- CESAR Registration of all driven plant and machinery
- Immobiliser to Thatcham Category P2 / P3 standard
- Attack alarms with central station monitoring
- Thatcham Category P5 alarm telemetric tracking system

Human

- · Monitoring and supervision
- Bona fide Haulier
- Event response
- Effective route plan

Standards Recommended for consideration as Control Measures

Construction Sites

Use of plant and machinery on Construction Sites may propose an enhanced theft risk, especially where the owner of the property is not in direct control of access to the site. The risk of theft should be properly assessed relative to the controls in place and if required additional Theft Prevention Measures applied:

- · Physical Theft Prevention Measures
- Electronic Theft Prevention Measures
- Human Theft Prevention Measures

Physical

Site

As well as the measures suggested for "Depots" the following should be considered:

- Inner compounds / zones should be established for parking up or storage when plant and machinery is not in use
- Temporary barriers (e.g. block material)
- Natural barriers offered by the sites position (e.g. rivers, canals and other land features)

Item

The level of protective measures that are sensible will vary dependent on how secure and robust the site security and control procedures are – please see "Depot" and "Open / Exposed Sites" for consideration of further measures.

Electronic

Site

- On site monitored CCTV systems linked to appropriate flood lighting
- Remotely monitored CCTV systems to BS8418 standard
- Portable detector / intruder alarm systems (with on site or central station monitoring)

Item

- CESAR Registration of all driven plant and machinery
- Immobiliser to Thatcham Category P2 / P3 standard
- Thatcham Category P5 telemetric tracking system

Human

The level of protective measures that are sensible will vary dependent on how secure and robust the site security and control procedures are – please see "Open / Exposed Sites" and Depot for consideration of further measures.

























Open/Exposed Sites

Where there is a risk that the plant or machinery will be left unattended on a site with no formalised access controls (i.e. open to the public), item based protections are critical. Even where a compound can be established with perimeter protection item based Theft Prevention Measures are considered critical to minimising the potential for theft:

- Physical Theft Prevention Measures
- Electronic Theft Prevention Measures
- Human Theft Prevention Measures

Physical

Site

Where possible the measures suggested for "Construction Sites" should be considered. If this is not feasible the following are sensible measures

- Consider short term rental of a nearby secure premises
- Maximise temporary perimeter arrangements
- Install temporary compounds or barriers to restrict easy access to plant and machinery

Item

- Plant and machinery painted in corporate
- · Locate plant within view of guards or CCTV system
- Key security locked safe / metal key cabinet or taken off site
- Secure small and portable items overnight in a locked container or remove from site to secure location
- Chain / padlock small plant items together (or to a secure structure)
- Fit cab screens to plant
- Block high value items in with smaller items
- CESAR Registration of all plant and machinery

Electronic

Site

 Portable or fixed CCTV / alarm system monitored offsite and linked to appropriate flood lighting

Item

- CESAR Registration of all driven plant and machinery
- Immobiliser to Thatcham Category P2 / P3 standard
- Thatcham Category P5 telemetric tracking system

Human

- Event response
- Regular reviews and changes to the security arrangements as site circumstances change
- Protective parking
- Staff incentives and penalties for good security practices on site
- Security focus in site management

Who are Thatcham and What do they do?

The Motor Insurance Repair Research Centre or Thatcham as they are widely known was established in 1969 by British Insurers. The Centre is independently operated with a Board of Directors drawn from amongst the 31 insurer members who fund their work.

Thatcham is a not-for-profit organisation. Their main aim is to carry out research targeted at containing or reducing the cost of motor insurance claims, whilst maintaining safety and quality standards. Collaboration with vehicle and security equipment manufacturers has brought about a major reduction in UK vehicle (mainly car) crime. The Thatcham security testing regime is considered to be one of the most rigorous in the world and acts as a model for crime prevention efforts internationally.

At the request of the newly founded Police Plant & Agricultural National Intelligence Unit (PANIU) and in conjunction with CITS members and the main UK insurers of plant and agricultural equipment, Thatcham, under the adopted title of "The Vehicle Security Steering Group-Plant (VSSG- P) have developed a 5 star security assessment and rating system for security devices/systems which can be fitted to plant at the time of manufacture or aftermarket retro-fitted thereafter and which are fully tested and proven to resist theft of construction and agricultural plant. Currently this work is based primarily around Category A and B plant. The Scheme awards stars for individual security features as detailed in the chart below:

*5 Star Rating	1st ★	Vehicle identification & registration (CESAR Scheme)	*[3 Star Rating]
	2nd ★	Unique Key	
	3rd ★	Category P2 / P3 Immobilisation device	
	4th ★	Peripheral security (cab / window locks)	
	5th ★	Category P5 After-theft tracking systems	

Thatcham are currently undertaking a significant amount of work for plant manufacturers who are now starting to actively trade on security via building in their own security features at the time of manufacture. As new theft methods and trends are identified Thatcham VSSG-P will develop extra stars for effective countermeasures.

Full details of the Thatcham VSSG-P initiative are available on their website: http://www.thatcham.org/security/index.jsp?page=974























What are the Plant Categories for?

The following chart has been extracted from the Home Office Construction & Agricultural and Plant Security Guidance Document 50/07. The Categories are used by Thatcham and plant Insurers to classify and develop security and underwriting initiatives suitable to the unique features of each group.

