



2nd EU Conference on Metal Theft 23./24. April 2014

„Metal Theft at Deutsche Bahn AG“

Susanne Kufeld – Corporate Security DB AG

Head of DB Situation Center and

Global Crisis Management

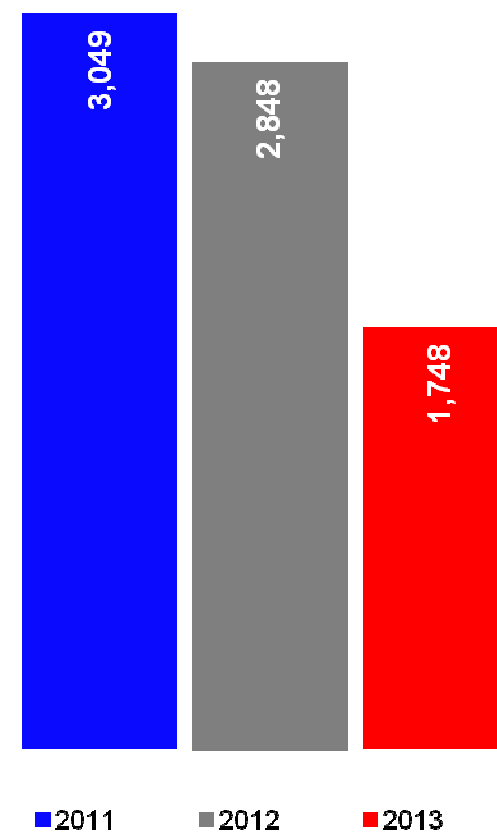
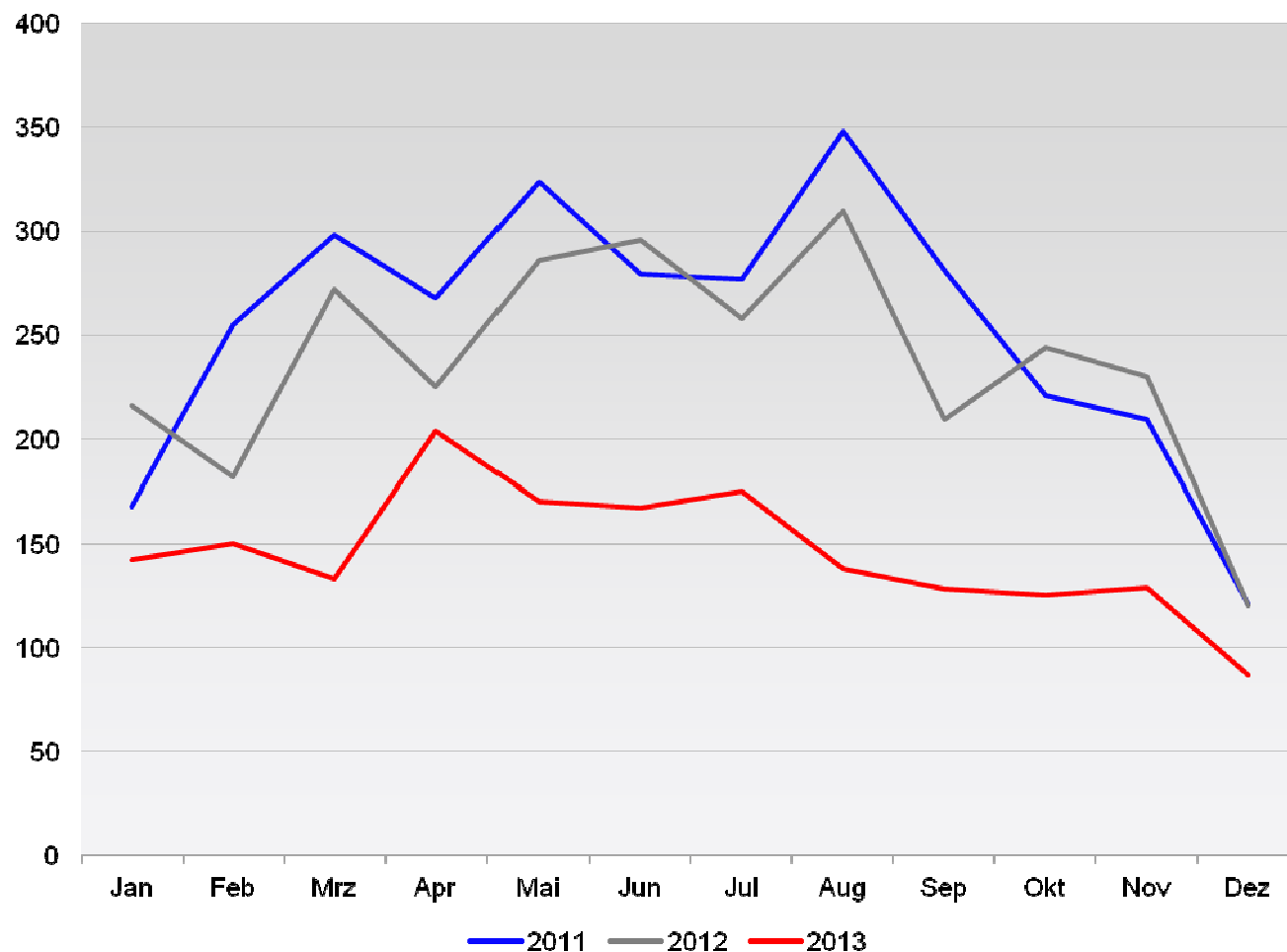
Content

