

A Work Project, presented as part of the requirements for the Award of a Masters Degree in Finance from the Faculdade de Economia da Universidade Nova de Lisboa.

ANA, SA
A Risk Management Approach

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Abstract

In 2007, following a series of sector transformations and wanting to be up to speed on industry best practices, *ANA – Aeroportos de Portugal, SA*, the Portuguese airports manager, adopts an Enterprise Risk Management (ERM) model. In 2009, with a challenging new regulatory model in sight and the idea of an imminent privatization, the company reassesses and restructures the model. This case study follows this transition process, the implementation of the new ERM model and the intricacies brought by the new regulatory model.

Key Words

Enterprise Risk Management (ERM)

Key Risk Indicator (KRI)

Regulatory Risk

ANA

*To my dear friend Mariana,
for the endless support,
endless patience,
and for pushing me
beyond my every limit
making this a reality.*

***“The pessimist complains about the wind
the optimist expects it to change
the realist adjusts the sails.”***

William Arthur Ward

Purpose of the Work Project

This Work Project is the result of the work developed within an internship program at *ANA – Aeroportos de Portugal, SA*, the Portuguese airports manager.

The internship was to be developed at the Risk Management Office within the Finance Division, working directly with the Risk Coordinator. This internship emerges at a time where ANA had completely redesigned its risk management approach and governance model and was then commencing its implementation process. To this very purpose, the main objectives for the intern were: to develop the methodologies to quantify six risks that were identified as priority; to adapt and optimize the respective quantification tools; to analyze the key risk indicators (KRIs) associated to each of the priority risks; to benchmark the adopted risk management approach to those used in some comparative airports; and finally to support the internal communication plan as a way to create a risk culture within the company.

This Work Project, through the use of a case study, aims at covering the main, and arguably the most interesting, aspects of ANA's risk management approach as well as attempts to provide a critical analysis of these topics using a discussion note.

Introduction

At the end of 2009, ANA approves and begins to implement a new Enterprise Risk Management (ERM) model, after a first approach taken in 2007 had proved to be ineffective. Operating in an industry marked by intense transformations in the previous years, with a new regulatory model on the way bringing new challenges to the company and having an imminent privatization in mind, adopting an ERM approach seemed to the Board like a necessary step. But was this step merely a show-off, a *looks good on paper* ERM model to impress the financial markets, or was this new model capable of structurally change the way the company faced risk and ultimately shape top management decisions?

ANA – Aeroportos de Portugal, SA

In 1998, ANA – *Aeroportos e Navegação Aérea, EP* (public company) splits in two different companies: NAV, EP which was to be focused exclusively on aerial navigation and ANA – *Aeroportos de Portugal, SA*, to be responsible for the management of the Portuguese airport infrastructures at Lisbon, Oporto, Faro as well as at the autonomous region of Azores (*Ponta Delgada, Santa Maria, Horta e Flores*). ANA was owned by the Portuguese State both through the country's treasury and finance department (*Direcção-Geral do Tesouro e Finanças*) which detained a 31,44% participation, and through a state holding – *Parpública*, detaining the remaining 68,56%.

ANA's activity was to comprise both the aviation and non-aviation business areas on top of the airport security and reduced mobility passengers (PMR)'s services. The aviation business was regulated and consisted of managing the necessary

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infrastructures to the traffic of aircrafts, passengers and cargo. The non-aviation business, unregulated, concerned the management of airport's commercial and advertising areas, real estate, parking lots and rent-a-car stations. The security and PMR components were object of autonomous regulation and were self-financed.

The Company's History

From the original company, ANA inherits a simpler and more efficient organizational structure and a more decentralized management with more decision capability at the various business areas, namely the airports, the commercial activities and the infrastructures projects and studies area, as the result of a vast restructure imposed by an eventful decade. Indeed, the 90s began with an oil crisis, followed by some political instability along with the USA's economic slowdown. These circumstances meant to ANA the very end of a self-financed investments cycle, forcing it to resort to credit to support its development - a huge turning point for the company. Moreover, the European market was profoundly liberalized and both monopolies and tariff controls were ended, measures that brought upon big challenges that ANA faced by rethinking its positioning, thus then reorienting the company towards a more competitive focus, electing **Client** and **Efficiency** as the key-words to orient future company growth. As so, when *ANA – Aeroportos de Portugal, SA* borns, had already very clearly defined objectives: optimize resources, improve productivity, create more and better infrastructures and to advance the success of airport marketing.

By the end of the decade, ANA had proven itself in the business, both in the country and beyond borders, and, as a result, Macau and Madeira's airports were then

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intrusting the company with its management. And so, ANA grew as a group, detaining a 70% participation in ANAM, the company managing the airports of *Funchal* and *Porto Santo* at the autonomous region of Madeira and a 49% participation in ADA, the company managing Macau's airport. In a strategic vision that defined ANA as a reference group in the airports' services, the group further integrated *Portway – Handling de Portugal, SA* (100%) and *Naer* (84,41%), the company established in 1998 to develop the projects necessary for the preparation and execution of those decisions to be taken in the process of planning and launching a new airport on the Portuguese mainland.

The construction of a new airport had been decided by the Government not only to respond to the imminent *Portela's* saturation, but also to endow the country with an Atlantic hub to then connect to Europe. In 2000 its model was set to be a partnership between the public and private sectors, and this was to be articulated with the privatization of ANA itself. In the meantime, *Portela* followed its expansion plan as to achieve its utmost capacity, *Sá Carneiro* airport prevailed its own development plan, aiming at serving the entire Iberian Northeast and *Faro's* airport proceeded with its remodeling, aspiring to become the best touristic airport of the Peninsula.

All these plans were seriously delayed by 9/11. The economic and aviation crisis took its toll in returns, aggravated by the steep increase in security costs. This ultimately led to the suspension by the Government in 2004 of the new airport project, which magnified the importance of *Portela's* plan. Furthermore, this context overstated the relevance of adopting a lighter and less expensive structure, capable of sharing resources and procedures among the entire group. This

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restructure, between 2002 and 2004, was a step further in creating the indispensable conditions to the company's privatization. In 2004 ANA's traffic recovered its upward trend, not only due to external macroeconomic factors, such as the Euro 2004, but also due to a successful commercial strategy with flexible prices and incentives that were able to attract new airline companies, most notably low cost companies, which have played a key role in the company's growth.

