



Cyberdefense



TIBER

Planning bank robberies in the
21st century



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What is TIBER?
**A bit of background
and context**

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Anatomy of a test:
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robberies in the 21st
century**

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TIBER and you:
**Why TIBER may be
relevant for your
organization**



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- Team Lead Offensive Security
- 4 years in Orange
- 6 years a hacker
- 7 years a consultant
- BSc Information Security
NTNU Gjøvik ++
- Experience with TIBER



Current Landscape

- **Critical infrastructure provided by private companies**
- **Highly interconnected**
- **Individual security strategies**
- **Weakest link can break the whole chain**
- **Attractive target for cyber attacks**

What is TIBER?

- **Threat Intelligence Based Ethical Red-teaming**
- Published in May 2018 by European Central bank (ECB) & national banks of EU countries
- Enables knowledge sharing, comparison and approval of RT tests across borders
- Adopted in Belgium, Denmark, Finland, Germany, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Romania, Spain and Sweden – ECB expect more countries to follow suit
- TIBER-NO: Contribute to financial stability by increasing resilience against cyber attacks for the Norwegian financial system

Anatomy of a TIBER test

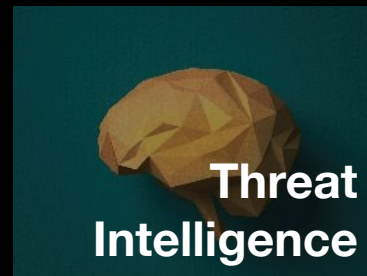
**National Central Bank
(Norges Bank)**



**Financial institution
(Customer)**



**Cyber security
vendors**



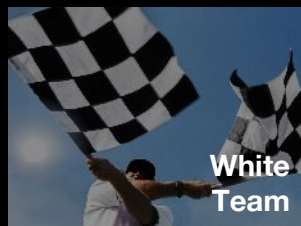
Anatomy of a TIBER test

Phases

Initiation



Preparation



Targeted TI



RT Test



Closure



Activities (Simplified)

Establishing
White Team

Scope
specification &
Critical functions

Procuring TI &
RT providers

Risk
management

Input to
Targeted TI

TI collection

TI analysis

Targeted TI
report

RT Test plan

RT Attack

WT test
management

BT Defend

RT test
report

360°
feedback

TIBER and you

- Wide recognition by the highest national authorities
- Framework is well suited for
 - ✓ Critical infrastructure – public and private sector
 - ✓ Multinational companies
 - ✓ Vendors with TI and RT expertise – at scale
- The “gold standard” of security testing in the finance sector
 - ? Other sectors are encouraged to follow
 - ? Critical functions – energy, healthcare, transportation, production +++



Cyberdefense

Build a safer digital society