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# WAVESTONE

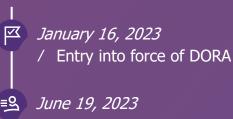
# DORA: ROAD TO 2025 AND BEYOND

Wavestone Insight Day

23 avril 2024

### Introduction

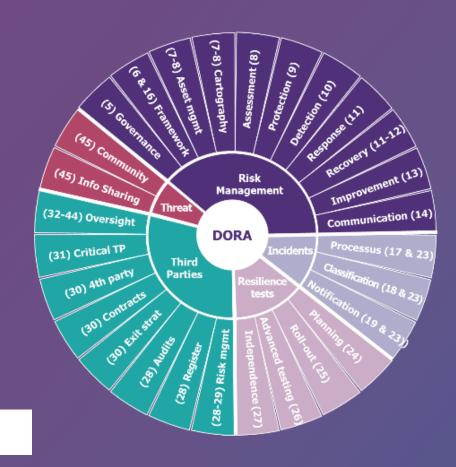
The Digital Operational Resilience Act (DORA) is a European Union regulation aiming to strengthen the financial sector's resilience to ICT-related major incidents



- / Publication of the first batch of RTS/ITS for consultation until September 2023
- December 8, 2023/ Publication of the second RTS/ITS batch for consultation until March 2024
- January 17, 2024Publication of the final RTS/ITS draft of lot 1
- July 17, 2024Publication of the final RTS/ITS draft of lot 2

January 17, 2025

/ Entry into application of the DORA regulation



Chapter II
ICT risk management

Chapter III
ICT-related incidents management, classification and reporting

Chapter IV

Digital Operational Resilience testing

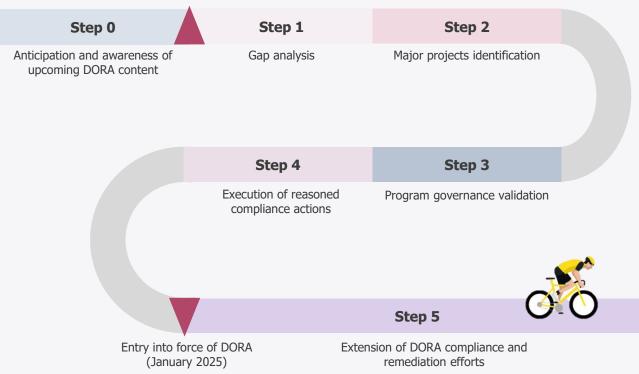
Chapter V
ICT third-party risk management

Chapter VI Information sharing arrangements

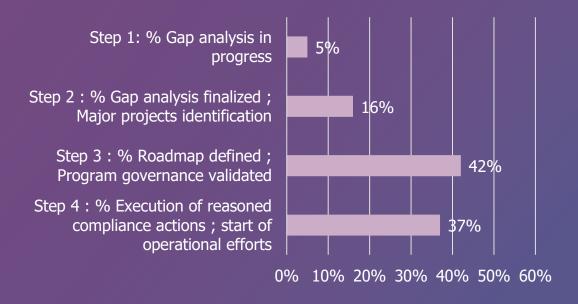
#### THE DORA JOURNEY

The market standard approach to DORA ...

Publication of DORA (January 2023)



#### ... and where our clients are to date



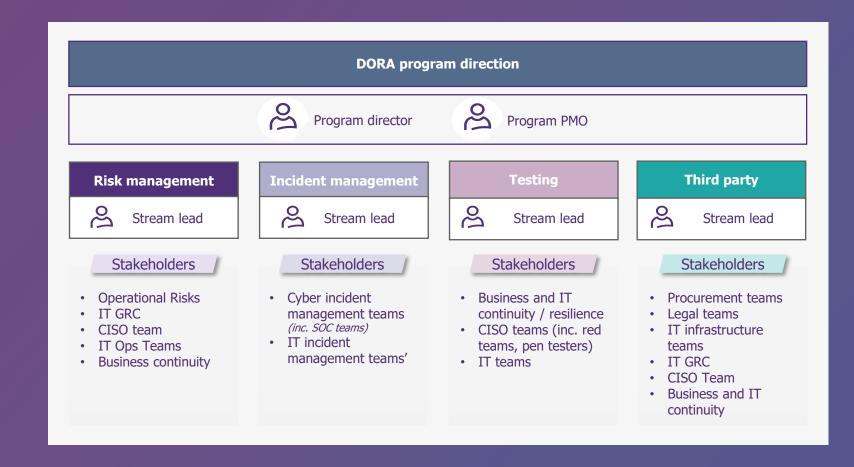
Benchmark of 19 Banking & Insurance entities supported by Wavestone

