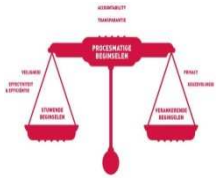


Deviant Behaviour

Using Deviant Behaviour in your Concept of Operations

Why deviant behaviour?

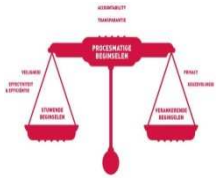


Pro-active security = cheaper security

- › Preparation
- › Prevention
- › Caught in the act
- › Crisis response
- › Investigation
- › Acceptance



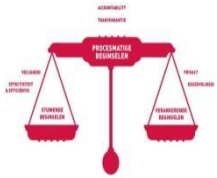
Later in the incident → increasing costs



Criminal phases

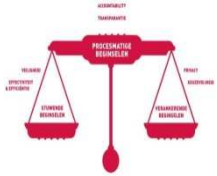
- › Broad target selection
- › Intelligence and surveillance
- › Specific target selection
- › Pre-attack surveillance & planning
- › Attack rehearsal
- › Execution: actions on objective
- › Escape & exploitation

United States. Army Training and Doctrine Command. *A military guide to terrorism in the twenty-first century*. Cosimo Incorporated, 2010.



Criminal phases

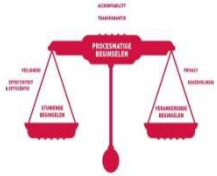
- › Creating motivation
- › Broad target selection
- › Intelligence and surveillance
- › Specific target selection
- › Pre-attack surveillance & planning
- › Attack rehearsal
- › Execution: actions on objective
- › Escape
- › Exploitation
- › Repent
- › Rehabilitation



Criminal phases

- › **Creating motivation**
- › **Broad target selection**
- › **Intelligence and surveillance**
- › **Specific target selection**
- › **Pre-attack surveillance & planning**
- › **Attack rehearsal**
- › **Execution: actions on objective**
- › **Escape**
- › **Exploitation**
- › **Repent**
- › **Rehabilitation**

Proactive security

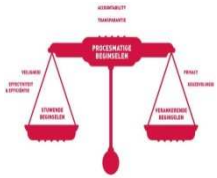


“Displacement has long been the Achilles heel of situational measures, and CCTV is no exception” – Gill, 2005

