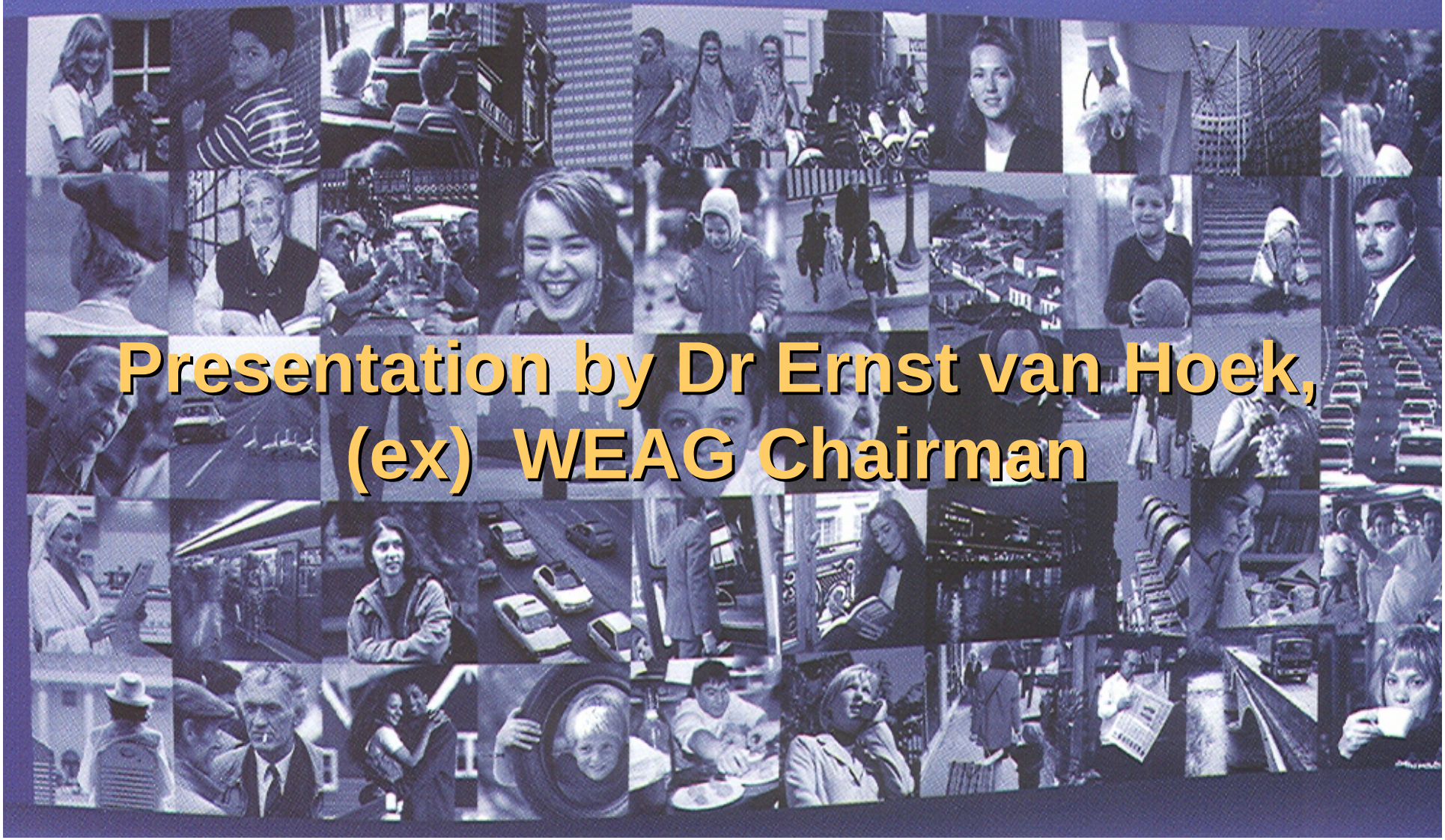
Research for a Secure Europe



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Lay out

- History
- What is Security Research?
- Relation to Defence Research
- How can it work
- What it means for Aerospace Research
- Conclusions

History

- Start in 2003: first exchanges of ideas and setting up of Personalities Group & sherpa's
- Motivation: International Terrorism & Crime biggest concerns of Europeans
- So far: EU not involved in Defence or related activities
- Personalities Report early 2004
- First projects in 2004

Security Research

- Advance capabilities for
  - information
  - protection
  - post disaster management
  - co-ordinated support
- Dealt with at local and regional levels
- European wide approach only starting
- PASR & ESRP

Security Research (2)

- Is not a discipline
- Is applied research
- Has commonality with Defence Research
- Has attracted high interest
- Is now politically relevant
- This could be a disadvantage as well!

International co-operation

- Assumes National activities
- Disappearing borders
  - For citizens
  - For the economy
  - For criminals
  - For terrorists!
- Governments slow to adept to it!

Reflection: Defence R&T – International Co-operation

- Defence R&T Characteristics:
  - Cooperation started during Cold War
  - Applied Research
  - Outcome protected: limited market mechanisms
  - Directed by governments
  - National orientations
  - Transparency limited
  - Was important for Allied Success

Security Research & Defence

- Defence technology usable
- Co-operative tools available
- Content: look at inventory of projects (“Assets”)
- Can we use them?
- We can use at least the ‘Culture’, but probably much more
- Role for European Defence Agency
  - Still to be defined
  - Will have to be in line with Commission activity

Existing Assets

- Tools:
  - MoU
  - Contracts / general conditions
  - Network
- Technologies:
  - Structure - Taxonomy
  - Multi disciplinary studies
  - Technical results

Actual application

- Radar:
  - Technologies for new small radars such as FM-CW radar (anti drug use?)
  - Looking through walls
- Materials
  - Damage tolerance
  - Self repairing
- IT

  Internet technologies
- Protection:
  - Flares
  - Ballistic protection /
  - Crew safety

Actual application (2)

- Modelling and Simulation
  - Synthetic environment and training
  - MED-LOG
- CB technologies
  - Detectors
  - Protection
- Space based technologies
  - High resolution sensors
  - Low cost ground station (RAPIDS)

Aerospace particular

- Vulnerability while flying
- Psychological effects highly relevant
- Economic impact
- Strong high-tech content
- Measures should be all inclusive, partial solutions have very limited effect

Aerospace particular (2)

- Integrated design for future aircraft
- The Human factor will always be the crucial one
- Permanent Training & Simulation

Way forward

- Seek synergy between projects by defining themes and clusters
- Provide link between technologists, industry, policy makers and executive organizations
- Think in advance about keeping the advance on lawbreakers / catastrophes

Way forward & Conclusions

- As borders lose their meaning, make sure to think in terms of regions / continents in your approach
- Only efficient co-operation can make a difference.

Methodologies and Solutions in Support of PASR and ESRP + …

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