



Where is the SMS heading

- a company wide approach to continuous improvement

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- 1. Introduction**
- 2. Basic Risk Management concepts**
- 3. Regrouping the SMS**
- 4. Continuous improvement**
- 5. Integration of management systems**



1. Introduction

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- ***SMS corner stone of safety regulatory framework as introduced by Directive 2004/49/EC***
 - **RU/IM responsible for risks of their activities**
 - **SMS identified as appropriate mean to fulfil responsibility**
 - **NSA issue safety certificate after assessment of SMS**
 - **MS approval = EU wide validity**
- ***Implemented in 2006 – still major concerns in 2010***
 - **Unwillingness to accept roles and responsibilities**
 - **Lack of harmonised NSA processes/approach**
 - **Poor understanding of basic concepts of SMS**



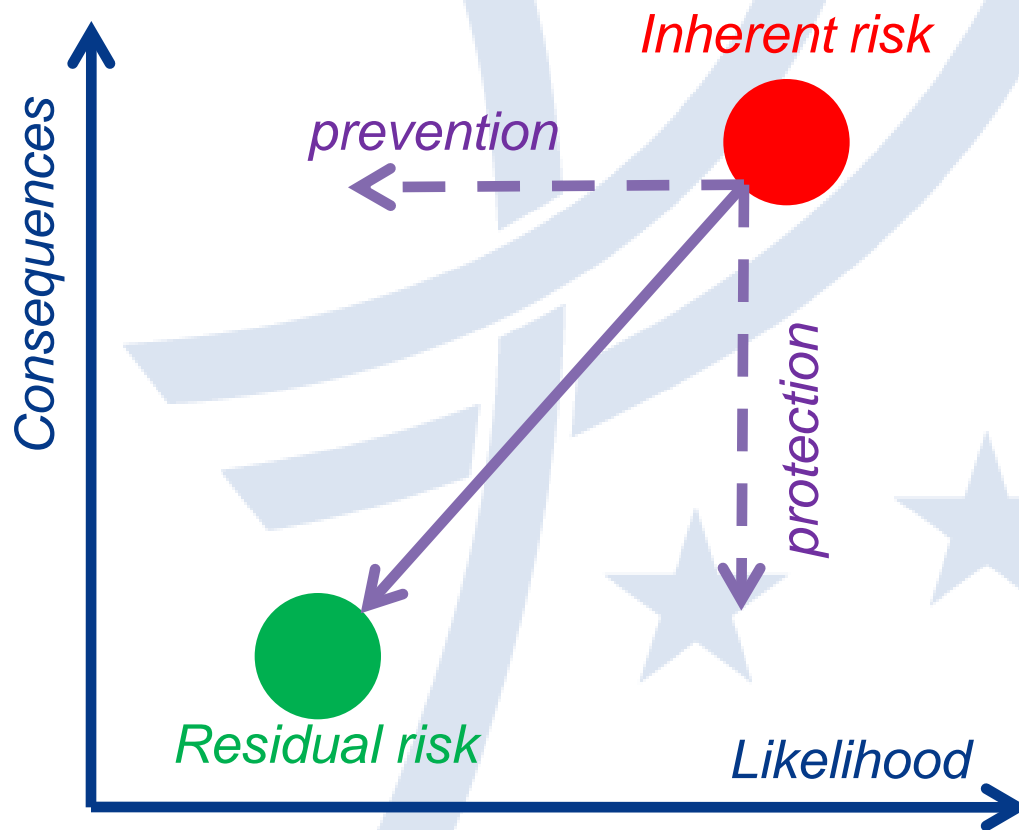
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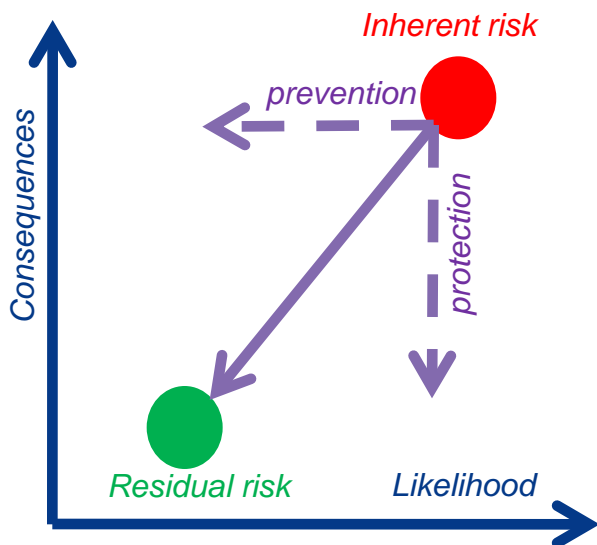