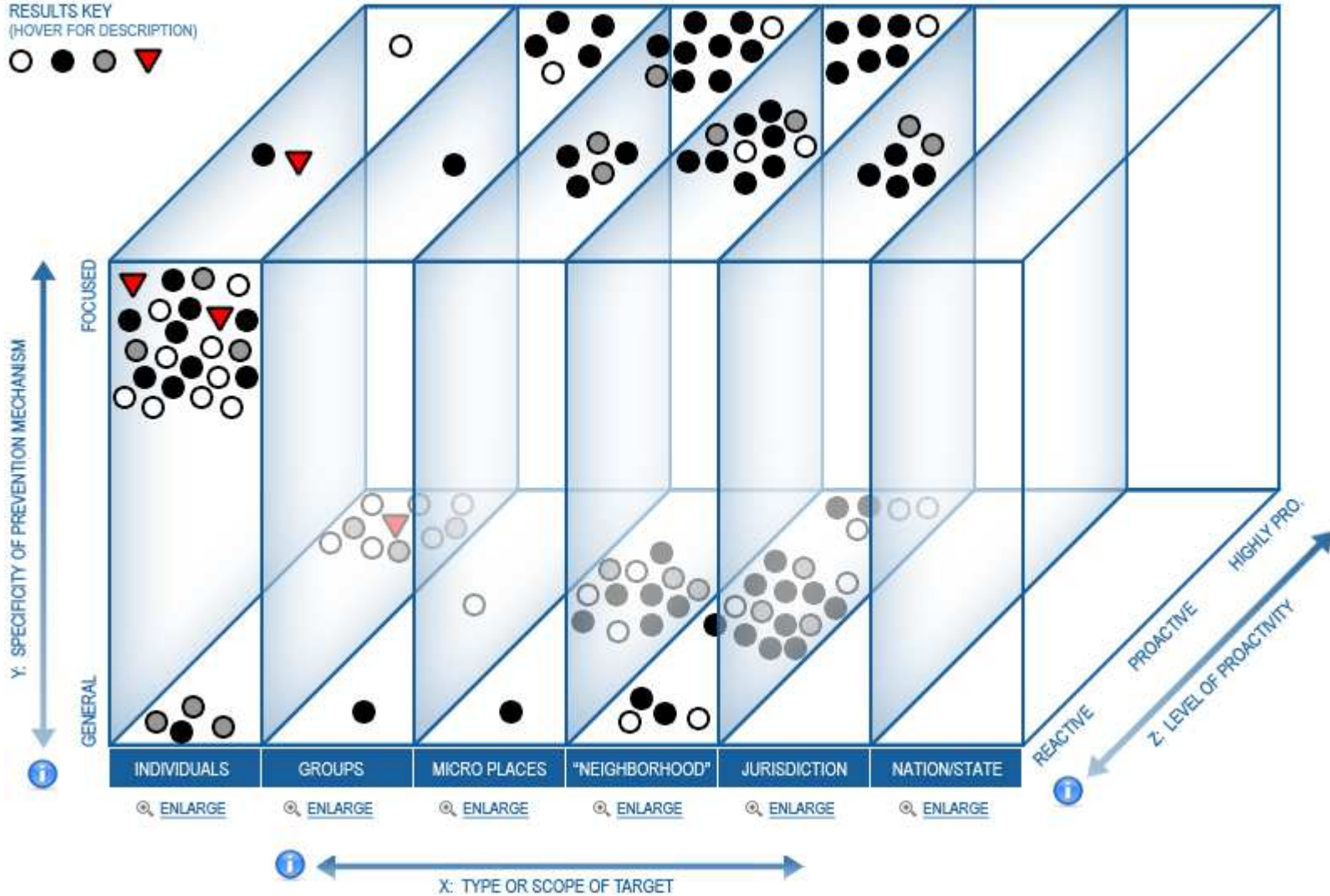
Friday, 29 November 2013 11:30

SPOT-ted \$900 Million, TSA Program Hasn't Caught One Terrorist

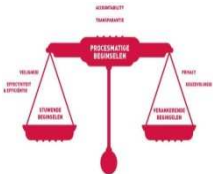
 Written by **Michael Tennant**



RESULTS KEY
(HOVER FOR DESCRIPTION)

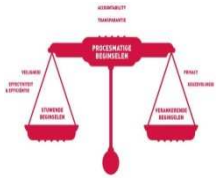


› <http://cebcp.org/evidence-based-policing/the-matrix/>



Effectiveness of proactive security

Security processes	Preparation	Prevention	Intelligence	Disturb	In the act	Investigate	Recover
Criminal phases							
Execution							

