

# Tunis Re

## Newsletter

N°48

First Quarter 2024

<https://www.rdvcarthage.com/inscription-hackathon/>

### EDITORIAL

Tunis Re has the great pleasure of organising jointly with the Tunisian Federation of Insurance Companies «FTUSA» and General Arab Insurance Federation «GAIF» the 17<sup>th</sup> Rendez-vous de Carthage which will take place in **Tunis from 19 to 22 May 2024.**

The topic of debate for this session is **«The insurance and reinsurance industry faced with the challenges of artificial intelligence (AI)»**. Choosing this topic confirms once again the importance of Data in the strategy of insurance companies and that the integration of new technologies and solutions based on artificial intelligence, in the operational process, allows a real increase in efficiency.

In fact, by overcoming challenges, the insurance industry can gain the benefits of AI to improve operational efficiency, better personalise offers for its customers, improve risk management and deliver faster, more efficient services.

This event will provide a real opportunity to discuss both the role of artificial intelligence in protecting and improving the insurance and reinsurance world and the mechanisms needed to extend the range of future solutions.

As we wish the 17<sup>th</sup> Carthage Rendezvous every success, we once again express the hope that 2024 will bring stability, prosperity and well-being to the world.

Lamia Ben Mahmoud



**By Bacem Jeribi**

## Preparing for AI and data quality

The current enthusiasm around artificial intelligence (AI) and the promise of major breakthroughs are clearly noticeable in various sectors. Thanks to advances in generative AI, insurers are becoming increasingly interested in these technics.

Using traditional machine learning methods, insurers around the world have revolutionized business processes, from health insurance underwriting to auto insurance fraud detection. These algorithms have enabled more in-depth analysis of accepted risks and faster decision-making, to the benefit of insurers and policyholders alike.

As technology advances, AI can be expected to play an even more central role in insurance product innovation and the personalization of the insurance offering. Through the adoption of auto machine learning, which enables AI systems to train themselves with little human intervention, and explainable AI (X-AI), which aims to make decision-making by AI transparent and comprehensible to users.

The use of such methods by Tunisian insurers is still very limited, a situation that can be attributed to several factors, not least the lack of processes guaranteeing data quality, which is essential for the proper functioning of Machine Learning algorithms. To overcome these obstacles, it is crucial to establish robust data standards and promote a data culture within insurance companies.

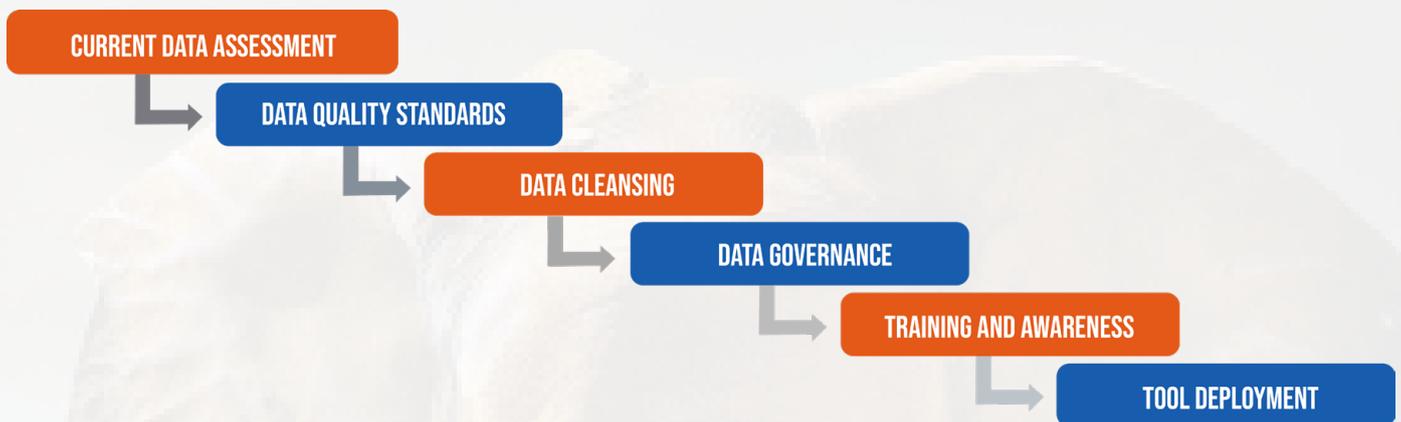
In what follows, we'll examine why data quality is considered the most critical factor in the success of future AI projects, and how organizations can assess, improve and maintain data quality to ensure optimal performance of their intelligent solutions and to be ready for rapid adoption of new technologies.

