

2018 EU-wide Stress Test exercise

*Introducing IFRS 9 requirements and
new reporting templates*

Aurexia (
CONSULTING

STRATEGY & MANAGEMENT CONSULTING
PARIS • LONDON • LUXEMBOURG • SINGAPORE • HONG KONG

- We are at your disposal to present to you our analysis:



Charles BAIN DE LA COQUERIE
Associé
+33 (0) 6 80 37 32 15
charles.baindelacoquerie@aurexia.com



Swann REDSLOB
Senior Manager
+ 33 (0) 6 73 44 67 47
swann.redslob@aurexia.com



EU-Wide stress tests

To a better assessment of EU banks resilience

Context and objectives



The banking industry has been subject to numerous major reforms since the financial crisis to make the financial system more stable and secure. Since the global financial crisis of 2007, the stress test exercises have become progressively predominant in the range of tools used by prudential authorities.



The EBA, in cooperation with the European Systemic Risk Board (ESRB), initiates and coordinates EU-wide stress tests to assess the resilience of financial institutions to adverse market conditions. The objective of the EU-wide stress test is to provide supervisors and market participants with a common analytical framework to compare and assess the resilience of EU banks.



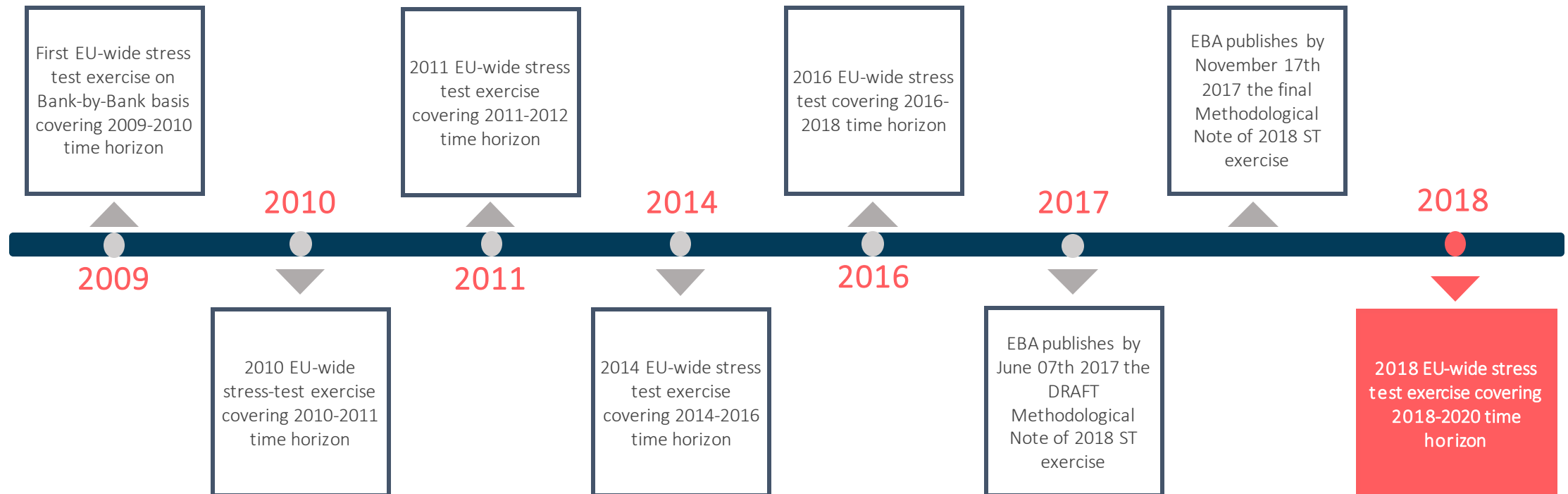
The stress test is conducted on the basis of a common methodology with relevant scenarios and a set of templates that record the starting point data and stress test results to allow the assessment of EU banks.



2018 EU-wide stress test draft methodology has been released on June 7th 2017. It is subject to discussion between the banks and the regulator.

EU-Wide stress tests

Timeline



EU-Wide stress tests

Evolution of Stress Test exercises : looking in the mirror

- Since 2009, the stress test exercises requirements have been continuously evolved in terms of risk coverage.