1. Current Metal Theft Situation
2. Approach within the DB
3. Measures taken since 2011
4. Unanswered questions / next steps

Metal Theft

Situation at Deutsche Bahn (Quelle: Internal Database)

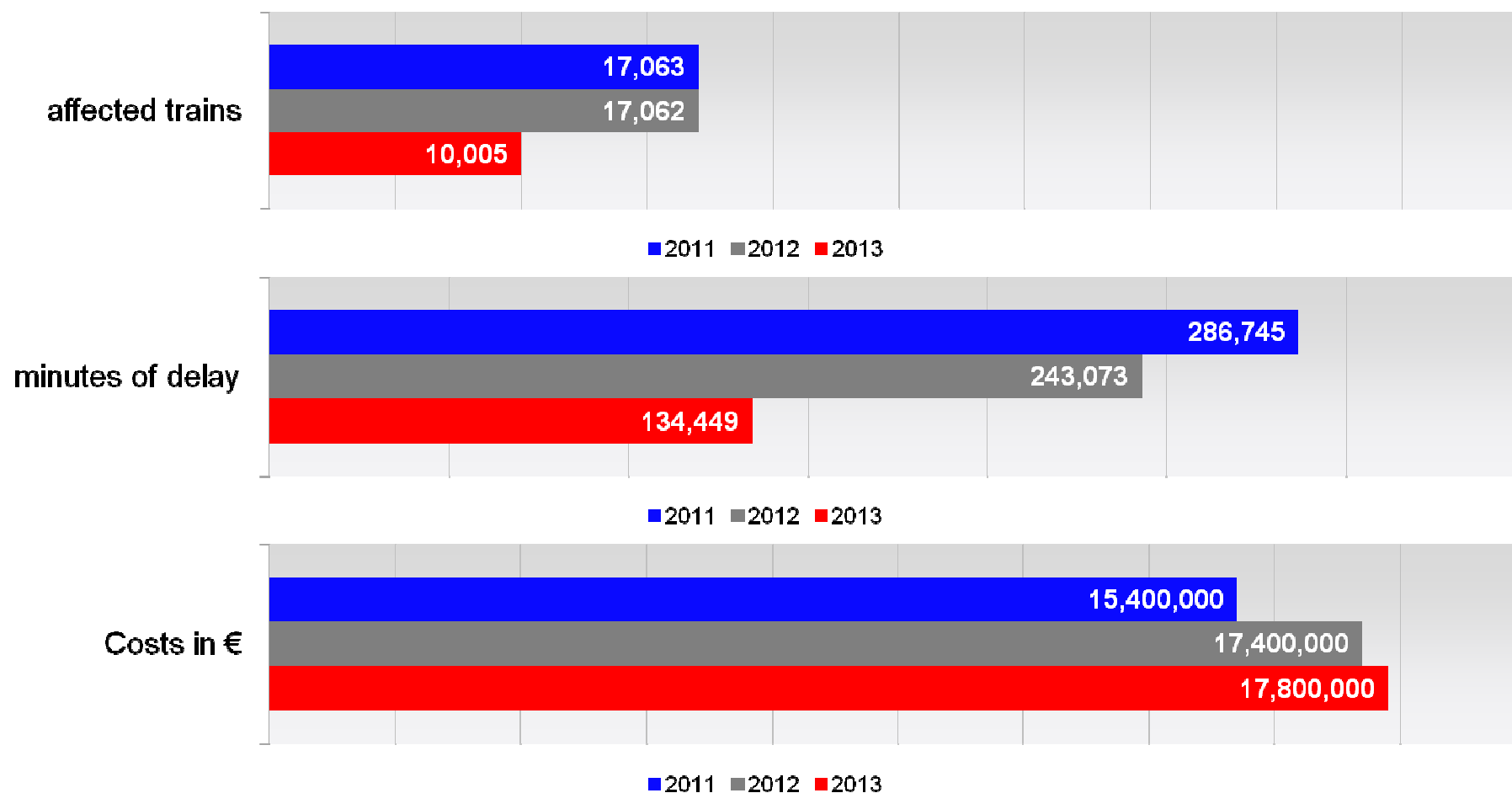
