

The security challenge in museums

What is this?

Problem

- Museum wants to show art objects to the public
- Wishes to increase the number of visitors
- Security staff has to safeguard the collection
- Museum staff has to earn money by renting hall for parties and catering

Introduction

- Willem Hekman
- Military career for 35 years (1964-1999)
- Director-general European Union of Historic Houses Associations (till 2004)
- Security advisor Rijksmuseum Amsterdam

The Rijksmuseum Amsterdam



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Rijksmuseum Amsterdam

Risk Analysis

- Vandalism (spitting and an attempt to set fire to a painting)
- Theft of art objects
- Fire
- Transport of art objects
- Terrorist acts
- Own security personnel
- Own museum staff renting out spaces for parties and catering

Other risks

- Crowd control
- School children
- Groups of tourists with guides

Embracing the statue of Triton



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Interlocking measures

- Building Construction
- Electronic measures
- Organisational measures

Building construction

- Entrances: tourniquet doors
- Metal detection in the doors
- All doors electronic locks
- Use of showcases
- All glass windows till 6 meter height 15 minutes break resistance

Test the glass resistance

- Reports with standard NEN
- Do not just believe this , but test it yourself

Our test equipment



Our test of glass is simple



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Electronic measures (1)

- Seismic glass break detectors
- PIR
- CCTV
- Extensive use of click-in points for cameras
- Extensive glass fibre network
- Smart cameras for stand-alone objects
- Access control high security areas
(Iris – recognition))

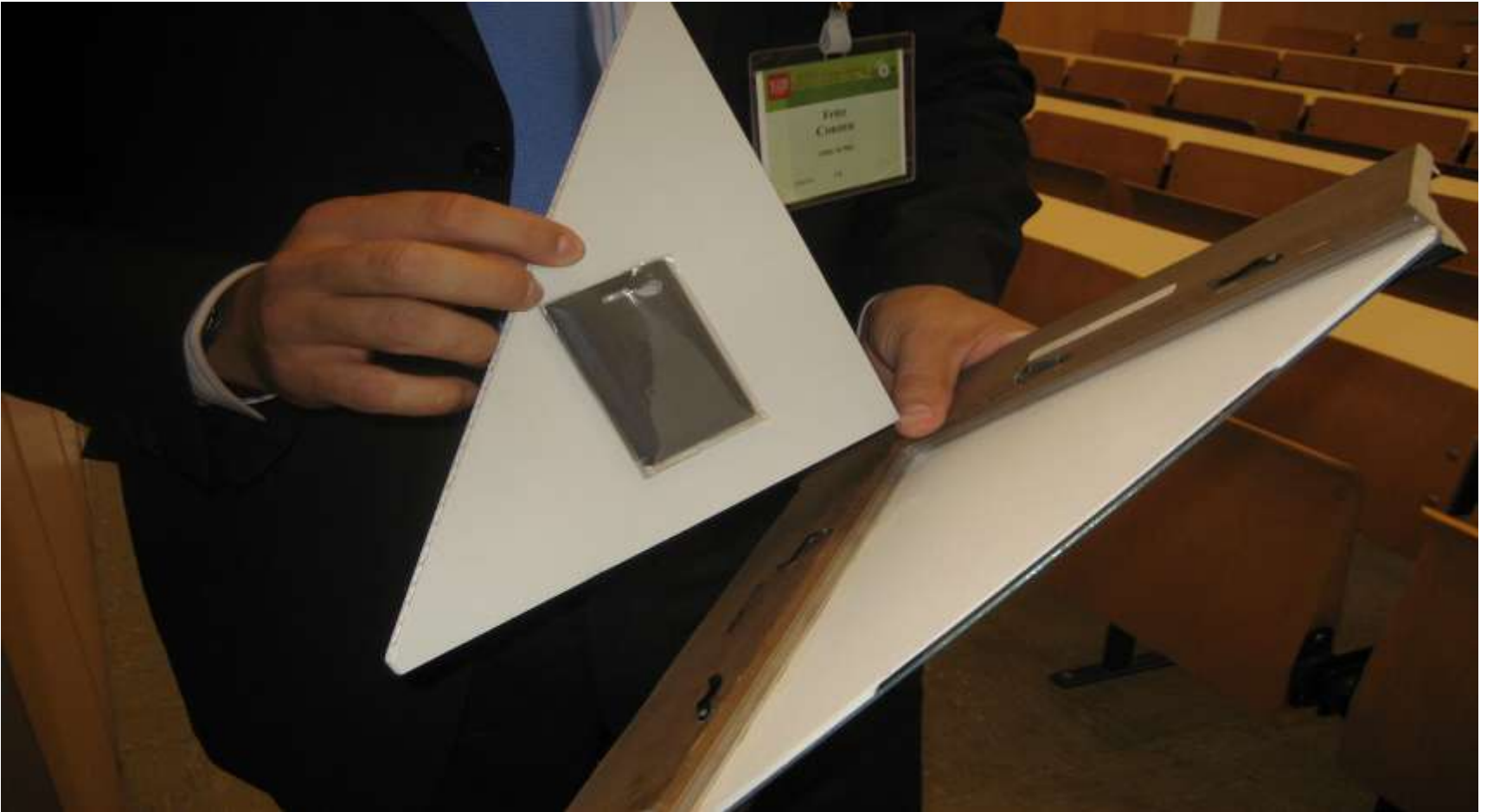
Electronic measures (2)