A First Approach

The airport sector had undoubtedly suffered massive transformations in the previous years that contributed decisively to amplify its risk exposure. The ever growing importance of low cost airline companies, the traffic shocks (9/11, rising oil prices, etc.) and even the tendency, particularly in Europe, for the industry to exit the public sector, were some of the engines for the observed changes. ANA, just like the sector that comprises it, had been experiencing profound transformations. These changes, along with ANA's constant concern with keeping up with industry's best practices as well as having an imminent privatization in mind and recognizing the added value financial markets attribute to a systematic risk management, led the company to define and approve in 2007 a model to manage the risk inherent to its activity.

This ERM model was based on a new governance structure that would supervise the implementation of the risk management procedures and communication plan **(Exhibit 1)**. The latter served the purpose of developing a risk culture within the company as well as communicating ANA's awareness of its risks and its proactive approach in dealing with them, along with the actual model.

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This governance structure was comprised by a Risk Function, to be responsible for the global management of the model, and by four Subcommittees to be responsible for the supervision of the risk management procedures implementation and for the monitoring of the KPIs (**Exhibit 2**). The Subcommittees were formed by several elements, all with their own functions and responsibilities, and were each dedicated to a different risk (**Exhibit 3**). These risks (planning and strategic execution, regulatory, planning and operational coordination, corporate) were broad in nature in an attempt for the sum of the four to be exhaustive in covering the company's risk map.

Although the risks were identified and a global mapping was made, a governance structure was set and functions and responsibilities were attributed, a risk management cycle was defined and the programs and risk management policies were placed for each Subcommittee, and even though some initiatives were accomplished in all Subcommittees, such as the *contingency plan*, the *large projects execution plan*, the *disaster recovery plan* and the *rules for financial instruments contracts*, by 2009 ANA realized most of the model's goals had not been met, its abandonment was growing and its implementation process was stagnated.

Subsequently, the company proceeded to reassess the model as to diagnose what had gone wrong. By doing so ANA concluded that the model was not successful due to a combination of different factors, most notoriously, the goals set for the model were too ambitious for the moment ANA was living, the governance structure proved to be excessively complex and flawed in the choice of key elements and the model was not able to create a risk agenda throughout the company that could promote the involvement of all divisions.

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Indeed, the company saw its ambition reflected in the large number of KRIs to be regularly monitored (25) and of procedures to be implemented (28) and the inability to prioritize them, particularly in a time when ANA had other priority projects in process, namely projects with greater visibility within the organization and with visible immediate results. So, the Subcommittees were having great difficulties in motivating people to dedicate their time to risk management and were even having problems in coordinating themselves and their busy schedules and as a result the agreed timings were being more and more neglected. This problem was intrinsically connected to the overly intricate governance structure. In fact, the large number of divisions involved in the management of the model was creating difficulties in the decision process and the great number of elements in each Subcommittee was making the schedules coordination very difficult. Furthermore, people felt that a person to be the top responsible for the success of the entire model was lacking and the absence of a focal point in risk management in each division was definitely hindering the management of the model. Finally, the company realized the low priority risk management had in the organization as a whole reflected in the small value attributed to the model itself and the documents produced and the reduced motivation to work for risk management. These were aspects the company thought denoted the low proactivity of the Risk Function and its difficulty in mobilizing the organization, along with the importance of the never implemented communication plan in addition to a lack of intervention and empowerment of the Board members.

Having identified the main factors preventing the success of a risk management initiative at ANA, the company proceeded to recognize the steps to relaunch the

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model. First and foremost, the company realized the imperative of simplifying the governance structure, giving it a more efficient use of the company's resources and centralizing efforts vs. decentralizing responsibilities, strengthening leadership by creating a *Risk Coordinator*, and intensifying resources allocated to the Risk Function. Furthermore, the risk map should be updated and priority risks ought to be identified and the same for the KRIs, by spotting those with greater impact and less implementation hardship. Moreover, there should be a development of more systematic tools and methodologies to quantify risks. And finally, risk performance had to be on directors' agendas and the communication plan had to be implemented.

The New Risk Management Model

Taking all lessons learned from the previous model experience into account, a new ERM model arose. The governance model was heavily restructured and simplified and responsibilities were clearly defined. As a result, the risk control was then concentrated in the *Risk Management Office* (RMO), a team composed of two elements: the *Risk Coordinator*, with total responsibility over the risk management control within the company, and the *Risk Analyst*, responsible for the execution of priority risks control procedures. The previous model's Subcommittees were concentrated on a single organ (*Risk Committee*) comprised of top management elements responsible for: analyzing the results from the control completed by the risk team; recommending mitigation measures; and selecting topics on risk management to be taken to the Board for approval (**Exhibit 4**). Finally, more responsibility was attributed to the various business units in the mitigation of existent risks, by implementing the measures set by the Risk Committee and the

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Board. To better understand and clarify timelines and responsibilities across the organization in this process, a risk management cycle was established (**Exhibit 5**).

As for the risk management procedures the focus was on prioritizing and systematizing. As a result, priority risks were to be established and their control was now the focus of the RMO. Tools and methodologies for the quantification of these risks were developed and were to be improved in a systematic fashion. Moreover, some basic (to be adapted and improved) templates were developed to facilitate the communication of risk control and its main conclusions and recommendations within the RMO to the Risk Committee.

Priority Risks

By the end of 2009, after careful assessment of an updated mapping (**Exhibit 6**) of all ANA's risk exposures (a procedure that should be done annually, as observed in the risk management cycle) and using the potential impact on ANA's business as rationale, six priority risks were identified:

Business Risk: relating to the unexpected variation on the drivers of both revenues and costs.

Credit Risk: associated with the failure of clients to comply with their debt.

Financial Risk: relating to the unexpected increase in the cost of debt, originated by an increase in the reference rate (Euribor) or to an increase in the spread, and the shortage of liquidity to guarantee the financial management of the company in the short-term.

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Large Investments Risk: concerning the failure to comply with the planned timing and budget to the execution of large investments within the company.

Disruptive Events Risk: associated to events whose materialization would have a huge impact on the company's demand (TGV, mergers, acquisitions, bankruptcies, airport dependency on a single airline, etc.).

New Regulatory Model Risk: associated to the change in the model that sets airport charges, a consequence of the economic regulation¹ approved on September 4th, 2009, which brought ANA the impossibility to reflect in the prices the demand and costs variations as well as unexpected investments or their extra costs.

The procedures for the control of these priority risks, main KRIs and the used comparative values can be found on **Exhibits 7, 8 and 9** respectively. Furthermore, some of the results for the quantifications made for the six risks for the year 2009, taken from the first report made by the new RMO, that functioned a bit like a *test-drive* for the tools and methodologies, but served the important purpose of providing a first feeling for these numbers at ANA, can be found on **Exhibits 10 to 15**.

