

Property Insurance in Germany

Managing EOW and BRG loss data in private and commercial risks

Oliver Hauner, German Insurance Association Sarajevo, 10th May 2015



Agenda

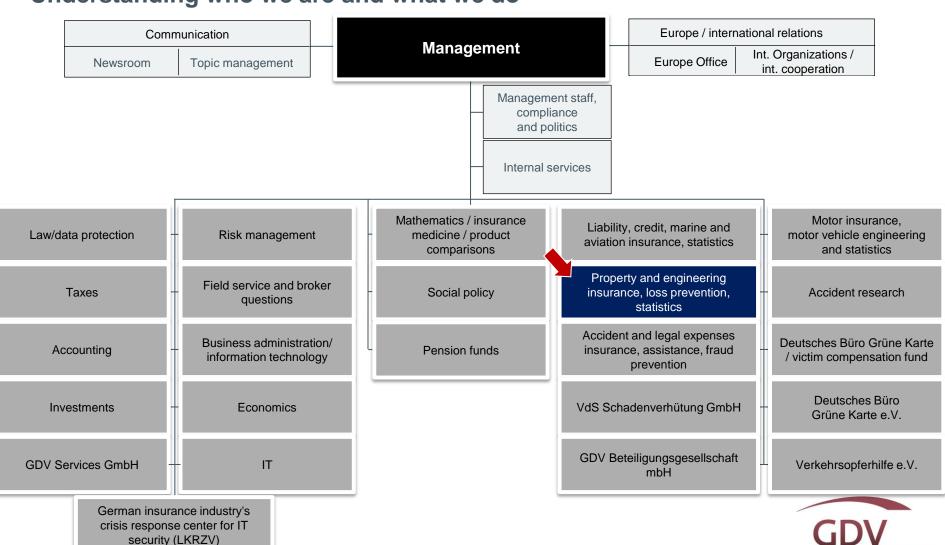
A "field trip" into collecting, analyzing and publishing loss data

- The Property Insurance (PI) department of the German Insurance Association
- Creating added value for members, lobby actions and public relations
- The workflow
 - Example 1: An in-depth look into "Escape of Water" (EOW)
 - Our challenge
 - Making statistics work
 - Prevention is a "must"
 - Legal background terms and conditions
 - Bringing it all together
 - Example 2: Understanding the mechanisms of "Burglary" (BRG)
- A blueprint for all topics
- To put it in a nutshell



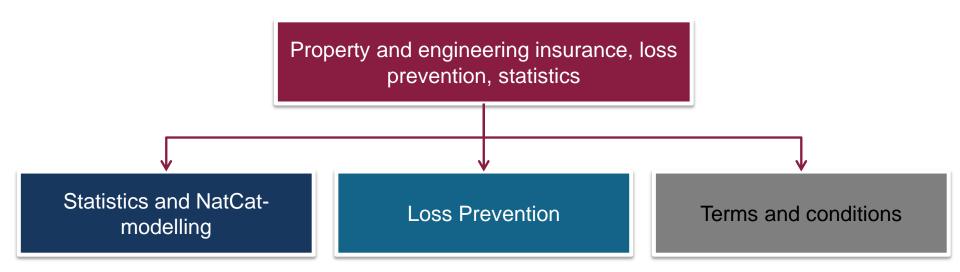
The PI-department of GDV

Understanding who we are and what we do



The PI-department of GDV

Understanding who we are and what we do

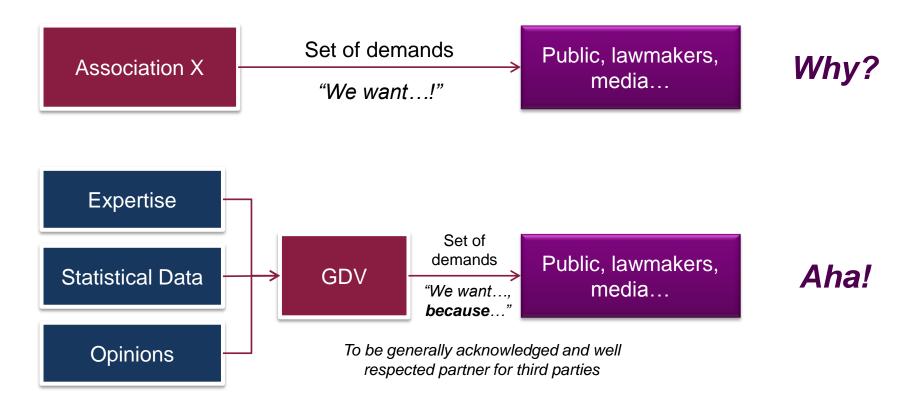


- Three teams
- Holistic approach to all PI-related tasks
- Broad expertise: mathematicians, engineers, underwriting experts, lawyers, cartographers...



