

**FIRST INTERNATIONAL CONFERENCE UMSSOFT 2007**  
**“Using Models and Simulations in Support of**  
**Force Transformation”**

“G. S. RAKOVSKI” Defense  
and Staff College  
27 - 29.06.2007

# MANAGING RISK IN FORCE DEVELOPMENT PROGRAMS

Colonel Venelin Georgiev, PhD



# OVERVIEW:

- **FEATURES OF THE FORCE TRANSFORMATION PROCESS**
- **PROGRAM RISK MANAGEMENT MODELS**
- **PROGRAM RISK MANAGEMENT METHODS**
- **MoD PRACTICE IN AREA OF PROGRAM RISK MANAGEMENT**

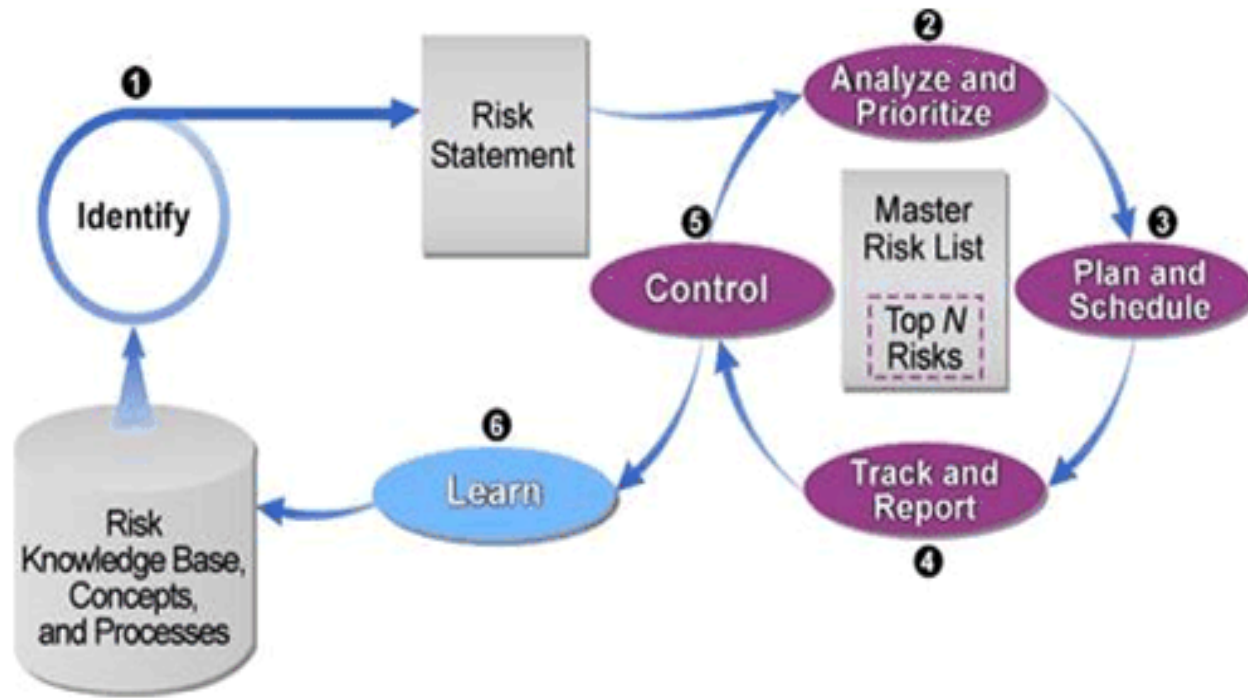
# FEATURES OF THE FORCE TRANSFORMATION PROCESS

- **NECESSITY OF CONTINUOUS AND STEADY MANAGEMENT OF THE FORCE TRANSFORMATION PROCESS**
- **THE FORCE TRANSFORMATION PROCESS IS IMPLEMENTED IN CONDITIONS OF LACK OF COMPREHENSIVE INFORMATION**
- **THE SUCCESSFUL FORCE TRANSFORMATION PROCESS DEPENDS ON THE QUALITY OF THE RISK MANAGEMENT PROCESS**