- ***Inherent risk***
 - „the risk found in the environment and in human activities that is part of existence“
 - safety risks related to RU/IM operations
- ***Residual risk***
 - „the remaining risk after risk management techniques have been applied“
 - acceptable risk level
 - risk control measures
 - *prevention* – reducing the likelihood
 - *protection* – reducing the consequences



- *The risk space:*



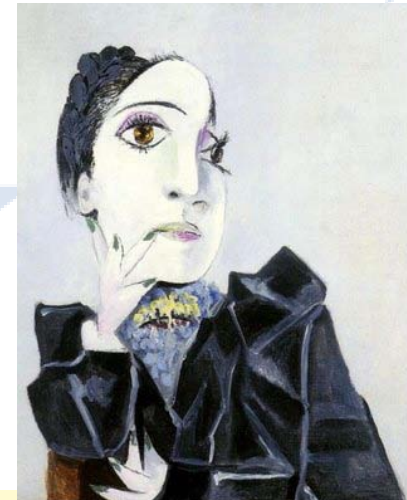
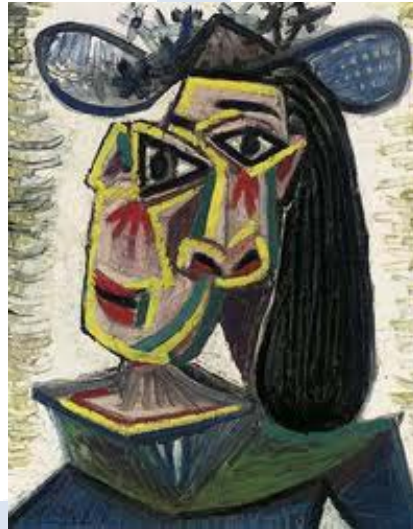


- ***Goal of SMS***

- **Optimise risk control measures based on true understanding, at all organisational levels, of both inherent and residual risk related to operations**

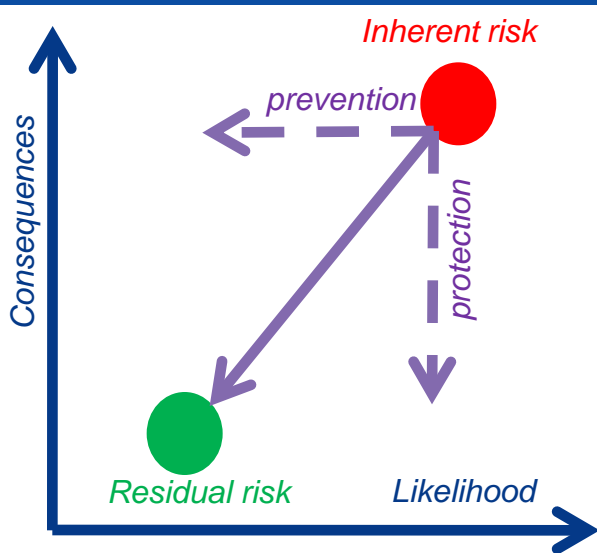


- *finding Dora Maar*





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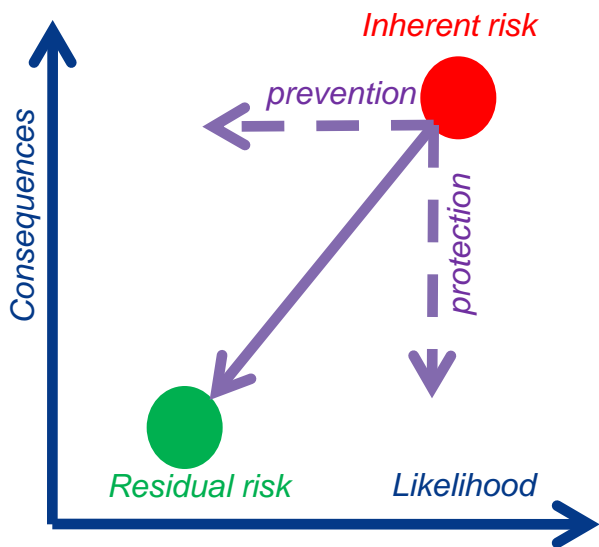