	2009	2010	2011	2014	2016
Supervisor	<ul style="list-style-type: none"> The committee of European Banking Supervisors (CEBS) 	<ul style="list-style-type: none"> The committee of European Banking Supervisors (CEBS) 	<ul style="list-style-type: none"> EBA in coordination with European Systemic Risk Board (ESRB), ECB and European Commission (EC) 	<ul style="list-style-type: none"> EBA in coordination with European Systemic Risk Board (ESRB), ECB and European Commission (EC) 	<ul style="list-style-type: none"> EBA in coordination with European Systemic Risk Board (ESRB), ECB and European Commission (EC)
Scope	<ul style="list-style-type: none"> 22 Major European cross-boarder institutions representing 60% of the total assets of the EU banking sector on a consolidated basis 	<ul style="list-style-type: none"> 91 banks covering 65% of the EU banking sector and at least 50% of each national banking sector Banking groups have been tested of a consolidated level 	<ul style="list-style-type: none"> 90 banks covering 65% of the EU banking system total assets and at least 50% of each national banking sector Highest level of consolidation of the banking group (CRD) 	<ul style="list-style-type: none"> 124 banks covering 85% of total EU asset value and at least 50% of each national banking sector Highest level of consolidation (banking group perimeter as defined by CRD/CRR) 	<ul style="list-style-type: none"> 51 banks covering 70% of total asset value
Time horizon	<ul style="list-style-type: none"> Two years (2009-2010) 	<ul style="list-style-type: none"> Two years (2010-2011) 	<ul style="list-style-type: none"> Two years (2011-2012) 	<ul style="list-style-type: none"> Three years (2014-2016) 	<ul style="list-style-type: none"> Three years (2016-2018)
Reference date	<ul style="list-style-type: none"> Consolidated year-end 2008 figures 	<ul style="list-style-type: none"> Consolidated year-end 2009 figures 	<ul style="list-style-type: none"> Consolidated year-end 2010 figures 	<ul style="list-style-type: none"> Consolidated year-end 2013 figures 	<ul style="list-style-type: none"> Consolidated year-end 2015 figures
Methodology	<ul style="list-style-type: none"> Input provided by the ECB for Credit Risk Commonly agreed parameters for Market Risk 	<ul style="list-style-type: none"> Mainly bottom-up approach Tier 1 capital threshold of 6% 	<ul style="list-style-type: none"> Bottom-up approach Tier 1 capital threshold of 5% 	<ul style="list-style-type: none"> Bottom-up approach CET1 (Common Equity Tier 1) threshold of 8% (baseline scenario) and 5.5% (adverse scenario) 	<ul style="list-style-type: none"> Bottom-up approach No pass fail capital thresholds. The results of the ST are used in the SREP process
Risk coverage	<ul style="list-style-type: none"> Credit risk Market risk 	<ul style="list-style-type: none"> Credit risk Market risk European sovereign debt 	<ul style="list-style-type: none"> Credit risk Market risk Sovereign risk Cost of funding 	<ul style="list-style-type: none"> Credit risk Market risk Sovereign Securitization risk Cost of funding and Net Interest Income 	<ul style="list-style-type: none"> Credit risk, including securitizations and sovereign risk Market risk (including sovereign risk), CCR and CVA Operational risk, including conduct risk Net interest income

EU-Wide stress tests

2018 Eu-Wide exercise in nutshell

- *The major change that 2018 EU-wide exercise will bring concerns banks that will report under IFRS9 starting from January 2018. In fact 2018 stress tests will take into account the impact of IFRS9 implementation in starting point data as well as in the projections of banks:*