Total view of the years 2011 to 2013



Metal Theft

Operational impacts and costs

Operational impacts and costs of the years 2011 to 2013

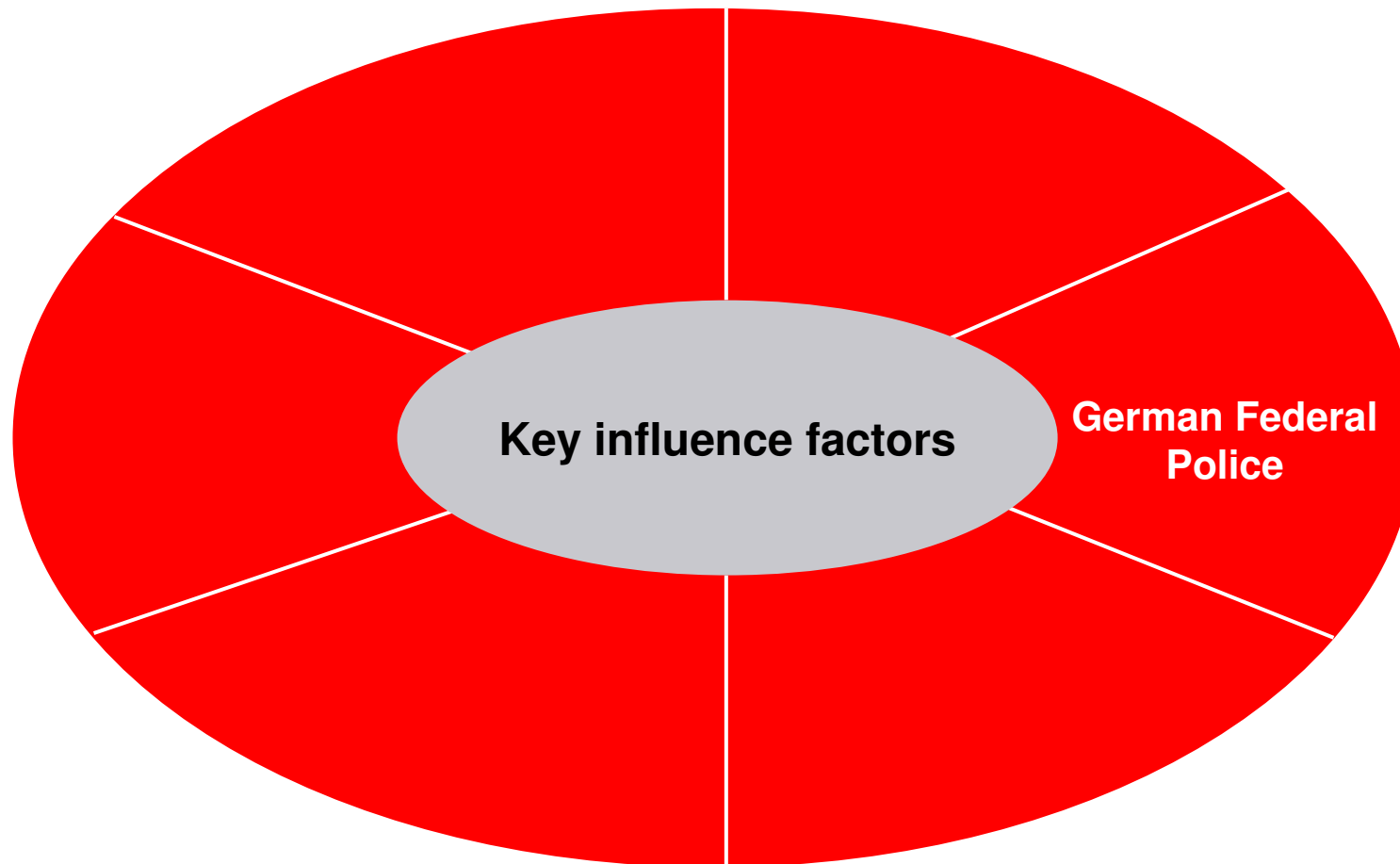


Metal Theft What to do?

