



First Regional Europa Re Insurance Conference
Developing Catastrophe and Risk Markets in Southeast Europe:
From Concept to Reality

**Introducing risk-based supervision for catastrophe risk
in Europa Re member countries**

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RBS of catastrophe insurance - technical requirements

solvency part

- (i) adequate capital allocated to catastrophe insurance;
- (ii) proper **technical provisioning**:
 - **unearned premium provision** *calculated for each policy based on actuarial price.*
 - best estimates of outstanding claims ultimate costs (including settlement costs)
updates as soon as new information comes

as well as

other

- (i) well designed & actuarially priced **products**;
- (ii) best **claims management and settlement** practices;



assessment procedure

1. process / formulas / guidelines to calculate:

1.1. catastrophe insurance required solvency

assessing net PML for
a defined return
period

- assess aggregate gross PML for a defined return period (200 years in Europe);
- assess amount of reinsurance recoverable;
- assess reinsurance credit risk;
- assess annual net average loss – which can be also used as benchmark for minimum risk premiums.

1.2. minimum unearned premium provision / claims provisions

2. main compliance principles / guidelines

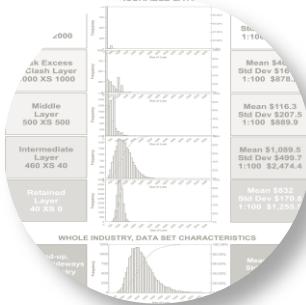
2.1. reporting requirements

2.2. supervision cycle

compliance requirements



gross exposure
reporting



reinsurance
reporting



technical provision
reporting



claims
reporting
(post event)

electronic systems to provide for fast & reliable information and automatic data analysis

data usability

| input | use |
|---------------------|---|
| gross exposure data | (i) calculate Gross PML for the given return period |
| | (ii) annual gross average loss |

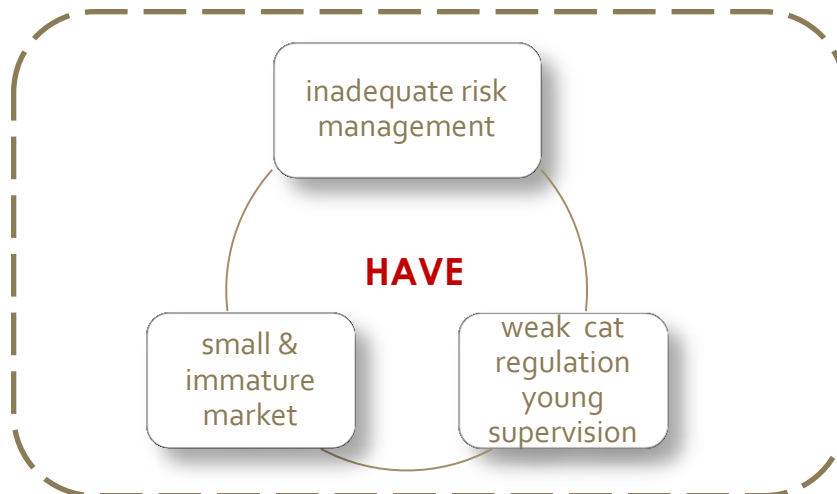
| input | use |
|------------------|--|
| claims paid data | (i) check compliance with claims manual / guidelines |
| | (ii) verify complaints |

| input | use |
|--|--|
| reinsurance treaty / facultative information | (i) calculate RI recoverable (ii) calculate adjusted RI recoverable |
| reinsurers' participation | |
| credit ratings of reinsurers | |

| input | use |
|----------------------|--|
| technical provisions | (i) check compliance with actuarial risk premiums; |
| unearned premiums | |
| claims provisions | (i) check adequacy of claims provisions |



VS



main conclusions

1. **risk based supervision approach is essential** to ensure sound market development