### PROGRAMS MOBILIZE TRANSVERSALLY ACROSS THE ORGANIZATIONS

VERY HETEROGENEOUS
STAKEHOLDERS TO COORDINATE

STREAM LEAD ROLES DO NOT OBVIOUSLY FALL UNDER AN EXISTING FUNCTION

SPONSORSHIP NEEDS TO BE AT A LEVEL THAT ENSURES THE APPROPRIATE IMPLICATION FROM ALL STAKEHOLDERS (COO-LEVEL)



# Now, LET'S BE REALISTIC...

ALMOST NOBODY WILL BE FULL COMPLIANT IN JANUARY 2025

DORA ROADMAPS EXTEND TO 2026 OR 2027

ARBITRATIONS HAVE BEEN
MADE TO FOCUS ON
NORMATIVE ACTIONS IN 2024



Where you should be

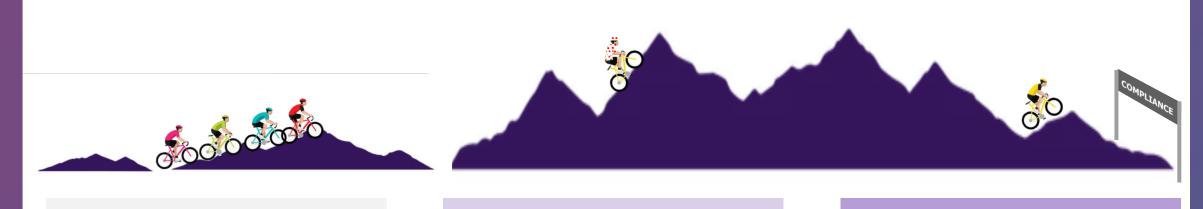
The "minimum target" for January 2025

What you should do in a second phase

#### **AGENDA**

- 1. ICT RISK MANAGEMENT: FROM NORMATIVE EFFORTS TO CONVERGENCE
- 2. Incident management: A strong challenge on notification delays
- 3. TESTING: A STRATEGIC VISION TO BUILD (NOT ONLY ON TLTP)
- 4. THIRD-PARTY RISK MANAGEMENT: BUILD, REINFORCE AND INDUSTRIALIZE

# CHAPTER II - ICT RISK MANAGEMENT FRAMEWORK



Where you should be

The "minimum target" for January 2025

What will be done after 2025

DORA business scope and critical functions identified, mapping started

Normative gap analysis

Macro gap analysis on existing practices

Critical functions identified and underlying assets mapped

ICT risk management framework reviewed

View on key remediation actions planned in build and run mode

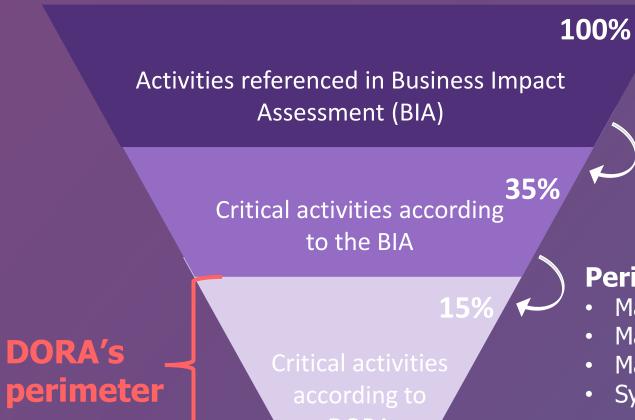
Operational Resilience steered at processlevel and cross-teams

ICT risk-related controls implemented

New remediation initiatives (e.g. IT / Cyber Recovery program)