The New Regulatory Model

ANA, as a utility and an obvious natural monopoly, was a heavily regulated organization. Still, as a completely state-owned company, its regulation allowed for a lot of flexibility and every year tariffs were calmly negotiated, absolutely respecting all regulation and always with the public interest in mind, but still set to

¹ Decreto-Lei n.º 216/2009 in Diário da República, 1.ª série — N.º 172 — September 4, 2009

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guarantee the company's welfare and to cover most of the company's losses and downfalls, thus eliminating most risks, or at the very least, strongly attenuating their impact.

In 2009, following the guidelines of the International Civil Aviation Organization (ICAO)² and European Union directives³ (that had to be incorporated in member-states' regulation by March 15, 2011), and having in mind an imminent privatization and the subsequent need for much stricter and transparent regulation, a new regulatory model arises and is approved later in that year on September 4th.

The model at a glance:

Price Cap: a maximum average return per passenger in the set of regulated activities (comprised by the air traffic activities, the only ones that actually constitute the utility and a natural monopoly) is established (**Exhibit 16 and 17**).

Single Till: commercial activities' returns contribute to finance regulated tariffs. This should evolve to **Adjusted Single Till:** as activities outside the terminal and not directly related to airport operations arise (hotels, business centers, retail parks, etc.), a reality particularly true in the case of the new airport (**Exhibit 18**).

Service Quality Evaluation: the regulator authority establishes service levels and indicators; financial penalties applied affecting regulated returns otherwise.

² ICAO's Policies on Charges for Airports and Air Navigation Services, Doc 9082/7, 7th Edition, 2004

³ Directive 2009/12/CE, March 11, 2009

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Operational Costs: the regulator may set efficiency levels to be achieved.

Commercial Returns: the regulator may present evidences to demand a performance improvement.

Investments: the regulator authority may not consider future investments, planned by ANA, if it considers them to be inefficient or unnecessary; it may not consider investments already completed by ANA, if it justifiably proves they could have been done in a more efficient manner; it may also not consider completed investments that were not part of the initial investment plan or that, if part taken on the plan, were completed with a cost significantly higher than planned.

Regulatory Periods: 5 years; the first was an adapting 2-year period (2010-2011)

The Future

2010 began and ANA was less than two years away from a fully implemented and functioning new regulatory model. Major changes were demanded within the company and the word risk gained a whole new meaning to this organization used to incorporate each realized vs. planned difference and every downfall in the following year returns. Was the company ready? Was it taking the right steps to prepare itself? The idea, restructuring and implementation of the ERM model was undoubtedly a step in the right direction, but was it enough? Was this new approach equipped to succeed where the first one had failed? Was the new RMO, together with the Risk Committee, be able to create the organizational risk culture indispensable to deal with the new challenges presented?

Discussion Topics

- Discuss the main aspects of the new risk management practices at ANA.
- What were the main novelties brought by the new regulatory model and what were the implications/risks that came along with it?
- What are the main challenges ahead for ANA's ERM approach?

Exhibit 1 Communication Plan

	Audience	Objective
Internal	All Divisions	Explain new procedures and governance structure
	All ANA's workers	Create a risk culture
	Risk Committee/Board	Follow risk management results in a timely manner
External	Financial Markets	Inform the market of ANA's risk management efficacy
	Insurance Companies	Inform insurance companies of ANA's effort to reduce risk
	General Public	Create a positive image and reputation for ANA

 Priority - 2010

Exhibit 2 Governance Structure and Responsibilities

	Governance Structure	Main Functions and Responsibilities
	<p>Steering Committee Risk Function Dra. Maria de Luz Campos Dra. Maria João Dias Dr. Pedro Solipa</p>	<ul style="list-style-type: none"> Owner of the risk management general process Set risk management policies Identify risks Set risk management guidelines Approve proposed procedures Follow the management of risk level global indicators
	<div style="display: flex; justify-content: space-around;"> <div style="background-color: #92d050; padding: 5px;">SC#1</div> <div style="background-color: #92d050; padding: 5px;">SC#2</div> <div style="background-color: #92d050; padding: 5px;">SC#3</div> <div style="background-color: #92d050; padding: 5px;">SC#4</div> </div>	
Sponsor Board	<ul style="list-style-type: none"> Eng. Carlos Madeira Dr. Rui Veres Eng. Heitor da Fonseca Dr. Ferreira de Lemos 	<ul style="list-style-type: none"> Propose risk management procedures and metrics Set periodicity to follow risks Monitor procedures implementation Participate in risk committees
Promoter	<ul style="list-style-type: none"> Dr. António Morgado (DPCG) Dr. Francisco Sebastian (DJUCON) Dr. Fernando Vieira (DASC) Dra. M^a da Luz Campos (DFIN) 	<ul style="list-style-type: none"> Promote procedures implementation Observe policies and procedures Create regular risk management reports to risk committees
Team	<ul style="list-style-type: none"> DIA DIMO DALS DEMA DEMA DSTE CSP DFIN DAA DRET GQ CSP DSTIC DAO SEGER DJUCON DFIN DAFR DIPE 	<ul style="list-style-type: none"> Verify policies and procedures implementation Collect field information Produce recommendation reports Produce technical viewpoints in the setting of risk management policies and procedures

