



# Business case in Reinsurance

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ISFA



# Introduction

**All you need to know...**

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➤ Why am I here?



# Introduction

Anne Pellerin

Actuary ISFA

Reinsurance Pricing Actuary

QBE Re (London)

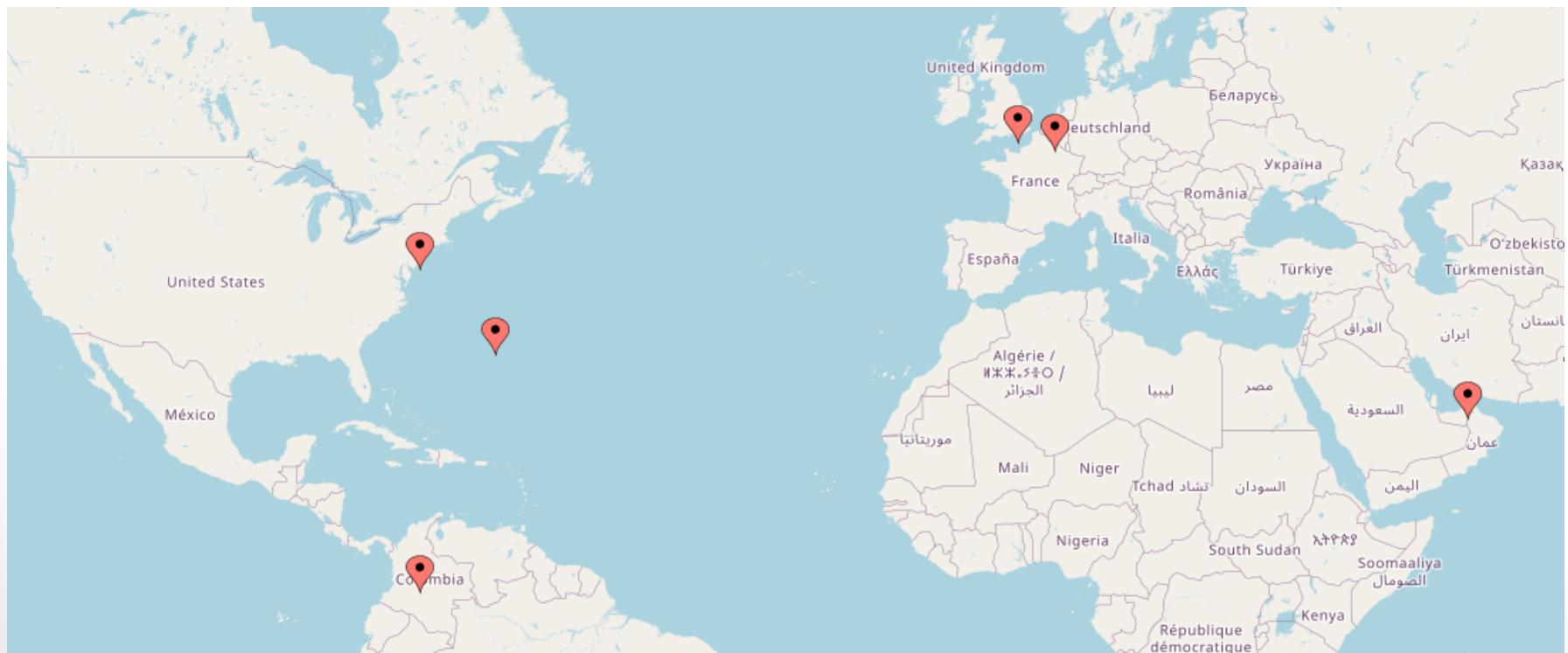
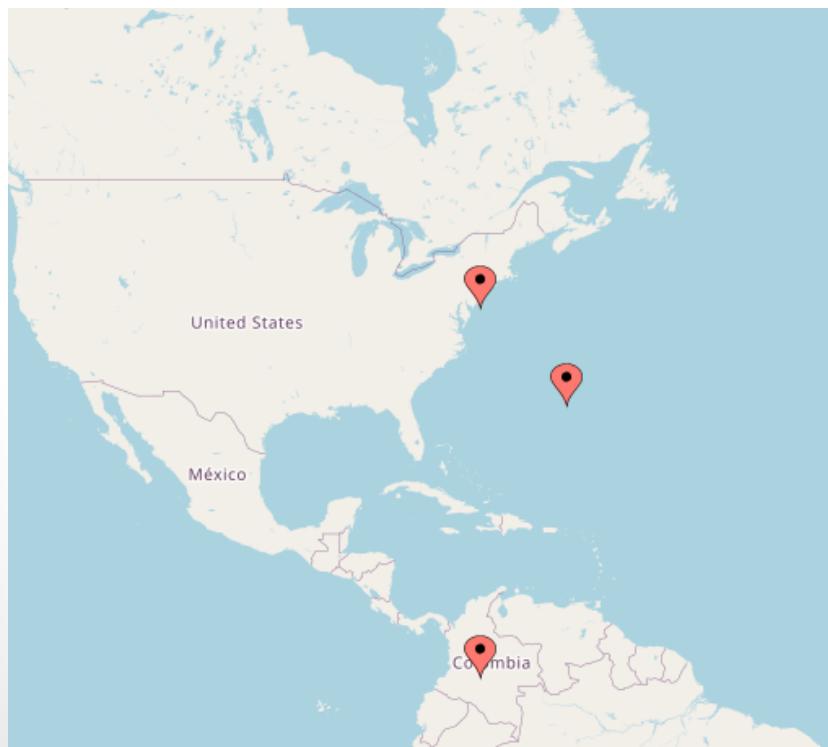
Mail: anne.pellerin@qbere.com