**«If artificial intelligence can mimic me, it means that I am the problem, not the computer.»**

*Alexandre Astier*

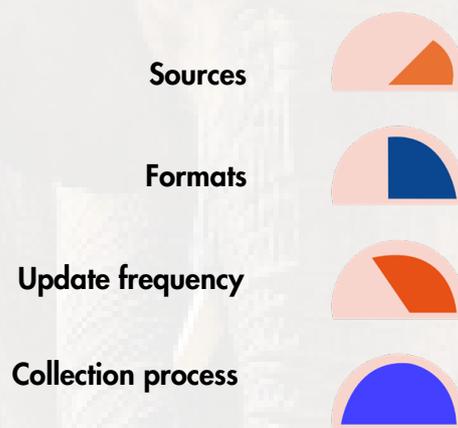
## ● Data quality roadmap

To guarantee optimum data quality, several steps must be rigorously followed. Firstly, it is crucial to establish clear data standards, defining the required formats, structures and quality levels. Secondly, data cleansing processes must be put in place to eliminate inconsistencies and errors. Thirdly, strong data governance must be put in place to maintain data integrity over the long term. In addition, it is essential to adopt state-of-the-art tools and technologies to automate these processes. Finally, a culture of data quality must be cultivated within the organization, where every employee understands the importance of data accuracy and contributes to its continuous improvement.

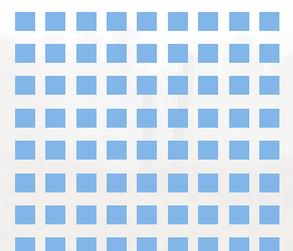


### 1. Evaluation of the Current State of Data

Assessing the current state of data is a crucial step for any company looking to improve its data management. This evaluation involves several key aspects:



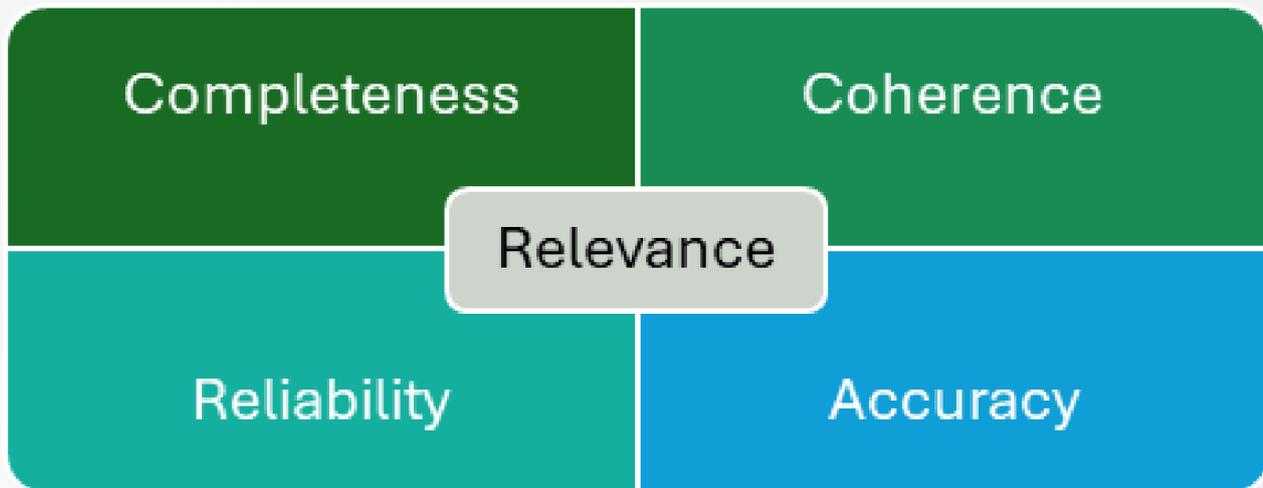
- **Understanding Data Sources:** It's essential to document where the data comes from. This can include internal databases, external sources, social networks, etc. Understanding these sources will enable the insurer to determine their reliability.
- **Identifying Data Formats:** Data can exist in various formats, such as text files, Excel spreadsheets, SQL databases, JSON files, etc. Identifying these formats will help the insurer determine the tools and skills needed to work with this data.
- **Examining Data Update Frequency:** Some data may be updated in real-time, while others may be updated weekly, monthly, or even annually. Understanding this frequency is crucial for determining how the data can be used and what information it can provide.