- X-Ray doorways for visitors
- Equipment to scan bags, jackets etc.
- Extensive object security (RFID) for all art objects and showcases
- Automatic switch between tags and portable radios and CCTV

South Wing

● de Meesterwerken

RFID tag for paintings



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Organisational measures (1)

- Training of security guards (continuously)
- Alertness of guards (pre active)
- Reorganise patrols of security guards
- Update and implement new and strict procedures for staff and visitors

Organisational measures (2)

- Close co-operation with 2 other museums in one Central Control Room
- Reorganisation of security units of different museums (exchange personnel)

Own personnel

- Multi cultural background
- Low education level
- Screening is essential
- Awareness for financial problems (crisis)
- Continuous alertness

Continuous alert ????



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Transport of art objects

- How is it done in different cities
 - The simple way
 - The professional way
 - Cheap or expensive
 - With or without security

Art transport in Moscow



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Packaging art in San Francisco



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Packing and storage in Vancouver



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Transport of art in Amsterdam ???



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Easy to guess the content



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Risks with transportation

- Timings of transport (only need to know)
- Don't use the same schedule with regular transports
- Use unidentified trucks
- Only trucks with GPS
- Packing and unpacking in secure area, not on the street

Tracking and tracing

- Use object security in the boxes connected with readers and GPS
 - RFID tag in the box or fixed on the art object
 - RFID reader in driver's cabin connected with a GPS sender/receiver

RFID tag hidden in a frame



Terrorist threat

- Bomb threat with IED
- Armed robbery

Bomb threat with IED

- Prevent it from entering the museum
- Which damage is likely ?
- Damage control

Use of rucksack or bag



This bag will never be checked



The nice gentleman forgot his briefcase



Baby is asleep, don't check the pram



Explosion of IED (1)



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Explosion of IED (2)



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Use the attenuator



Armed robbery

- Recognition
- Weaponry
- Purpose of crime
- Damage control

Recognition (1)

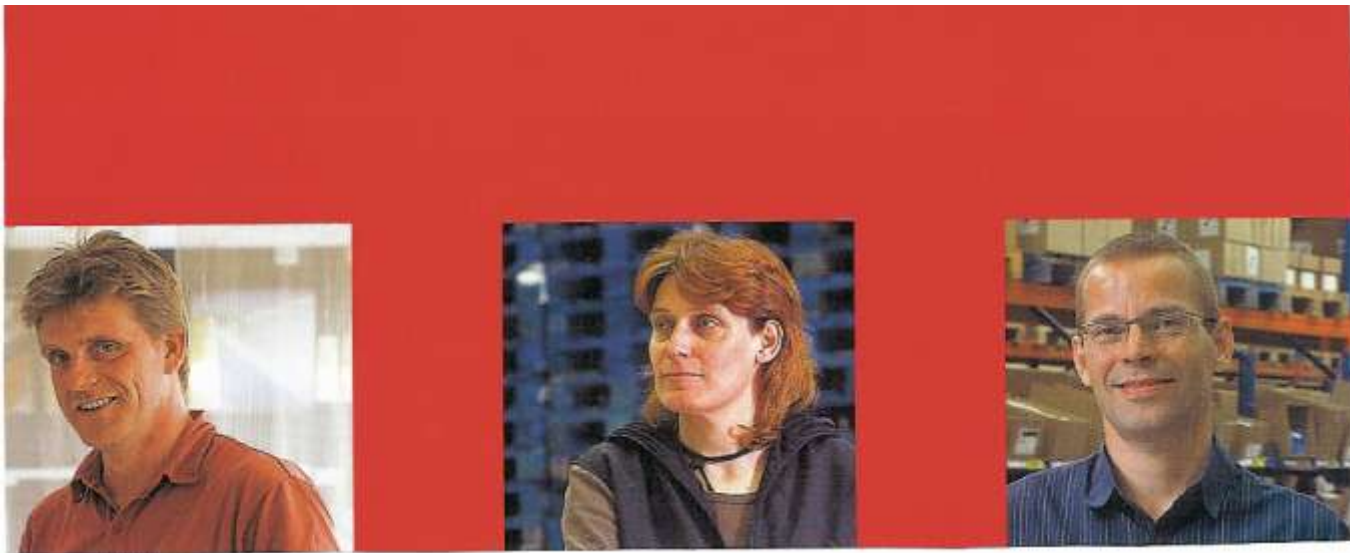


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Recognition (2)



Favourite weapons



Easy to hide



Purpose of crime

- Theft
- Damage to the image of the museum

Damage to our image ??



