

Cable Theft Prevention with “CBiD”

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Presented By
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Your Partner in Infrastructure Development

The Power of One

CBI Electric: african cables
Tel: +27 16 430 6000

CBI Electric: low voltage switchgear
Tel: +27 11 928 2000

CBI Electric: telecom cables
Tel: +27 12 381 1400

Several methods of asset identification exist that may be applied to cables :

- Embossing
- Embedded printed tapes
- Etched wires
- Microdot marking
- DNA trace marking

Question is, which is the most effective???



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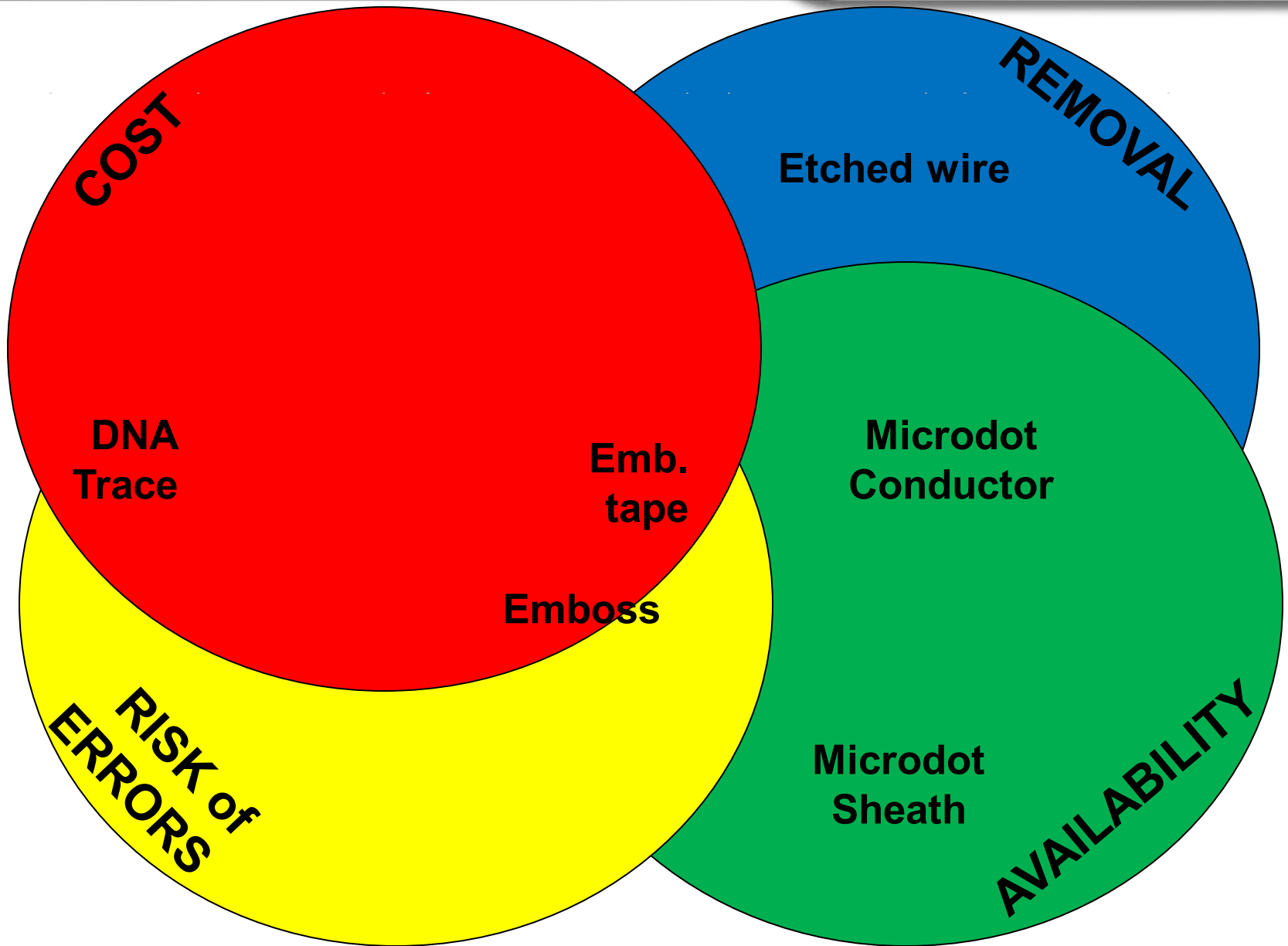
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CBI-electric: african cables