- **Analyser les processus de collecte de données :** Il est important de comprendre comment les données sont collectées. Cela peut impliquer des processus automatisés, des saisies manuelles, etc. Une analyse de ces processus peut révéler des points faibles potentiels tels que des erreurs de saisie.

## 2. Data Quality Standards Definition

Defining data quality standards is an essential step to ensure that the data used by the company is reliable and useful. Here are some key aspects of this definition:



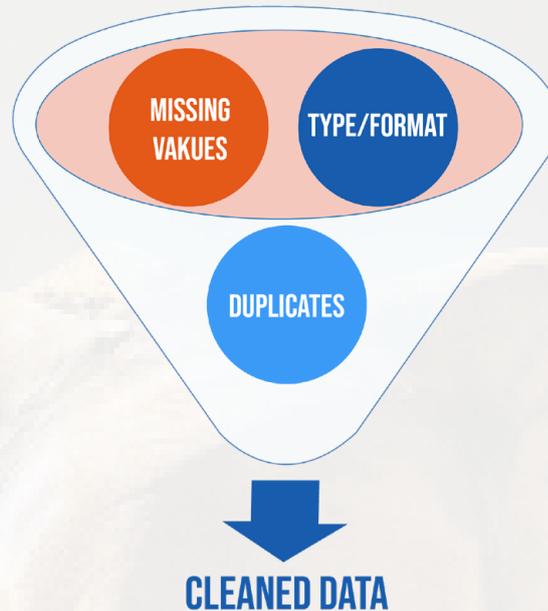
- **Accuracy:** Data must be accurate and error-free. For example, incorrect addresses and risk locations can lead to errors in risk accumulation assessment. Data accuracy must be checked regularly to ensure that it is always up to date.
- **Completeness:** Data must be complete, with no missing or incomplete values.
- **Consistency:** Data must be consistent, i.e. it must be logical and uniform. For example, if a company uses several systems to collect data, it must ensure that these systems use the same formats and units of measurement.
- **Reliability:** Data must be reliable, collected and processed in a rigorous and systematic way. This means that the company must have confidence in the methods used to collect, store and analyze the data.
- **Relevance:** Data must be relevant, i.e. it must be directly linked to the company's objectives. For example, if the company's objective is to improve its estimates of possible claims costs, it needs to improve the collection of data that can help achieve this objective.

These data quality standards must be aligned with business objectives and AI requirements. For example, if the company is using AI for fraud detection, it must ensure that the data used by AI is accurate, complete, consistent, reliable and relevant to fraud detection.

Finally, it's important to note that defining data quality standards is an ongoing process. Companies must regularly reassess and adjust their standards as their objectives evolve and new data becomes available.

### 3. Data cleaning

Data cleaning is an essential part of data management. It is a process designed to improve the quality and usefulness of data by eliminating errors and inconsistencies. Here are some key aspects of this process:



- **Revising typographical errors:** Typing or input errors are common in data. For example, a risk name may be misspelled, or a numerical value may be incorrect. Data cleansing involves identifying and correcting these errors to ensure data accuracy.
- **Format standardization:** Data can be presented in a variety of formats. For example, dates can be written as text or numbers, and addresses can be written in different ways. Format normalization involves converting data into a standard format to ensure consistency.
- **Data conflict resolution:** Data conflicts can arise when different sources provide conflicting information. For example, two different databases may give different addresses for the same policyholder. Data conflict resolution involves identifying and resolving these contradictions to ensure data reliability.
- **Dealing with missing values:** Data can sometimes contain missing values. A risk declaration form may not have answers to certain questions. Data cleansing may involve imputing these missing values using statistical techniques, or deciding to delete records with missing values if they are deemed non-essential.
- **Removing duplicates:** Duplicate records can distort analyses and lead to erroneous conclusions. Data cleansing therefore involves detecting and removing duplicates.