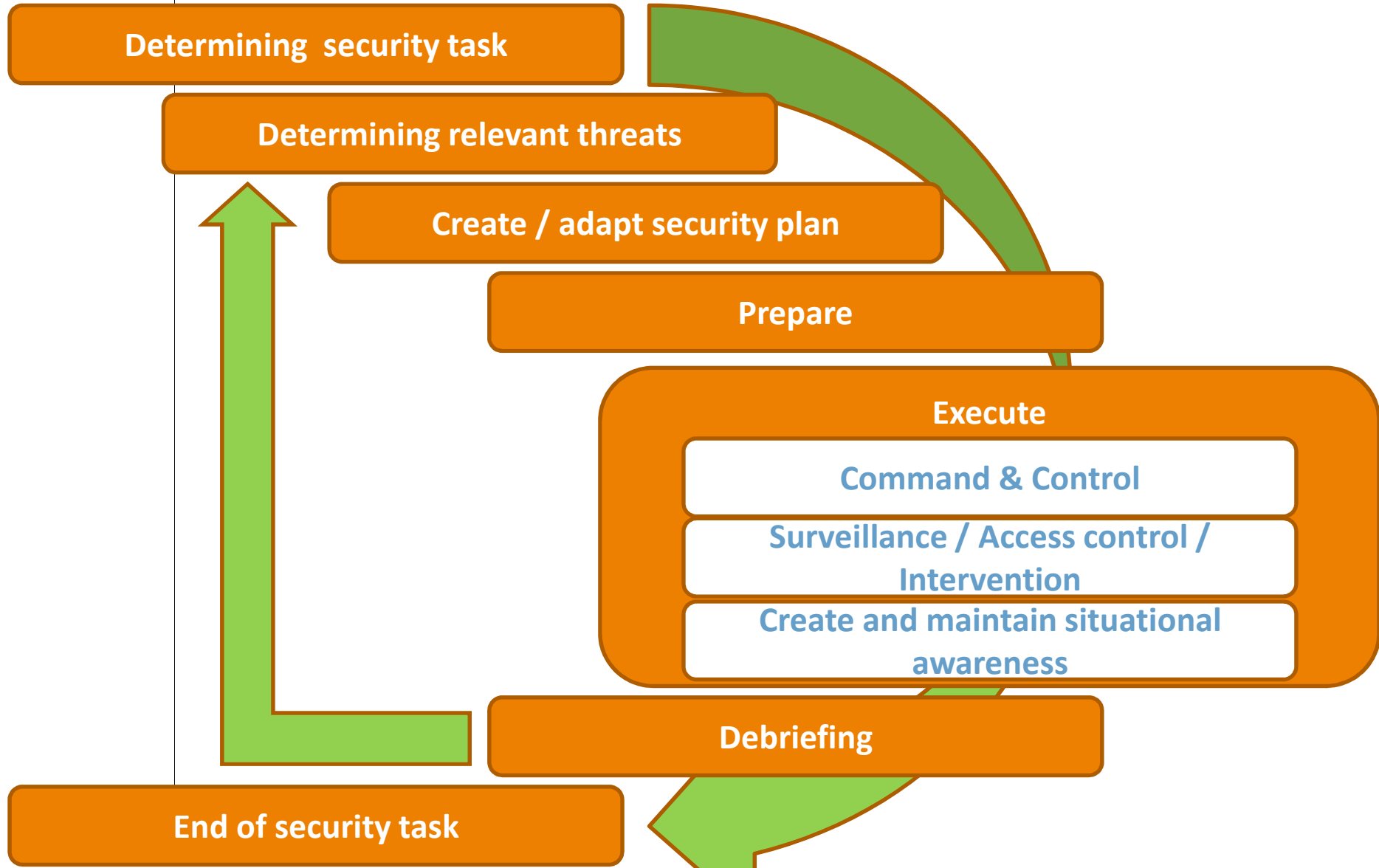


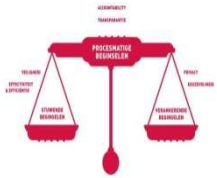
Effectiveness of proactive security

Security processes	Preparation	Prevention	Intelligence	Disturb	In the act	Investigate	Recover
Criminal phases	Preparation	Prevention	Intelligence	Disturb	In the act	Investigate	Recover
Create motivation							
Broad target selection	C	C	C				
Intelligence and surveillance	C	C	C			C	
Specific target selection	C	C	C	C		C	
Pre-attack surveillance & planning	C	C	C	C		C	
Attack rehearsal	C	C	C	C		C	
Execution	C			C	C	C	
Escape	C				C	C	
Exploitation							
Repent							
Rehabilitation	C						C

How do we use deviant behaviour?