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Evaluation of cable identification methods



Embedded Printed Tape:

“CBiD” tape



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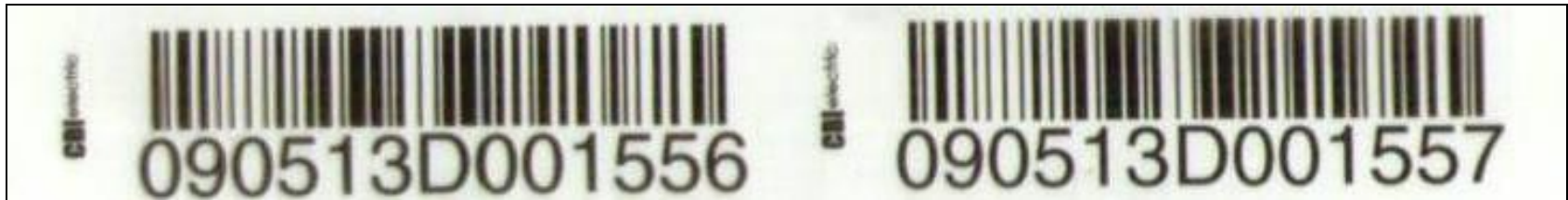
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The “CBiD” solution



- Each cable is produced with a set of unique “CBiD” marks during stranding on “CBiD tape”



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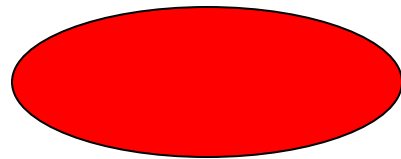
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The “CBIID” solution



- Proof that the number is a CBI-electric number



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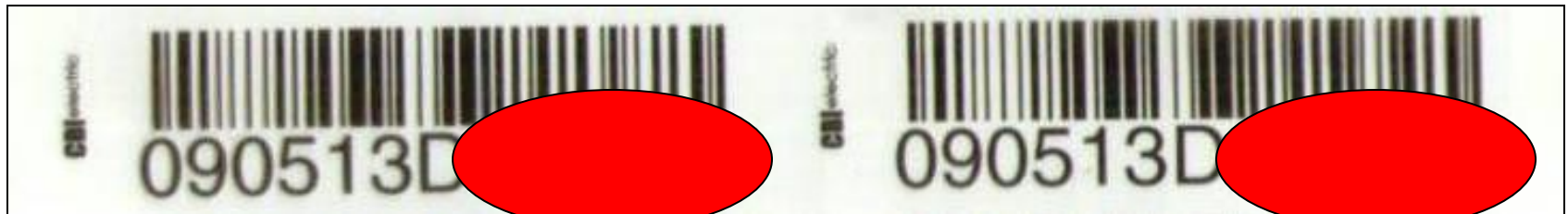
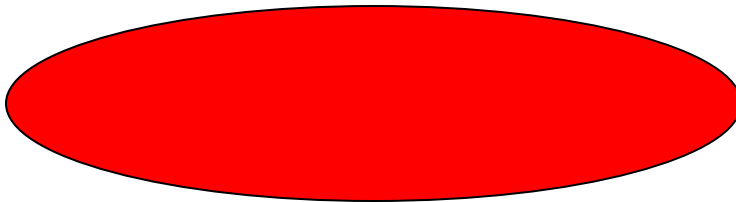
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The “CBIID” solution



- Numbers changes frequently



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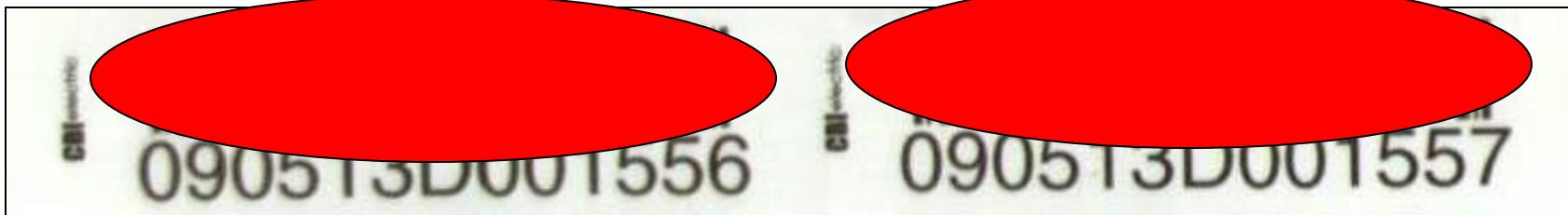
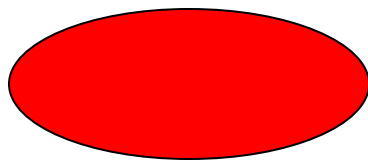
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The “CBIID” solution