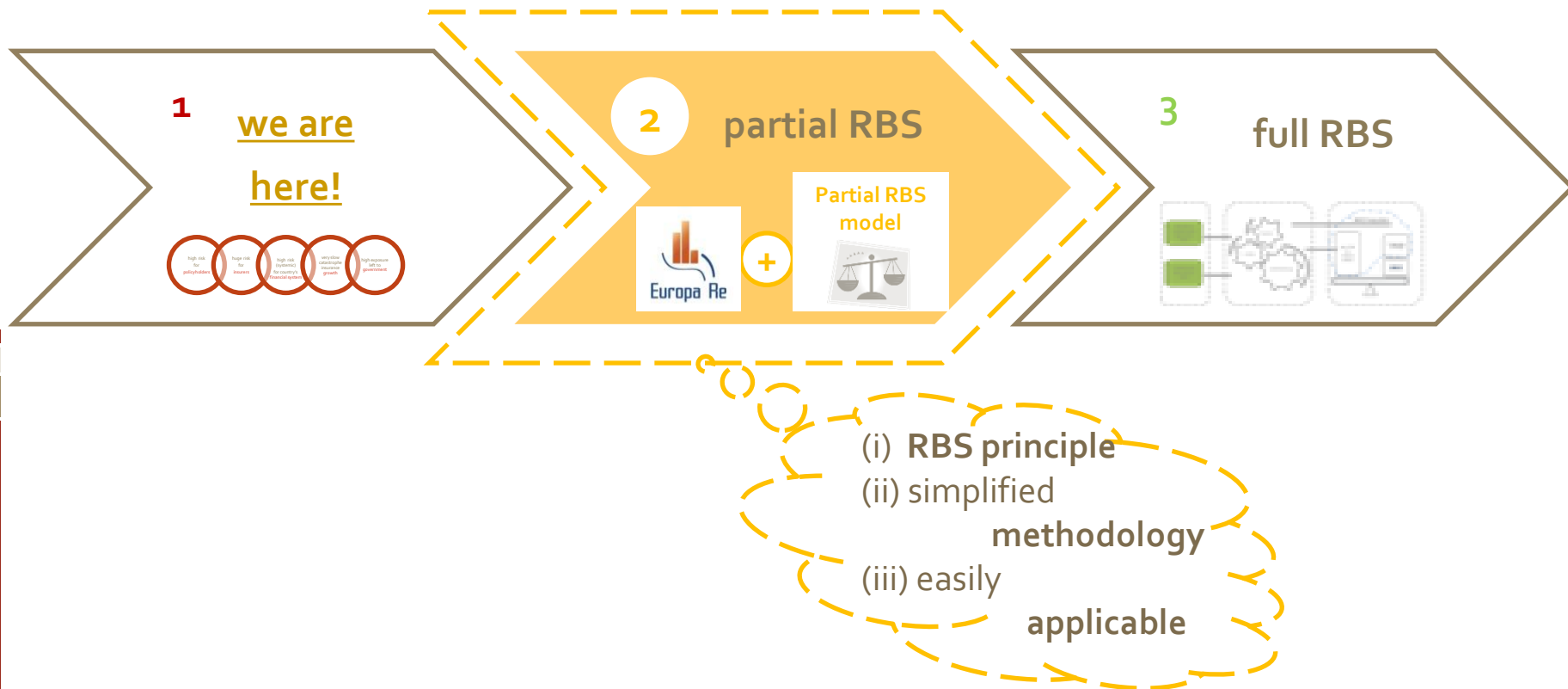
2. current stage of market development poses **considerable challenges for immediate implementation** of the full risk based supervisory methodology