# **DORA FOCUSES ON CRITICAL BUSINESS ACTIVITIES**





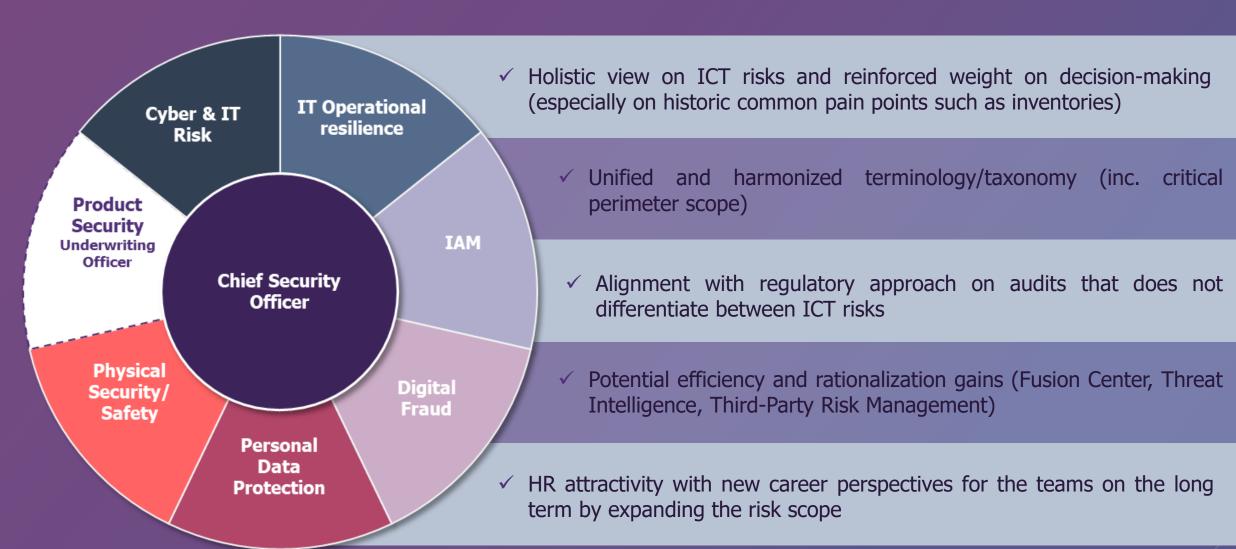
Selection of critical activities with a MTPD\* of less than 48 hours

### Perimeter challenge with the 4 following criteria:

- Major impact on the entity
- Major Impact for customers
- Major non-compliance
- Systemic Impact on the financial sector

# MID-TERM, CONSIDER GOING FURTHER ON ICT RISK CONVERGENCE





# CHAPTER III - ICT INCIDENTS MANAGEMENT



ICT Incident processes known at group-level

Incident classification criteria translated in operational assessment

Gap analysis between notification content requirements and current capabilities

Tools and processes to consolidate ICT

incidents implemented

Operational teams trained in classification processes and procedures

Notification mechanisms implemented

Incident processes optimization

Notification performance measured and regularly tested

### NOTIFICATION IS A CHALLENGE FOR CONCERNED ORGANIZATIONS



Initial notification within

4 hours after classification, 24
hours after detection

An intermediate report within **72 hours** 

A final report within **1 month** 

- · Date and time of incident detection
- Incident description
- Classification criteria
- Impacted Member States
- · Incident source
- Impact on other entities, recurrence
- Business continuity plan activation

- Incident reference code
- Occurrence date and time
- Recovery details
- Classification criteria
- Incident type
- Affected areas and processes
- Infrastructure details
- Communication actions
- Reporting to other authorities
- Actions taken

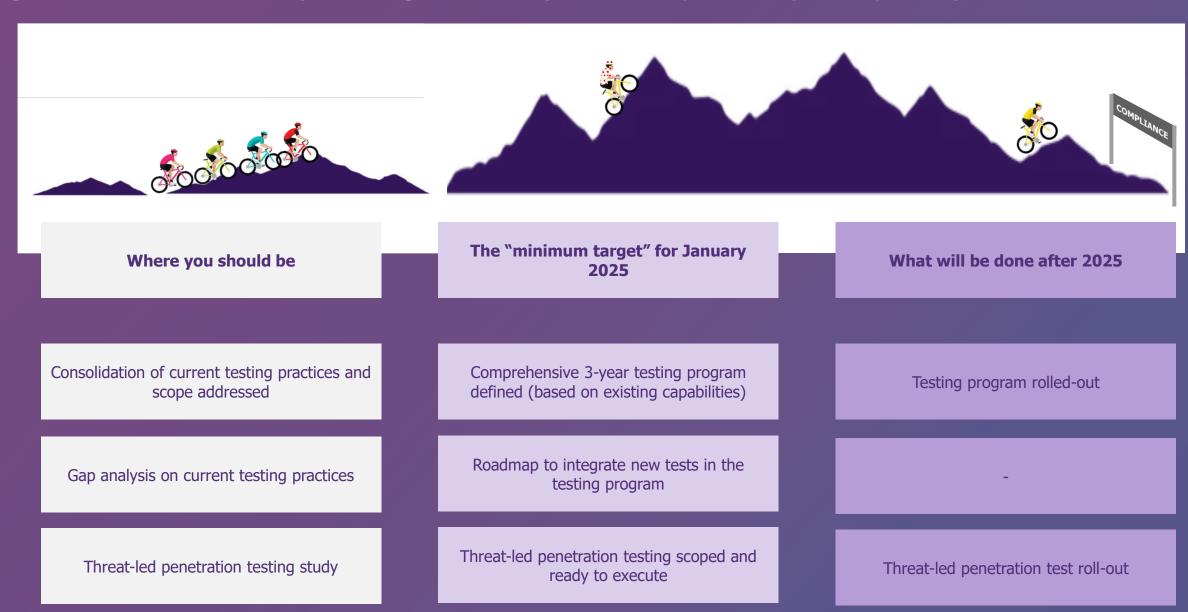
- Root cause
- Legal compliance
- Breach of contractual arrangements
- Resolution date and time
- Resolution measures
- Reclassification
- Information for resolution authorities
- Costs and losses details

