

Corporate risk management

CHAPTER 8

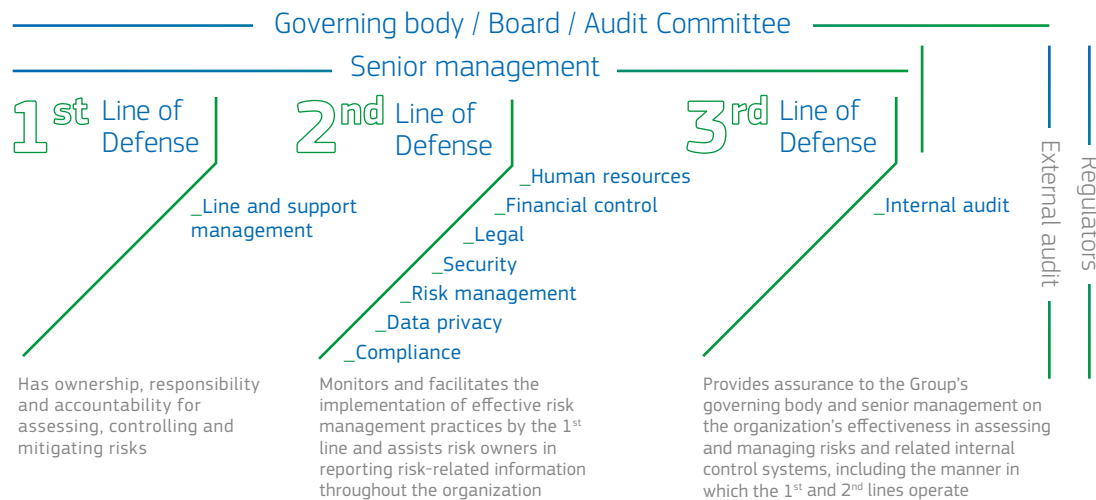
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Amadeus adopted the Three Lines of Defense Model a few years ago with the endorsement of the Board of Directors and the Executive Committee. This model integrates, coordinates and aligns all Amadeus support and assurance functions for the effective management of risk across the Group.

Since its adoption, the model has fostered effective risk management across Amadeus, especially through the adoption of a Combined Assurance concept, through which we have expanded the coordinated management of control activities and the sharing of results.

Three Lines of Defense and Combined Assurance



First Line of Defense: executive management, management and staff



Amadeus' commitment to integrity and transparency begins with its own staff. Amadeus employees adhere to the ethical standards set forth in the Amadeus Code of Ethics and Business Conduct and related policies. We don't see this code and our core policies purely as a "rule book," but as a mutual agreement across the company to promote positive behaviors that will add value to our business and ensure the highest standards of integrity at all times. The areas covered in the code are:

- _ Commitment to the environment
- _ Avoiding conflicts of interest
- _ Protecting personal data and confidentiality
- _ Handling relations with third parties and the media in a sensitive manner
- _ Handling company property, equipment and installations with care

In 2017 we drew up our Human Rights Policy, affirming our commitment to international human rights. We expect all our suppliers and business partners to uphold internationally recognized standards regarding working conditions and the dignified treatment of employees.

Human rights form part of Amadeus' risk analysis framework. We evaluate the risks of infringing on the following rights:

- _ Non-discrimination
- _ Collective bargaining

Amadeus policies



Compliance policies

- _ Amadeus Code of Ethics and Business Conduct
- _ Anti-Bribery Policy
- _ Anti-Fraud Policy
- _ Business Continuity Policy
- _ Entertainment/Gift Policy
- _ Information Classification Policy
- _ Speak Up Policy

Legal policies

- _ Corporate Privacy Policy
- _ ACO Privacy Manual
- _ Antitrust and Competition Law – Compliance Manual
- _ Internal Rules of Conduct to the Securities Market
- _ Security and Privacy Handbook

Finance policies

- _ Corporate Purchasing Policy

Human resources policies

- _ Amadeus Human Rights Policy
- _ Health and Safety Policy

Industry affairs policies

- _ Amadeus Environmental Policy
- _ Charitable Contributions Policy
- _ Political Contributions and Lobbying Policy
- _ Social Responsibility Policy and Practice

Information security policies

- _ Acceptable Use Policies

- _ Freedom of association
- _ Fair wages
- _ No child labor or forced labor
- _ Adequately healthy and safe working conditions

Although such risks fall very low on our risk map, we have a series of mitigating and monitoring actions to manage them, both internally and with our suppliers and business partners.