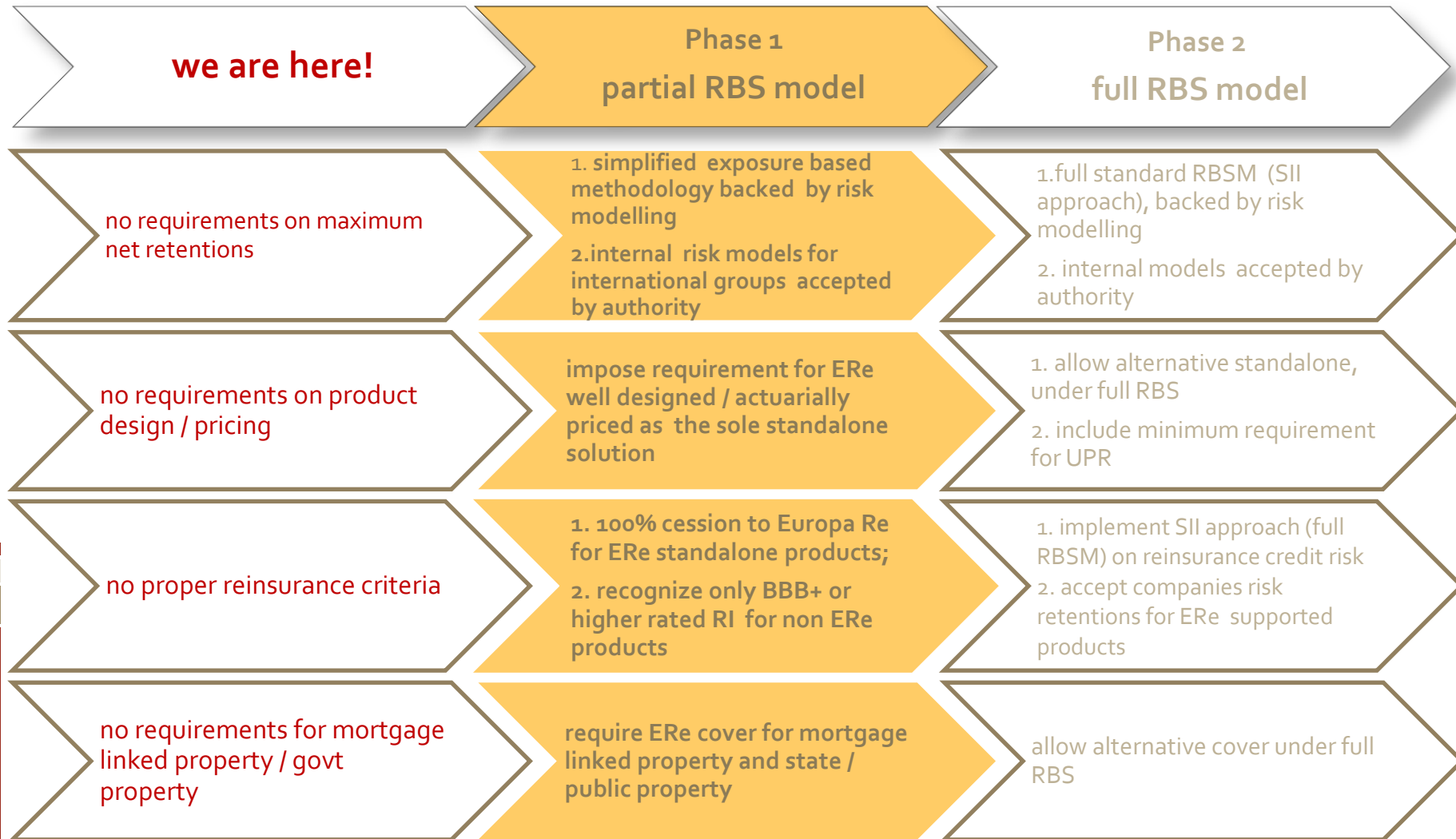
what we propose?



sound growth under a gradual move towards RBSM



regulation roadmap (main regulatory steps)



what is partial RBS model?

1. simplified **methodology** to assess catastrophe net risk retentions of an insurer on the basis of a catastrophe event that can occur on a given return period.

backed by

- 1.1 risk **modeling** (financed by the World Bank)