Category	Description		
А	Driven Equipment comprising Large Tracked and Wheeled Machines greater than 3 tonnes		
В	Driven Equipment comprising Compact and Smaller Driven Equipment less than 3 tonnes		
С	Non-Driven Equipment and Towed Plant with Axle		
D	Non Driven Mobile/Portable Attachments and Equipment		
Е	Power Tools Power Tools		
F	Non-Powered items		

Examples of best practice in securing equipment



Trailer locks and tow hitch locks preventing removal.



When leaving equipment overnight on sites secure compressors under boom arms of mini excavators then use immobilisers or hydraulic locks to prevent removal.



If leaving mini excavators remove from trailer, slew cab and extend boom arms. Use immobilisers and/or hydraulic locks. This makes the machine impossible to remove or lift away. Note the use of CESAR registration and corporate livery. Criminals dislike stealing this type of equipment due to expense of repainting equipment.



Secure equipment together preventing either being lifted or dragged away. Use immobilisers and/or hydraulic locks with chain and padlocks.



For attachments and buckets weld plant numbers and company logos/ details to aid identification.



Secure trailers and equipment to each other or to road furniture. Lift all chains from ground to prevent easy attacks and purchase for cutters/bolt croppers. Invest in good quality approved chains and padlocks.



Make the thiefs life harder. Equipment removed from trailer and boom arms extended and immobilisers and /or hydraulic locks set preventing ease of theft.



Boom arms and legs extended and immobilisers and/or hydraulic locks set. This telehandler now becomes nearly impossible to remove quickly by theft.

And how not to do it!



This machine will be stolen in a number of seconds.. not locked and no hitch lock installed. An expensive mistake.



Obvious but you would be surprised how many people will do it! You don't leave your keys in the transit van but this scene is a familiar sight.























Summary Page

I am extremely proud to be the head of the Plant and Agricultural National Intelligence Unit and can say without reservation that this last year has been exceptional, both in our fight against the plant and machinery thief and with the excellent work that has taken place with our industry partners.

This year has seen an unprecedented number of arrests in connection with theft of plant and a number of criminal networks successfully disrupted. It has also been an exceptional year for the amount of stolen machinery that we have seized, identified and returned to rightful owners. Plant theft recoveries have leapt from 5% to almost 30% with CESAR-marked machinery and for non-marked equipment, recovery has also risen to 12%, proving that these new partnerships are indeed starting to pay dividends. I look forward to the day when every piece of plant and agricultural machinery is CESAR-marked and theft and down time in the industry is a thing of the past. This may be a bit like a turkey voting for Christmas but, after all, it's what we are all working towards.

And the message is really getting out to those people that matter; police nationally are becoming more aware of the issues surrounding plant theft and the repercussions on business, and those within the industry know more now than they did a year ago about how they can protect themselves and their stock from unscrupulous thieves. And all this in just one year! PANIU is making real headway and our second year will be even more fruitful; established police points of contacts (SPOC's) across the UK will liaise with local industry and together will reduce machinery theft and arrest and charge those engaged in local nefarious activities; they will recover equipment through effective partnerships, advocate the benefits of CESAR, collate and disseminate intelligence and reverse the theory that this type of crime is low-risk and high-gain.

The future is indeed bright; the National Roads Policing Operation Crassus will continue into 2010 targeting plant machinery thieves; new national Intelligence meetings will be held across the country; the formation of new Rural Crime Policing Units to protect the farming community; the National PANIU Police training courses; the formation of the new International PANIU/BMIA/CESAR hotline allowing 24-hour enquiries on suspected stolen machinery and, lastly, the formation of the new PANIU/CESAR/Construction Plant Hire Association fraud databases to protect the plant hire industry and help prevent fraud.

I would like to end by thanking everyone that has been involved with us in helping to reduce crime in the industry and in particular Datatag, for their commitment, expertise, hard work and dedicated support and I look forward to another successful year.

Will Young - Detective Inspector Head of the Plant and Agricultural National Intelligence Unit.



A landmark in theft deterrence now in the agricultural market

Unbelievably, over £1 million of UK Agricultural & Construction equipment is stolen each week with only 5% ever recovered*.

In a major security initiative aimed at reducing this massive problem, the CESAR Scheme - **The Official Security and Registration Scheme**, has been designed by Police and Security experts to deter theft of equipment, correctly identify stolen & recovered machinery and to help the Police gain a prosecution.

The Official CESAR Scheme combines a secure and accredited 24/7 call centre database with state of the art Datatag ID technology and is fast becoming the industry standard with local authorities, leading contractors, hire companies, police, insurers and finance companies. This important scheme is now available for the Agricultural market and is promoted by the Agricultural Engineers Association (AEA) and the Construction Equipment Association (CEA) and is powered by Datatag ID Ltd with support from:

- Major Equipment Manufacturers and Official Importers
- The Home Office
- The Police
- Plant Hire Companies & Industry Associations
- Leading Agricultural Insurers offering substantial discounts

CESAR equipped Machinery is approximately 4¹ times less likely to be stolen.

CESAR equipped Machinery is approximately 6³ times more likely to be recovered.

1. Compared with standard IMIA⁽²⁾ data 2. The International Association of Engineering Insurers 3. Source PANIU







Call 08 450 700 440 | www.cesarscheme.org enquiries@cesarscheme.org



































Unbelievably - £1 million of UK equipment is stolen every week and only 5% ever recovered





PROTECT YOUR EQUIPMENT NOW! Call 08 450 700 440 | www.cesarscheme.org







PANIU is a specialist police unit dedicated to reducing plant theft in association with:

Supported by Home Office



Chief Police Officers













Construction Plant hirers Association









Plant Theft Action Group

It would not have been possible without the assistance and funding help specifically from:







HSB Engineering Insurance Limited











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