Key influence factors

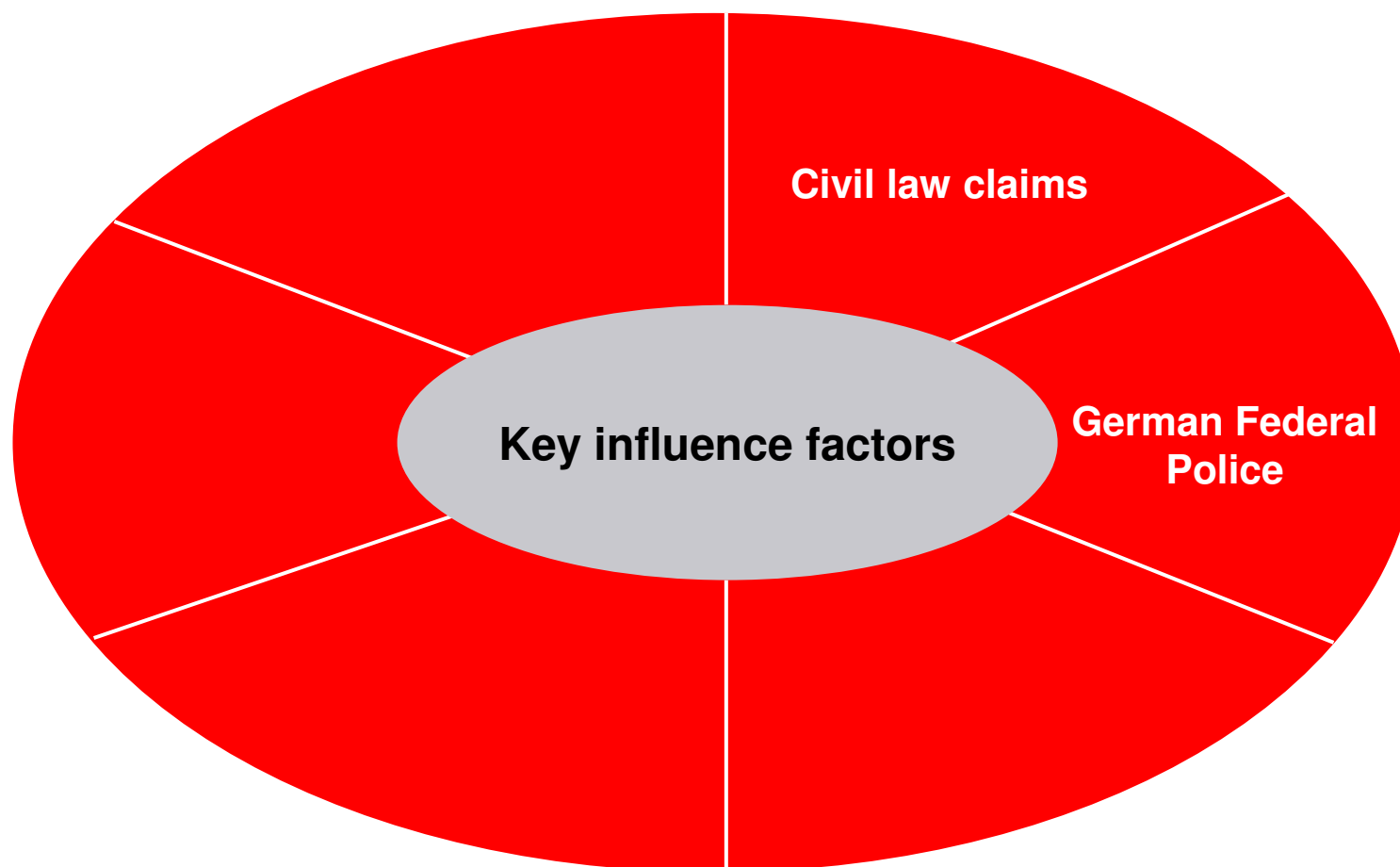
Metal Theft

Key influence factors and measures



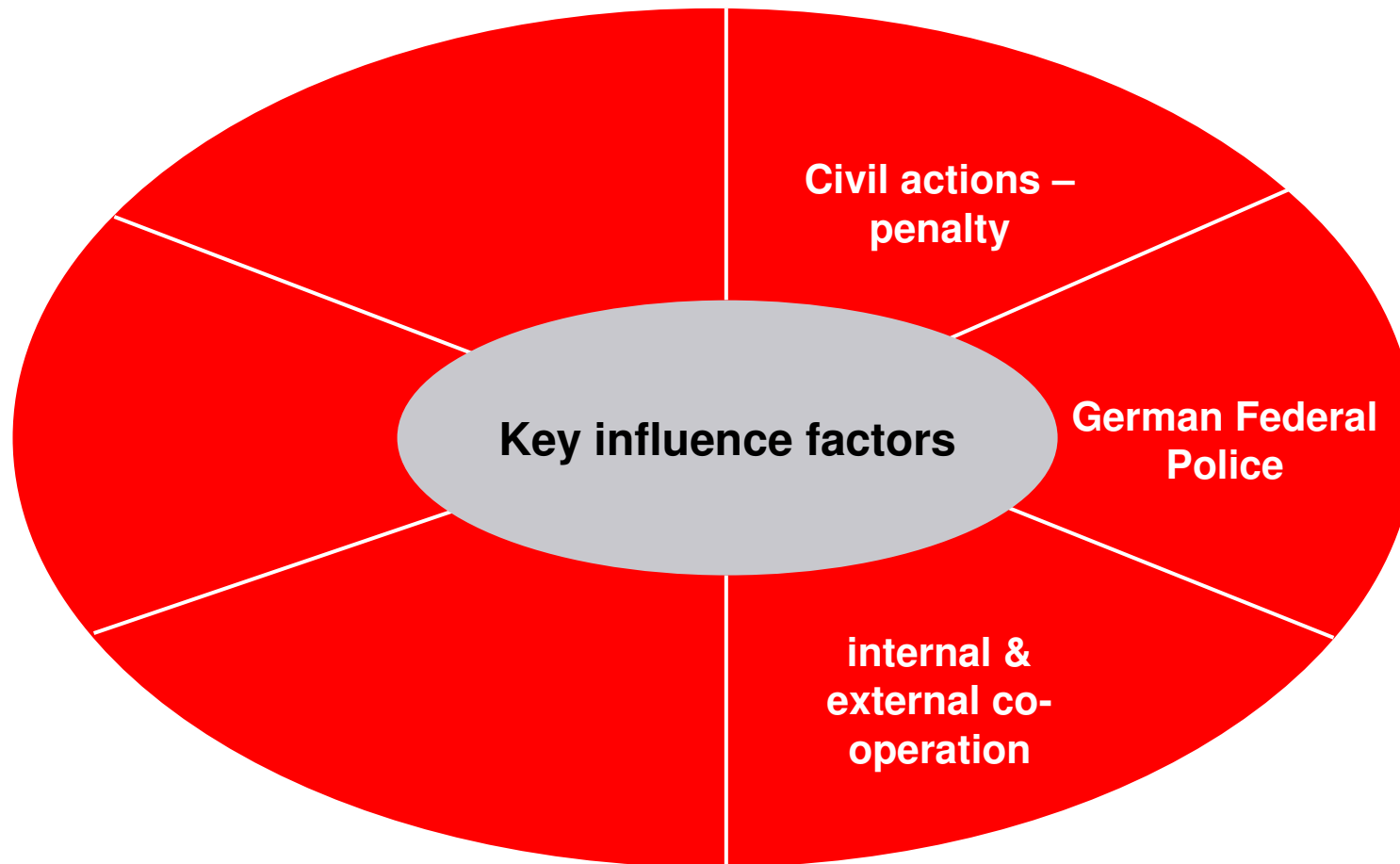
Metal Theft

Key influence factors and measures



Metal Theft

Key influence factors and measures

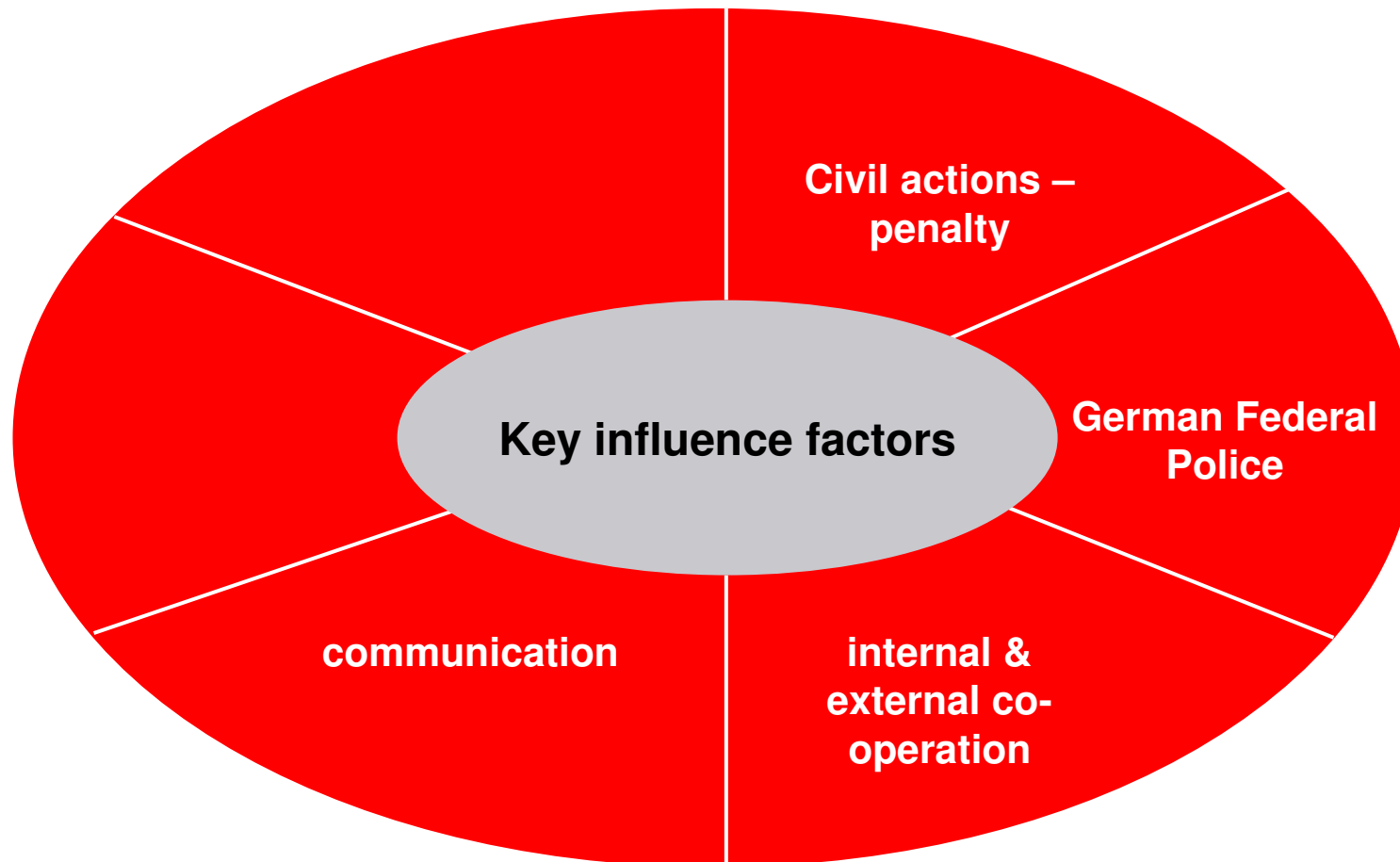






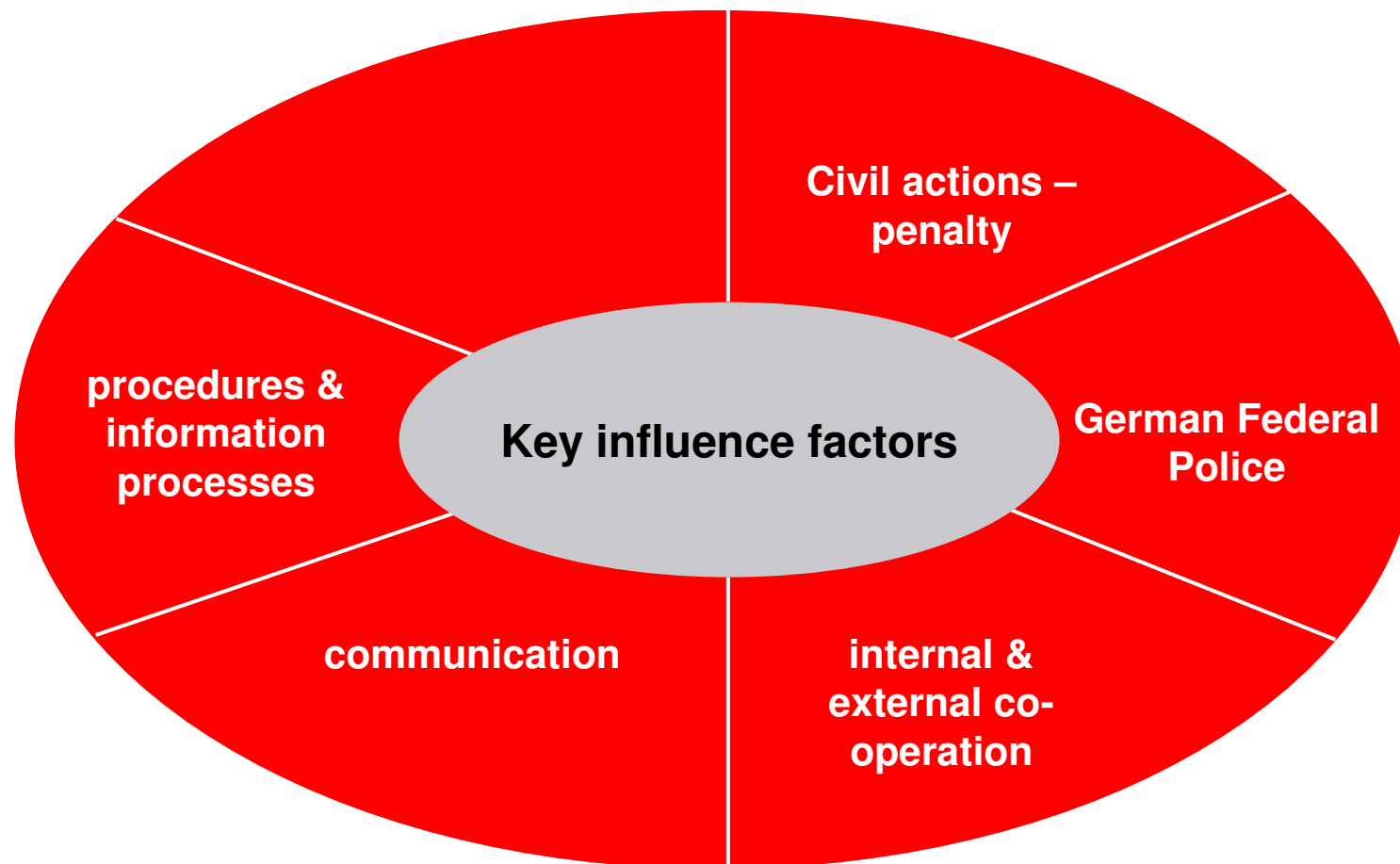
Metal Theft