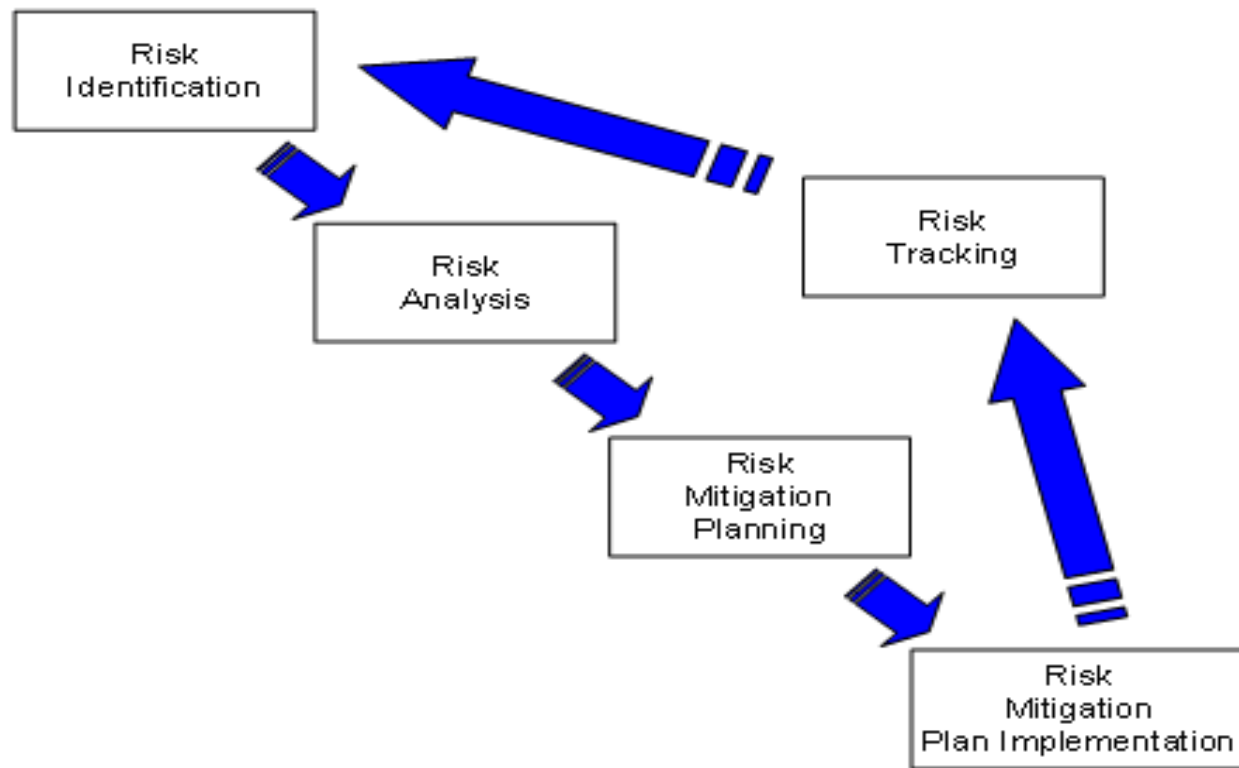
# PROGRAM RISK MANAGEMENT MODELS - 1



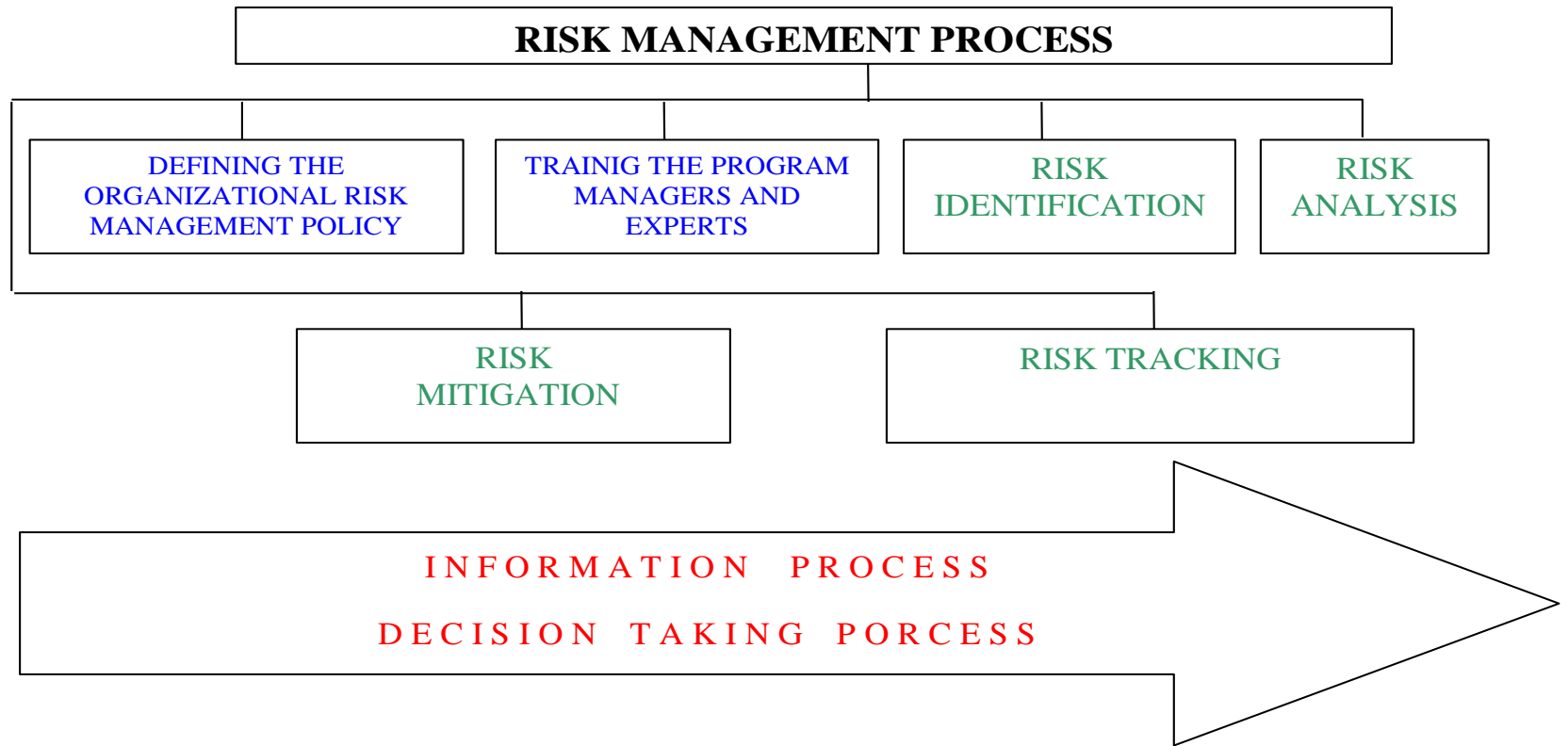
# PROGRAM RISK MANAGEMENT MODELS - 2



# PROGRAM RISK MANAGEMENT MODELS - 3



# RISK MANAGEMENT MODEL APPLIED IN MoD





# RISK MANAGEMENT MODEL APPLIED IN MoD

## RISK IDENTIFICATION

- What can go wrong with Force Development Program implementation?
- As early as possible
- By using appropriate methods

## RISK ANALYSIS

- How big is the risk?
- After identifying the program risk
- By using appropriate methods

## WHAT, WHEN, HOW

## RISK MITIGATION

- What is the program approach for addressing the program risk?
- After ranking of the identified program risks
- By defining, choosing and applying appropriate strategies

## RISK TRACKING

- How are things going?
- During the risk mitigation plan implementing
- By using appropriate methods for control over programs