In summary, data cleansing is a complex but essential process to ensure that data is accurate, consistent and useful to the business. It requires a combination of technical skills and an in-depth understanding of the company's data and processes.

### 4. Implementation of Data Governance Processes

Data governance is a crucial aspect of data management. It aims to ensure that data is managed effectively, securely, and in compliance with applicable standards and regulations. Here are some key elements of implementing data governance processes:

- **Establishment of Data Policies:** Data policies define the rules and procedures for data collection, storage, management, sharing, and use. These policies must be clearly communicated to all members of the company and regularly updated to reflect changes in business objectives, data technologies, and regulations.
- **Definition of Data Standards:** Data standards define quality requirements. These standards help ensure that data is reliable, accurate, and usable for business needs.
- **Implementation of Data Management Procedures:** Data management procedures describe specific steps for data collection, processing, storage, backup, recovery, and deletion. These procedures should be designed to minimize the risks of loss, corruption, or unauthorized disclosure.
- **Assignment of Responsibilities for Data Management:** It is important to clearly define who is responsible for what in terms of data management. This may include appointing a data governance officer, training employees on their data management responsibilities.
- **Implementation of Data Security Measures:** Data security is an essential component of data governance within insurance companies. This may involve using encryption technologies, implementing data access controls, conducting regular security audits, and implementing data security incident response plans.

## 5. Training and Awareness

Training and awareness are key elements to ensure data quality within a company. Here are some important aspects of this process:

- **Data Management Training:** Employees need to be trained on best practices in data management. Training should also cover the company's data policies and procedures, as well as data quality standards.
- **Awareness of Data Importance:** Employees need to understand why data quality is important and how it affects the company. For example, they need to understand how poor data quality can lead to decision-making errors, affect AI performance, and damage the company's reputation.
- **Understanding the Impact of Individual Actions:** Each employee needs to understand how their actions can affect data quality. For instance, if an employee incorrectly enters information into a database, it can result in errors that affect the entire company. Employees should be encouraged to take responsibility for the data quality they handle.
- **Continuous Training and Updates:** Training and awareness should not be one-time events. Instead, they should be integrated into the company culture and regularly updated to account for new technologies, regulations, and data practices.

Training and awareness are essential to ensure that all employees understand the importance of data quality and their role in preserving it. This requires commitment from company leaders, as well as clear and ongoing communication about the importance of data.

## 6. Use of Data Quality Management Tools and Technologies

The use of tools and technologies for data quality management is an essential aspect of a company's data strategy. These tools and technologies can help automate and optimize many aspects of data quality management. Here are some key elements of this usage:

**Data Cleansing Tools:** These tools can automate the data cleansing process by identifying and correcting errors and inconsistencies in the data. They can address issues such as missing values, duplicates, format errors, and inconsistencies between data sources.

**Data Quality Monitoring Tools:** These tools can help monitor data quality in real-time or at regular intervals. They can generate alerts when data quality falls below a certain threshold or when anomalies are detected.

**Data Quality Reporting Tools:** These tools can help generate detailed reports on the state of data. These reports may include information on accuracy, completeness, consistency, reliability, and relevance of the data. They may also include recommendations for improving data quality.

**Integration with Existing Systems:** Data quality management tools should be able to integrate with the company's existing systems, such as databases, content management systems, analytics platforms, etc. This ensures that data is consistent and up-to-date across the enterprise.

**Compliance with Standards and Regulations:** Data quality management tools must comply with applicable data standards and regulations. This may include standards such as GDPR in Europe and equivalents.

## Conclusion

In conclusion, although setting up a data cleansing process may involve initial costs, the medium- and long-term benefits for insurers, in terms of forecast accuracy and the performance of AI solutions, far outweigh the necessary investment. This underlines the importance of a robust data management strategy to fully exploit the potential of AI in the insurance industry.