Key influence factors and measures



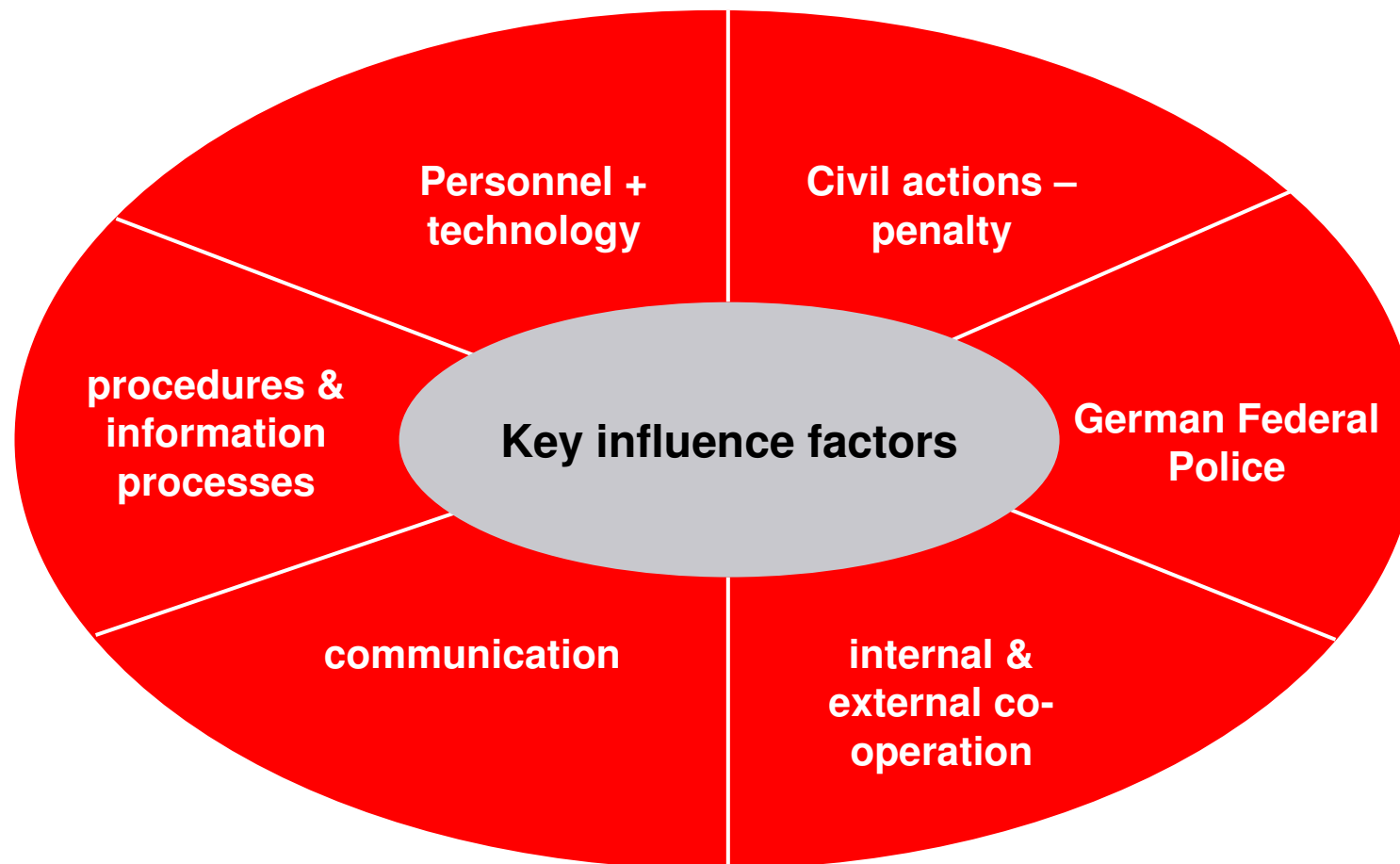
Metal Theft

Key influence factors and measures



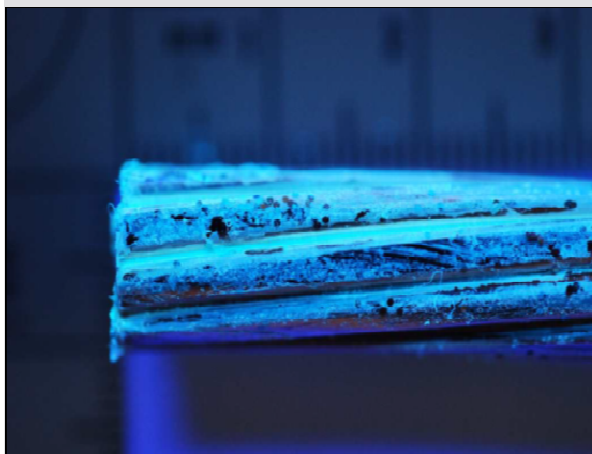
Metal Theft

Key influence factors and measures



Technology

Artificial DNA

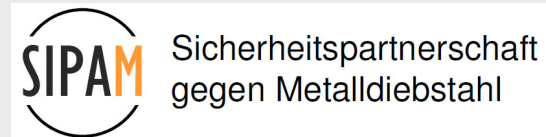


Technology Artificial DNA





Initial findings of practical tests involving "artificial DNA"



