

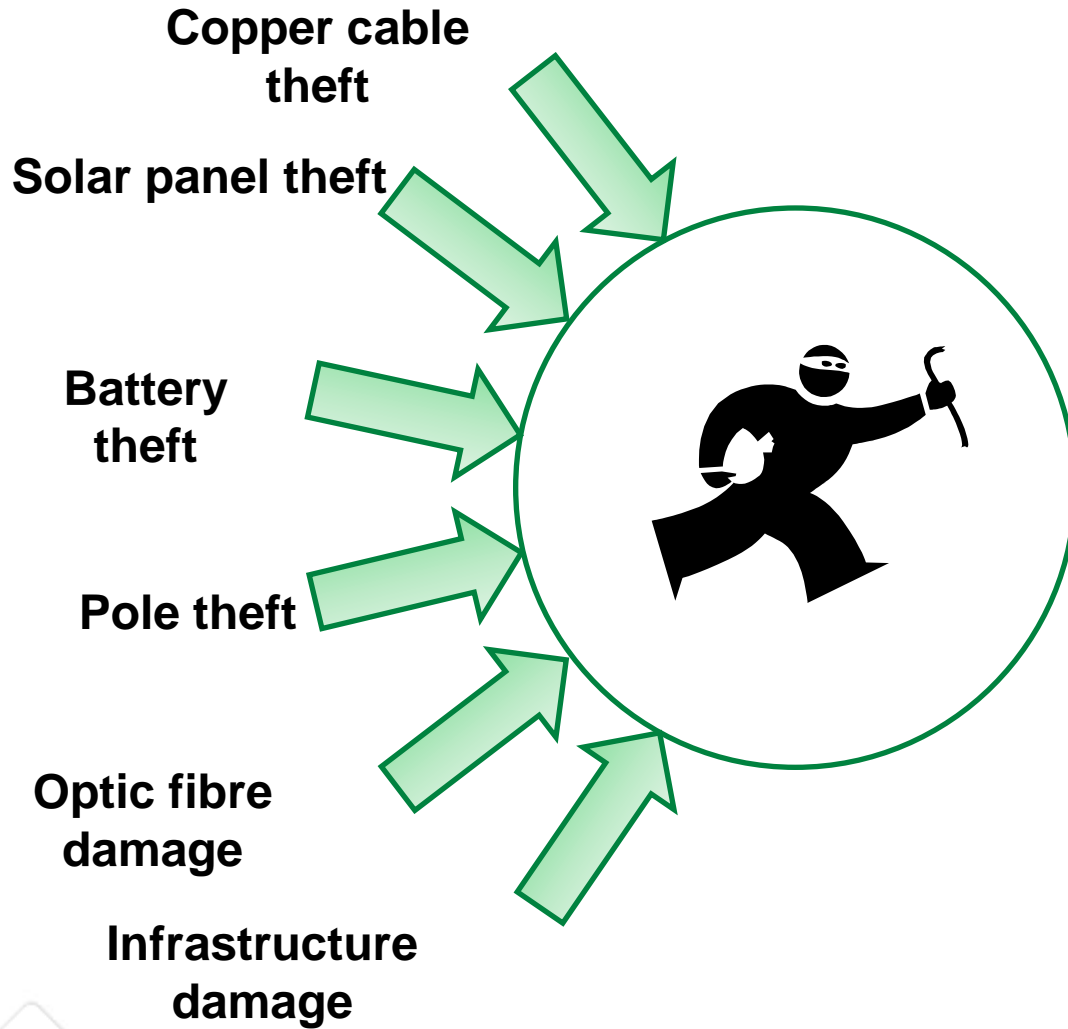
Cable Theft – The Telkom experience

Presentation to the SARPA
Convention 2013
- Mossel Bay -

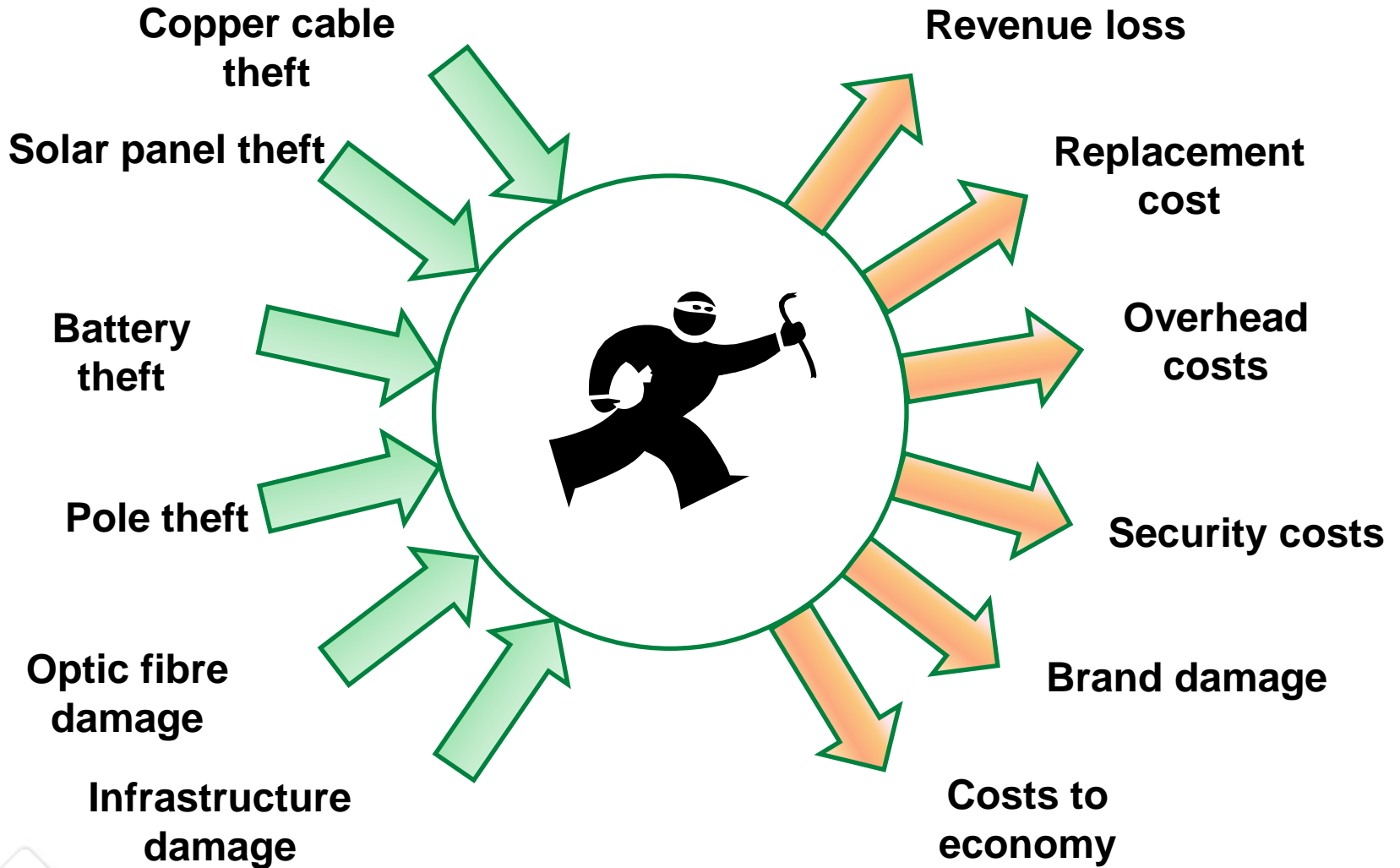


John V. Smith
12 July 2013

Areas of Theft & Damage:

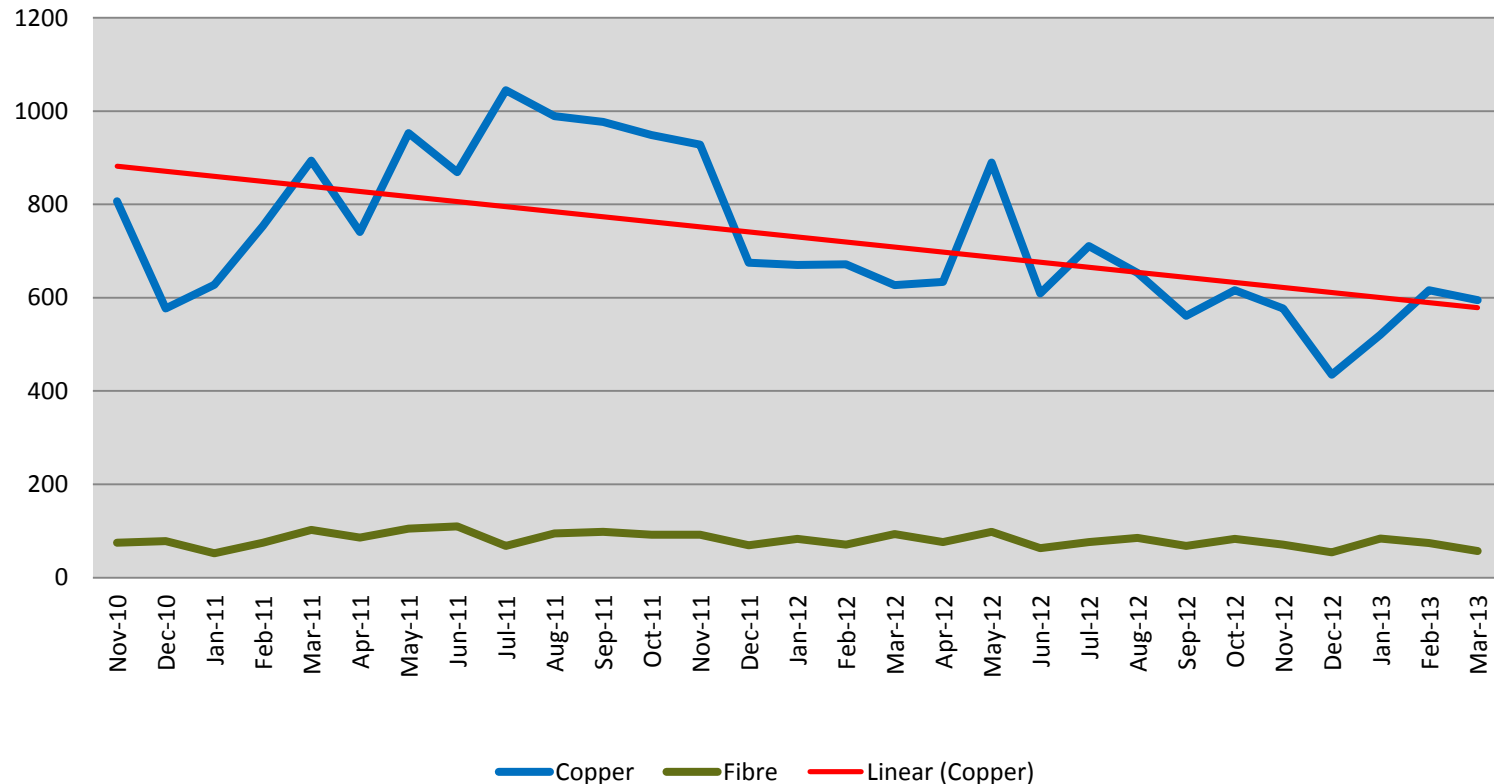


Impact of Theft & Damage:



Theft/Sabotage incidents:

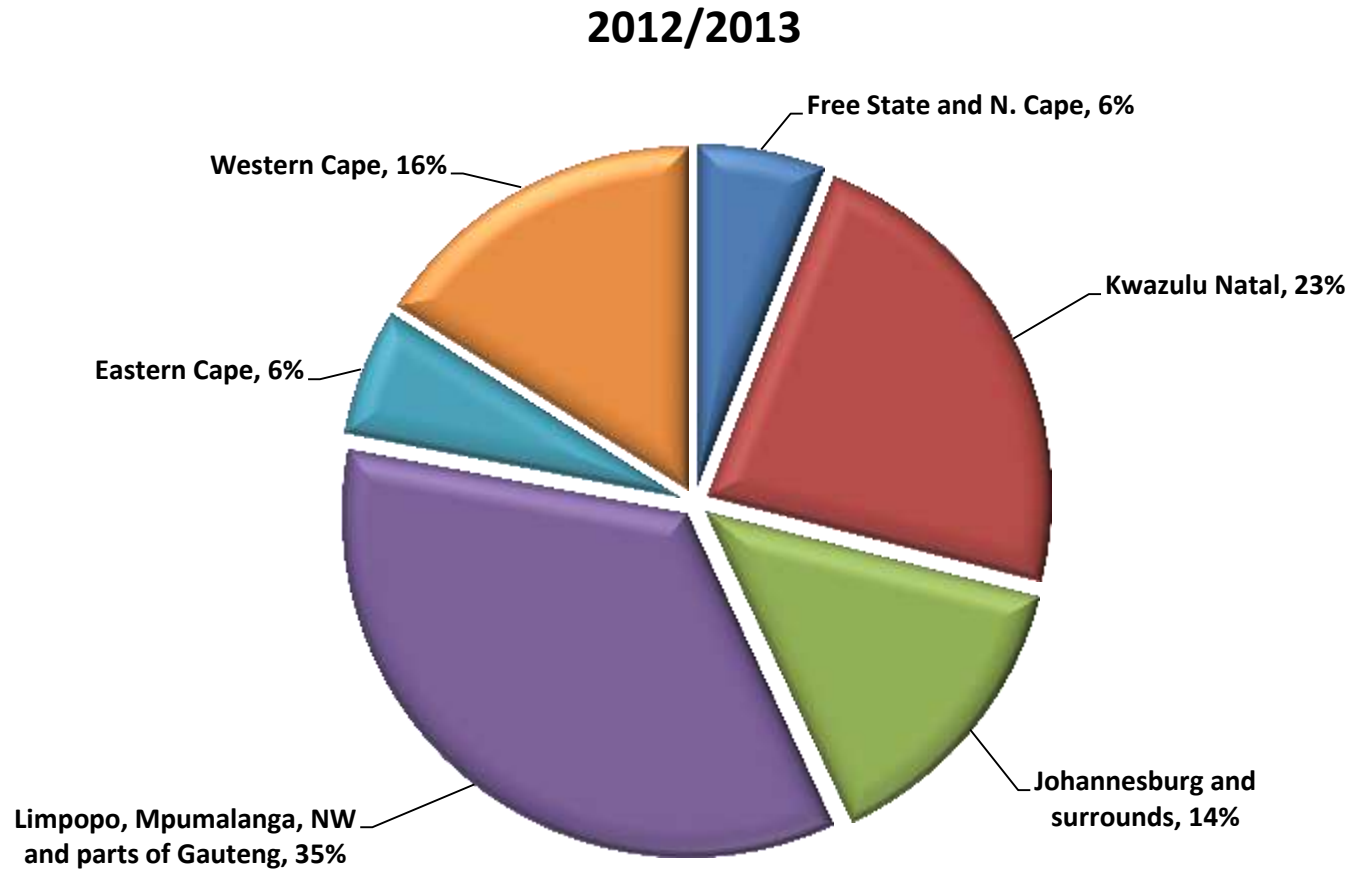
Theft/Sabotage Incidents from November 2010