➤ **Emergency plan**

➤ **protection**

- ***Operational processes***

- **Processes that create, produce and deliver the products and services wanted, including the direct response to operational safety threats**

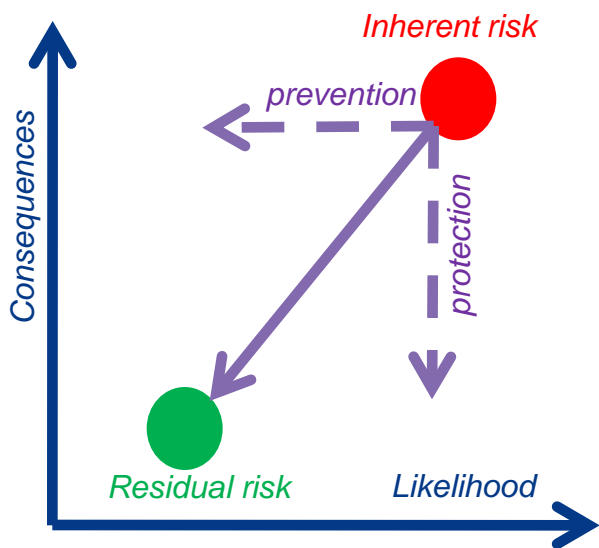


- **Support processes**

- **Implementing and establishing the operational processes and making them work as designed**



- ***Structure & responsibility***
 - People need to know role in system and what they're responsible for
- ***Competence management***
 - People need to have knowledge and skills to perform
- ***Information***
 - Availability of all relevant information in adequate form
- ***Documentation***
 - Develop and maintain recorded information