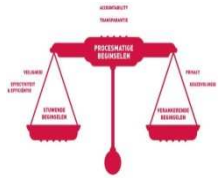
Concept of Operations





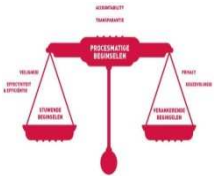
Nine definitions of deviant behaviour (1-4): threat based

- › Behaviour which may lead to dangerous and/ or undesired situations, i.e. which threaten the continuity of the processes at the location;
- › Behaviour which correlates significantly with incidents;
- › Behaviour which is part of the modus operandi of a criminal act;
- › Behaviour which has as purpose to gain an advantage for one self at the cost of someone else: unethical behaviour;



Nine definitions of deviant behaviour (5-9): continuity based

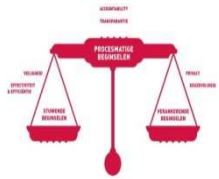
- › Behaviour which is not part of any of the allowed (work-)processes which occur at the respective location or object;
- › A reaction which does not fit to the stimulus if the intent of the subject were benign;
- › Behaviour which falls outside the normal distribution of behaviour at the respective location;
- › Behaviour which is unwillingly displayed due to high cognitive pressure;
- › Behaviour which does not fit the local social norms, including anti-social behaviour and culturally abnormal behaviour.



Indicative behaviour of pickpocketing



Aart Beukers – Eye-D Security Experts &
Dutch National Police

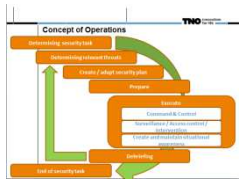
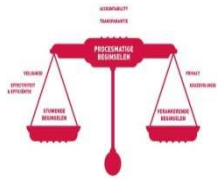


MOMAP voor zakkenrollerij bij tram

MOMAP Pickpocket

In the pickpocket scenario generally one or more (two is common) pickpockets work together. They are usually opportunistic criminals, selecting victims based on their vulnerability and likelihood for loot.

Modus Operandi	Looking for easy victim	Selecting victim	Position relative to victim	Distracting intended victim	Snatch valuable	Hide loot	Leave location
Time							
Persons en and objects							
Actions and events							
Possible interventions and stimuli							
Context							

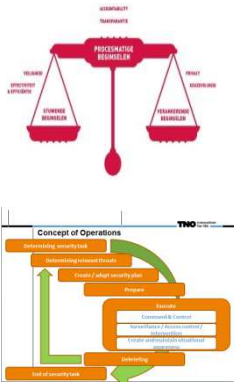


MOMAP voor zakkenrollerij bij tram

MOMAP Pickpocket

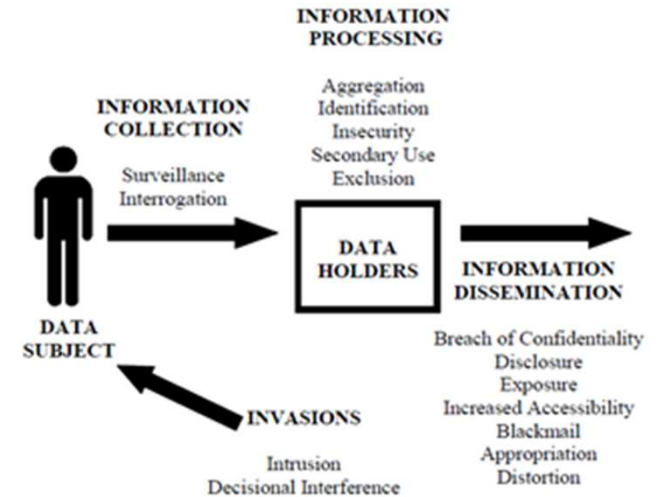
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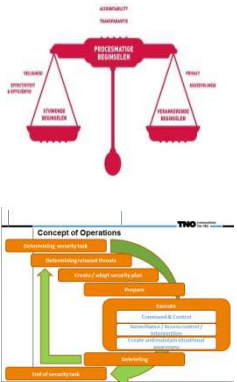
Modus Operandi	Looking for easy victim	Selecting victim	Position relative to victim	Distracting intended victim	Snatch valuable	Hide loot	Leave location
Time	10:05	10:30	10:31	10:37	10:37	10:37	10:38
Persons en and objects	P1, P2, P3	P1-P3, V3	P1, P2, V3	P1, V3	P1, V3	P1, P2	P1, P2, P3
Actions and events	Hanging around	Communication between P1, P2 and P3	Tram approaching	P1 is stalling the line	P1 snatches	P1 gives loot to P2	
Possible interventions and stimuli	Introduce fake victim	Approach victim to ask for route	Move in between P1 and V3	Distract P1 or P2	Caught in the act	Caught in the act	Caught in the act
Context	The location is Amsterdam. The scenario was put in scene by the Amsterdam police with actors.						