**Notification process** 

#### **Key take-aways**

- Fortunately, Cyber teams are used to classify and notify major incidents to authorities
- The first step is to define how to harmonize and converge cyber and IT teams methods (actions and timing)
- Then will come the time to measure and demonstrate the ability to respect delays through KPI and exercises

# CHAPTER IV — DIGITAL OPERATIONAL RESILIENCE TESTING



### **TESTING IS NOT TLPT-ONLY!**



#### **Key recommendations**

- Map the tests and identify gaps with DORA
- For each test adapt relevant policies and procedures
- Build a 3-year program prioritizing tests with a lower maturity level

#### Security

- Vulnerability assessments and scans
- Network security assessments
- Physical security reviews
- Questionnaires and scanning software solutions
- Source code reviews where feasible
- Tests on detection mechanisms
- Penetration testing
- TLPT (Threat-Led Penetration Testing)

# Resilience / Business continuity

- Tests of ICT business continuity plans, ICT response and recovery plans, test of the crisis communication plans
- Tests of the backup procedures and restoration and recovery procedures
- Tests of exit strategy of ICT third party supporting critical or important functions

#### **ITSCM / Quality**

- Tests of all changes to ICT systems
- Compatibility testing
- Performance testing
- Source code reviews where feasible

# Transverse or to be clarified

- Gap analysis
- Open source analyses
- Scenario-based tests
- End-to-end testing

**Testing to perform** 

# SIGNIFICANT EVOLUTIONS FROM THE CLASSICAL RED TEAMING PHILOSOPHY



#### **Improvable Red Team aspects**

Red Team has **too many interpretations**, most often observed as **orthogonal evaluation** of **detection** capabilities as well as **cybersecurity maturity** 

Outside of rare Assume Breach cases, there may be **no assessment** of the **internal** security level when **no intrusion vector** is found. Also, **AD is often targeted first**, failing to provide a **clear vision** on the **security** level of **business processes** 

Operations are often **stopped upon detection**, giving **false impressions of security** and the providers goal becomes **stealthiness** rather than evaluation, making it **harder** to define the **Blue team action plan** 

Operations are often constrained by low budgets or short deadlines, increasing the risk of detection or decreasing the depth of the security assessment



#### With TIBER-EU / TLPT

Operations are **standardized**, offer an **improved approach** to Red Teaming and follow a **clear structure** described in **TIBER-EU framework** 



**End-to-end testing** with advanced **business scenarios** is the main goal, using **leg-ups** to **aid providers** should the target environment be **mature enough** 



**Detection** is an **objective for the Blue team** rather than a **failure** for the Red team, to provide a **clearer picture** of the its **intrinsic capabilities** 



Operations are **forced** to happen on a **longer timeframe**, better simulating real-world threat actors with **opportunistic approach** or **advanced tooling** 

### THE CHALLENGES OF THREAT-LED PENETRATION TESTING



# International presence



- / Segmentation of activities in **multiple countries** and **subsidiaries**
- / Selection of leading TLPT authority and compliance with foreign laws
- / Relying on **joint TLPT** operations to **limit overload** on internal support teams