- Why am I here?

# QBE Re

## QBE Re Offices:

- Brussels
- London
- New York
- Bermuda
- Dubai
- Bogota

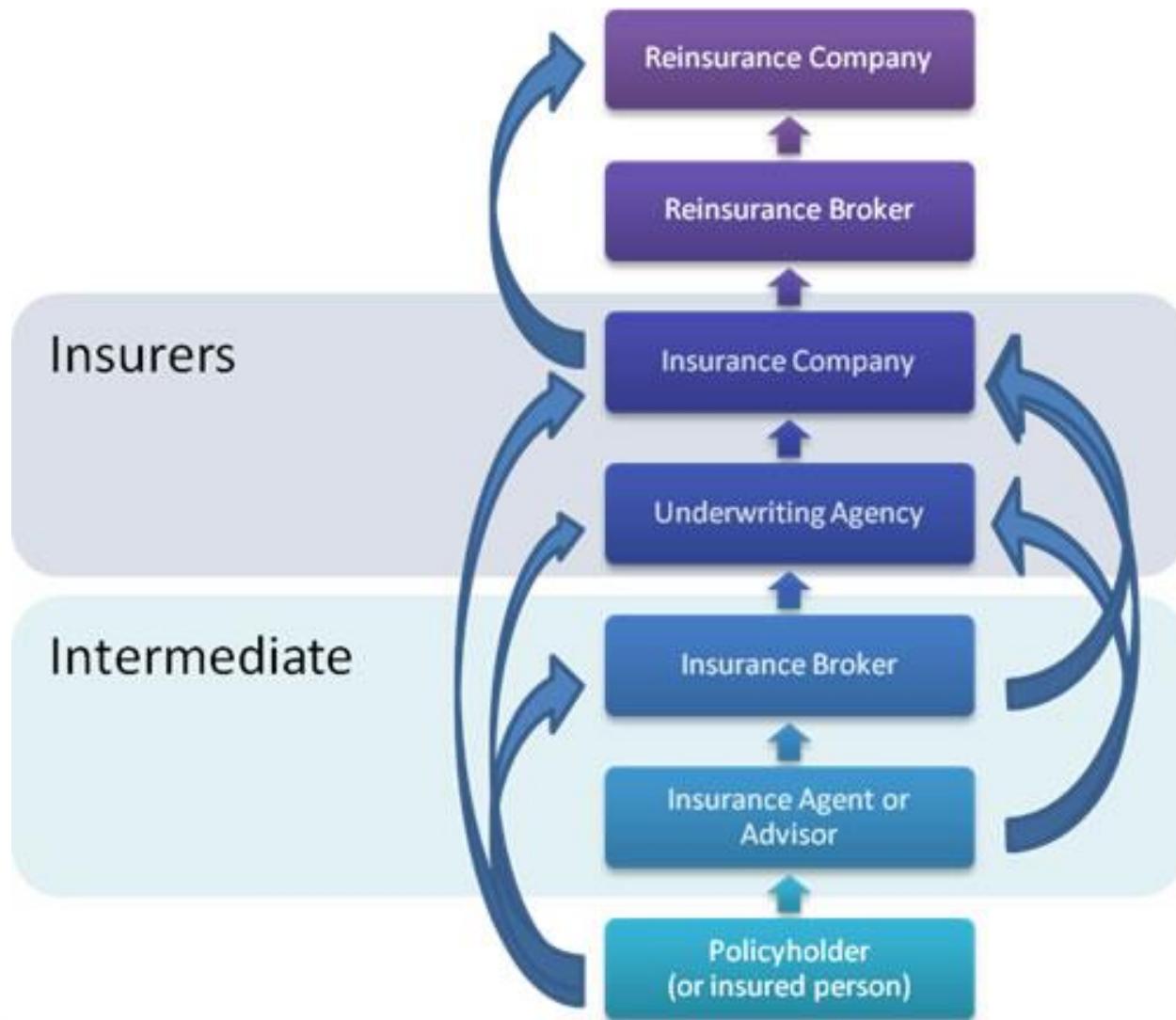




# QBE Re (Brussels) Key figures

- Professional reinsurance company
  - Established in 1946
  - European multiline reinsurer
    - Life and non-life business
- Single shareholder : QBE
- Premium income (GWP): ± €300m
- S&P rating : A+
- ‘Optimal’ business approach
- Staff
  - ± 85 employees
  - almost 20% of actuaries
  - 57% of university degrees

# Chain of the industry



# Spirit of the business case

**Imagine you've just been hired by a (re)insurance company...**

**Where?**



# Spirit of the business case

## Lloyd's of London



- Started in a coffee shop in 1688
- Initiated by ship-owners
- Not an insurance company
- <https://www.lloyds.com/>

# Spirit of the business case

Your mission...

From data to decisions!



# Spirit of the business case





# Spirit of the business case

- You'll receive:
  - One dataset
  - Requests / proposals for reinsurance quotations
- You'll have to do:
  - Reinsurance pricing
  - Reinsurance optimization
- Using
  - Lot of notions and models
  - Solvency II constraints

DEADLINE FOR THE  
MODELLING RESULTS : 24/03



# Plan for today

## ➤ Goal: Pricing

- Introduction
- Reinsurance
- Pricing principles
  - XL
  - SL / QS
- Extreme events modeling



# Plan for tomorrow

➤ Goal: Start of the data analysis and project

- Split session
- Data outputs
- Q&A



# Plan for 05/04

- Quotations results
- Reinsurance placement
- Examples & Q&A

# Spirit of the business case

Imagine you are now in the Lloyd's of London...



- Core business: Reinsurance arrangements
- ✓ Each insurer has to place its reinsurance program
- ✓ Each reinsurer may accept shares on profitable reinsurance programs
- An equilibrium has to be found

# And the bell may ring...



# Practical information

- Work by group of 4 or 5
- Data for one line of business
- You can share info between groups
- Everyone has to understand everything