- Fibre incidents are normally collateral damage
- Sabotage are cases where cables are cut but not stolen



Theft/Sabotage incidents per Region:

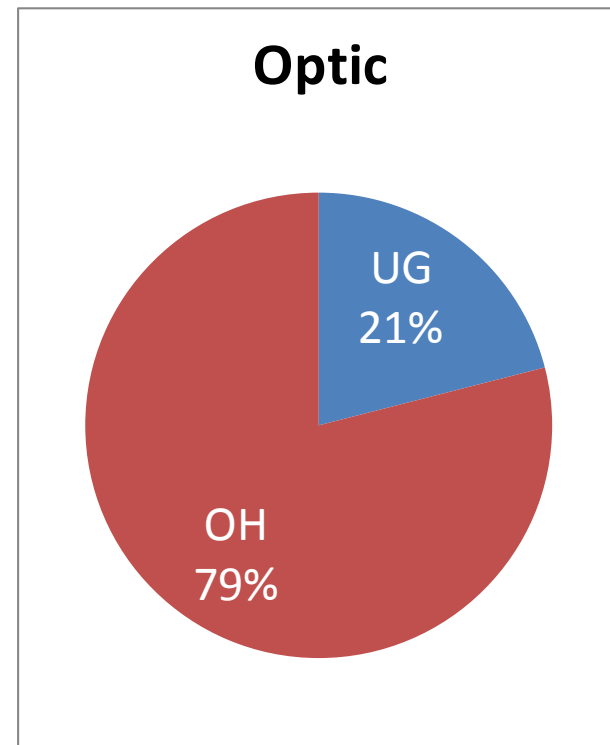
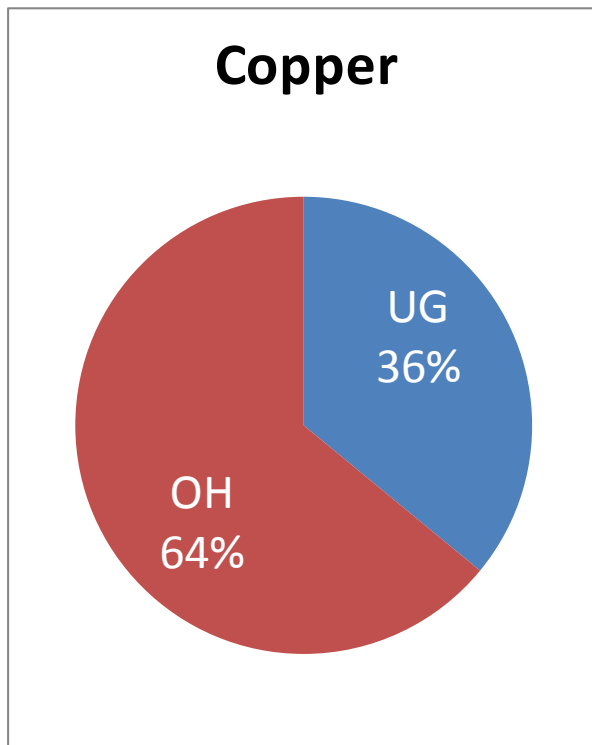


- 2012/2013 figures are to end March 2013



Theft/Sabotage incidents:

Overhead vs. Underground plant



Theft/Sabotage incidents:

The battle at the front line



Cable theft syndicate under the guise of being a contractor

Source – NTBI Office 2012/10/10



Theft/Sabotage incidents:

The battle at the front line



Breaking into a manhole from the side

Source – NTBI Office 2012/10/10



Cables cut in a manhole

Theft/Sabotage incidents:

The battle at the front line



Pole & cable theft for illegal power reticulation is now also becoming a major issue



Theft/Sabotage incidents:

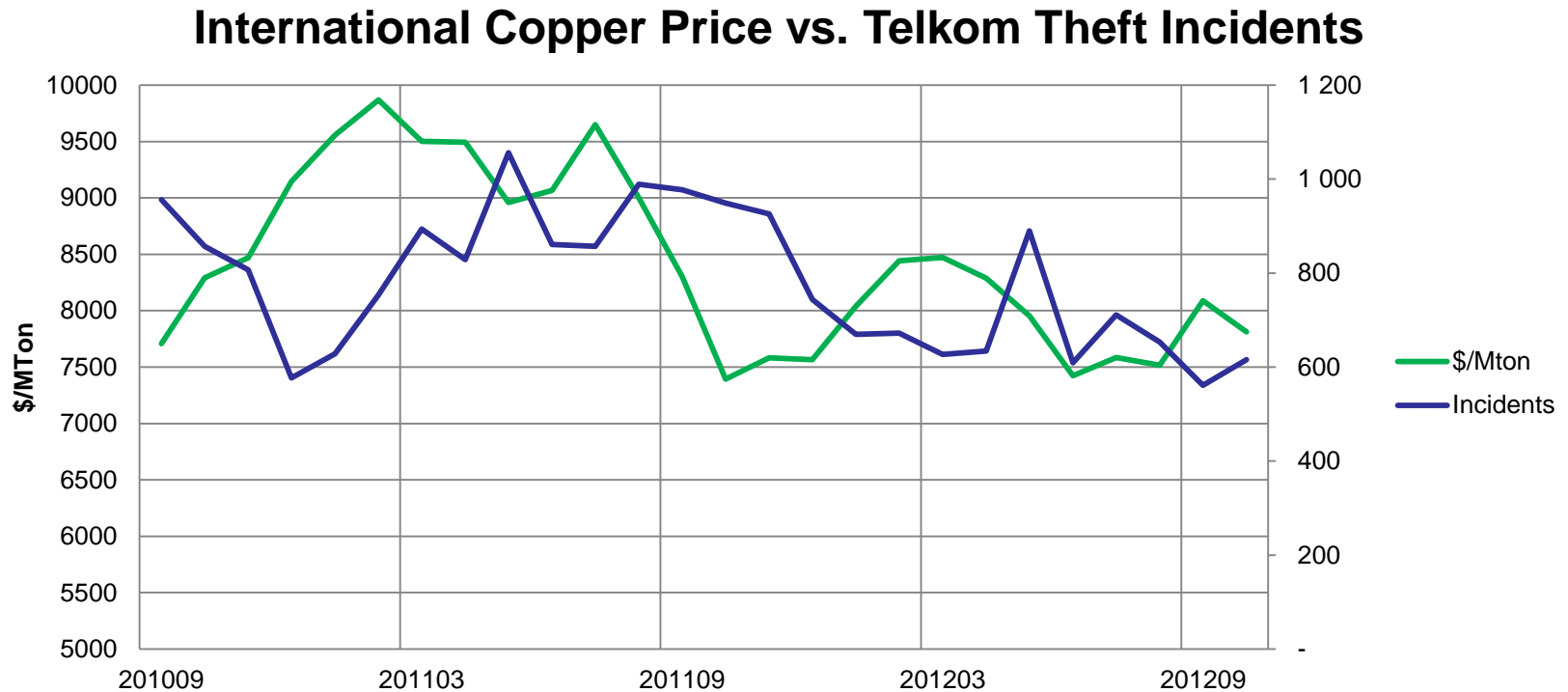
The battle at the front line



Telkom cable recovered by the Ethekewini municipality in Springfield Park



Impact of the Copper price on theft:



Source: http://ycharts.com/indicators/copper_lme_settlement_price

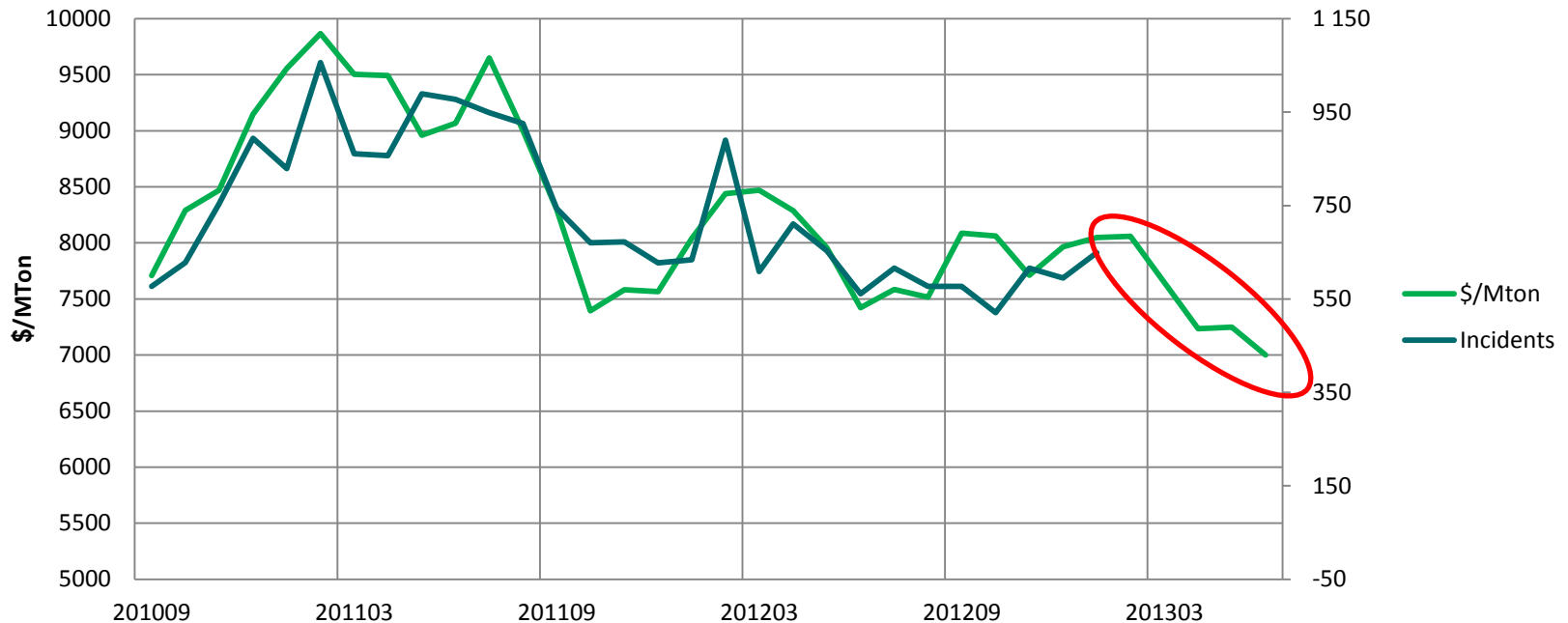
*Correlation coefficient for these two sets of data is: **0.114048***



Impact of the Copper price on theft:

- What if we shift the data by 1 month?