Exhibit 3 Subcommittees and Covered Risks



Exhibit 4 New Governance Structure and Responsibilities

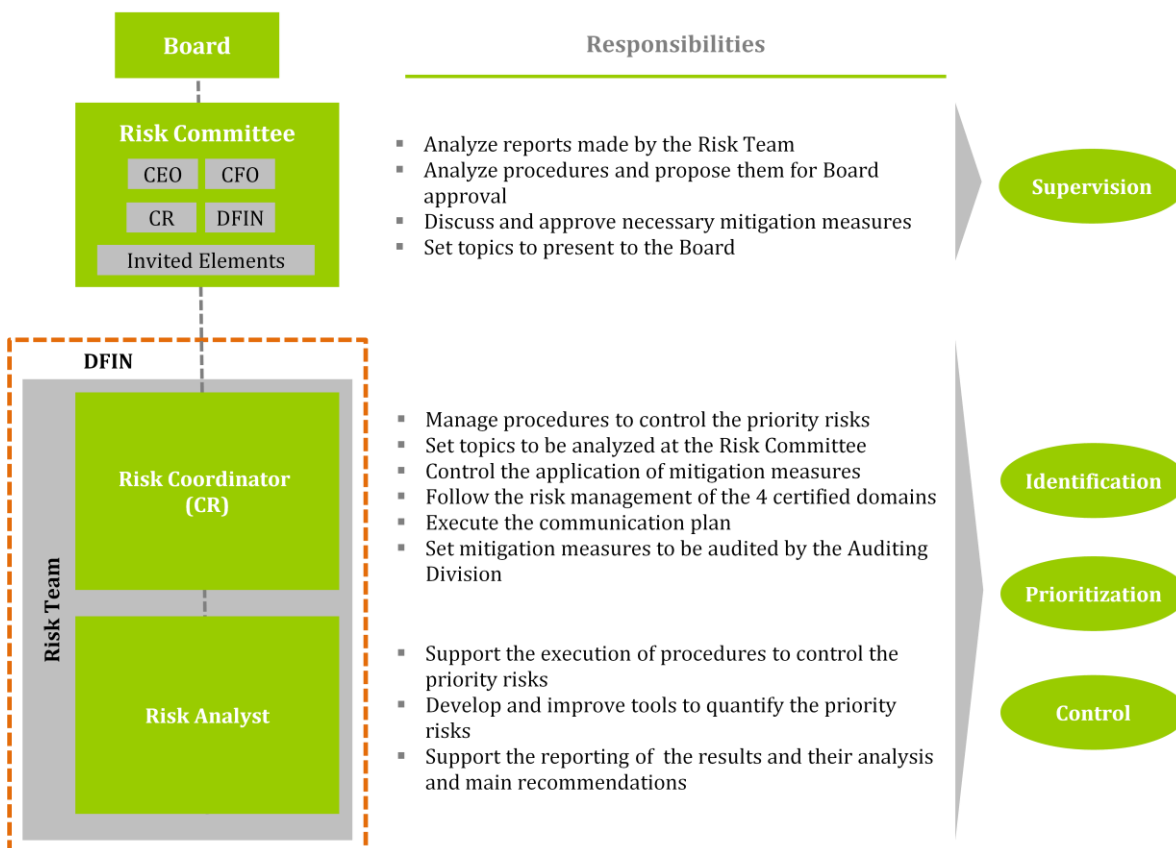


Exhibit 5 Risk Management Cycle

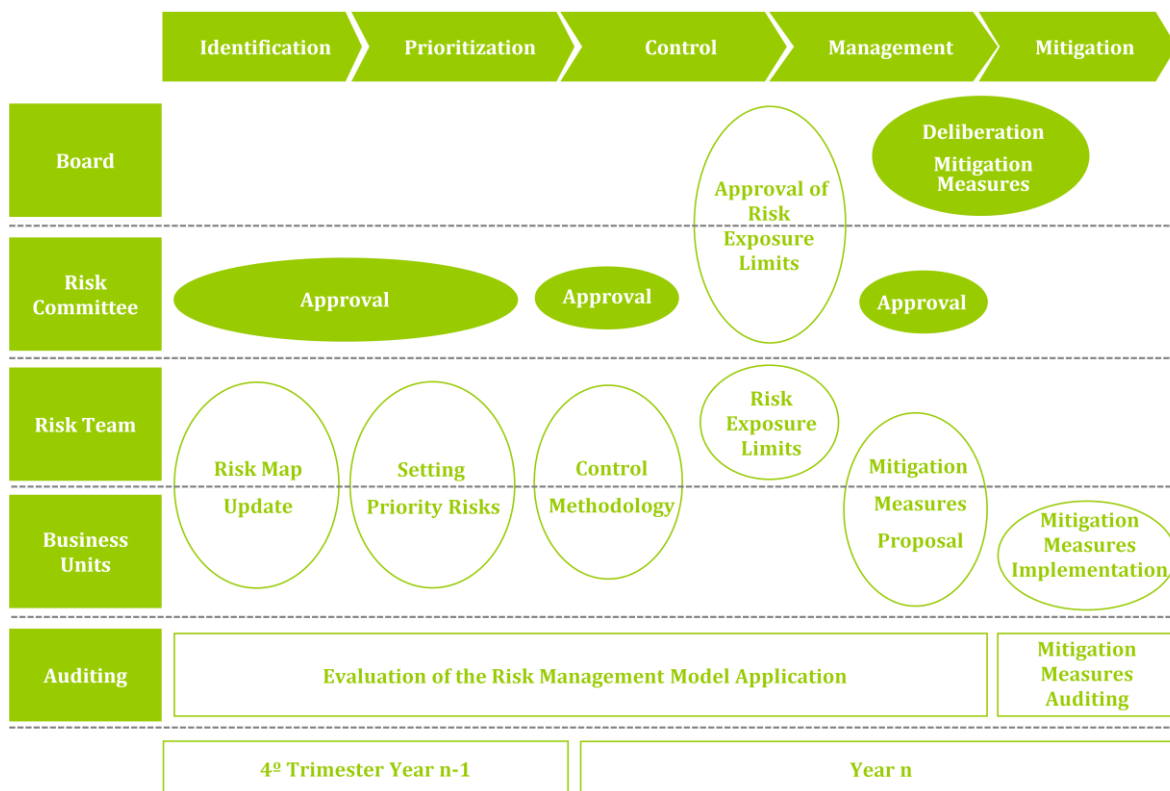


Exhibit 6 Map of ANA’s risk exposures



Exhibit 7 Risk management procedures, periodicity and ability to manage each of the priority risks.

	Procedures	Periodicity	Ability to Manage
Business	<ul style="list-style-type: none"> • Update business drivers historical data • Execute <i>Crystal Ball</i> software to compute the V@R 	Every Semester	
Credit	<ul style="list-style-type: none"> • Collect the financials for ANA's main creditors • Use a scoring model to set credit limits 	Every Month	
Financial	<ul style="list-style-type: none"> • Evaluate cost of debt scenarios and quantify their impact • Collect ANA's main financials and ratios and compare them with Board approved limits 	Every Trimester	
Large Investments	<ul style="list-style-type: none"> • Update all data relating to the expansion plans of each airport and execute the <i>Pertmaster</i> software • Compute the impact of the deviations on each project's NPV 	Every Trimester	
Disruptive Events	<ul style="list-style-type: none"> • Update the list of disruptive events • Compute and analyze the impact of each one of them on ANA's business 	Every Semester	
New Regulatory Model	<ul style="list-style-type: none"> • Update and compare traffic and OPEX forecasts to realized values • Compute the impact of the deviation on ANA's P&L 	Every Trimester	