The use of poor-quality data represents a significant risk for insurers. Indeed, erroneous or poorly cleansed data can lead to inaccurate decisions, affecting pricing, underwriting and claims reserves. The people in charge of these tasks within companies can take the time to remedy shortcomings before carrying out their analyses, but if they hope one day to use AI tools and automate analyses, they need to plan ahead for this pre-processing.

On the other hand, the negative impacts of neglecting data quality can be just as significant. They can lead to errors in risk assessment, financial losses due to ill-informed decisions, and potentially regulatory sanctions if inaccurate data violates compliance standards.

**Tunis Re Flash Info**

**•Appointment of new members to the Board of Directors of Tunis Re**

The Ordinary General Assembly held on April 30, 2024, which approved the Statements for the year ended December 31, 2023, has decided to appoint:

- Mrs. Asma Madhioub as an Independent Member (Chair of the Audit Committee) to the Board of Directors of the Tunisian Reinsurance Company «Tunis Re» for the years 2024-2025 and 2026.
- Mrs. Meriam Zine as an Independent Member (Chair of the Risk Committee) to the Board of Directors of the Tunisian Reinsurance Company «Tunis Re» for the years 2024-2025 and 2026.
- The General Assembly also approved the election (following the elective assembly exclusively for minority shareholders held on April 25, 2024) and the appointment of Mrs. Nejla Moalla Harrouch as a Member representing minority shareholders on the Board of Directors of Tunis Re for a period of 3 years from 2024 to 2026.

**•Tunis Re issued the 2<sup>nd</sup> edition of its Emerging Risks Barometer**

Tunis Re published the second edition of its Emerging Risks Barometer in February, focusing on the emerging risks faced by the world today, such as climate change, cyber risks, political risks, economic instability, and regulatory risks.

**•Tunis Re very active during the 2<sup>nd</sup> edition of the Arab Actuarial Conference**

The second edition of the Arab Actuarial Conference was held from April 23 to 25, 2024, at the Four Seasons Hotel in Tunis, under the high patronage of the Prime Minister. This conference, organised by Fintech Robos, assembled a substantial community of actuaries, insurers, and reinsurers, as well as representatives from various sectors such as banks, investment, health, social security funds, regulators, etc.

Tunis Re was prominently featured at this conference as a gold sponsor and actively participated in two panels:

- The implications of risk-based solvency for insurance actors, presented by Mrs. Henda Sebai, Risk Management Manager.
- The role of insurance in addressing cyber risk, presented by Mr. Mourad El Arouj, Senior Underwriting Manager.

**• Tunis Re hosted a training session on IFRS 17**

On April 17 and 18, 2024, Tunis Re organised a specialised training on IFRS 17 standards, led by the actuary Mr. Amine Zemni from Novacture, with the participation of Mrs. Yosra Chelly, Vice-President of the Council of Chartered Accountants. This initiative reflects Tunis Re's commitment to the professional development of its employees and its objective to maintain high standards in perfect consistency with regulatory requirements

**Compensation for flood victims in Nabeul**

According to Law N°2019-24, which extended the scope of intervention of the Insured's Guarantee Fund<sup>1</sup> FGA<sup>2</sup>, to the compensation of damages resulting from the floods occurred in 2018, Tunis Re has been charged to manage the section dedicated to compensate the victims for material damages in the governorate of Nabeul.

Hereafter, the situation as at April 20<sup>th</sup>, 2024:

| Files Numbers         |               |
|-----------------------|---------------|
| Deposits              | 876           |
| Treated               | 217           |
| Accepted              | 173           |
| Approved funds in TND | 6 798 340,624 |
| Amounts paid in TND   | 6 792 692,698 |

**FTUSA launches the 1<sup>st</sup> edition of its «Emerging Risks Ranking 2023»**

FTUSA organised the inaugural edition of its Risk Management event on March 7, 2023, focusing on the «Ranking of Emerging Risks 2023: Insights from the insurance sector». This event gathered leaders in risk management and was marked by insightful discussions and dynamic exchanges revolved around the document presented by FTUSA.