Our mergers and acquisitions procedures also include due diligence on human rights-related risks. Our Integration team ensures that Amadeus' policies are effectively implemented into newly integrated companies. And our Speak Up Policy encourages employees to report any breach of the Code of Ethics and Business Conduct, including potential human rights violations.

During 2019 no significant breaches of the Code of Ethics and Business Conduct were reported.

The core policies listed below are supported by systems which undergo regular internal and external quality reviews to ensure regulatory compliance and application of best practices. We have instruments in place for employees to seek advice on whether certain activities are considered ethical or lawful according to our corporate policies. One key instrument, the Ethics Committee, provides guidance as well as receives reports of any unethical or unlawful behavior.

Second Line of Defense: internal governance functions



Control activities are embedded in all areas of the company. Major control activities are carried out from departments such as Risk & Compliance, Security, Privacy, Legal, Finance and People & Culture.

Risk management and controls

Risk & Compliance is responsible for centralizing the continuous monitoring of major risk and compliance issues within Amadeus. It also leads a transversal Combined Assurance program also involving the Group Privacy Unit and the Corporate Information

Security Office. The Combined Assurance program coordinates its activities with other functions focused on business control. This includes our Regional Business Oversight commissions (made up of senior personnel from Legal, HR, Finance and our business units) and our Internal Financial Controls unit (oversees compliance with the Internal Control over Financial Reporting (ICFR) standard).

Risk & Compliance develops Amadeus' Corporate Risk Map and establishes control and monitoring procedures for each of the identified risks, in conjunction with the owner responsible for each risk. The risks ascertained from this analysis, as well as monitoring measures, are reported on a regular basis to the Risk Steering Committee and the Audit Committee, as well as the Executive Committee and the Board of Directors.

We continually monitor the most significant risks that could affect the activities and objectives of Amadeus and its companies. Amadeus' general policy regarding risk management and monitoring focuses on:

- _ Achieving the company's long-term objectives in line with its established strategic plan
- _ Giving the maximum level of guarantees to shareholders and defending their interests
- _ Protecting the company's earnings
- _ Protecting the company's image and reputation
- _ Giving the maximum level of guarantees to customers and defending their interests
- _ Guaranteeing corporate stability and financial strength over time

The ultimate aim of the Corporate Risk Map is to provide visibility on significant risks and facilitate effective risk management. Risk analysis is a fundamental element of the company's decision-making processes, both within the governing bodies and in the management of the business as a whole.

The Corporate Risk Map also takes into account the global risks identified each year by the World Economic Forum¹ – such as economic, environmental, geopolitical, societal and technological risks.

The Corporate Risk Map takes into account issues or risks that could impede Amadeus from achieving its strategic objectives as well as other issues that have not yet manifested sufficiently to be managed – commonly referred to as “known unknowns” or emerging risks.

¹ World Economic Forum (2019). *Global Risks Report 2019, 14th Edition.*

These are newly developing or changing risks that are difficult to identify and quantify and could have a major impact on society and the industry. Examples include:

- _ Increased share of elderly travelers. We need to understand the particular requirements of this segment of travelers. Our development teams are designing products and services to adapt to this growing market.
- _ Extremely fast digital development. New economic models of travel distribution emerge as a consequence of rapid technological changes. We are mitigating this risk through a combination of measures that include R&D investment, strengthened customer relationship and innovation initiatives, among others.
- _ Climate change. Risks for our business include both the physical effects of climate change, as well as behavioral change from travelers. We are considering how to include sustainability concerns in the travel purchase process, in addition to our initiatives to reduce emissions in our operations and for our customers.

The latest version of the Corporate Risk Map defines the most critical risks relating to Amadeus' operations and objectives, including:

- _ Technological risks derived from failures in the infrastructure or caused by cyber-attacks
- _ Operational risks that could affect the efficiency of business processes and services
- _ Security and compliance risks
- _ Commercial risks that could affect customer satisfaction
- _ Reputational risks
- _ The macro-economic and geopolitical environment
- _ Trends in the travel and tourism industry

Some of these risks have evolved from the previous Corporate Risk Map, while others have been newly identified.

These highlighted risks are assigned to risk owners at the highest level of the company, who are given the duty of proposing the risk response. Progress with mitigation and evolution of key risks is submitted to the Risk Steering Committee for review and consideration, together with any proposed action plans for necessary measures or further actions.

Due to its transversal and dynamic character, this process identifies new risks that affect Amadeus arising from changes in the environment or the revision of objectives and strategies.

In the current business environment, with its increasing stakeholder demand for transparency, ethics and social responsibility,

reputational risk management is becoming increasingly relevant. The Amadeus Reputational Risk Map is fully integrated into the overall Corporate Risk Map of the company. So assessing the reputational impact of a particular risk is embedded into our methodology. Similarly, cybersecurity risks are managed through a security risk framework driven by our Corporate Information Security Office, which is also integrated into the Corporate Risk Map.