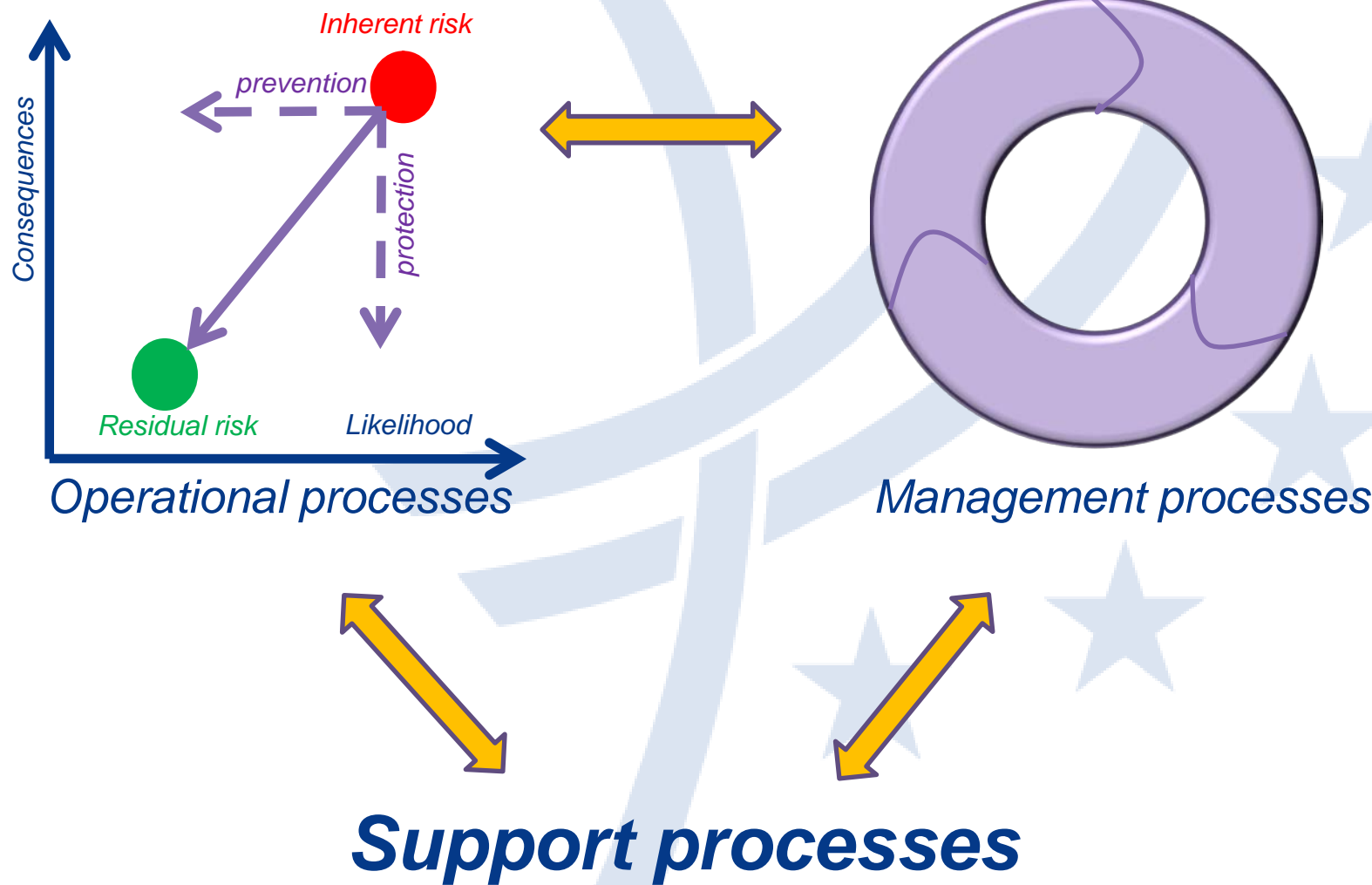


- **Management processes**

- **Define how to accomplish tasks, (incl. risk control measures), how to evaluate and how to adapt them to changing environment**

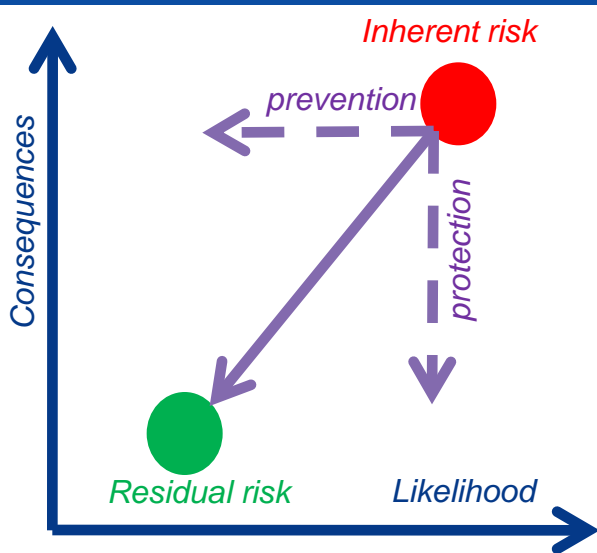


- ***Leadership***
 - Principles and core values, management commitment and decision taking
- ***Risk assessment***
 - Anticipating potential threats and develop risk control measures
- ***Monitoring***
 - Measure safety performance
- ***Organisational learning***
 - Implementing change and learning from experience