**Fighting Vehicle Theft: FTUSA signs a partnership agreement with ARGOS France**

The Tunisian Federation of Insurance Companies «FTUSA» and «ARGOS» signed a partnership protocol to strengthen their collaboration in fighting against vehicle theft. This agreement follows an event organised by FTUSA in collaboration with ARGOS France, focused on identification and fighting methods against vehicle theft.

**Appointments**

- Mrs. Jouda Khemiri was appointed President of the General Insurance Committee «CGA» in April 2024, succeeding Mr. Hafedh Gharbi upon his retirement. Prior to her recent appointment, Mrs. Jouda Khemiri acted in the role of Deputy General Manager at «CGA».
- Mr. Anouar Ben El Hadj Abdellatif was appointed as the new General Manager of «CARTE -Life» following the retirement of Mrs. Afifa Boughzou.

**Events**

- The 17<sup>th</sup> Carthage Insurance and Reinsurance Rendezvous will take place from May 19 to 22, 2024, at Laico Hotel in Tunis. The event is co-organised by Tunis Re, the Tunisian Federation of Insurance Companies (FTUSA), and the General Arab Insurance Federation (GAIF). The theme of this edition will focus on the challenges of Artificial Intelligence for insurance.

### A growing demand and high capacity during reinsurance renewals on April 1st

The reinsurance renewal on April 1st has reinforced the progress made on January 1<sup>st</sup>, as abundant capacity and increased competition for Nat-Cat reinsurance have resulted in improved outcomes for most insurers. The renewal confirmed a further improvement in conditions and was also described as more favorable to insurers, with predictable terms and generally stable pricing for catastrophe reinsurance.

### Natural disasters cost insurers \$108 billion in 2023

Swiss Re forecasts that insured losses could double due to climate change over the next decade, driven by more frequent and intense weather phenomena. Severe storms are becoming a major concern, ranking as the second-largest source of losses after tropical cyclones.

In 2023, natural disasters caused \$280 billion in damages worldwide, of which \$108 billion were covered by insurers, marking a slight decrease compared to the previous year.

### Strong floods hit the regions of Dubai, Oman, Bahrain, and Qatar

Heavy rains, storms, and floods struck southwest Asia, particularly the United Arab Emirates, between April 8 and 17, resulting in significant economic and insured losses estimated at several hundred million of US dollars. Exceptional rainfall was recorded in Dubai and consequently Dubai International Airport was severely affected, leading to the cancellation of over 1,200 flights and causing considerable material damage.

The disaster also affected other Gulf countries, including Bahrain, Oman, and some regions of Qatar. In the Sultanate of Oman, 18 people lost their lives, including nine schoolchildren and three adults.

### The collapse of the Baltimore bridge could result in significant financial losses for insurers

A city highway bridge collapsed after being struck by a container ship. Baltimore, the main port on the American East Coast, is now blocked.

This «event could potentially become the largest maritime insurance loss ever recorded.» According to analysts, this claim could result in up to \$4 billion of insurance claims.

### 10<sup>th</sup> edition of Casablanca Insurance Rendez-vous

The 10<sup>th</sup> edition of Casablanca Insurance Rendez-vous brought over 1,000 participants from 45 countries. Organised by the Moroccan Insurance Federation «FMA», it took place on April 17<sup>th</sup> and 18<sup>th</sup>, 2024, under the theme «What insurance in a world of uncertainties?».

After the deliberations during the event, several recommendations were made, particularly in favor of sharing experiences and enhancing global risk pooling

through reinsurance. There was also emphasis placed on the importance of public-private partnerships and prevention. Alongside the event, the «FMA» and the «EIA» Emirates Insurance Association signed a technical agreement aimed at sharing their experiences and improving the insurance industry in Morocco and the United Arab Emirates.

### Key Highlights of the Insurance Sector in Algeria in 2023

In 2023, the insurance sector in Algeria experienced a growth of 3.5%, with a total turnover reaching DZD 169.6 billion according to the National Insurance Council «CNA» in its last update for the last quarter of the year 2023. Non-life premiums are dominating, totaling DZD 144.2 billion, while the life branch represents DZD 17.6 billion.