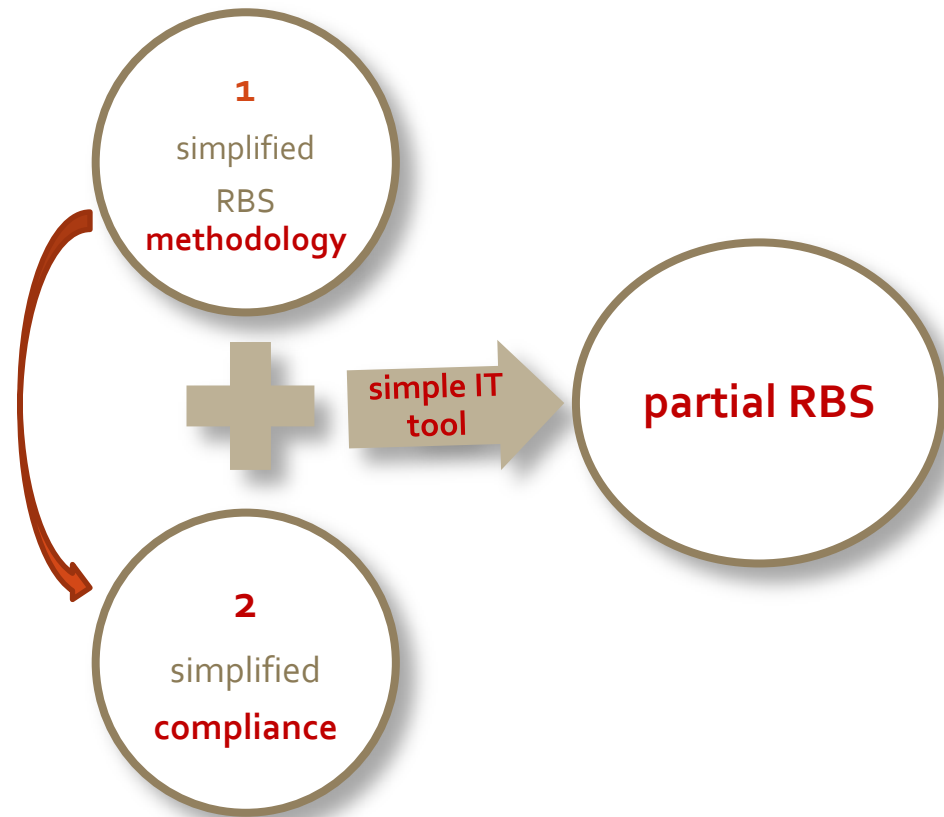
2. **compliance**

- 2.1. simple **reporting requirements**
 - 2.2. compliance **criteria**

and

simple IT solutions to support methodology & compliance

A simplified version of RBS:



partial RBS – main objectives

| proposed requirements | objectives |
|---|--|
| <u>general</u> | |
| a. approve Europa Re supported products as the only standalone catastrophe insurance covers allowed in the market | prevent alternative badly designed & poorly rated standalone products, in absence of modeling / proper actuarial expertise / risk management |
| b. require 100% risk cession under standalone catastrophe policy to Europa Re; | guarantee continuous proper cover for clients & insurers for Europa Re products |
| c. impose regulation on maximum net retention level of catastrophe risk accumulation (simple to apply, country tailored); | (i) increase attention and control over all catastrophe risk products; |
| d. impose / enhance reinsurance regulation with prudent requirements on RI credit quality | (i) reduce risks related to insurer's solvency; |
| | (i) move towards risk based supervision model |
| <u>specific</u> | |
| e. require compulsory ERe insurance over mortgage linked property | avoid financial sector systemic risk (insurer / bank) |
| f. require compulsory ERe insurance over state owned / public property | reduce government costs related to catastrophe claims for public property, serve as a vehicle to increase population awareness |

partial vs full RBS?

compare main features

| | parameters | partial RBS | full RBS | result |
|---|---------------------------------------|---|---|---|
| 1 | principle | assess net PML resulting from a 1/200 years event | assess net PML resulting from a 1/200 years event | same |
| 2 | gross PML assessment | using simple PML calculation model that involves a few parameters | complex and detailed assessment involving coefficients for many parameters (zone, type, occupancy, deductible, other) | higher technical requirements in full RBS / which need high expertise / know how / supervisory capacities |
| | | based on city with largest exposure (or correlated cities) | based on specific portfolio assessment using various parameters for different zones use of zone aggregation matrix (SII) | |
| 3 | assessment of reinsurance recoverable | simplified approach to assess amount of recoverable amounts | use complex techniques to assess recoverable amount | |
| | | assessed only for BBB+ or more | use SII approach on reinsurers' credit rating / aggregation factors | |
| 4 | assessing net PML for one peril | does not consider effect of annual aggregate loss | accounts for effect of annual aggregate loss (to avoid double counting) | |
| 5 | assessing net PML all perils | simple aggregation assuming no correlation | aggregation based on correlation factor | |

partial vs full RBS?

compare main features (continued)

| | parameters | partial RBS | full RBS | result |
|---|---|--|--|--|
| 6 | assessing company's available solvency and net catastrophe insurance capacity | 1. current country approach (non SII) – compared to S1 result as a benchmark | IFRS approach – compared to S II results as benchmark | much higher technical requirements in full RBS / which need high expertise / know how / supervisory capacities |
| | | 2. simple comparison of net PML with available solvency | nat cat risk integrated into the multiuse solvency (SII approach) | |
| 7 | reporting / disclosure | simple reporting of city aggregate gross exposures | complex reporting which involves all methodology parameters | |
| 8 | pricing & reserving | no minimum criteria for pricing / provisioning | minimum criteria for pricing / reserving based on complex modeling & actuarial approach of methodology | |
| 9 | terms & conditions | minimum country T & C criteria | minimum T & C criteria | |



conclusions

1.

risk based supervisory model is essential for developing a sound catastrophe insurance market;

2.

current conditions pose challenges for implementation of full RBS

3.

partial RBS approach combined with Europa Re products is seen as a viable alternative till the full implementation of the RBS