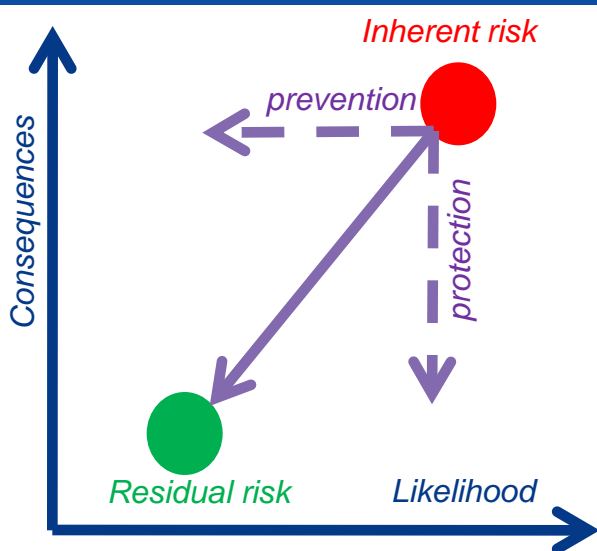


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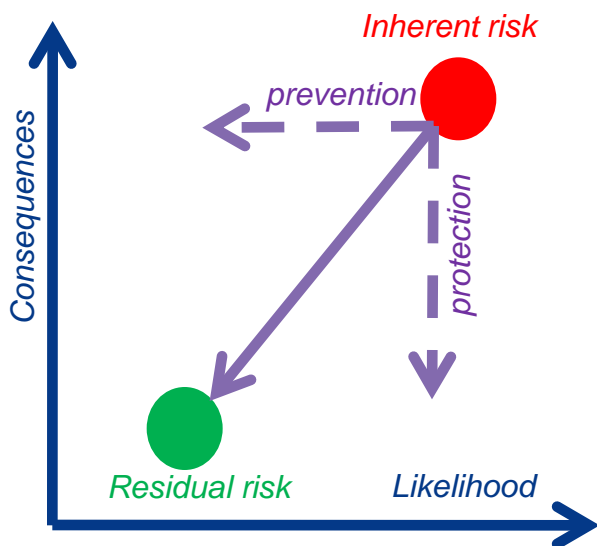
- ***Outcome indicators***

- **Trying to build image of *residual risk*, based on accident/ incident/ precursors**
- **Only reactive improvement**



- ***Performance indicators***

- **Measuring the effectiveness of existing *risk control measures***
- **Detect performance problems early and improve more pro-actively**

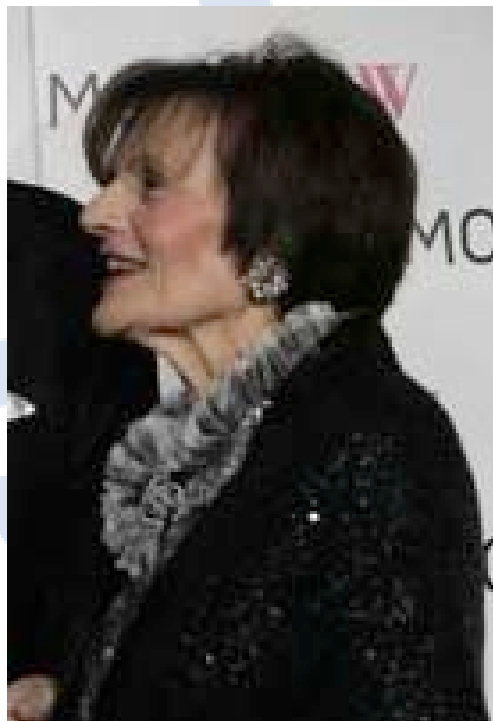


- ***Change indicators***

- **Checking assumptions made and identifying change in environment (internal/ external) – the *inherent risk***



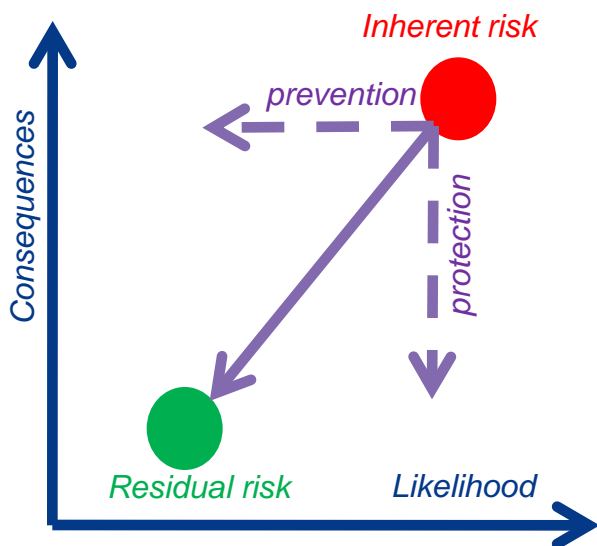
- *finding Dora Maar (continued)*



- *Henriette Theodora Markovitch (1907 -1997)*



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- **ISO 31000**

- **Risk = effect of uncertainty on objectives**
- **Safety = 1 of many business objectives**
- **SMS integrated in company wide risk management**



- *finding Dora Maar (continued)*





Thank you for your attention!

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