Exhibit 8 Key Risk Indicators to be used by the Risk Team

	KRIs
Business	<ul style="list-style-type: none"> ▪ EBITDA@risk (5%) ▪ Contribution of each business driver to increase the EBITDA@risk
Credit	<ul style="list-style-type: none"> ▪ Credit scoring for top 10 clients
Financial	<ul style="list-style-type: none"> ▪ Cost of debt, variable, fixed and total on % and M€ ▪ Debt to equity ratio and ANA's rating ▪ Scenario analysis of 1pp increase on Euribor and on the spread
Large Investments	<ul style="list-style-type: none"> ▪ 50% and 80% probability CAPEX - using a triangular probability distribution (-10%;15%) ▪ 50% and 80% probability end of project date - using a triangular probability distribution (-10%;15%) ▪ Impact on project's NPV
Disruptive Events	<ul style="list-style-type: none"> ▪ Each airport dependency on their top 3 operators (on total traffic% and total returns%) ▪ Impact of relevant disruptive events
New Regulatory Model	<ul style="list-style-type: none"> ▪ PAX (by mix: Schengen, EU non-Schengen and International) real vs. forecast ▪ Movements real vs. forecast ▪ Gains/Losses on traffic, OPEX and CAPEX estimations

Exhibit 9 Values to compare with ANA's figures for each KRI

	Comparative Values		
	● Green	● Yellow	● Red
Business	V@R <12% EBITDA	12%<V@R<15% EBITDA	V@R>15% EBITDA
Credit	Every client within credit limit or guarantee	1 client outside the credit limit or guarantee	More than 1 client ,or 1 top5 client, outside the credit limits or guarantee
Financial	R1<3 and R2>5 N<75 M€	3<R1<3,5 or 5<R2<5,5 30 M€ < N < 75 M€	R1>3,5 or R2<5,5 N<30 M€
Large Investments	TC80%<TCb and TL80%<TLb	TC50%<TCb<TC80% or TL50%<TLb<TL80%	TC50%>TCb or TL50%>TLb
Disruptive Events	Event's impact < €5M	€5M < Event's impact < €10M	Event's impact > €10M
New Regulatory Model	Impact < €5M	€5M < Impact < €10M	Impact > €10M

R1 = Debt/EBITDA R2 = EBITDA/Interest N: short-term debt in use
 TC%: estimate for the maximum value of total cost at that % probability TCb: total cost budgeted on the base plan
 TL%: estimate for the maximum value of total length at that % probability TLb: total length budgeted on the base plan

Exhibit 10 ANA's EBITDA@risk and volatility contribution of the most volatile drivers

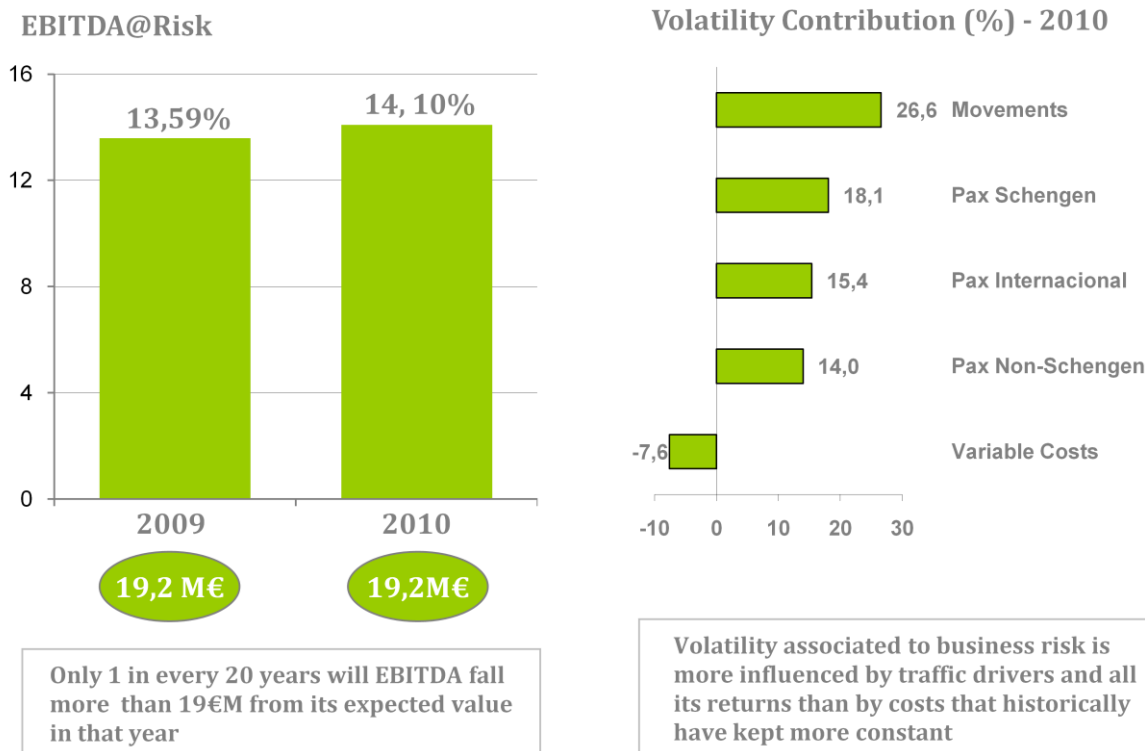


Exhibit 11 Evaluating the impact of a scenario where EURIBOR and/or the spread of debt planned to be contracted in that year would be a 1pp higher than planned.



Exhibit 12 Faro airport’s expansion plan – maximum cost and length evaluated at 80% probability and the impact of a scenario with both these maximum values on the project’s NPV.

