

Wireless Systems Security

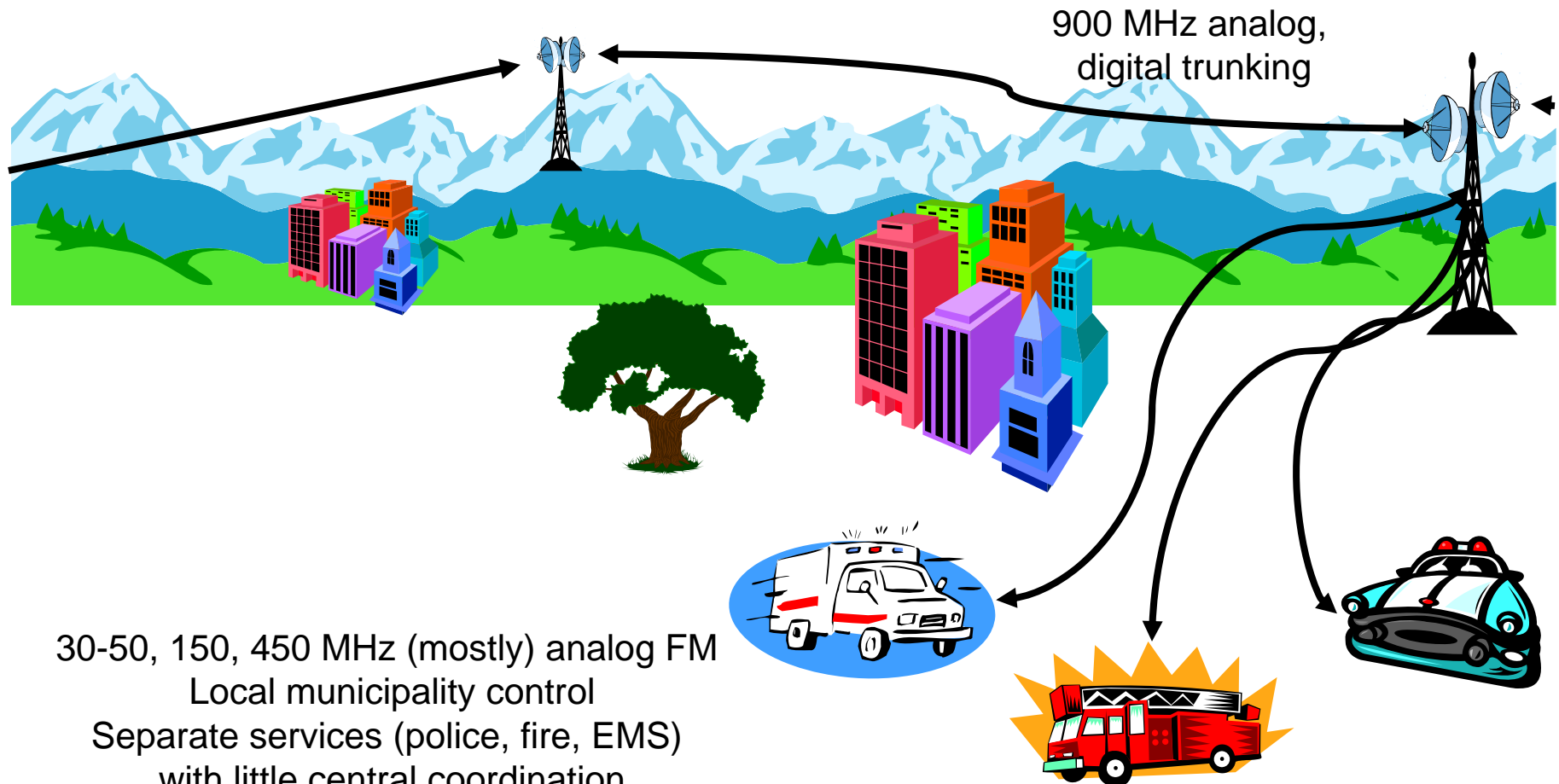
EE/NiS/TM-584-A/WS

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Week 6

Case Study 2

Case 2 – Public Safety Wireless Networks