Berlin, 20 June 2013

Nadine Zocher

Head of Environment & Recycling
Verband Deutscher Metallhändler e.V.

TESTING

Handheld UV lamp



TESTING

**Handheld UV
lamp and
sample cable**



TESTING

**Sample among
other cables
in daylight**



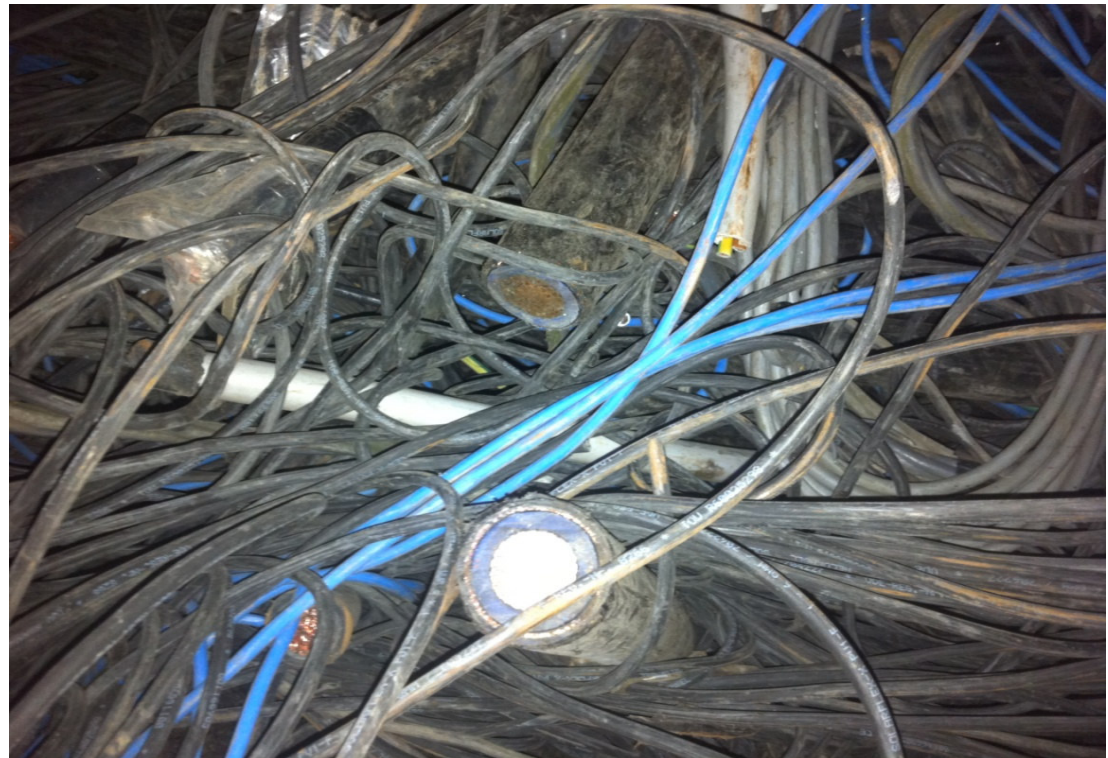
TESTING

**Checking a
load of cables in
daylight**



Possible sources of error

**Cross-linked
polyethylene
in daylight**



Possible sources of error

**Cross-linked
polyethylene
under UV light**



Possible sources of error

**Paper
with the same
color as kDNA**



Possible sources of error

**Plastic cable ties
under UV light**



PROBLEMATIC NATURE OF EXCAVATOR LAMP



results

- Handheld UV lamp principally working
 - kDNA is visible
 - light conditions
 - change the color and develop the durability of cables
- ➔ Change the product brief together with authorities

Unanswered questions – next steps?



Platform for Coordination ?



Security map ?



Distribution channel ?



Achtung – unsichtbare Markierungen!

**Die künstliche DNA führt zum Täter
und macht Metalle unverkäuflich!**