- Prevents typographical errors
- Has built in parity checks
- Readable from all orientations



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How it works

CBI electric

CBiD
in



How it works



CUSTOMER ID
out

- At final Test & QA , the “CBiD” marks are recorded together with Drum number
- Customers allocated to product prior to dispatch
- Data is uploaded to offsite database which can be externally interrogated to establish ownership at any time
- Data management by a reputable Service Provider endorsed by BAC, SAPS and Interpol



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- The database is populated with the details of every drum of cable sold, and includes:
 - the manufacturer
 - drum number
 - serial numbers of each core
 - product description
 - date manufactured
 - The Product owner.



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- Cable owners are able to build their own database of cable product and their allocation to specific projects.
- On finding a piece of cable, the “CBiD” numbers in one or more cores can be traced.



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Performance of CBI*i*D



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- Does not impact electrical or mechanical performance of the cable
- Resistant to Impregnation compounds and Manufacturing lubricants
- Innermost in cable (conductor)
 - Extra effort needed to remove
 - Away from flames



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Performance of CBiD



45 minutes in a veld fire



- Identity by piece (100mm) not by Drum
- Only need a small sample for proving ownership
- Traceability
 - Per customer
 - Per sub level (if controlled)
- Independent length verification
- Serial No complies with 2nd Hand Goods Act
- No special equipment needed for reading



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Ideal Solution

- Every metre
- Of every core
- Of every cable
- Supplied to every customer
- By every manufacturer
- Survive 1082°C

CBI solution



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Theft prevention with CBiD ?



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- Cable ID is the essential but not enough on its own
- Essential:
 - Managing the data
 - Easy access to database (SMS)
 - Promotional material
 - Education of all parties
(Customers, Police, Staff, Scrap dealers)



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Four ways that “CBiD” addresses theft:

1. Proof of possession of stolen goods
2. Proof of involvement with a specific crime
3. Clause 21 2 (b) of the Second Hand Goods Act
Register of Serial numbers
4. Clause 22 1 (c) of the Second Hand Goods Act
Reporting of attempt to remove serial numbers



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10 million metres of “CBIID” tape has been successfully inserted to date!

As implementation of “CBIID” becomes more widespread & more legal action taken on perpetrators, a significant reduction in cable and copper theft can be expected.



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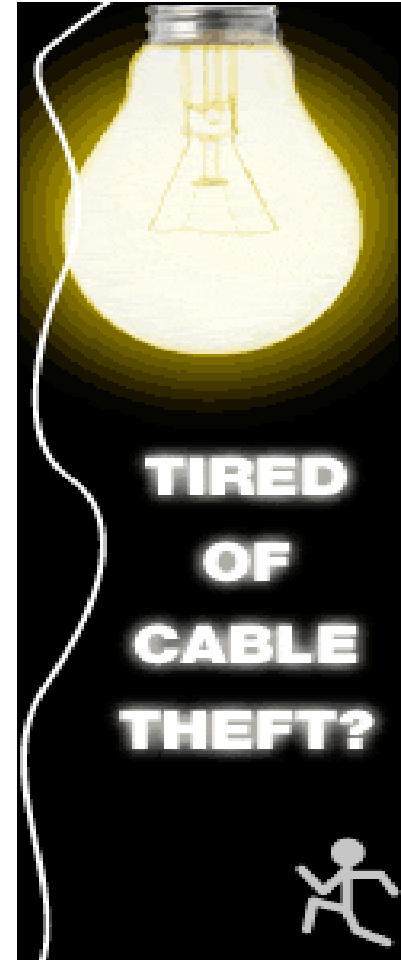
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Questions?

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**Thank you for
your attention!!!**



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