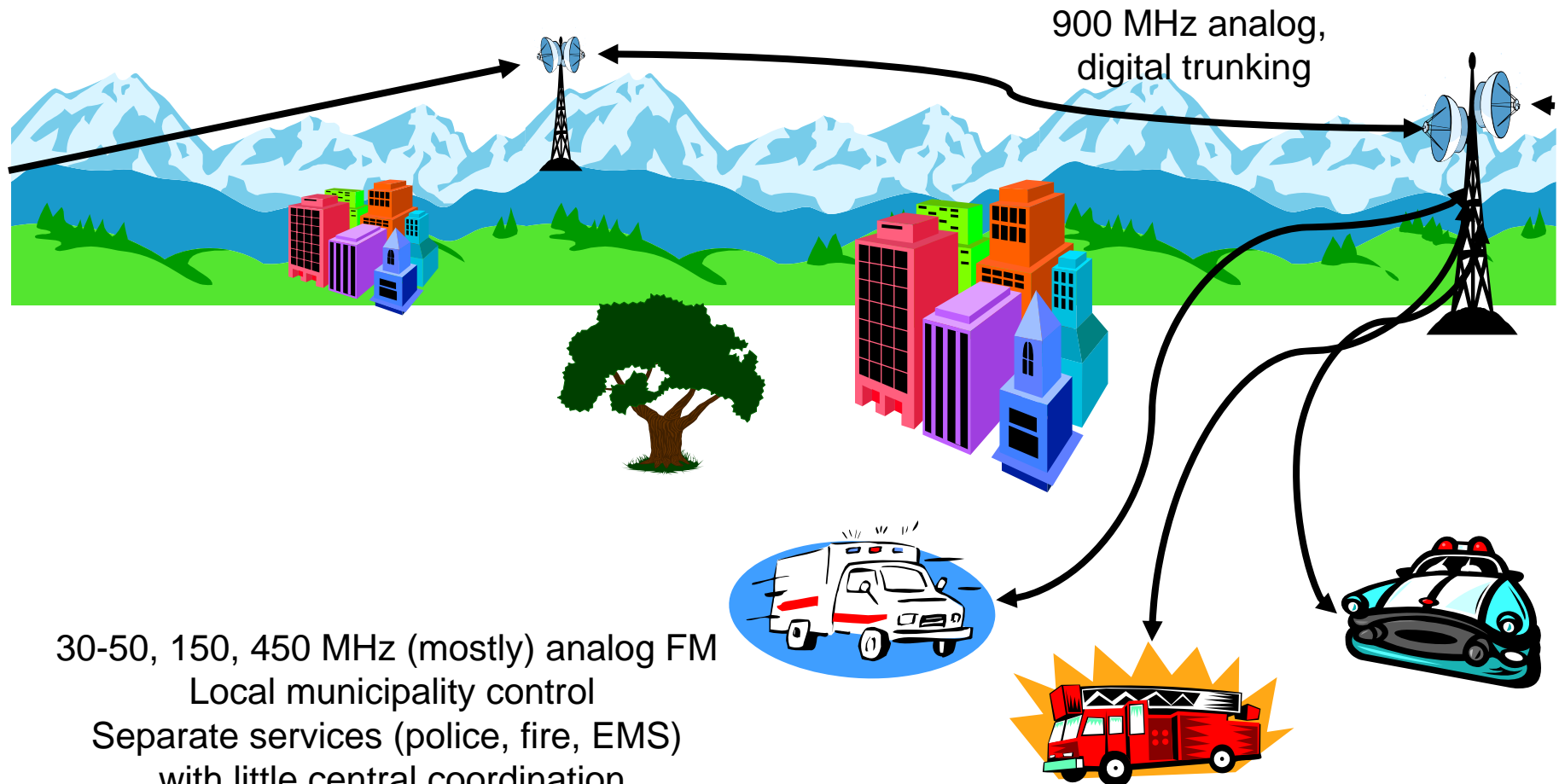


30-50, 150, 450 MHz (mostly) analog FM
Local municipality control

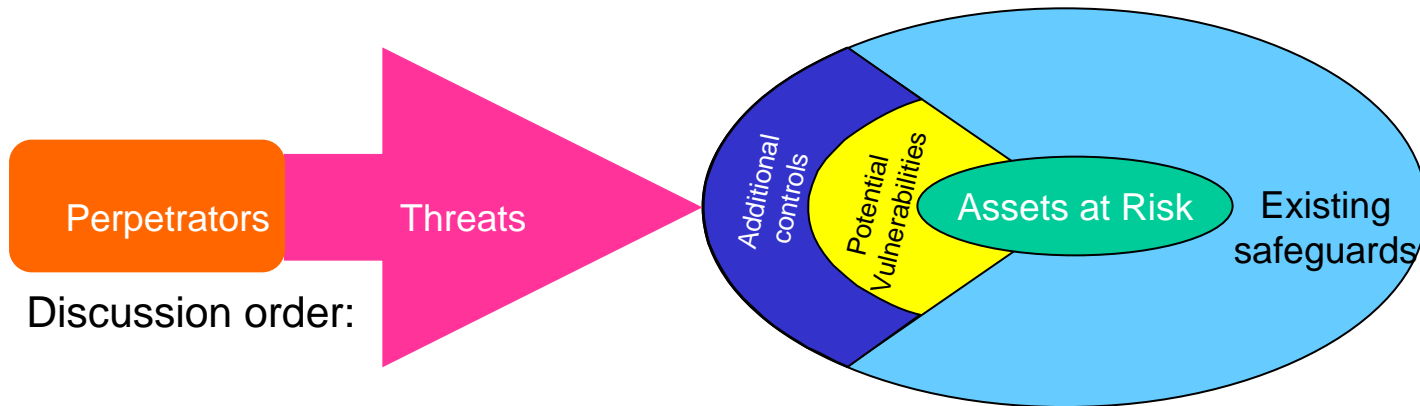
Separate services (police, fire, EMS)
with little central coordination