### Oman Re obtains a Retakaful license

Oman Re has obtained a Retakaful license, marking a development in its operational capacities.

### Africa Specialty Risks launches ASR Syndicate 2454 at Lloyd's

ASR, the pan-African focused (re)insurance group, has launched ASR Syndicate 2454 at Lloyd's focused on underwriting business across Africa. It is the first African focused syndicate writing business at Lloyd's and is managed by Apollo.

The syndicate will focus on underwriting ASR's existing lines of business, which include Political Risk & Trade Credit, Political Violence and Terrorism, Parametric, Energy, Property, Construction, Liability and Treaty.

### Maksure Risk Solutions becomes a Lloyd's registered broker

Maksure Risk Solutions, an independent broker specialised in insurance and reinsurance, originating from Africa, received accreditation as a broker registered with Lloyd's in April 2024.

### Mergers & Acquisitions

- Gulf Tamin has acquired 13.85% of Arab Insurance Group «ARIG»'s capital, completing the purchase of 30,466,862 shares previously held by the Emirates Investment Authority.
- Chedid Capital has now achieved full ownership of Ascoma's capital by acquiring the remaining 20% of the Ascoma Group.

### APPOINTMENTS

- Mr. Abdelhakim Berrah succeeds Sid Ali Ouzane as the General Delegate of the Algerian Union of Insurance and Reinsurance Companies «UAR».
- Mr. Ahmed Al-Jabr has been appointed as Acting Chief Executive Officer of Saudi Re, effective from April 1, 2024.

### EVENTS

The 50<sup>th</sup> Conference and Annual General Assembly of the African Insurance Organisation will take place from the 1<sup>st</sup> – 5<sup>th</sup> June 2024 in Windhoek, Namibia.

The theme of the 50<sup>th</sup> AIO Conference is "Coping with increasing natural catastrophes in Africa".

# Activity Figures of The Tunisian Insurance Market As at 31.12.2023

At 31 December 2023 The Insurance sector in Tunisia has been characterized by :

|                               | (M TND)   |           |            |           |            |
|-------------------------------|-----------|-----------|------------|-----------|------------|
|                               | 2021      | 2022      | Evol 22/21 | 2023      | Evol 23/22 |
| <b>Turnover</b>               | 2 833     | 3 185     | 12%        | 3 389     | 6%         |
| <b>Motor</b>                  | 1 202     | 1 309     | 9%         | 1 358     | 4%         |
| <b>Life</b>                   | 722       | 903       | 25%        | 928       | 3%         |
| <b>Others</b>                 | 909       | 973       | 7%         | 1 103     | 13%        |
| <b>Claim charges</b>          | 1 637     | 1 734     | 6%         | 1 793     | 3%         |
| <b>Motor</b>                  | 714       | 804       | 13%        | 871       | 8%         |
| <b>Life</b>                   | 342       | 320       | -7%        | 282       | -12%       |
| <b>Others</b>                 | 580       | 611       | 5%         | 640       | 5%         |
| <b>Nbr of ussed policies</b>  | 3 042 096 | 3 166 482 | 4%         | 3 387 839 | 7%         |
| <b>Motor</b>                  | 1 813 067 | 1 819 062 | 0%         | 1 888 426 | 4%         |
| <b>Life</b>                   | 728 571   | 826 823   | 13%        | 936 457   | 13%        |
| <b>Others</b>                 | 500 458   | 520 597   | 4%         | 562 956   | 8%         |
| <b>Nbr of reported claims</b> | 1 293 760 | 1 549 551 | 20%        | 1 584 368 | 2%         |
| <b>Motor</b>                  | 268 779   | 301 271   | 12%        | 308 492   | 2%         |
| <b>Others</b>                 | 1 024 981 | 1 248 280 | 22%        | 1 275 876 | 2          |
| <b>Investments</b>            | 7 550     | 8 432     | 12%        | 9 157     | 9%         |