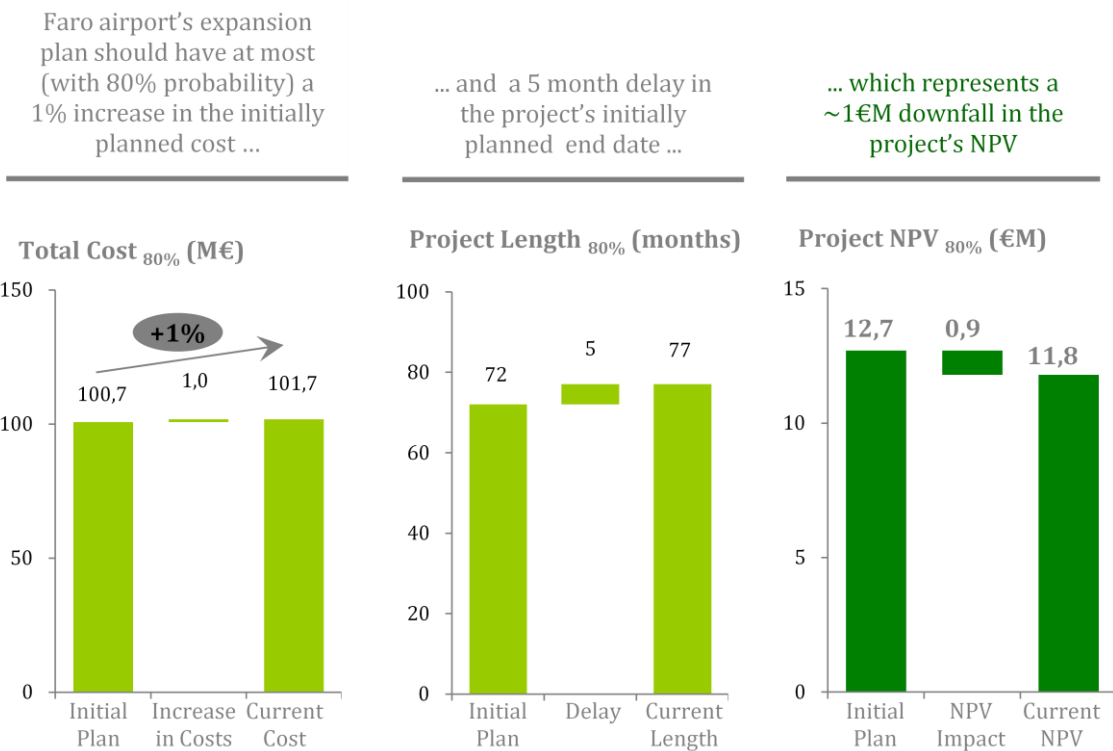


Exhibit 13 Impact of 4 different disruptive events on ANA's 2009 EBITDA

Scenarios	Impact (2009)	Main Assumptions
TGV	• 11.1	<ul style="list-style-type: none"> 85% reduction in the Lisbon-Oporto air traffic route and vice-versa and a 10 to 3 decrease in the number of flights 65% reduction in Lisbon-Madrid air traffic route and vice-versa and a 16 to 11 decrease in the number of flights
TAP acquired by Lufthansa	• 5,2	<ul style="list-style-type: none"> Closing of routes to secondary cities in Iberian Peninsula and direct flights to Eastern Europe Increase in traffic and flights to Frankfurt, Munich, Milan and Madrid to compensate for the aforementioned closed routes
Ryanair leaves Oporto	• 3,4	<p>Decrease in the traffic of Ryanair routes</p> <ul style="list-style-type: none"> 75% loss on routes without competition 50% loss on routes with regular operators competition 30% loss on routes with low-cost operators competition
Easyjet leaves Faro	• 4,7	<p>Decrease in the traffic of Easyjet routes</p> <ul style="list-style-type: none"> 75% loss on routes without competition 50% loss on routes with regular operators competition 30% loss on routes with low-cost operators competition

Exhibit 14 Real vs. forecast evolution and how this would affect ANA if in a regulatory period

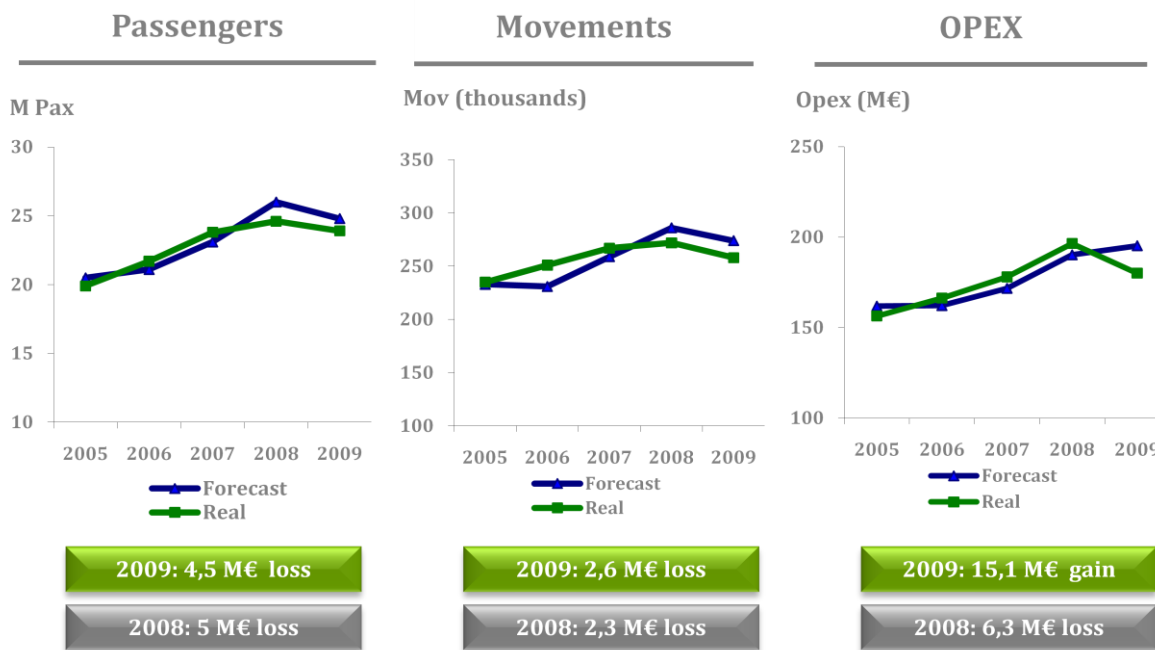


Exhibit 15 4 different scenarios and how this was to affect ANA in a regulatory period

Risk	Possible Scenario	Impact
Demand overestimation	<ul style="list-style-type: none"> • Forecast of 1M pax above the real value at the end of the year • Forecast of 10.000 movements above the real value at the end of the year 	- 5,9 M€/year that may extend for the entire regulatory period
Costs underestimation	<ul style="list-style-type: none"> • Underestimation of costs in 1% 	- 1,8 M€/year that may extend for the entire regulatory period
Inability to achieve the efficiency factor	<ul style="list-style-type: none"> • Efficiency factor established at 2%/year during the entire regulatory period • Decrease in operational costs at only 1%/year during the entire regulatory period 	- 4,5 M€/year of average loss during the entire regulatory period
Non-inclusion of investments	<ul style="list-style-type: none"> • Non-inclusion of 10% of the investments realized in 2009 in the regulatory model 	- 0,5 M€/ano during the investment amortization period

