

# Theft of Construction Plant & Equipment

IMIA Moscow 2005

# The Working Group

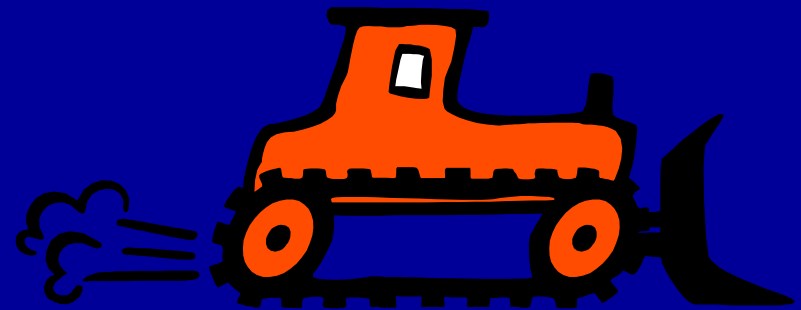
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# Theft of Construction Plant & Equipment

- What is stolen
- Cost of plant theft
- Why plant is stolen
- How theft risk can be managed
- What plant operators can do
- Actions by insurers



# What is Stolen - some examples

Excavators esp. mini-excavators



Backhoe  
Loaders



Telehandlers



Dumpers



# What is Stolen - more examples

Rollers



Compressors



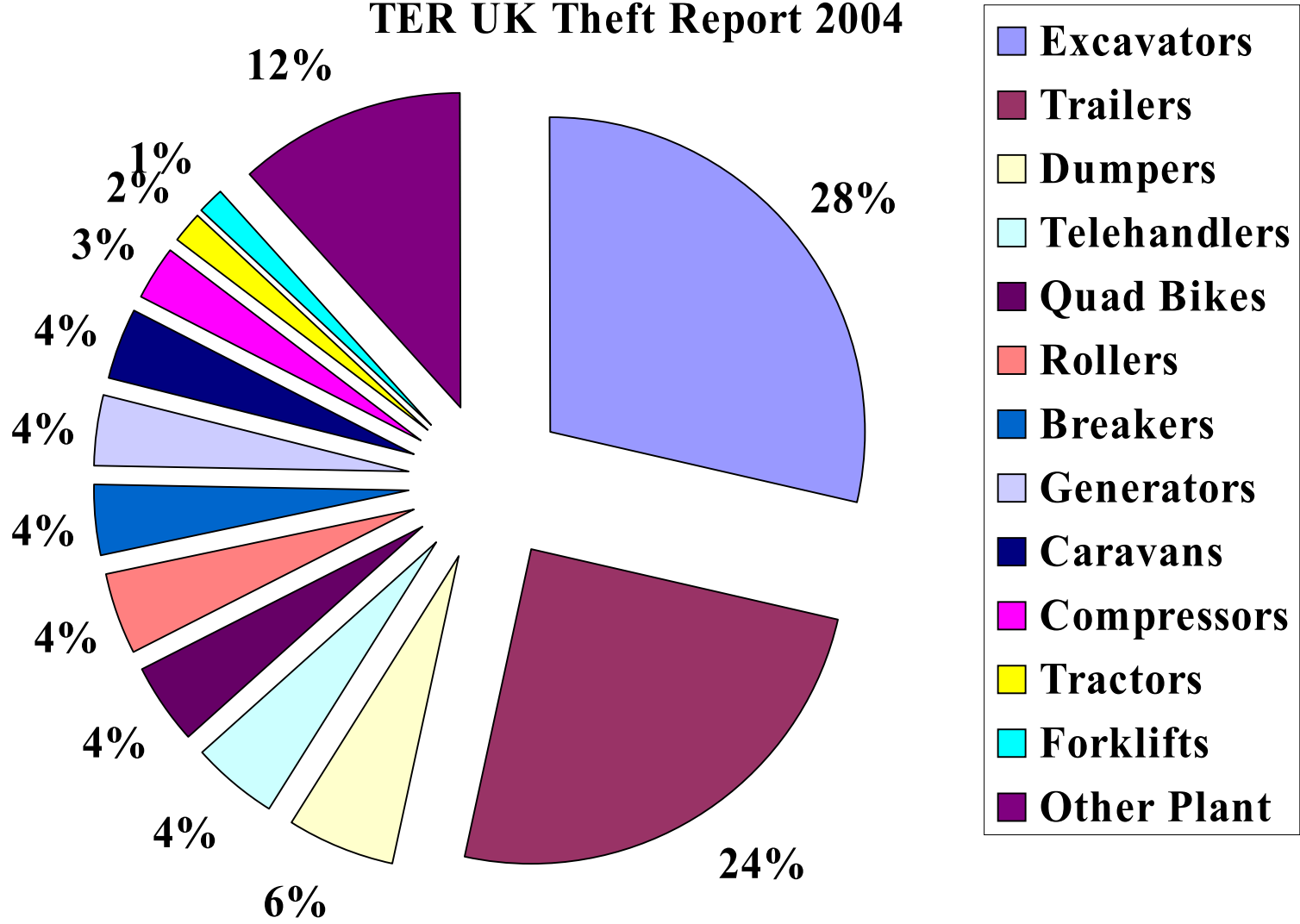
Generators



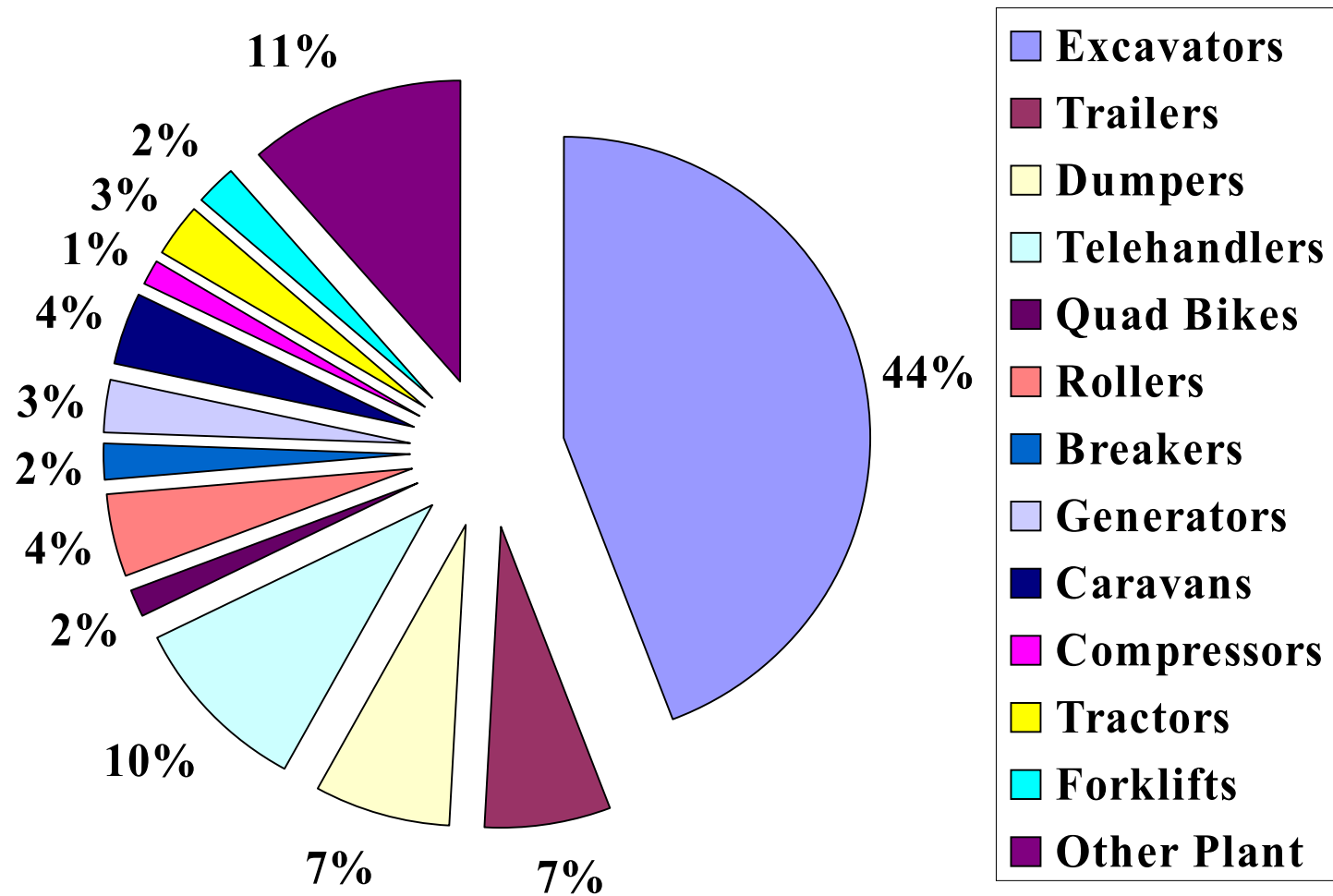
Compactors



### Types of Plant Stolen (Numbers) TER UK Theft Report 2004



## Types of Plant Stolen (Value) TER UK Theft Report 2004



# The Cost of Plant Theft

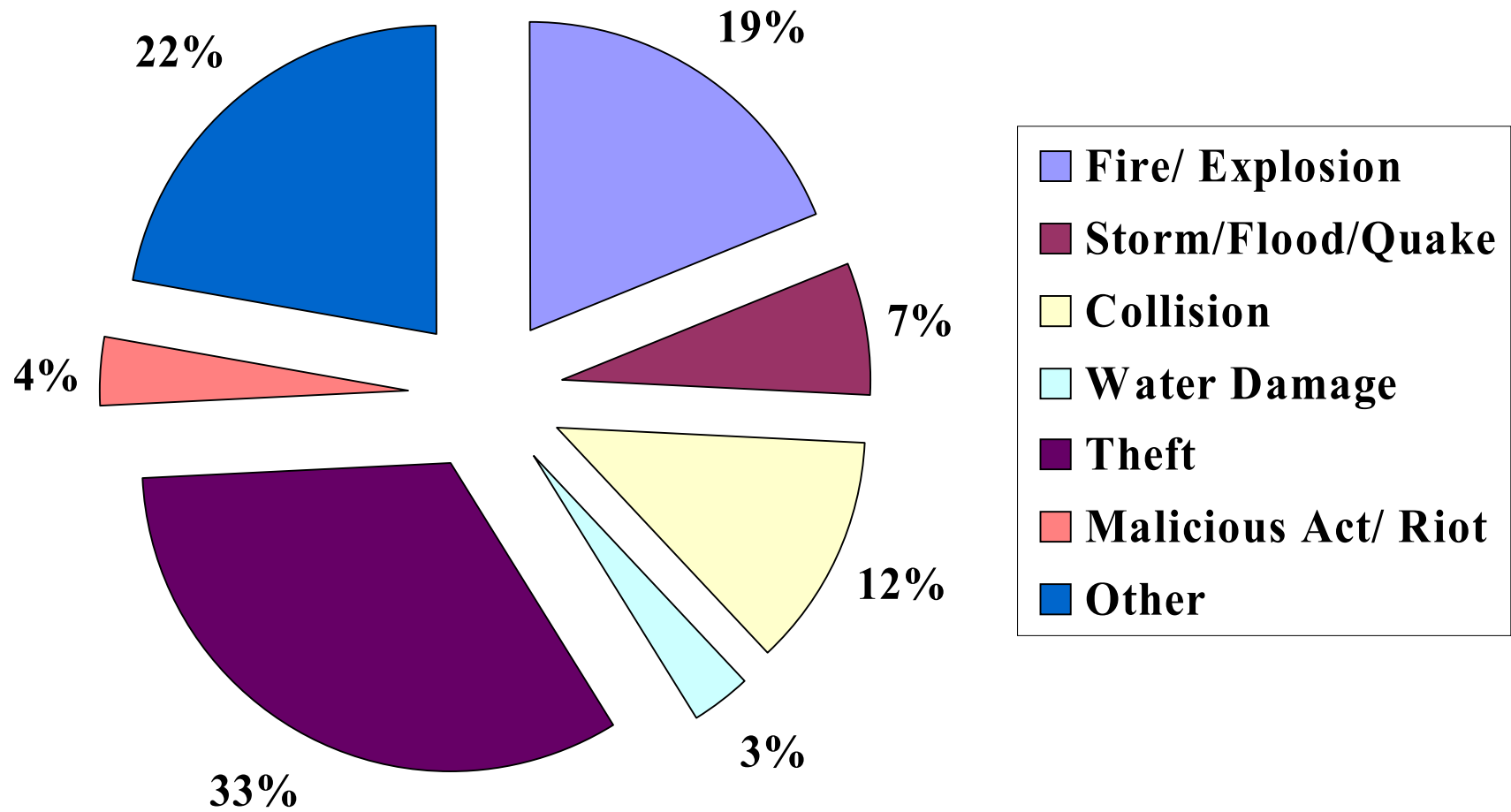
- Plant theft costs USD bns. in replacement costs and consequential expenses
- Varies by country - significant issue in Western Europe and USA
- Much of the risk held by plant operators through:
  - self-insurance
  - deductibles
  - uninsured consequential expenses
  - down-time caused by absence of vital plant
- Funding of illegal drug & terrorist activities