# Activity Figures of Tunis Re

## 1<sup>st</sup> Quarter 2024

**Turnover** **70.498 MDT**

**+14%**

**Retained Premium** **56.109 MDT**

**Retention Rate**

**80%**

Tunisia

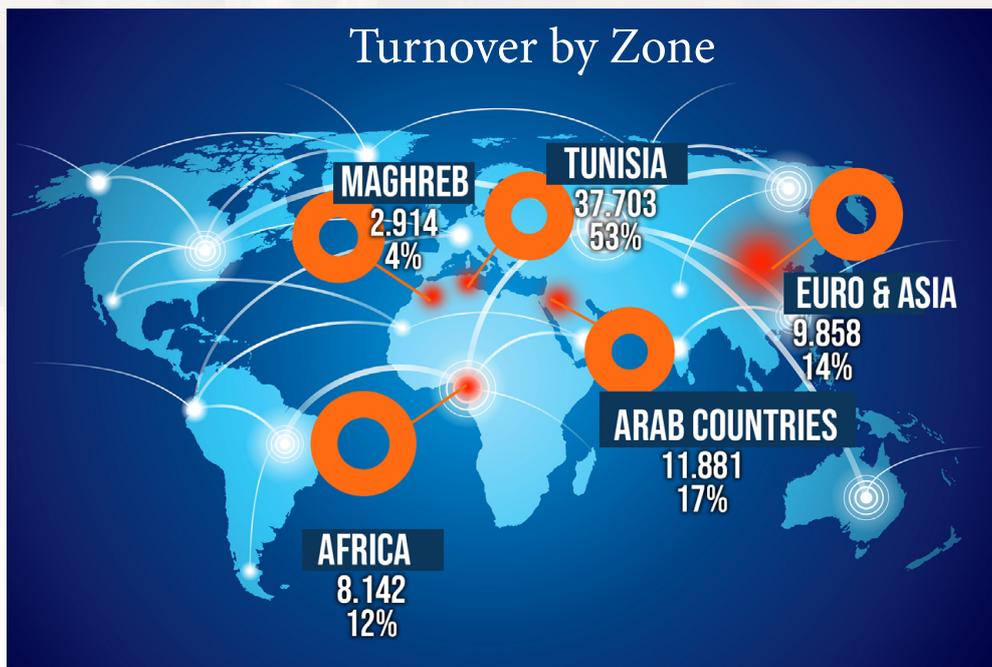
**53%**

**+11%**

Overseas

**47%**

**+17%**



**26.386 MDT**

**Net Claims Charge**

**37%**

**Loss Ratio**

**Investments**

**Investments income**



**508.191 MDT**



**7.726 MDT**

**Figures as at 31 March 2024 of the listed Insurance Companies (TND Million)**

| Companies         | Premiums      |               |            | Gross Claims Charge |               |             | Investments  |              |            |
|-------------------|---------------|---------------|------------|---------------------|---------------|-------------|--------------|--------------|------------|
|                   | March-24      | March-23      | Var%       | March-24            | March-23      | Var%        | March-24     | March-23     | Var%       |
|                   | STAR          | 136.975       | 127.349    | 8%                  | 71.448        | 64.684      | 10%          | 21.362       | 21.128     |
| ASTREE            | 84.947        | 78.631        | 8%         | 19.985              | 18.191        | 10%         | 15.897       | 12.384       | 28%        |
| BH ASSURANCE      | 56.313        | 50.568        | 11%        | 35.273              | 23.698        | 49%         | 6.757        | 5.761        | 17%        |
| MAGHREBIA*        | 97.829        | 90.618        | 8%         | 40.093              | 33.634        | 19%         | 5.794        | 4.386        | 32%        |
| MAGHREBIA<br>VIE* | 31.743        | 30.114        | 5%         | 13.012              | 10.393        | 25%         | 11.460       | 7.941        | 44%        |
| <b>Tunis Re</b>   | <b>70.498</b> | <b>61.978</b> | <b>14%</b> | <b>26.386</b>       | <b>36.423</b> | <b>-28%</b> | <b>7.726</b> | <b>6.429</b> | <b>20%</b> |

\* Net Claims Charge

Best Wishes of Good Continuation to our Dear Colleague Mr. Foued Hlaoui, exemplary employee of the year 2023.



Director of Publication : Mrs Lamia Ben Mahmoud

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