Exhibit 16 Price Cap vs. Rate of Return

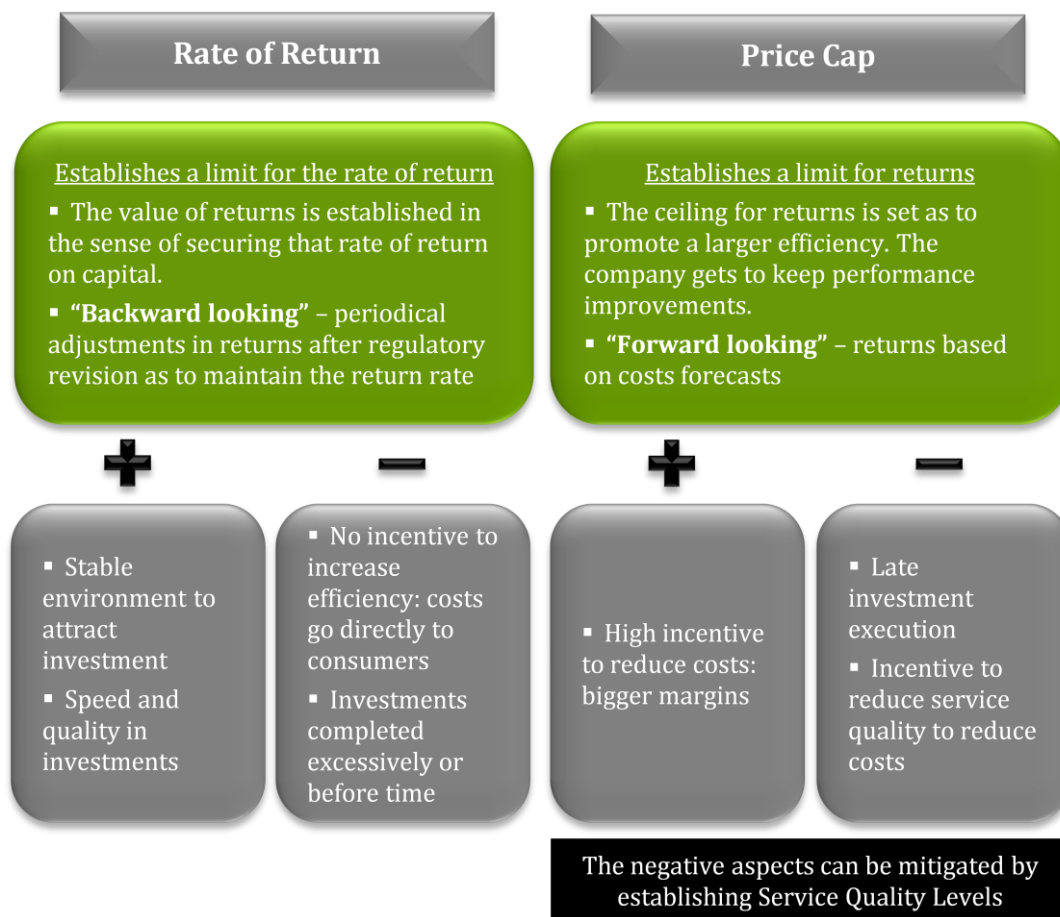
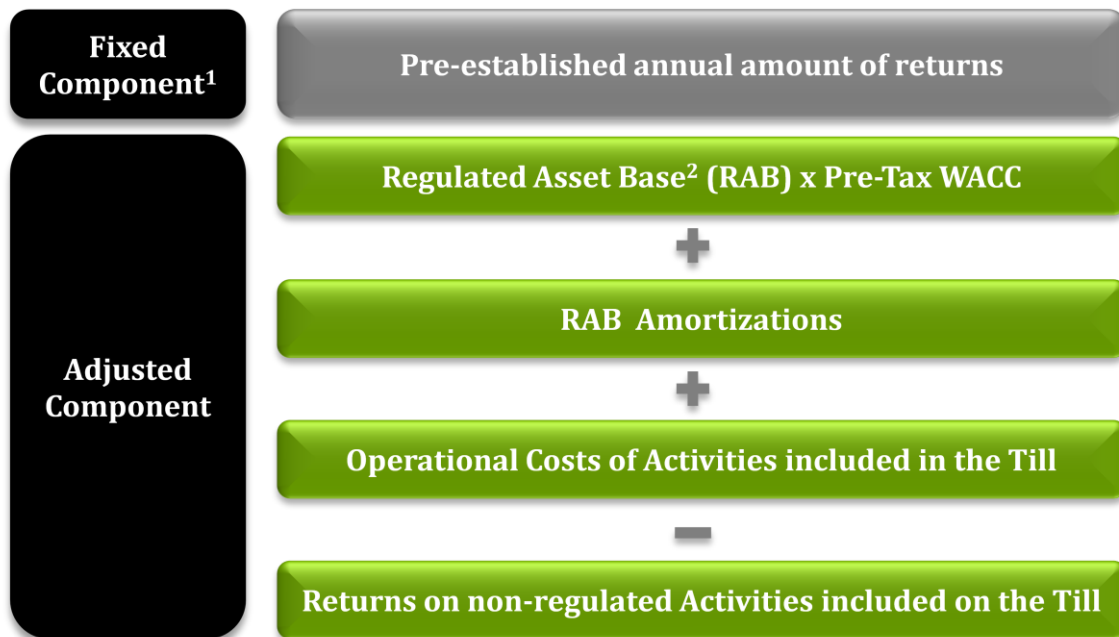
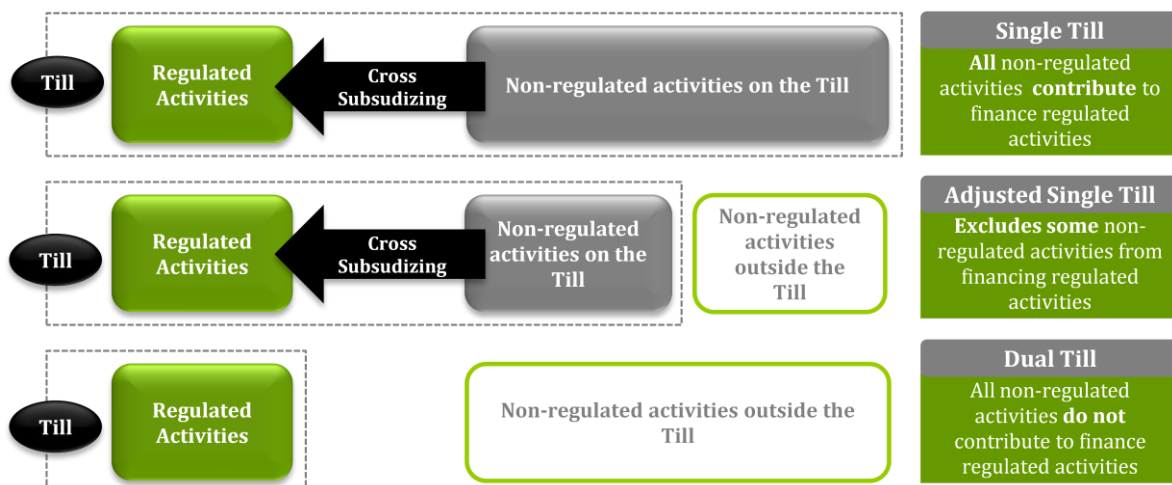