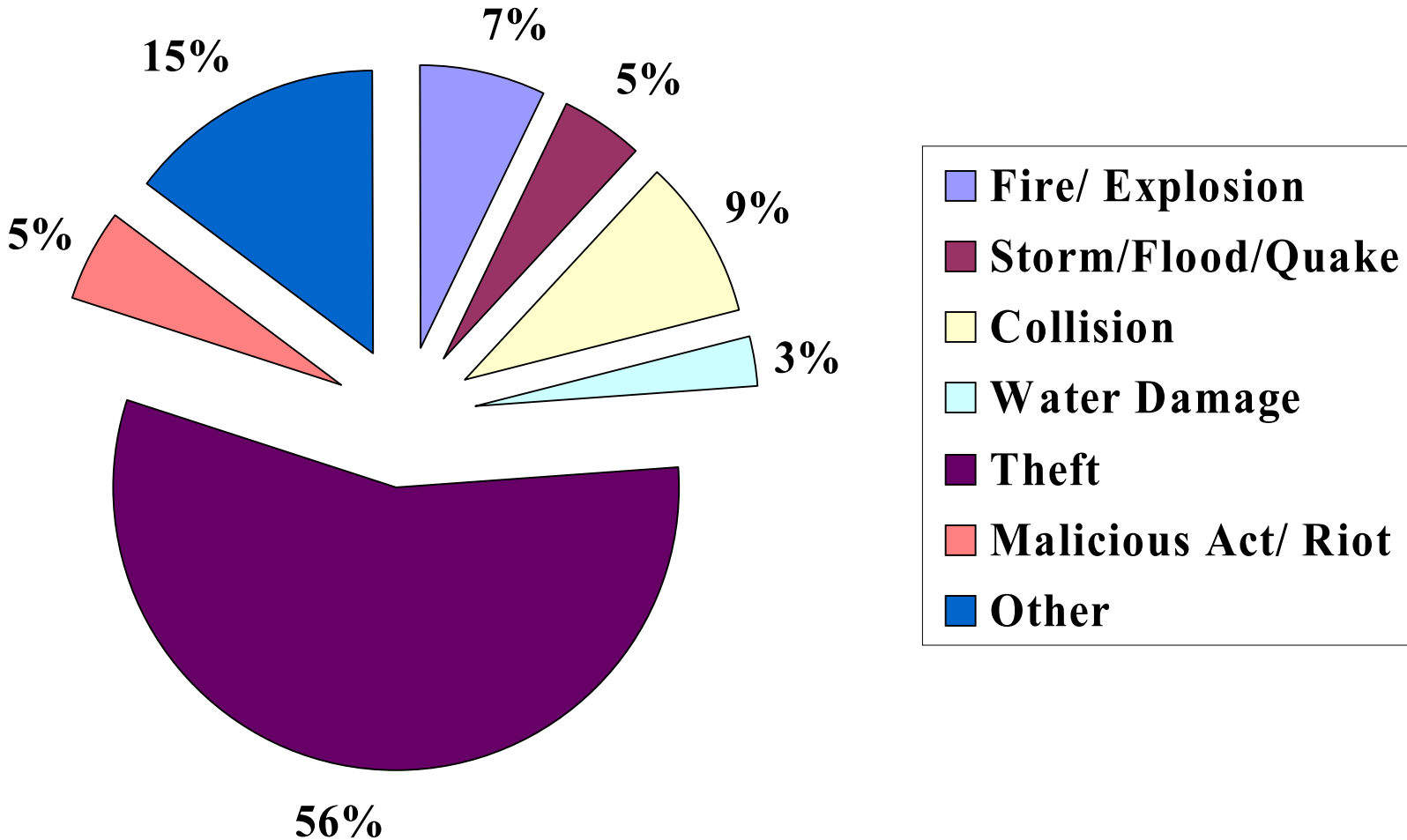
# Plant Insurance

- “All risks” cover
- Deductible levels vary from nil to USD 10,000+ (or up to 20% of plant value)
- May be insured on its own or with works
- Theft is often significant share of insured losses
  - UK (BMIA): 50% cost 60%+ reported claims
  - USA (ISO 2002): 33% cost 56% reported claims
  - S.Africa (SAEIO): 40% cost 30% reported claims

### US Contractors Equipment Losses 2002 (ISO) - Amount



# US Contractors Equipment Losses 2002 (ISO) - Numbers



# Why Plant is Stolen (1)

- Plant theft is perceived to be a low risk crime
- Involvement of organised gangs
- It is lucrative - average values of stolen plant typically USD 10,000 to USD 15,000
- High level of demand in local and export markets
- Lack of checks by buyers in used plant market - easy to sell on for cash

## Why Plant is Stolen (2)

- Poor plant and site security - plant is relatively easy to steal
- Risk of detection and prosecution is low:
  - delays in reporting plant stolen
  - inadequate police training & resource; low priority for police
  - plant rapidly moved out of country
  - plant may be broken up into components

# Why Plant is Stolen (3)

- difficult to establish ownership of suspected stolen plant which is found because of:
  - inadequate identification marking
  - fraudulent change of identify
  - lack of standard identification
  - lack of registration

# Issues affecting Exposure

- Plant often on exposed or isolated sites which are difficult to secure
- Tight profit margins - insufficient funds for plant security
- Lack of care by plant users