Some point-to-point; heavy use of RF repeaters

Case 2 – Public Safety Wireless Networks

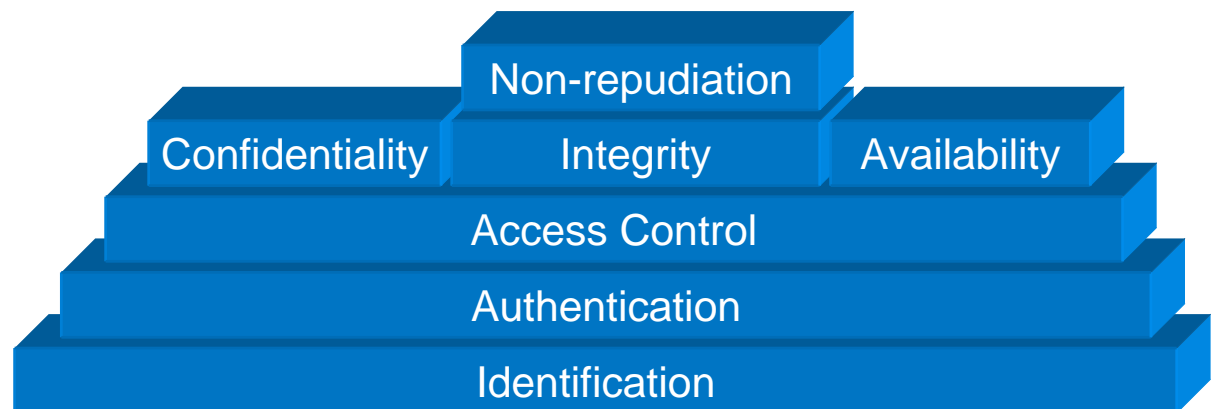


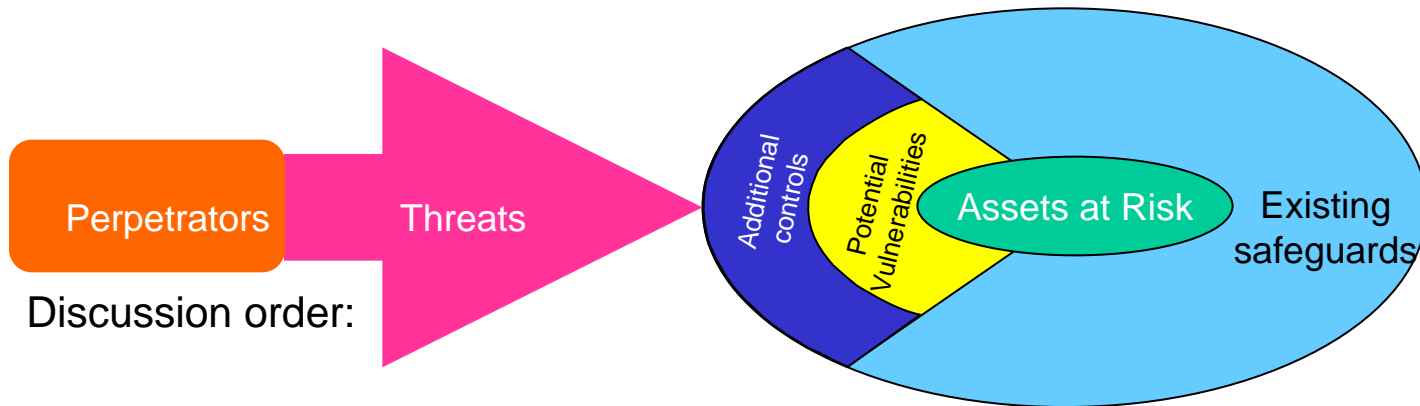
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Discussion order:

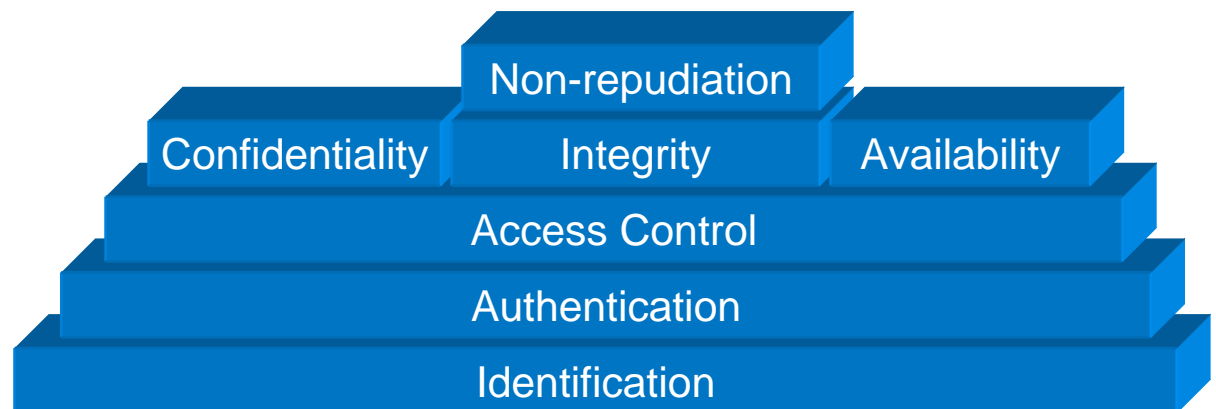
- Assets
- Perpetrators
- Threats
- Existing Safeguards
- Potential Vulnerabilities
- Additional Security Controls