# PROGRAM RISK MANAGEMENT METHODS

## - METHODS OF PROGRAM RISK IDENTIFICATION

### - *METHODS FOR EXPERT ASSESSMENT*

DELFI

BRAINSTORM

SCENARIOS

### - *METHODS FOR FISICAL IDENTIFICATION*

BASED ON CONTROL OF CURRENT  
PROGRAM STATUS

BASED ON CONTROL OF PROGRAM  
IMPLEMENTATION DOCUMENTS

## - METHODS OF PROGRAM RISK ANALYSIS

MATRIX METHOD

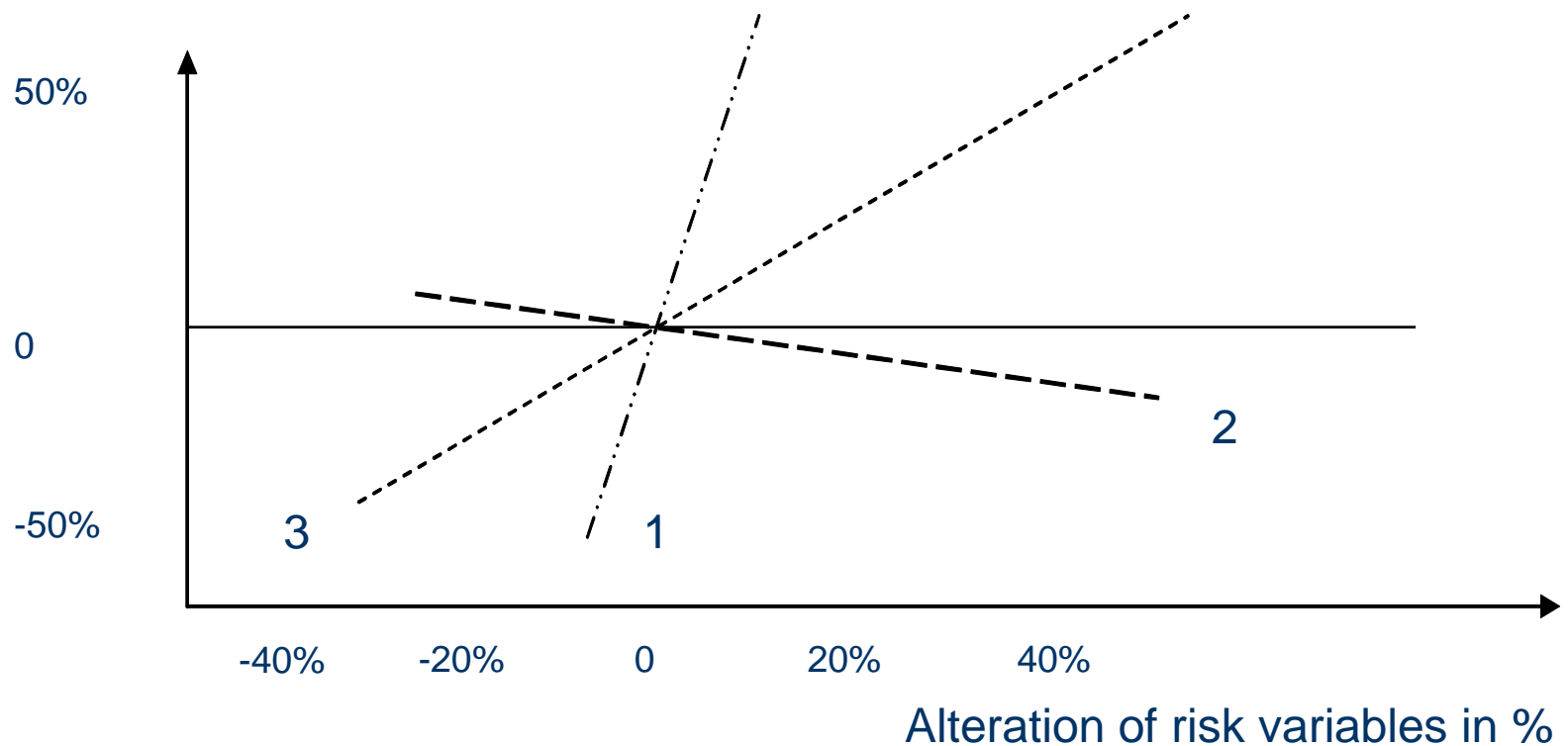
STATISTICAL METHOD

SENSITIVE ANALYSIS

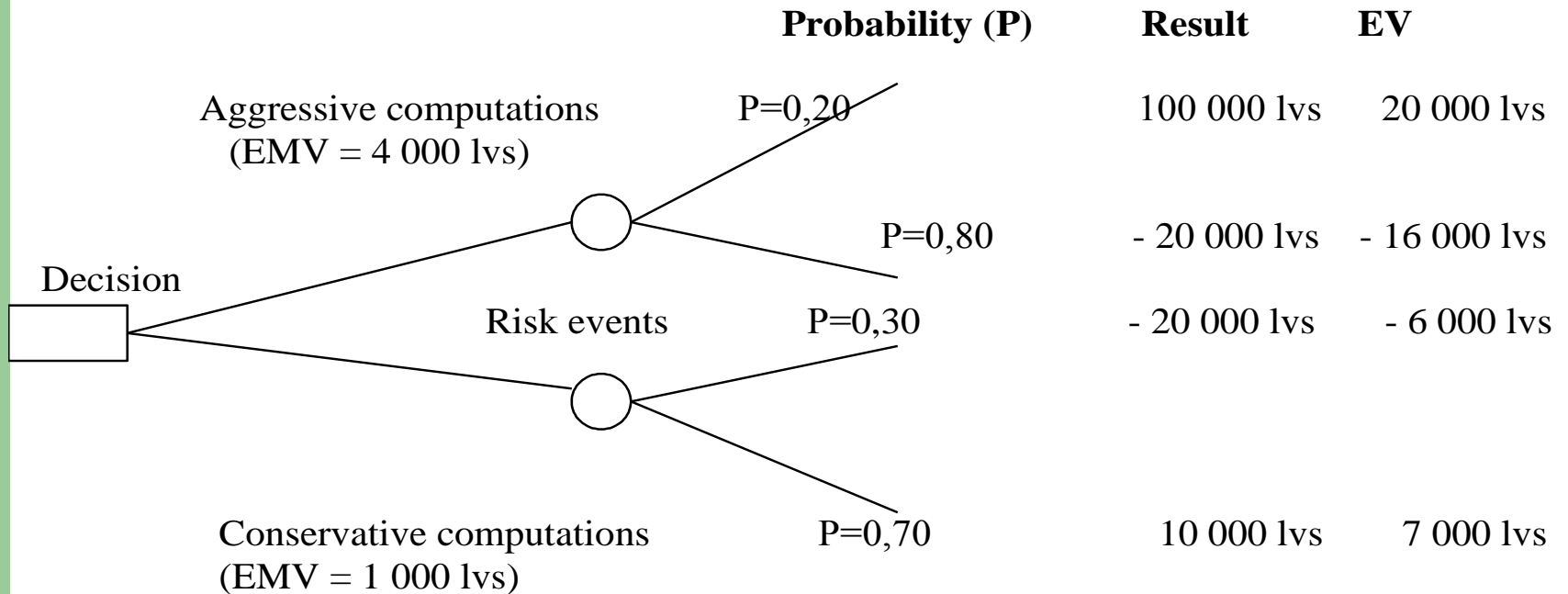
DECISION TREE

# SENSITIVE ANALYSES

Alteration of factors in %



# DECISION TREE



# MoD PRACTICE IN AREA OF PROGRAM RISK MANAGEMENT

- **DEVELOPING THE ORGANIZATIONAL POLICY OF PROGRAM RISK MANAGEMENT**
- **TRAINING THE PROGRAM MANAGERS AND EXPERTS**
- **DEVELOPING AND APPLYING METHODOLOGY FOR PROGRAM RISK MANAGEMENT PORCESS IMPLEMENTATION**

# CONCLUSION

- **THE SIGNIFICANCE OF THE FORCE TRANSFORMATION IMPOSES APPLYING THE PROGRAM RISK MANAGEMENT PROCESS AS A PART OF THE WHOLE MANAGEMENT PROCESS**
- **THE EFFECTS FROM THE PROGRAM RISK MANAGEMENT DEPENDS ON THE QUALITY OF THE APPLIED MODELS AND METHODS**
- **THE CHOICE OF THE APPLIED MODELS AND METHODS IN PROGRAM RISK MANAGEMENT IS SIMILAR TO ART AND DEPENDS ON THE MANAGERS AND EXPERTS**

# **MANAGING RISK IN DEFENSE DEVELOPMENT PROGRAMS**

- **THANK YOU FOR YOUR ATTENTION!**
- **ANY QUESTIONS?**