Exhibit 17 Formula to compute the Price Cap at ANA, for each regulatory period



- 1) this component serves the purpose of helping finance future investments, namely the new airport
- 2) the RAB includes the value of physical assets required to operate both the regulated activities and the non-regulated included on the till

Exhibit 18 How the Till works



Main aspects of the new risk management practices

Ana was indeed able to learn from the previous experience and correct some of the main flaws of the previous ERM model. The new model had now a much simpler structure with a fully dedicated RMO, focused on the company's priority risks. Still, a step further should be taken, as a simple governance best practice, to make the RMO a fully independent body, reporting directly to the Risk Committee, not having to report first to the Finance Division, namely to its director.

Although the model is generally well worked out in terms of procedures and KRIs, some of the correspondent comparative values seem a bit random. For instance, looking at the disruptive events, should an assumption be made that an event with an impact inferior to 5€M should be disregarded? Is the company not worried with Easyjet leaving *Faro's* airport (4,7€M impact)? Shouldn't this information still be incorporated strategically for negotiation power if the situation is presented? What about future impact?

As for credit, is it really relevant to raise a yellow flag if some client with a tiny office in one of ANA's buildings has not paid his rent on time? Here it would be important for the RMO to focus on the top 10/20 clients and possibly the top 10 infractions each month and leave the rest to be controlled at a operational level providing it with a proper systematized action plan (setting up relevant, most likely seasonal, credit limits that if surpassed would have an immediate response), so that top management does not need to meet and discuss a response for each credit infringement.

Discussion Note

The most random seems to be the EBITDA@Risk; why 12% and 15%? Posterior computation shows ANA's V@R at 13,59% in 2009 and even higher at 14,10% for 2010. Is this a worrisome figure? Should a yellow flag be raised? In an attempt to grasp this number, it would be interesting to benchmark ANA's peer group⁴:

Copenhagen	Schiphol	Wien	Zurich	ANA
7,62%	13,52%	8,87%	6,68%	13,59%

It is possible to observe that Schiphol's figure is quite similar while the others present as substantially (approximately half) lower. Further research should be done to understand these differences. Is this risk level intrinsic to the company's activities that are somehow more similar to Schiphol's. Can this risk be reduced? Does ANA want to reduce it?

The New Regulatory Model

The Price Cap aspect of this model brought upon some risks that accrue to the embedded in the model **risks of not accomplishing the efficiency and performance demanded by the regulator** on operational costs and commercial returns respectively. Observing its computation formula it can be seen that ANA is to absorb all **traffic volume risk** as the Price Cap is set for a certain volume that if not achieved might represent a loss for the company. On the other hand, if overcame might constitute a gain that the company gets to keep. Furthermore, it introduced the **risk of underestimating operational costs** as well as the **risk of overestimating commercial returns**.

⁴ Computation made using 5 years of data (the same as ANA) collected from Annual Reports and from ACI (Airports Council International).

Discussion Note

The main change brought is simply the imperative of good planning. Looking at 2008 real vs. forecast differences, movements, passengers and opex differences add up to a 13,6€M loss. In 2009, opex alone had a 15,1€M difference, granted it was a gain, but it still reflects a serious planning flaw. These differences will no longer be able to just be incorporated in the following year's tariffs and will be effective gains/losses for the company. Furthermore, besides the differences in itself being a risk, there is also a regulatory risk component in the sense that the regulator needs to believe in ANA's planning and accept it (or not). So, here too would be interesting to understand if these differences are common and simply intrinsic to the sector, by the use of benchmark, or if others are consistently outperforming ANA in their planning and the company can actually do something about it, such as invest in R&D, HR and tools better equipped to forecast traffic, or hire specialized consultants.

Moreover, the first element of the adjusted component on the formula brought in two huge risks: by using the regulated asset base (RAB) it introduced **investment risk** since any unplanned investments, or projects costing more than planned, will not be remunerated within the regulatory period, not to mention the regulatory risk component, whereby the regulator may **never acknowledge these investments**; and by the use of the *pre-tax WACC* as rate of return on RAB, it introduces the risk of the regulator **setting a *pre-tax WACC* lower** than the one actually realized in the 5 years of the regulatory period.

Again here, there is an argument to be made for good planning and credibility, but there is a step further to be taken. There should be a risk management approach to a large investment from the very beginning, starting at the initial plan. When the

Discussion Note

budget is estimated it should already account for risk. The risk of excavating and finding some material that is much harder to break, the risk of some red tape detail delay some part of the project for a couple months, etc., are risks that can perfectly be incorporated in the initial plan, using empirical probabilities that people in the field have a good sense of, thus coming to an **expected value** of what will be the cost of the project, as opposed to the current figure, providing an estimate for the case where everything goes as planned. As is, it makes little sense to use a triangular probability to compute probable maximum costs and lengths; it most certainly will never be less than the best case scenario, and the budget will be consistently overrun, affecting ANA's credibility, reputation, and with the new regulatory model, its pockets, at the very least within the regulatory periods.

Future Challenges

With the new regulatory model stopping ANA to pass-through most of its risk to its consumers, it forces the company to rethink risk and the best approach to deal with it. The introduction of a new and improved ERM model was in fact an important step, but the company could incorporate this model as a great source of critical information and learn how to use it strategically. Knowing the value of *Easyjet at Faro*, allows the company to grasp a ceiling for the incentives to give this airline to remain there; knowing the impact of the TGV, gives an opportunity for the company to decide how to tackle this new competition: is it worthwhile to invest in incentives for TAP or promote a low cost route? A good planning, along with a clear understanding of its risks, may allow the company to discuss some fair risk premiums to be incorporated in the Price Cap formula; for instance, the

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expected value of clients credit default in a regulatory period (by analyzing historical data and maybe considering macroeconomic conditions).

For all this to work it needs to make sense within the organization, risk needs to be taken seriously across the company as whole. To that purpose, focus should be put on actually implementing the seemingly well designed communication plan. Furthermore, communication lines between the RMO and all divisions should be open and flexible and these divisions should have access to risk management information concerning them. For example, it would be interesting to show DPCG (the planning and management control division) the real vs. forecasts differences. People are more likely to incorporate risk when presented with a 13,6€M reality check, than with a theoretical display of the concept.