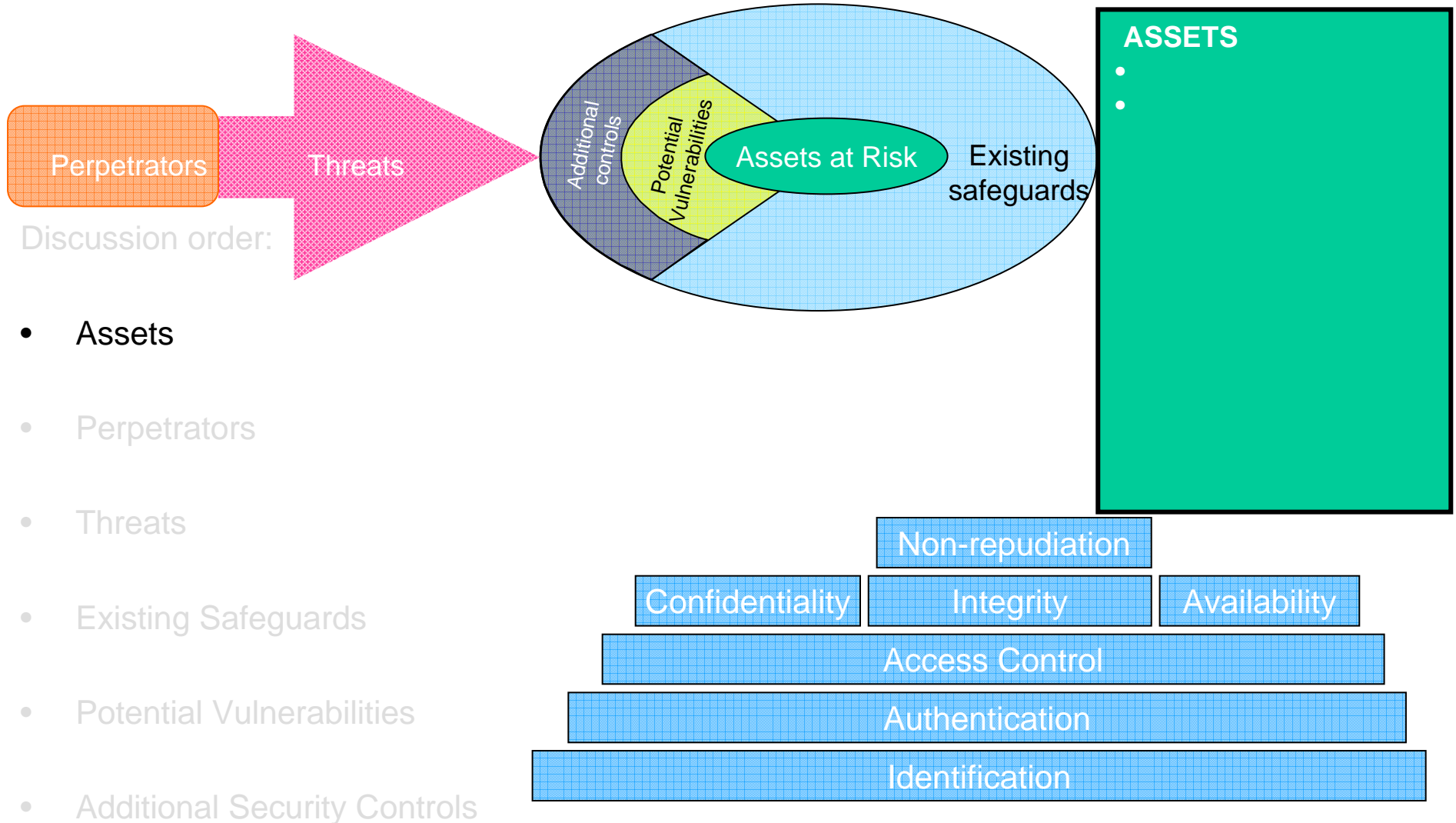


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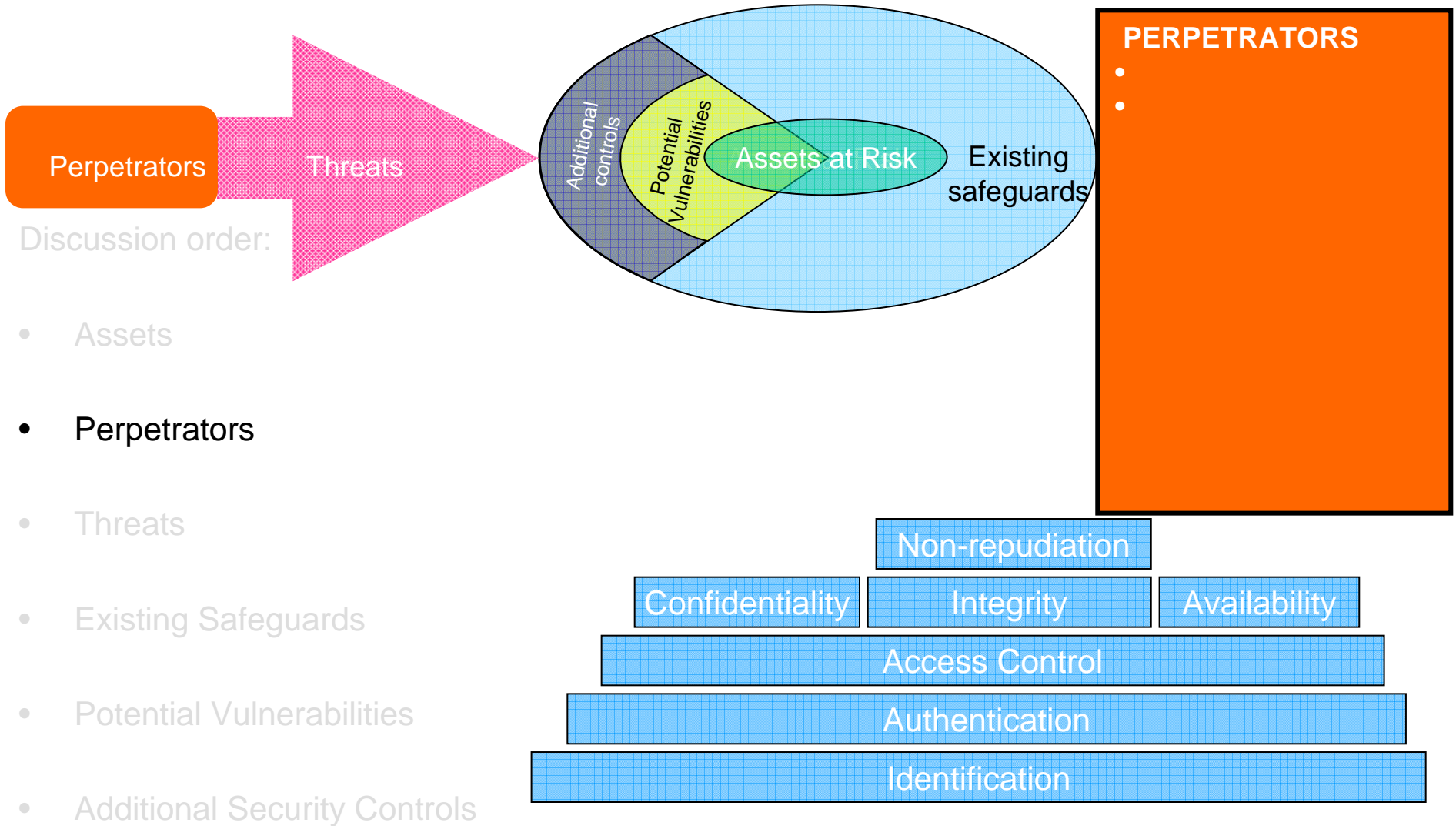