- Difficulties in securing plant
- Problems in controlling sites where many sub-contractors present
- Collusion of site workers

# Fraud

- The cost of theft is increased for insurers because of fraudulent claims by some plant operators through:
  - false claims for theft for plant sold or non-existent plant
  - exaggeration of the value of stolen plant
  - retention of recovered plant after claim has been paid



# Summary of Theft Problem

- Plant theft is a significant cost for plant operators and their insurers
- Low risk and profitable for thieves
- Levels of care displayed by operators for site and plant security are often low
- Low priority for police
- Lack of standardised identification and registration
- Lack of due diligence in 2nd hand market

# Comparison with Motor Theft (1)

- Theft of motor vehicles considerably reduced in recent years due to greater in-built security in the form of immobilisers and sophisticated locks
- Consumer demand + government and insurer pressure on manufacturers
- By comparison, often no in-built security on new plant

# Comparison with Motor Theft (2)

- Motor vehicles
  - have unique and widely understood identification marks
  - unique keys
  - tend to be cherished by their owners
- The above are generally not true for plant, even though individual items of plant may have a comparable or greater replacement value

# Management of Theft Risk

- Plant theft could be reduced significantly primarily through better risk management by plant operators
- Also
  - encouragement by insurers
  - assistance from manufacturers
  - government initiatives

