



Ministerie van Financiën



Weaponsystems (2015)

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Context: security debate

- After Cold War: armed forces lost scale
- Budget halved as % GDP vs. NATO norm
- National debate: armed forces now too small?
- After Cold War: threats more diverse
- Recently perception of security threat changed again
- Rapid technological change



Background:

- Challenge for Dutch MoD
 - To cope with more diverse threats and rapidly changing weapon technology with half the budgets
 - Still plethora of weapon systems in Europe
 - Cost of non-Europe in Defence: 10-40% (\$ 30-120 billion)
 - Example: tanker fleet US versus Europe
 - Europe: 42 tankers and 10 types
 - US: 550 tankers and 3 types



Logical response: recreate economies of scale and learning effects

- Through cooperation and integrated contracts
 - Illustration: with original plan for 1300 Boxers APC price would have been 25-35% lower than with present 472
- Conclusion
 - We could have more value for defense money with present budgets
- Two roads
 - Joint procurement of new weapon systems
 - Bottom up cooperation with existing weapon systems



The logic of cooperation

- Procurement of new systems
 - Full benefits if it includes maintenance, training, operations
- Alternative: COTS/MOTS
 - Borrow economies of scale from private sector
 - Example: Scania-trucks
 - However: no guarantee of interoperability
 - Full benefits with integrated contracts
- Bottom up cooperation
 - Starts at operational level
 - Gradually develops based on successes and trust
 - Grasp opportunities which arise down the road



The smartness of integrated contracts

- How?
 - Create economy of scale via private sector
 - Supplier: profit as an incentive for innovation, optimisation of logistics and processes
 - Customer: risk minimalisation and readiness optimisation
- Impact?
 - More value for money



Netherlands participates in all kinds of cooperation

- Bottom up
 - Benesam: operational integration Navies of B and NL
 - German-Dutch Army cooperation: DSK and 1st Panzer Division
- Procurement
 - Boxers
 - SMART-L radar
 - NH-90
 - Upgrade F16
 - Scania: integrated contract
- Many other examples of cooperation
 - More than 70 larger projects in total



Key question for working group

- There is still potential to get more value for money through economies of scale
 - Based on Europe-wide studies
 - Examples of failures: no EU Navy frigate and disappointments: NH-90
- Key question
 - How to catch this potential for cooperation?
 - What are in this respect opportunities for integrated contracts?



To do better in the future we should learn from the past: review historic cases

- Dutch experience with international procurement cooperation
 - Boxer, upgrade F-16, Smart-L radar, NH-90, AWACS
- Experience with integrated contracts
 - Scania-trucks
- Bottom up cooperation
 - Benesam
- Experiences of other countries: Clingendael
 - A400M
 - Fennek
 - Strategic Airlift Command



Findings on new weapon systems

Factors complicating effective cooperation

- Large number of participating countries
- Presence of (competing) national defense-industries
- Uncertain cost of development
- Absence of a lead nation
- Political commitment to cooperation
 - No exit strategy
- Examples: NH-90 and Boxer
 - 1300 NH-90's in 2 variants end up in 350 NH-90's in 23 variants
 - 1300 Boxers for 4 countries end up in 472 Boxers for 2



Principal findings on cooperation

Factors facilitating cooperation

- COTS-MOTS product
- Synchronized capability demand
- Limited number of countries
- Limited number of changes to specifications
- Trust among partners: based on past experience
 - Some flexibility in specifications
- Presence of a lead nation
- Examples: upgrade F16, AWACS, SMART-L



Principal findings on bottom up cooperation?

- Step-by-step approach
- Long time almost invisible
- Building up of trust takes time
- If successful firm base for deep integration
 - Integration 2 NL brigades in German divisions
 - Task specialization
 - Belgian Navy in maintenance minesweepers
 - Dutch Navy in maintenance frigates
 - Longer term also impact on requirements



Findings on integrated contracts

- Importance of knowledge of user profile
- Build some flexibility in the contract
 - Changes may happen
- Know how of contract management



Findings on the net benefits of cooperation

- Expert military judgements indicate that cooperation is beneficial for the cases analysed
- But there is almost no hard evidence to support this judgement
 - No metrics, no quantitative evidence
 - No culture: to measure = to know
 - No framework to quantify net benefits: ex ante or ex post
 - Not for joint procurement: DMP-process
 - Nor for bottom up



Dutch policy on cooperation based on past experiences

- Focus on limited number of trusted strategic partners
 - To get results
 - US, D, UK, B, Lux, F, DK and NOR
- Apply the lessons of past experiences
- Deep integration
 - Germany
 - Joint D-NL steering group: 200 projects
 - Major materiel projects: M-frigates, tanks, firesupport,
 - Operational integration of 2/3 of Dutch Army in German divisions
 - Belgium: Benesam
 - Joint maintenance of frigates and minesweepers
- Working group: right policy
 - But no overnight benefits



The potential up to 2030

- Net present value of templates 2015-2030: \pm € 30 bn
- German investment program: \pm € 60 bn
- Conclusion: many projects and therefore many opportunities to do better
- Illustrative impact of 5% efficiency gain on value for money: € 4,5 bn



What more can be done to catch potential?

- Structurally: apply a cost-benefit framework to identify systematically the biggest opportunities for value for money
 - Taking into account Nato shortfalls
 - Check regularly net benefits during negotiation
 - Facilitate LCC through better internal governance
 - Empower MoD personnel to use the framework
- Strategically: identify the logical next step in cooperation
- Time frame: identify the benefits that could be realised in the short term



Structural: improve the framework

- McNamara: 'what you don't measure, you can't manage'
- Present DAP-framework provides insufficient systematic guidance to identify projects with best value for money
 - From a military and/or financial perspective
 - Framework should also quantify net benefits of international cooperation
- It should be integrated in the Defence Acquisition Process
- Similar framework should be used for bottom up operational cooperation



Structural: improve the governance of DAP

- More checks & balances
 - Role of challenger
 - Challenging the assumptions of business cases/cost benefit analyses
- Two options
 - Role for controller
 - Cape-like institute



Strategic: the next step in cooperation?

- Vigorously continue cooperation with Germany
 - Best opportunity to regain economies of scale
 - Joint D-NL EU-battlegroup?
- Explore actively opportunities for cooperation with UK, NOR and DK
 - UK: Apaches, Chinooks, Hercules, naval-systems
 - NOR: submarines
 - DK: SMART-L
- If successful: try to deepen cooperation to North Sea area as a whole
- US: maintain long standing materiel cooperation, especially between air forces



Time frame: short term benefits?

- Cooperation: long-term matter
 - No easy gains
- Short term: focus on existing weapon systems
 - BCG-analysis Apaches: 6% 'investment' in maintenance budget could improve readiness Apaches 15-44%
- Advice: analyse existing weapon systems on low cost possibilities to improve readiness and rank them
- Take this ranking into account when allocating new budgets