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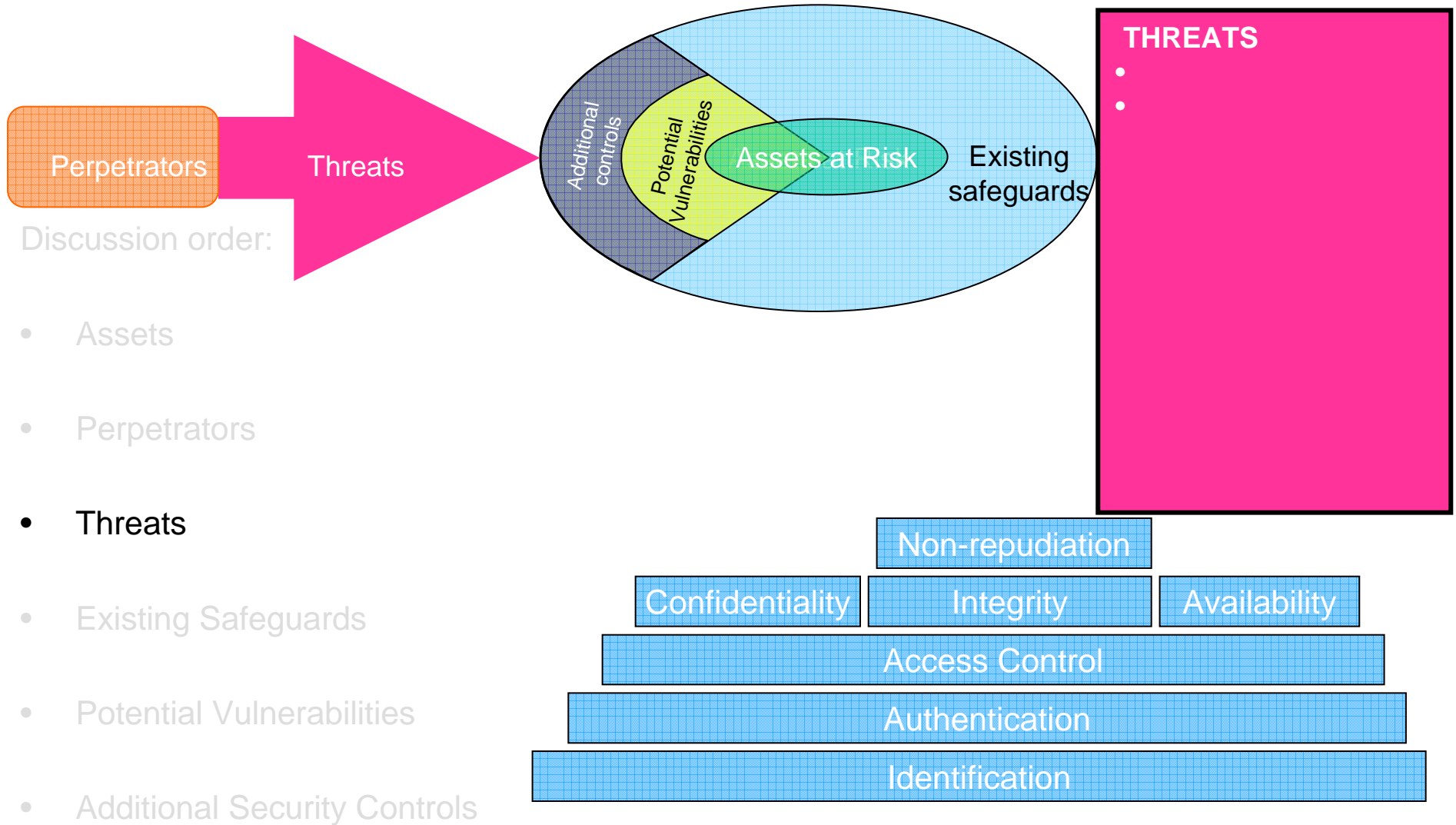
Assets