# What Plant Operators can do

- Physical and procedural security measures are available to to minimise exposure to theft
- Risk management requires priority and resources
- Strategy should be agreed and actioned by:
  - senior management
  - site management
  - plant users
- Responsibilities understood by all concerned

# Security Procedures

- Procedures for purchase of 2nd hand plant to ensure that plant is not stolen
- Recording of plant details in asset register
- Procedures for hiring in plant
- Procedures for despatching to and recovering from sites - knowing where plant is located
- Post-theft actions

# Depot & Site Security

- Staff recruitment, training and awareness
- Perimeter protection - fencing, guards, lighting, alarms, movement detectors, CCTV
- Key control
- Site supervision
- Local security advice and co-operation

# Plant Security

- Return plant to secure depot if possible
- Positioning of plant on site to make theft more difficult
- Use of anti-theft systems to prevent theft, locate and identify plant after theft
- Registration on national plant register



# Anti-theft Systems (1)

- Plant identification markings
  - permanent, visible and hidden
  - VIN / PIN numbering
  - use of unique colours, logos
- Physical restraints
  - mechanical locking devices for legs, booms, tracks etc

# Anti-theft Systems (2)

Leg lock on  
backhoe  
loader



Lock on  
steering ram



# Anti-theft Systems (3)

Track lock



Boom lock in place on mini-excavator



# Anti-theft Systems (4)

- Immobilisation systems for self-propelled plant
  - immobilisation of diesel engines, hydraulic systems or key circuits
- Alarms
- Tracking systems primarily for monitoring movement of self-propelled plant
  - use of GPS, GSM, radio wave technology
  - should be specially designed for plant use

# National Plant Registers

- Available in some countries, such as TER in UK and NER in US
- Registration of ownership by insurers, plant manufacturers, banks as well as plant operators
- Assist in verification of ownership
- Help to reduce fraud
- Assist police by providing a reference point
- Registration of stolen plant

# Actions by Insurers (1)

- Insurers have to take action to minimise their loss ratios and have generally dealt with plant theft by:
  - loading premiums
  - increasing deductibles
  - risk selection
- This of course results in extra cost and risk for plant operators

## Action by Insurers (2)

- Insurers can assist by:
  - applying minimum security requirements
  - offering incentives for added security in form of discounts, lower deductibles, contributions
  - security surveys of depots and sites
  - working with registration agencies
  - providing security advice
  - involvement in industry / government initiatives

# Example of Insurer's Action

- Plant operator's loss experience poor; insurer increased rates and deductibles
- Following management change, insured more receptive to external advice
- Insurer insisted immobilisers on all self-propelled plant and security markings applied
- All plant registered with TER 50% paid by insurer
- Better site security introduced
- In 5 years since, only one loss



# Government Initiatives

- UK government sponsors the Plant Theft Action Group (PTAG)
- Represents plant operators, insurers, police, TER, plant manufacturers, CPA as well as government
- Forum for discussion of security issues
- Publishes minimum security standards for makers of security devices (attack times)
- Recommendation of use of standard VIN / PIN by manufacturers

# Manufacturers / Suppliers

- Likely to respond if sufficient customer demand for immobilisation systems to be built in during manufacture
- Use of standard VIN / PIN identification marks would assist
- Physical restraints, immobilisers, identification systems available in after-sales market

# Conclusions (1)

- Plant theft is a significant issue for plant operators in many parts of the world and for their insurers
- In many cases much can be done to improve security through better risk management where there is a willingness on behalf of the plant operator to take positive action

## Conclusions (2)

- Techniques are available to plant operators to manage the theft risk in the form of procedures, depot and site security, fitting of anti-theft systems and registration (where available)
- Insurers should actively encourage better risk management through incentives, advice and requirements for specified levels of security

# Conclusions (3)

- Better management of the theft risk will lead to:
  - for plant operators: reduced plant costs, less down-time, lower insurance premiums and deductibles
  - lower loss ratios for insurers
  - better use of police resources