Sample of banks	<ul style="list-style-type: none"> ▪ Sample of 49 banks with a minimum of 30bn € in asset covering broadly 70% in terms of total consolidated assets as of end 2016 of: <ul style="list-style-type: none"> ✓ The banking sector in the eurozone area ✓ Each non-eurozone EU member state ✓ Norway ▪ The exercise is run at the highest level of consolidation. The scope of consolidation is the perimeter of the banking group as defined by the CRR/CRD. Insurance activities are therefore excluded both from the balance sheet and the P&L.
Macroeconomic scenarios	<ul style="list-style-type: none"> ▪ The exercise assesses the resilience of EU-banks under: <ul style="list-style-type: none"> ✓ 2018 common macroeconomic baseline ✓ 2018 adverse scenario
Time horizon and reference date	<ul style="list-style-type: none"> ▪ The exercise is carried out on the basis of year-end 2017 figures and will be applied over a period of 3 years from end 2018 to end 2020
Approach	<ul style="list-style-type: none"> ▪ ST exercise is conducted following a constrained bottom-up approach. Banks are required to project the impact of the defined scenarios taking into account strict constraints. A complete review is performed by competent authorities.
Risk coverage	<ul style="list-style-type: none"> ▪ Banks are required to stress test the following common sets of risks: <ul style="list-style-type: none"> ✓ Credit Risk including securitizations ✓ Market Risk, Counterparty Credit Risk (CCR) and Credit Value Adjustment (CVA) ✓ Operational Risk, including Conduct Risk ✓ Net Income Interests (NII) <p>In addition to the risks listed above, banks are requested to project the effect of the scenarios on the NII and to stress P&L and capital items not covered by other risk types</p>
Accounting regime	<ul style="list-style-type: none"> ▪ All balance sheet and P&L projections over the years 2018 and 2020 to be carried out on the basis of the applicable accounting valid on 1 January 2018. Any changes of the standards occurring after the launch of the exercise are not binding. ▪ For banks that will report under IFRS9 in 2018, the EU-wide stress test takes the impact of the introduction of IFRS9 into account in starting point data as well as the projection of banks ▪ The regimes that are valid in the beginning of the exercise to be applied during every year of the time horizon of the stress test ▪ Historical values until 2017 to be reported based on the regimes that were valid for the corresponding reporting dates (unless banks were required to restate their public accounts)
Static Balance sheet assumption	<ul style="list-style-type: none"> ▪ Static balance sheets as in previous exercises on solo basis, sub-consolidated and consolidated level (constant level of exposures)

EU-Wide stress tests

2018 Eu-Wide exercise in nutshell

- In the frame of 2018 EU-Wide exercise, the participating banks are required to provide common templates divided into two sets:



- Calculation support and validation data templates (CSV)** : data to be filled by participating banks including the results of the stress test and other information required for the analysis by the competent authorities input to their quality assurance process
- Transparency templates (TRA)**: data on stress test outcomes to be disclosed on a bank-by-bank basis

- The templates to be provided are summarized as follows:

Template set	Topic	New templates (vs ST 2016)	Revised templates with significant changes (vs ST 2016)	Revised templates with minor changes (vs ST 2016)	Total	Impacts
CSV	General input table	0	1	0	1	++
CSV	Credit risk	2	3	5	10	+++
CSV	Market risk, CCR losses and CVA	5	1	0	6	+++
CSV	NII	0	2	0	2	++
CSV	Conduct risk and other operational risks	0	0	2	2	+
CSV	Non-interest income, expenses and capital	4	1	2	7	+++
Number of CSV templates to be reported by banks					28	
TRA	Credit risk	0	2	1	3	++
TRA	Non-interest income, expenses and capital	1	1	2	4	++
TRA	Summary adverse or baseline scenario (stress test results)	0	0	1	1	+
TRA	Information on performing and non-performing exposures (historical)	0	0	1	1	+
TRA	Information on Forborne Exposures (historical)	0	0	1	1	+
Number of TRA templates to be reported by banks					10	
Total of templates to be reported by banks					38	

EU-Wide stress tests

Tackling EU-wide Stress Test exercises

Aurexia support credit institutions to comply with Stress Tests 2018 from the impact study to the operational implementation.