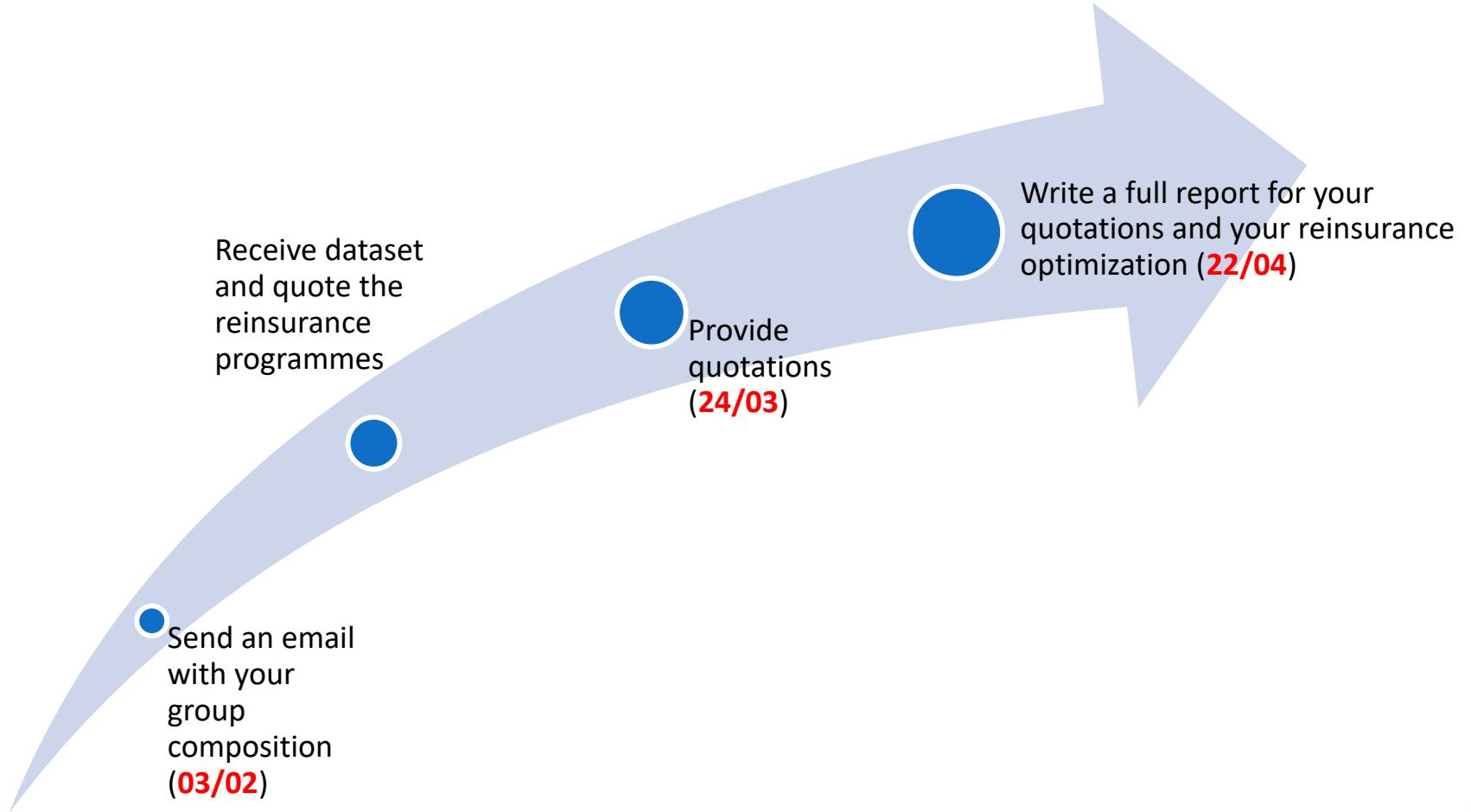
## Important recommendations

- Day to day work
- Ask questions where needed
- Sensitivity testing
- Focus on clear reporting





# Conclusion





# Implementation hints

- Not focused on complexity, **clarity** and transparency are keys
- Implementation issues should be shared within the group
- Work in **Excel**: Eventually you can work with R for calculations (this is **not** recommended). Your code has to be deeply documented and you should crosscheck your outputs. Outputs must be in Excel.
- You have to provide **all your material** by the **22/04 (23h)**
- Additional tests & initiatives are warmly recommended
- Links with master thesis are welcome



# Presentation of the results

Aim: Report as if you have to report to the management of your company

Report: 7 pages ( 1 page for summary, main conclusions, 5 for technical results (cf Full Report sheet), and 1 for feedback post-placement) **maximum**

Graphs/Tables highly recommended

No format imposed, but be synthetic, efficient, and result driven.

# Questions - suggestions?



FLEA SNOBERRY

Andrés Diplotti

AFTER INTERVIEWING THOUSANDS OF PEOPLE, I  
HAVE FOUND A STRONG CORRELATION EXISTS  
BETWEEN BEING SMART AND AGREEING WITH ME.