In addition to managing risks, Amadeus is very focused on ensuring compliance with initiatives such as the General Data Protection Regulation (GDPR) of the European Union. Our activities also extend to existing control standards such as PCI-DSS (credit cards), SOC 1 (computer controls) and ISO 27001 (security).

Amadeus, like any other organization, is exposed to risks that could significantly disrupt key internal services to Amadeus as well as external IT services that we provide to customers. To ensure minimal disruption in such catastrophic events, Amadeus has implemented a Business Resilience Program designed to protect our people, assets and infrastructure, and minimize the potential impact to acceptable limits.

Finally, through the training and awareness plan coordinated by Risk & Compliance, we try to ensure that all employees understand and apply best practices on ethical behavior as well as security and privacy.

The Risk & Compliance Office works closely with the following committees:

- _ The Ethics Committee, which provides guidance on ethical behavior and compliance issues. This committee also addresses any concerns that employees may have and assists in the implementation of the Code of Ethics and Business Conduct. Promoting integrity, transparency and ethical conduct in all our operations is very important to us, and we have a zero-tolerance approach to prohibited practices, both in our internal affairs and external operations.
- _ The Risk Steering Committee, which is a decision-making body empowered by the Executive Committee to provide oversight and guidance on risk management activities and issues across Amadeus. This includes risk assessment and prioritization, risk mitigation strategies and crisis response.

Both the Ethics Committee and the Risk Steering Committee meet several times a year.

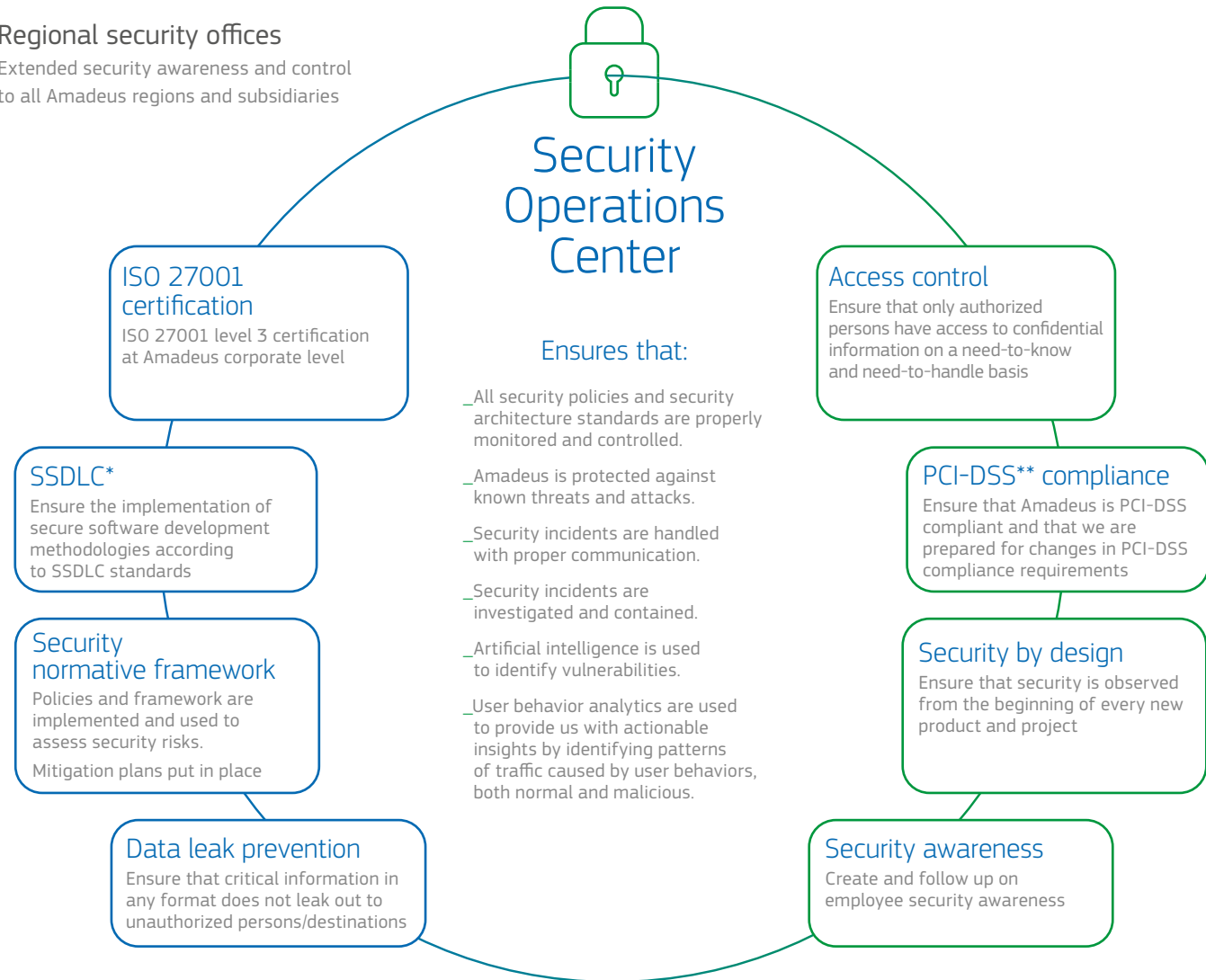
Amadeus Corporate Information Security Office