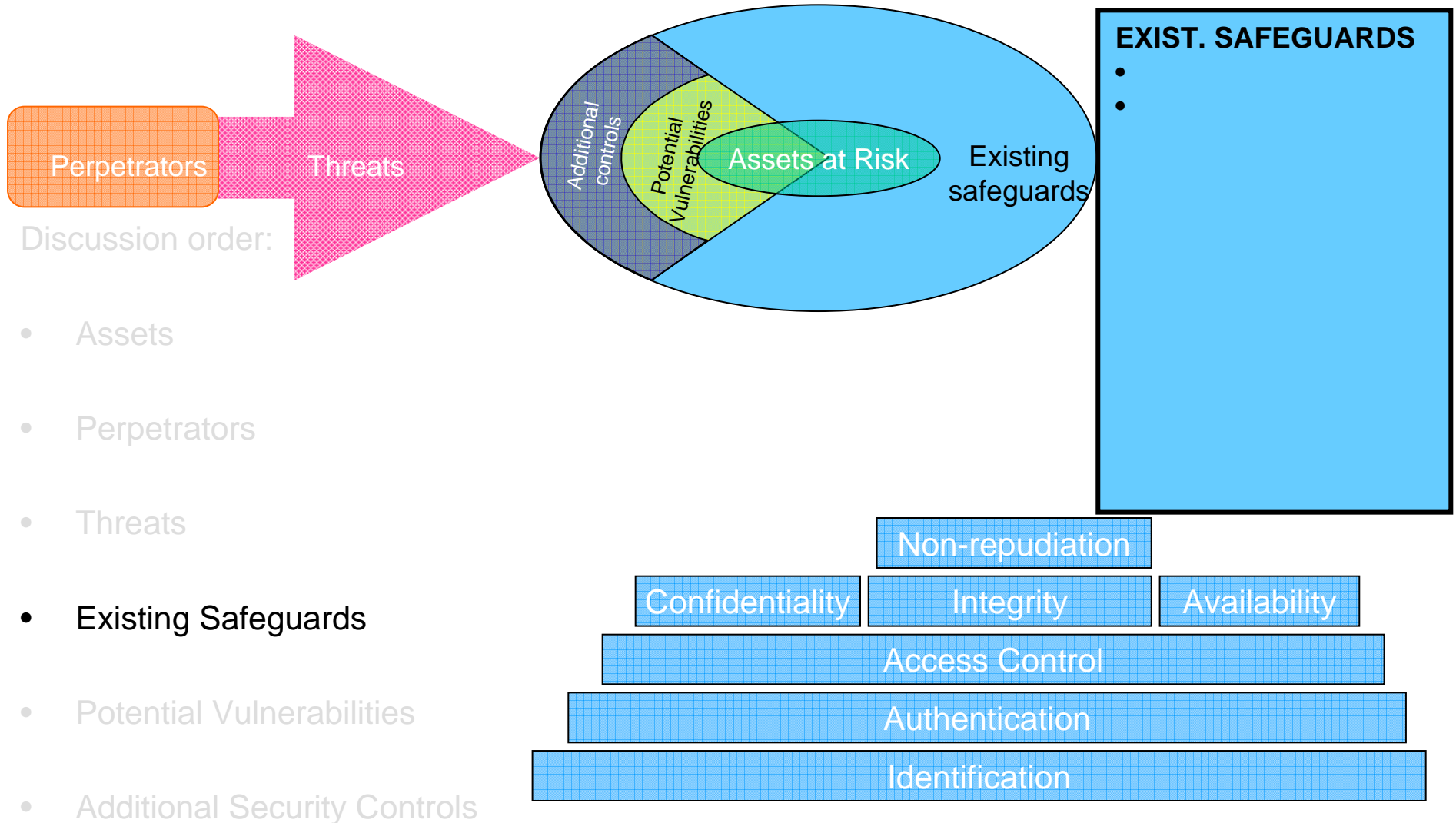
Perpetrators



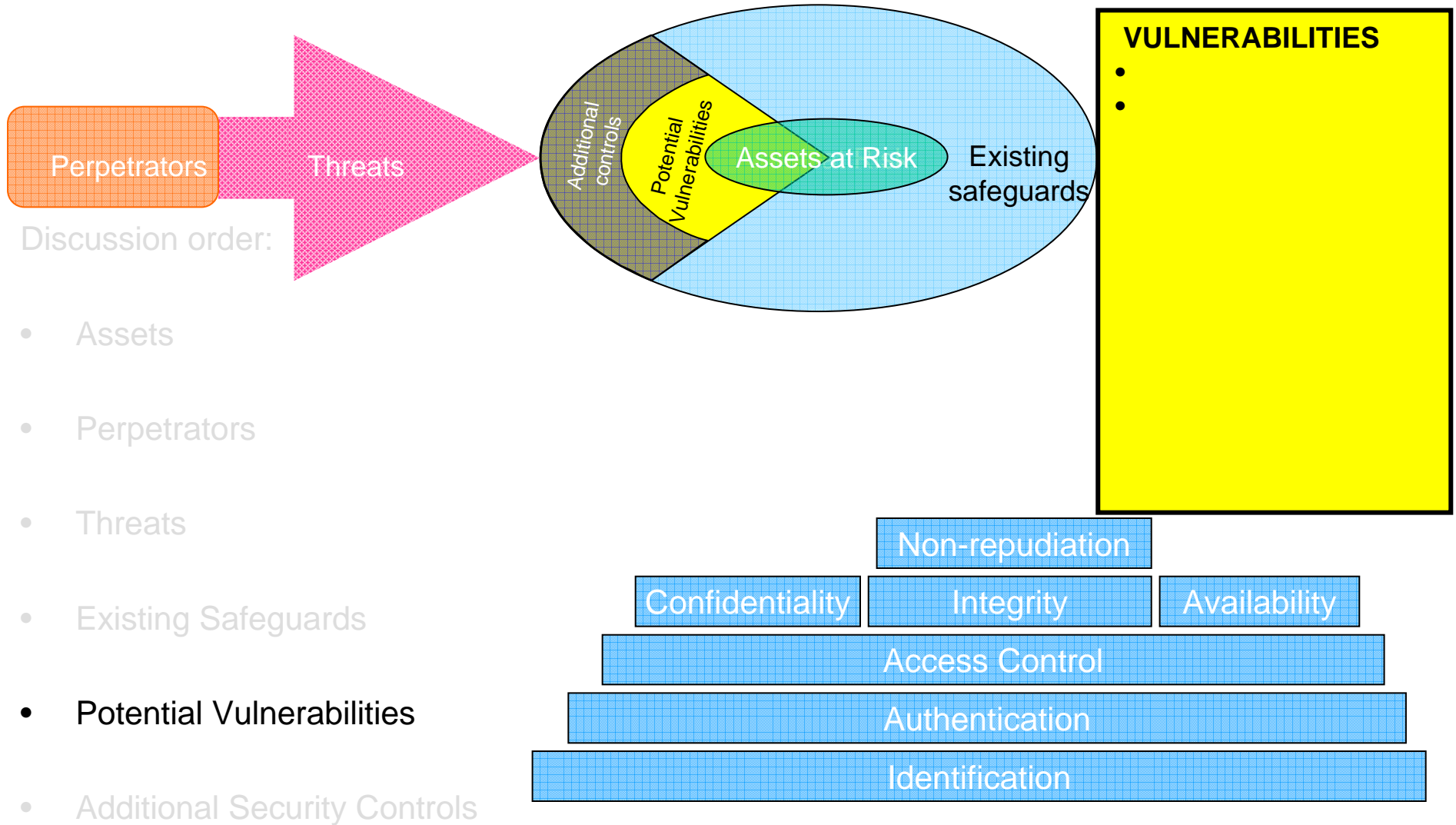
Threats



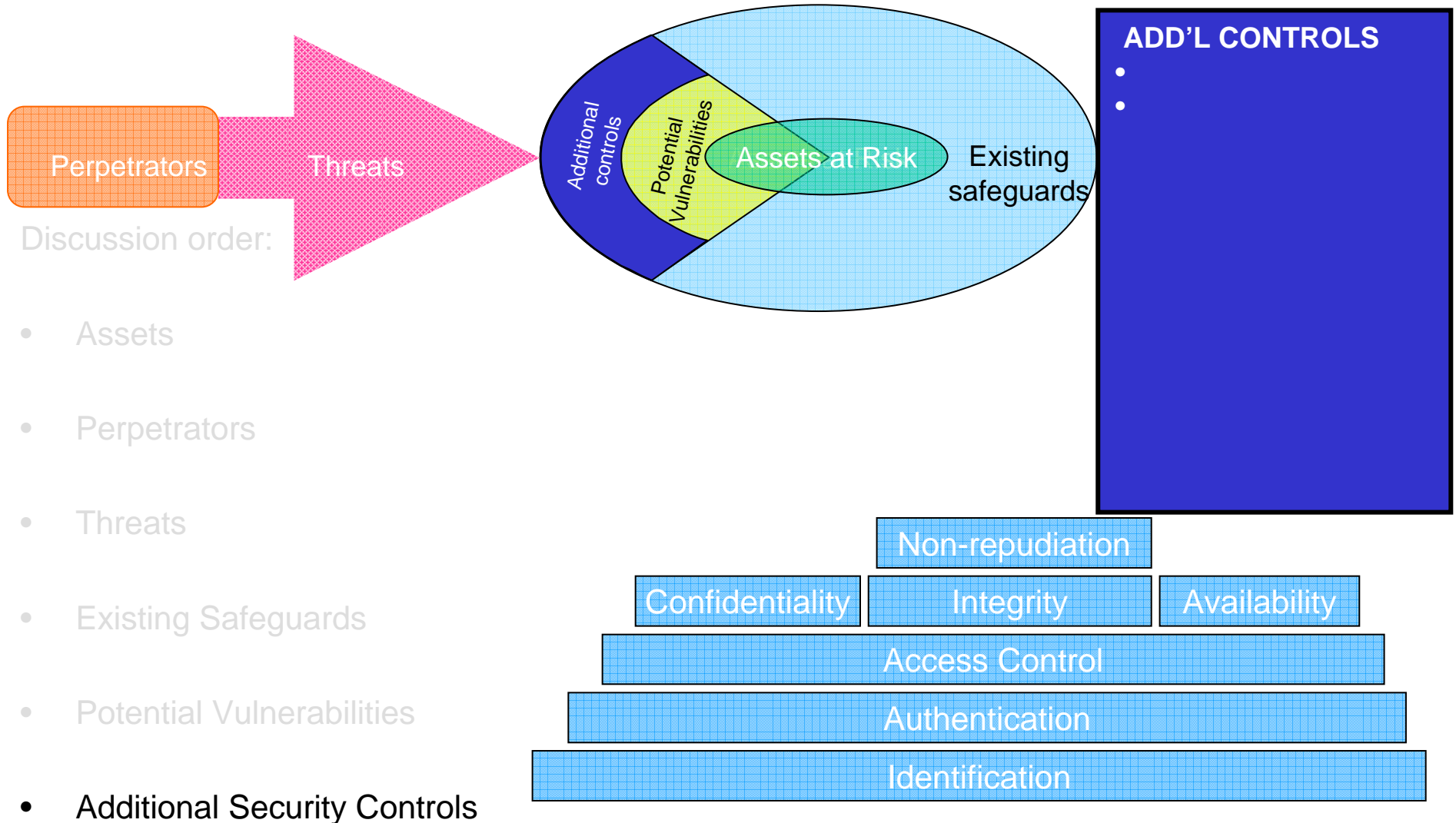
Existing Safeguards



Potential Vulnerabilities



Additional Controls



ASSETS

-
-

PERPETRATORS

-
-

THREATS

-
-

EXIST. SAFEGUARDS

-
-

VULNERABILITIES

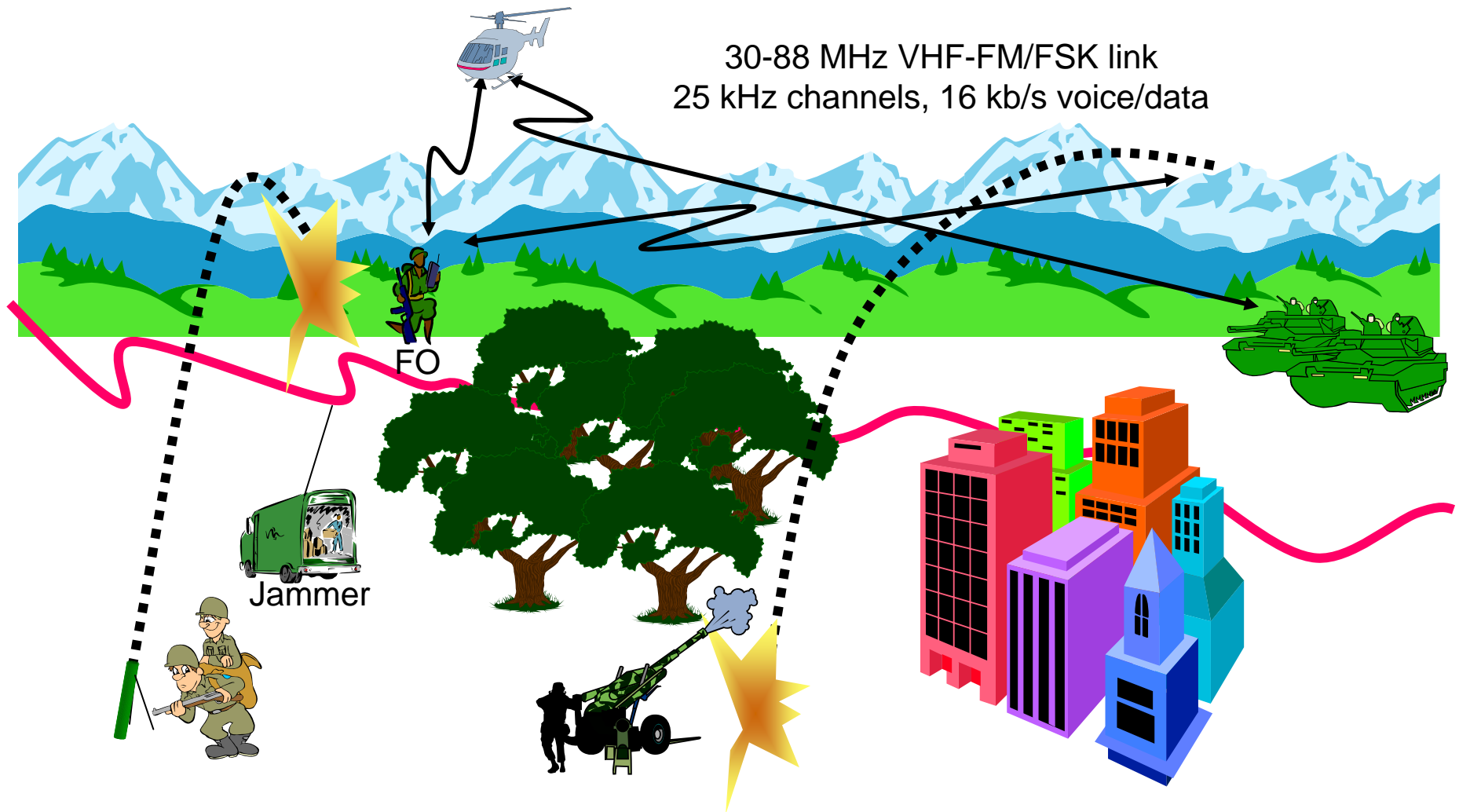
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ADD'L CONTROLS

-
-



Case 3 – Military Tactical Radio Systems



Security Technical Paper Assignment

- Follow the instructions from Week 3, Paper 1 assignment, to access the IEEE Conference Proceedings database.
- Pick an article from the Proceedings of IEEE Symposium on Security and Privacy (from the last 5 years) that interests you
- Write a 3-5 page report on the paper. Report should include:
 - Citation of the paper you are using
 - Summary of fundamental ideas presented in the paper
 - Issues paper addresses and how they have been addressed in the past
 - Discussion of 1 or 2 core ideas of paper
 - Identification of any **wireless-related issues** brought up in the paper (there may not be any)
 - Potential applications of technology presented
 - Future opportunities created by the technology