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Damage control

- X-Ray doorways for visitors
- Equipment to scan bags, jackets etc
- Alertness of guards at entrance and in museum
- Procedures (safety for visitors and personnel)

X-Ray every person



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Scan the luggage



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Lockers outside the building against a bomb proof wall



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Use of showcases

- Client has to specify what he wants
- Specify exactly the break resistance of your glass
- Security by use of RFID tags

Big opening between sides



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Visitors have to keep distance



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Secure



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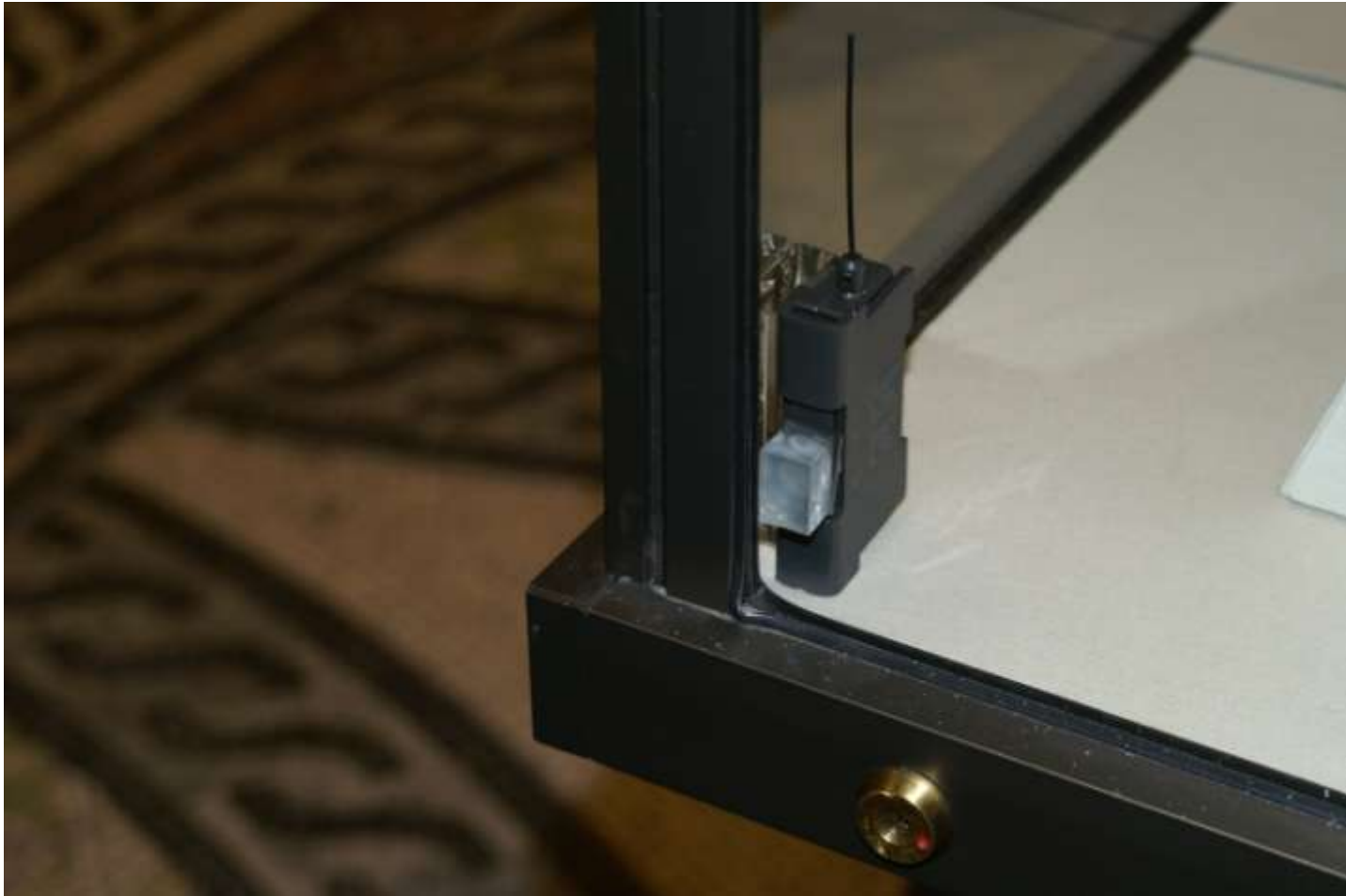
Screws outside showcase with weapons makes this an easy target



RFID tag for showcases



Tag for showcases



RFID tag in use



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Examples of not-tested glass in The Netherlands

- Theft of Hitler's book "Mein Kampf" (the National War and Resistance Museum in Holland in 2004)
- Theft of diamonds (6 million euro) – these were Crown Jewels in loan from Portugal (Museum Museon in The Hague in 2002)

Mein Kampf (1)



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Mein Kampf (2)



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Mein Kampf (3)



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Portuguese crown jewels (1)



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Portuguese crown jewels (2)



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Portuguese crown jewels (3)



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Portuguese crown jewels (4)



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Thank you for your attention