	Main stakes for credit institutions	Aurexia support to cope with EU-wide stress tests
REGULATORY	<ul style="list-style-type: none"> Comply with new EBA regulatory requirements for 2018 stress testing exercise Include IFRS 9 requirements & stress the current Capital (REA) on credit risk, Provide new reporting templates to the regulator 	<ul style="list-style-type: none"> Support credit institutions in the understanding of the EBA guidelines <ul style="list-style-type: none"> Deliver the impact study of the EBA methodological guidelines Provide a gap analysis between Stress Tests 2016 and Stress Tests 2018 Present IFRS9 impacts on the credit risk scope
ORGANISATION	<ul style="list-style-type: none"> Early launch the ST 2018 project : gather and involve all project stakeholders Assess the impacts on the organization in defining the target roles & responsibilities of each contributor 	<ul style="list-style-type: none"> Define the project governance with Business lines, Risk, Finance, IT Build project structuration : define work streams and related roadmap Set up steering committees and follow up instances Define the Target Operating Model of 2018 EU-Wide Stress Tests
PROCESSES	<ul style="list-style-type: none"> Assess the new ST 2018 methodological impacts on risk processes Anticipate ST 2018 requirements in the existing reporting processes 	<ul style="list-style-type: none"> Define the ST 2018 reporting process Deliver the impact study on operations / risk methodologies processes Set up the new reporting controls (ST scenarios & financial controls framework definition) Identify fast close reporting closing initiatives Enable robotics initiatives for manual tasks representing huge workload for reporting teams
IT & DATA	<ul style="list-style-type: none"> Identify and prevent from poor data quality issue on the Risk Exposure Amount (REA) and the stressed impairment, stressed CVA, stressed IRC Provide stress test templates to the National Central Bank (Bank of England, Banque de France, Bundesbank...) 	<ul style="list-style-type: none"> Define the architecture design to produce 2018 stress testing Draw / insert in a robust data governance in respect to BCBS 239 principles Identify key data with poor quality to launch remediation plan Provide functional specifications to include ST2018 requirements in operations systems, referentials or risk and finance

Aurexia in a nutshell

About our company



- Established in 2006 -

A decade of global management consulting for the **Banking** and **Insurance** industries

CAPITAL MARKETS
SECURITIES SERVICES
TRANSACTION BANKING
ASSET MANAGEMENT
PRIVATE BANKING
RETAIL BANKING
INSURANCE
FINANCE
RISK MANAGEMENT



- Aurexia Institute -

Frequent market studies published on:

Business matters
Regulatory watch
Process improvement insights
Architecture benchmarks



- Digital Lab -

A pragmatic vision of disruption:

Robotics / AI
Fintech Ecosystem
Blockchain



- International -

5 local offices to support our clients globally:

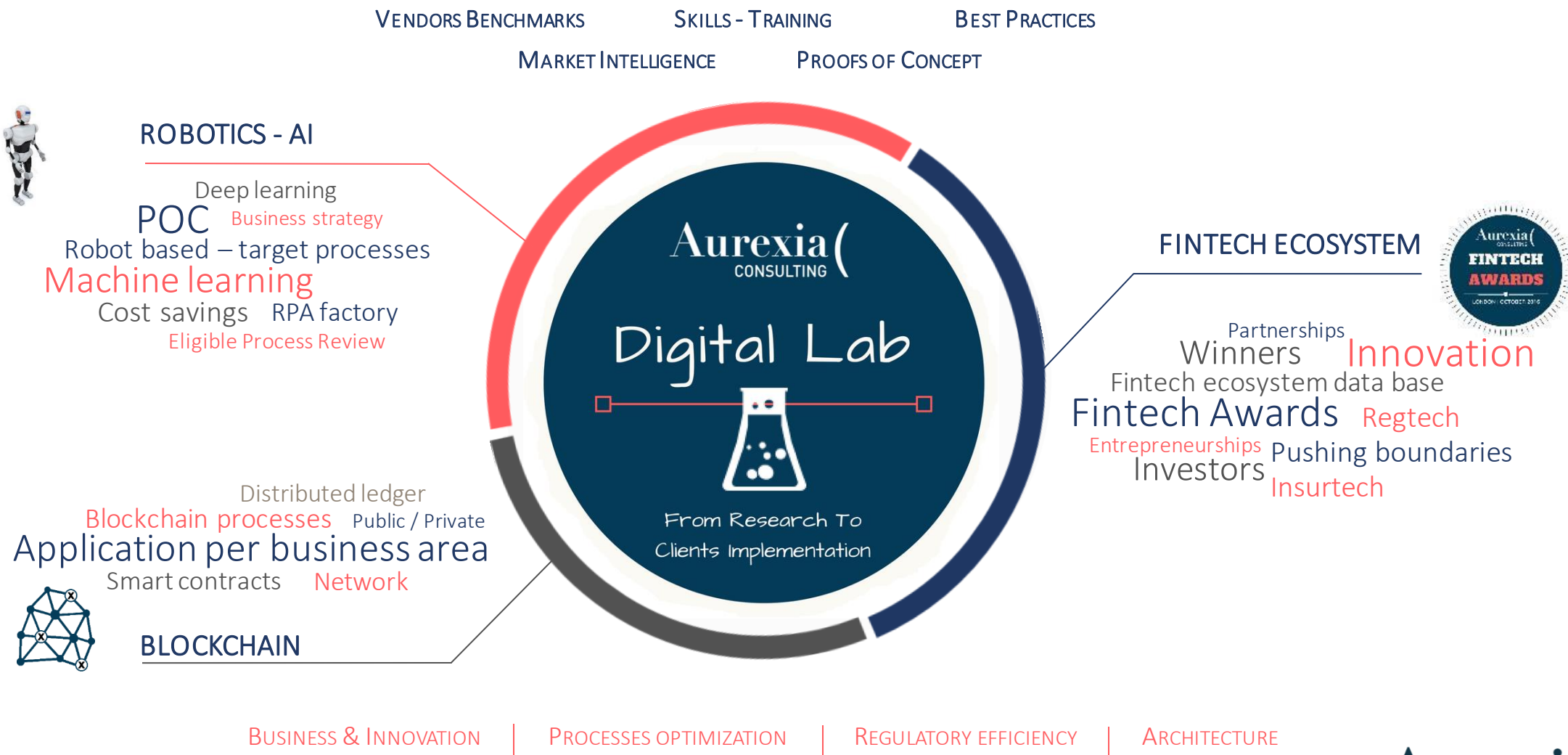
Paris - London
Luxembourg
Singapore
Hong Kong

Follow us on:



Our Digital Strategy

A comprehensive lab, from research to clients implementation



They trust us

Major institutions in the banking and insurance industries



Nos bureaux à l'international sont pilotés par des Partners du cabinet, facilitant la coordination pour des missions multi-pays



PARTNER

Dominique
HERROU



PARTNER

Eric
VERNHES



PARTNER

David
VILLARD



PARTNER

Charles
BAIN de la
COQUERIE



COO

Caroline
SMADJA

EUROPE



Nicolas
OLIVEROS

LONDON

1 Fore Street
London EC2Y 5EJ
+44 (0)20 7526 8372



Alain De
CIDRAC

LUXEMBOURG

8-10 Avenue de la Gare,
L-1610 Luxembourg
+352 691 121 832

PARIS

62 rue de Caumartin,
75009 Paris
+ 33 (0)1 42 66 27 38

ASIA



Dominique
HERROU

HONG-KONG | SINGAPORE

96 Robinson Road
#11-04 SIF Building
Singapore 068899
+ 65 9786 3870



Partners

Dominique Herrou
+33 (0)6 77 94 48 14
dominique.herrou@aurexia.com

Eric Vernhes
+33 (0)6 86 51 54 76
eric.vernhes@aurexia.com

Charles Bain de la Coquerie
+33 (0)6 80 37 32 15
charles.baindelacoquerie@aurexia.com

David Villard
+ 33 (0)6 75 53 19 47
david.villard@aurexia.com

Offices

Paris Office
62 rue Caumartin, 75009 Paris, France
+ 33 (0)1 42 66 27 38

London Office
1 Fore Street, London EC2Y 5EJ, United Kingdom
+44 (0)20 7526 8372

Luxembourg Office
8-10 Avenue de la gare L-1610 Luxembourg
+352 (0)26 38 93 59

Asia Office
96 Robinson Road #11-04 SIF Building
Singapore 068899

WWW.AUREXIA.COM/EN