Amadeus continuously reviews and improves its processes to keep ahead of upcoming threats, ensuring that technical controls are

Amadeus Corporate Information Security Office

Regional security offices

Extended security awareness and control to all Amadeus regions and subsidiaries



* SSDLC: Secure Software Development Life Cycle.

** PCI-DSS: Payment Card Industry Data Security Standard.

considered and addressed, and that our people are aware of our policies, controls and processes to avoid or minimize the impact of these threats. We follow the ISO 27001 standard, including:

- _ Corporate security objectives and controls set by our Corporate Information Security Office.
- _ Our Security Risk Map, which gives priorities for the implementation of mitigations.
- _ A maturity assessment carried out by a third party to identify security gaps, which are also monitored and followed in our Corporate Security Program.

All these activities are monitored and controlled by our Corporate Security Program (SHIELD).

From a global operations and technology perspective, Amadeus has established an independent Security Operations Center to monitor at all times the security status of the services we provide to customers. This service also helps us understand emerging technical threats and invest in the most appropriate technology to mitigate new risks.

Since January 2017 Amadeus has been a member of the Aviation Information Sharing and Analysis Center (A-ISAC), showing our continuous commitment to increasing our customers' trust and the sharing of best practices.

Third Line of Defense: Group Internal Audit



Amadeus' Group Internal Audit:

- _ Supports the Audit Committee in monitoring the effectiveness of the company's internal control and risk management systems.
- _ Provides independent and objective assurance and consulting services designed to add value and improve Amadeus' operations. It helps accomplish our goals by using a systematic, disciplined approach to evaluate and improve the effectiveness of governance, risk management and control processes. This includes the potential for fraud and how the organization manages fraud risk.
- _ Covers all companies, businesses and processes majority-owned or controlled by Amadeus. Every year, Group Internal Audit performs a thorough background and risk assessment

exercise to verify and update our audit priorities. This considers, among other dimensions:

- The Group's strategic objectives and projects
- The Corporate Risk Map
- Internal/external challenges and enablers identified through interviews with senior management and major control functions
- Magnitude and geographical footprint of the Group's entities and activities
- Audit cycles

The output leads to the formalization and approval by the Audit Committee of a yearly internal audit plan.

The legal entities included in Group Internal Audit reviews during 2019² represented more than 60% of the total Amadeus workforce. The main risks identified during internal auditing are reported to senior management and the Audit Committee, and their status is periodically updated until resolution or acceptance by the governing bodies.

As an optimum complement to its independent reviews, Group Internal Audit holds periodic coordination meetings with the main control, business and technology units.

The reporting lines and authority of Group Internal Audit are set by the Audit Committee to ensure that it has sufficient authority to carry out its duties. To ensure Internal Audit's objectivity, its staff have no direct operational responsibility or authority over any of the activities audited. Accordingly, internal auditors do not implement internal controls, develop procedures, install systems, prepare records or engage in any other activity that may impair their judgment.

Group Internal Audit is governed according to the mandatory elements of the Institute of Internal Auditors' (IIA) International Professional Practices Framework (IPPF). This includes its Core Principles, its Definition of Internal Auditing, its International Standards and its Code of Ethics. Group Internal Audit also runs a Quality Assurance & Improvement Program that combines ongoing monitoring with periodic internal and external assessments. The program includes the evaluation of Group Internal Audit's conformance with the IPPF. It also assesses the efficiency and effectiveness of Group Internal Audit and identifies opportunities for continuous improvement.

² Including internal audit reviews, and the assessment of the design and effectiveness of the Internal Control over Financial Reporting (ICFR) and the Corporate Crime Prevention (CCP) models.