International Copper Price vs. Telkom Theft Incidents

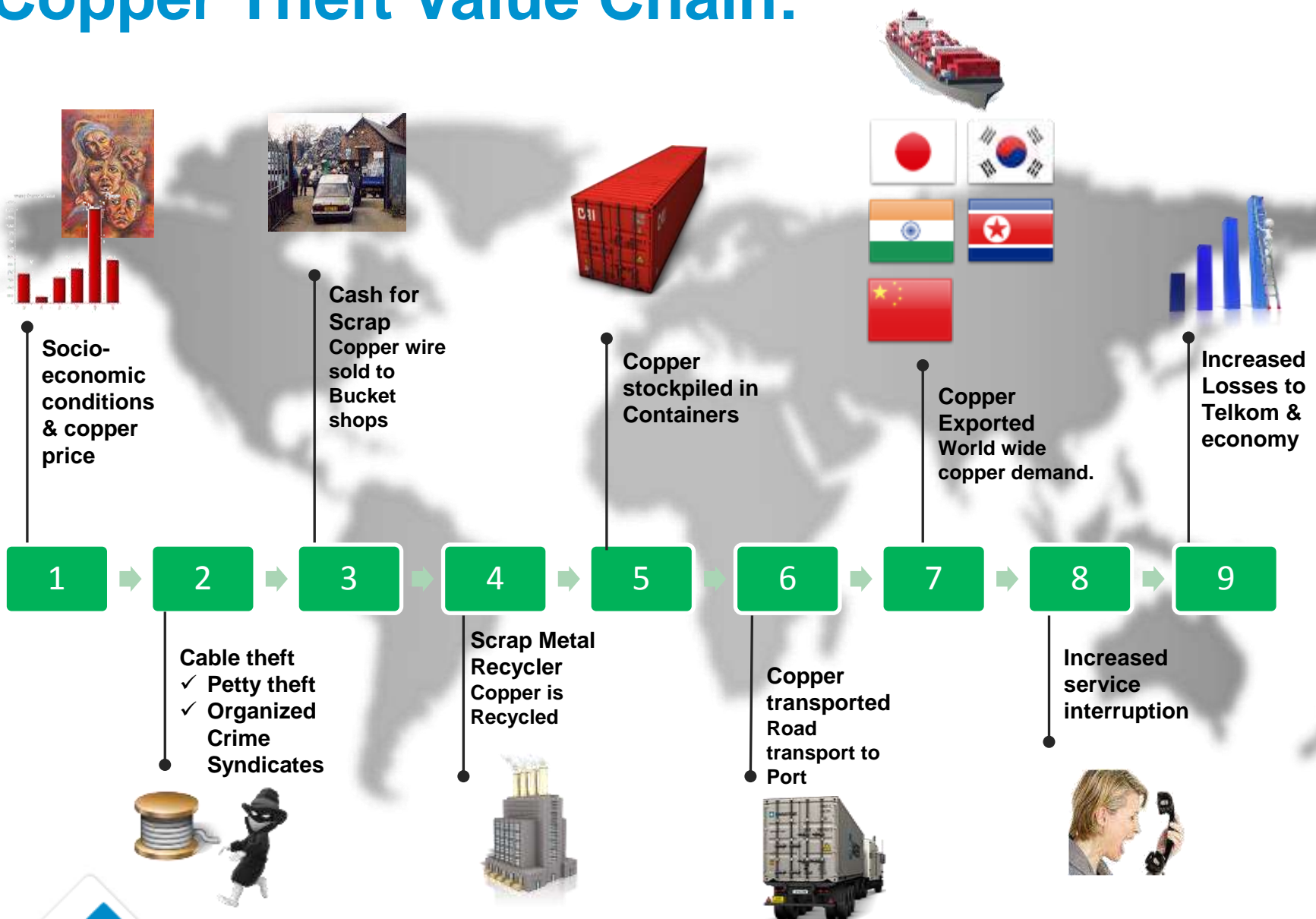


Source: http://ycharts.com/indicators/copper_lme_settlement_price

Correlation coefficient for these two sets of data increases to: **0.588251**



Copper Theft Value Chain:



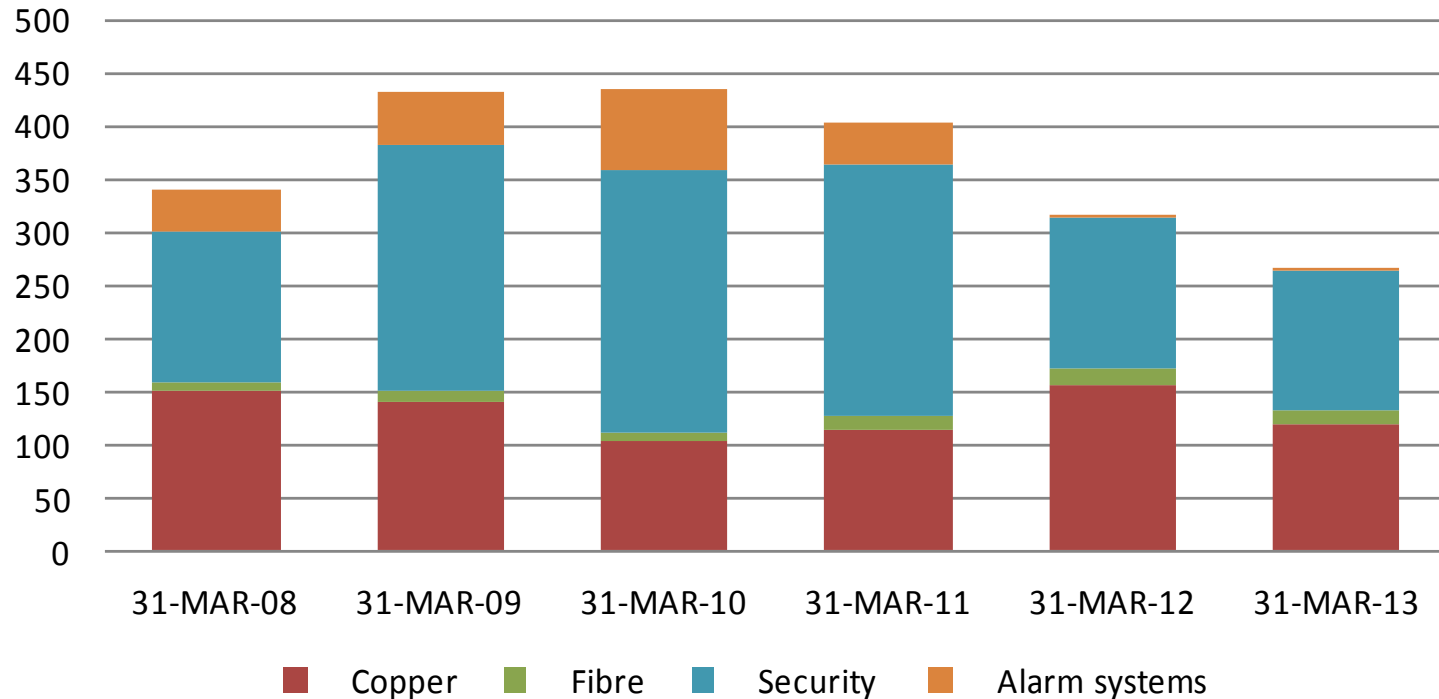
Why metal crimes are not resolved:

- High prices paid for non-ferrous metals
- Easy markets (>3000 known scrap metal dealers and many more “bucket shops”)
- Prior to 2012, no effective Scrap Dealers Control Act
- No meaningful control over exports
- Easy granting of bail
- Light sentences



Cost breakdown (Direct costs):

Cost Breakdown (Direct Costs) (Rm)



Stated costs include the following:

- Copper theft replacement costs
- Optic repair costs
- Armed response costs
- Internal Security costs



Cost breakdown (Indirect costs):

- **There are a variety of additional “hidden” or Indirect Costs that cannot easily be measured:**
 - **Overhead costs**
 - Administration of cable repairs
 - Handling of customer communication and escalations
 - **Revenue**
 - Loss of revenue on both incoming and outgoing calls
 - Loss of rental income for period that service is unavailable
 - Potential loss of customers to competition
 - **Brand**
 - Damage to the Telkom SA brand due to negative experiences of customers and negative reporting in the media



Cost breakdown (Indirect costs):

- There are a variety of additional “hidden” or Indirect costs that cannot easily be measured:
 - **Economy**
 - Loss to the broader SA economy due to Telkom and other customers being unable to transact their normal business

*It is estimated that the actual cost to Telkom i.r.o. Indirect Costs and Revenue Losses is at least 4 to 5x the repair cost.
The cost to the greater economy could be orders of magnitude higher*



Other implications of cable theft:

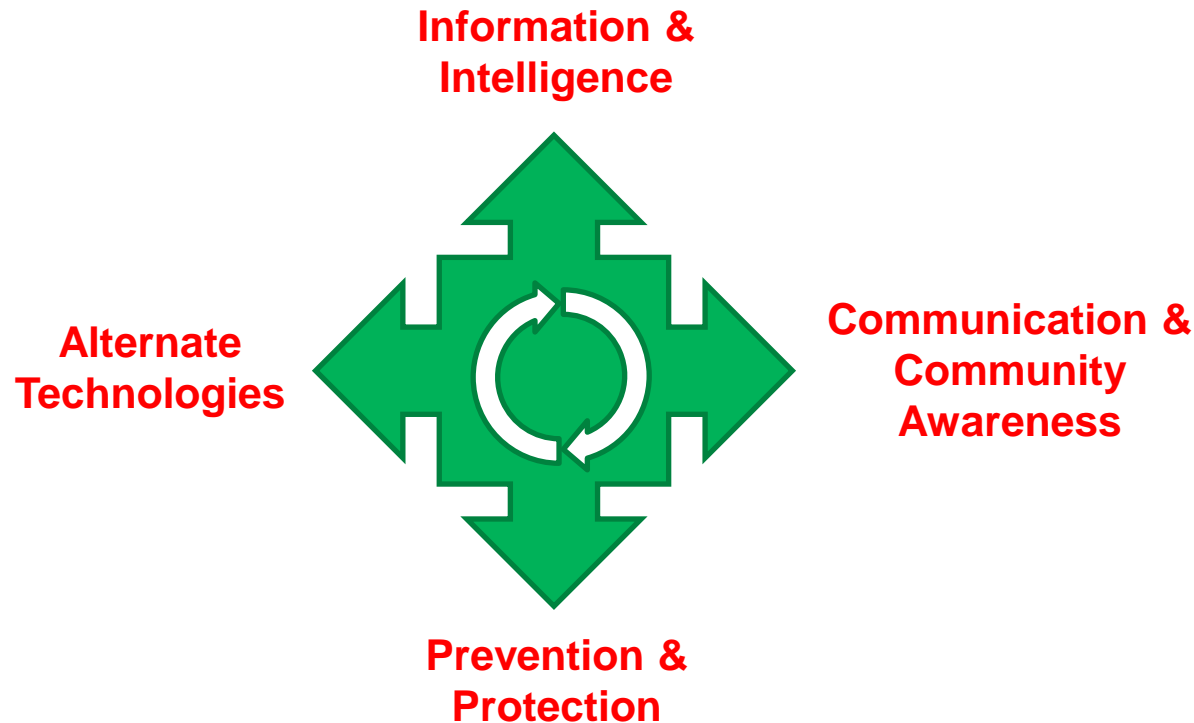
- **Over and above the financial implications there are broader social implications:**
 - **Essential services**
 - Clinics, Hospitals & Ambulance Services
 - SA Police Services
 - Fire Brigades
 - Schools
 - Government Departments & Municipal Services
 - SA Defence Force
 - Post Offices
 - etc.

Any one of these being out of reach can have serious implications, even leading to loss of life!



Overall counter strategies:

- Telkom's Security and Repair Strategy is based on four major pillars:



Communication & community awareness:

- **Communication:**

- Communication is a vital part of the overall strategy:
 - Internal:
 - Raising awareness of the situation amongst staff so that they can be the company's eyes and ears
 - External:
 - Raising the profile of the problem via normal media channels
 - Playing a leading role in bodies such as BACSA, SACCI, NFCCC, etc.

- **Community Awareness:**

- Includes:
 - Education of stakeholders (e.g. SAPS, Judiciary, CPF, Chiefs, Community Leaders, other Government Departments & Municipalities and the local communities) about the importance of the infrastructure deployed in their areas and the role they have to play in protecting it
 - Strengthening the professional working relationship between the Local Government, Telkom, the general community and any other community groups
 - Involving the community in addressing infrastructure theft and how they can assist Telkom to provide a quality, effective and efficient service
 - Collaboration and partnerships with all stakeholders by empowering these communities
 - Partnerships with local Media and Community Radio Stations in addressing the scourge of cable theft



Prevention and Protection:

Prevention and Protection are managed via the following:

- Alarming of cable routes (on a zoned and priority basis)
- Securing the network:
 - Welding manhole lids
 - Covering cable runs with concrete
 - Burying cable runs up to 2m deep
 - Replacing overhead with underground cable
 - Replacing wooden poles with steel or concrete
 - Lashing overhead cables to steel wires
 - Securing the bottom of wooden poles with concrete or metal mesh
- Deployment of contracted Armed Response teams
- Patrolling of identified hotspots
- Special hot-spot initiatives, including use of helicopters
- Raids on suspected scrap dealers i.c.w. SAPS



Alternate technologies:

- In many cases the only solution is the migration of customers to alternate technologies. This is designed to provide a high quality service on infrastructure that is inherently unattractive to thieves
 - Different technology solutions are appropriate to different scenarios
 - Different technology solutions take different periods to deploy
- Alternate technologies include:
 - Non copper cables (aluminium, copper clad steel)
 - Fibre based services
 - Satellite services
 - Cellular services

Unfortunately almost all alternative solutions are fairly expensive



Current Challenges:

- There is ongoing and increasing pressure from stakeholders (customers, internal divisions, shareholders, Government, etc.)
- Despite some sympathy for Telkom's challenges, there is a universal view that *we must fix the problem*
- This viewpoint is largely driven from the perspective of service restoration rather than any understanding around the security issue, the cost and the limited alternatives
- The new Second Hand Goods Act, 2009 is important new legislation primarily designed to control illegal purchase and processing of stolen non-ferrous metals by scrap metal dealers. This still needs to be fully bedded down
- There are some signs that syndicates may be bypassing the Act by transacting with syndicates away from their normal premises
- There is very good cooperation and communication with SAPS at strategic and management levels

There is very good cooperation with SAPS at strategic and management levels



Thank You!