Invasiveness

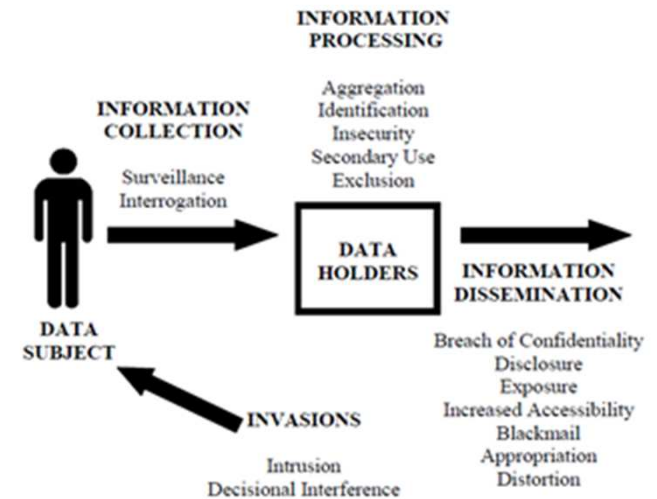
- › Surrender of autonomy / cooperation
- › High level of detail of personal data
- › “Bycatch” of personal data (camera versus personal tracking device)
- › More than legally allowed (espionage is more invasive than surveillance)
- › Different from communicated publicly (e.g. covert surveillance)





