

EMFASE



Empirical Framework for Security Design and Economic Trade-off

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Research Questions

How can SESAR stakeholders **identify** and **select** appropriate **Risk Assessment Methods** for ensuring **Security** in the complex ATM domain?

What are ATM stakeholders' **needs** and **selection criteria**, and which Risk Assessment Methods could fulfil those needs?

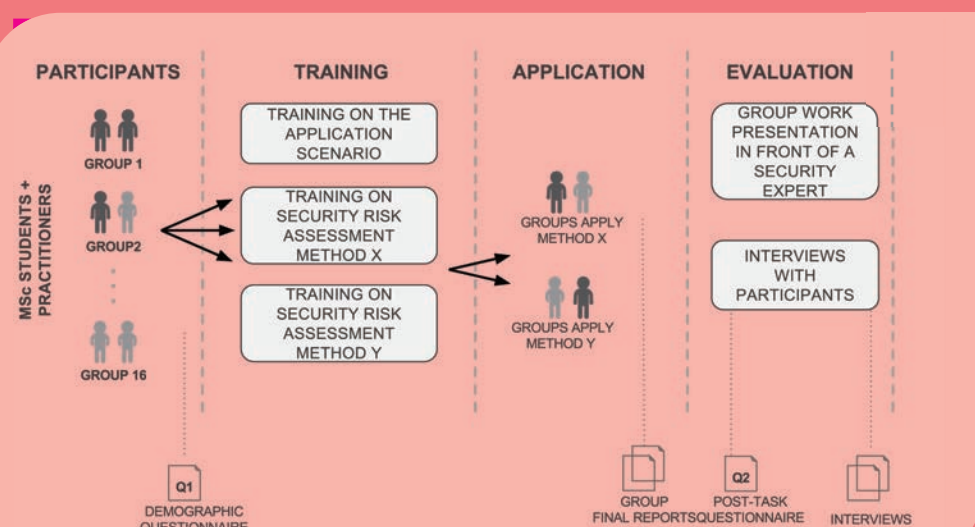
How can we know that the Risk Assessment Method applied **really works**?

Why does one Risk Assessment Method **work better** than others, in given circumstances?

Would additional expensive Security analysis and measures **be worth the cost**?

Approach

EMFASE will answer the above questions by applying different risk assessment methods on different application scenarios e.g. **Airport Collaborative Decision Making** and **Remotely Operated Tower** and by evaluating them with respect to their **performance, security impact, usability, and economy**.



Expected results

The EMFASE project main results will be:

- A **Framework for empirical evaluation** of security risk assessment methods
- Guidelines** to help security experts to select security risk assessment methods
- Causal explanations** of why selecting a risk assessment method in given circumstances will be the best decision.