# Business lines partitioning



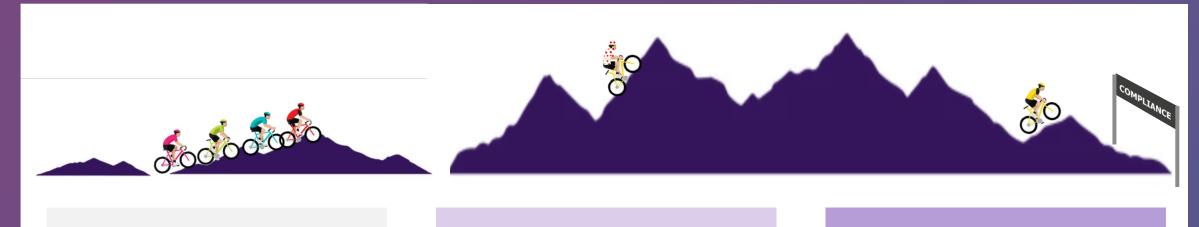
- / Segment and scope Critical Functions to optimize costs & workload
- / Identify global support teams and providers solicited for each TLPT
- / Validate the testing strategy with regulators to forecast organization

# Continuous testing



- / TLPT as the **final evaluation** and **attestation** of **continuous** efforts
- / Stable maturity level requires continuation of audit & testing activities
- / Pentests on global infrastructure & standard Red Team also contribute

### CHAPTER V - ICT THIRD-PARTY RISK MANAGEMENT



Where you should be

The "minimum target" for January 2025

What will be done after 2025

Critical TP scope set and registry initiated

TPRM process adapted and reinforced

First exit strategy principles scoped

% of key contracts reviewed

TPRM staffed and operational (including TP audits and other run risk assessment)

Exit strategy studied for a few critical TP

All contracts reviewed / remediated

Extension of processes to 4<sup>th</sup> party and beyond

Exit strategy designed and tested for all critical TP

### BUILD PROGRESSIVELY ITS TPRM SERVICE CENTER



# Baseline of its service center

- Establishment of a **TOM** (Target Operating Models), including a **TPRM framework** (policies, procedures and rules)
- Setting of TPRM activities and elaboration of delivery models
- Establishment of processes to ensure a high delivery standard for all group entities

# **Bronze Package :** Groundwork for contractual remediation

- Inventory and classification of third parties
- Creation of a control library tailored to each category
- Automation of contractual reviews
- Due diligence and management of security topics in negotiations

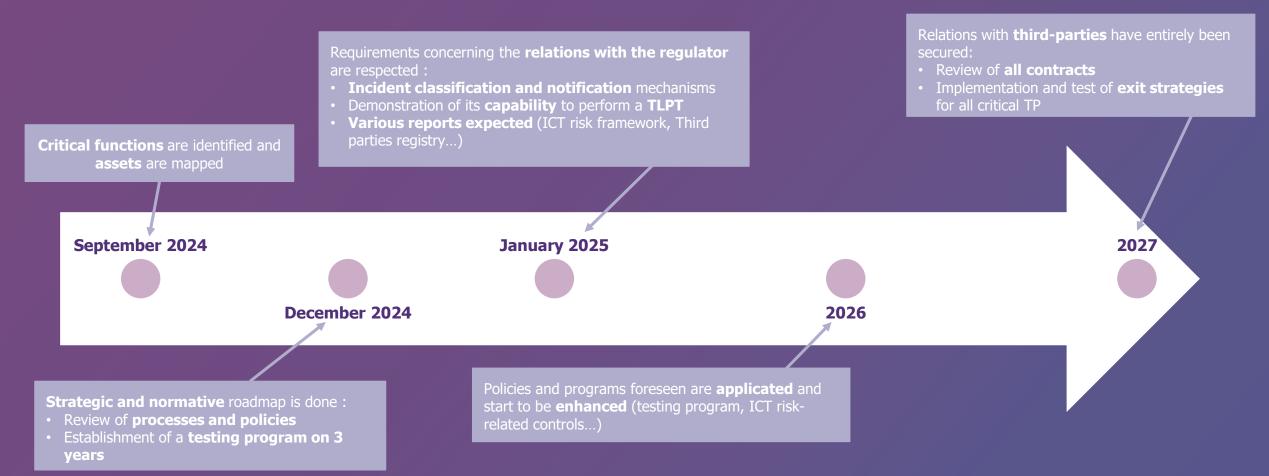
# **Silver Package :** Continuous monitoring of contracts life cycle

- Establishment of **insurance procedures**
- Development of a **testing spectrum**, from automated evidence reviews to comprehensive on-site audits for pivotal providers
- Preparation of procedures to ensure the monitoring and immediate response to potential vulnerabilities

# Gold Package: Final implementation of all TPRM facets

- Implementation and testing of exit strategies
- Performance of multifaceted crisis exercise, involving numerous ecosystem stakeholders
- A special focus on end-to-end testing that covers transversally third-party security, interconnections and exit strategies

# CONCLUSION - DORA COMPLIANCE JOURNEY





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