Invasiveness

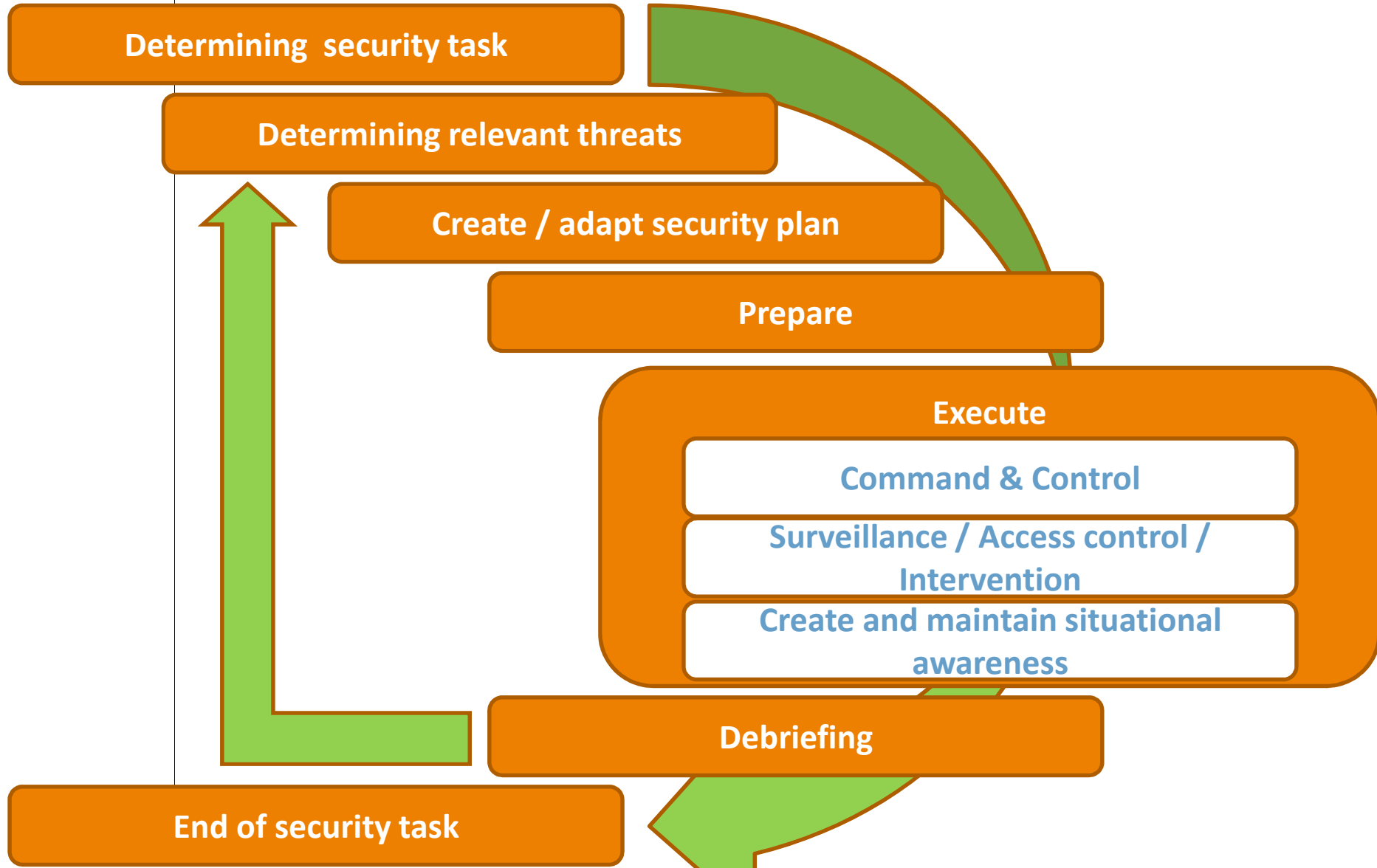
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Invasiveness (4 point)		Invasiveness (9 point)		Description
A	None	0	None	There is no surveillance
B	Slight	1	Knowing	The subject knows that he is being monitored, but does not see, have to carry or do anything special (e.g. you assume that a certain fraction of the subjects carries mobile phones which you can monitor);
		2	Seeing	The subject sees the devices monitoring him around him, but he does not have to carry something or act in a special way;
C	Moderate	3	Carrying	The subject carries a device which is being monitored. The device does not require any special acts in order to be monitored, e.g. a GPS tracking device;
		4	Acting	Acting (i.e. cooperation): the subject regularly has to act in a certain way in order to be monitored, e.g. have biometrics taken in a controlled environment, or offer an RFID card to a reader;
		5	Possibly interrupting	The monitoring agent (device, etc.) has the option to interrupt when he sees fit, but this is not certain, e.g. a police officer standing next to a people flow;
D	Strong	6	Interrupting	The subject knows he will actually be interrupted in his normal behaviour in order to respond to a probe or an information-request, e.g. a reception desk at a secured object;
		7	Bodily	The subject has to give physical access to (a part of) his body, e.g. a pat down at an airport.
		8	Full transparency	The subject hands over control over his body and allows monitoring of his internal physiological factors

What do we need to do to use knowledge of deviant behaviour?

Concept of Operations



- › Dutch National Programme on High risk object security
- › EU FP7 Tactical Approach to Counter Terrorists in Cities (TACTICS)
- › Dutch National Topsector High-tech Systems & Materials “Passive Sensors”
- › TNO Research programme on Deviant Behaviour

TNO innovation
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TNO-rapport

Afwijkend Gedrag
Maatschappelijk verantwoord waarnemen van gedrag
in de context van veiligheid

Datum 15 februari 2014
Auteur(s) Jeroen van Rest, Maaike Roelofs, Anna van Nunen

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