Creating added value for members, lobby and PR

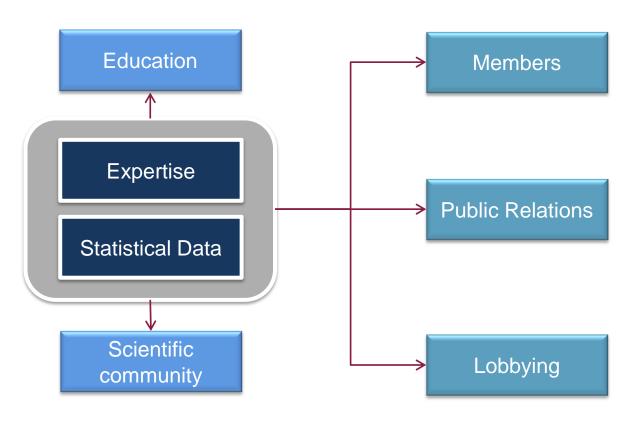
Why GDV isn't any other lobby organization





Creating added value for members, lobby and PR

Why GDV isn't any other lobby organization

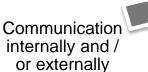


- Statistical background for gross-calculations
- Think tank for new challenges (e.g. Cyber)
- Guidelines for prevention
- Statistical and professional background for stories, podcasts etc.
- Interview partners
- Annual publications
- Statistical and professional background for setting up any kind lobby actions
- Expert talks with lawmakers



The basic workflow within GDV

- Press release
- Interview
- Expert conference
- Conversation with lawmakers





Problem arises

- Draft bill
- Questionnaire
- Newspaper article
- GDV bodies





- Position papers
- Guidelines
- Professional articles
- Tables / Studies

Generating output



Further and / or parallel analysis by political relationship experts

Analysis by PI et al

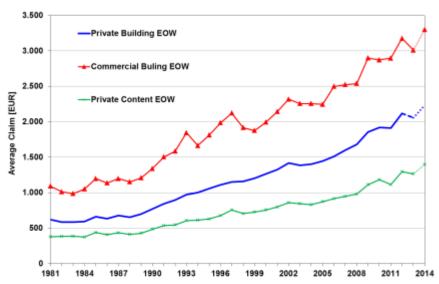
Analysis by insurance experts



Our challenge

- EOW-Losses are continuously on the rise
 - Overall
 - Average Claim
- EOW losses could be attributed to many factors:
 - Burst water pipes
 - Pitting
 - Frost
 - Faulty installation
 - Soaked inventory (content)
 - Mold formation
 - Over-ageing pipework
 - Insufficient training of craftsmen



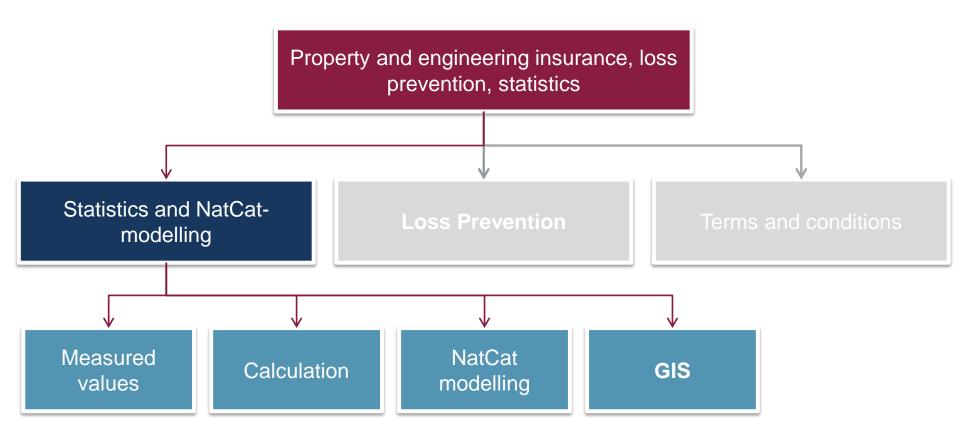




First task:
Get all available data and analyze it thoroughly



Making statistics work





Making statistics work: Three major groups of statistics

Statistics of measured values

 Collecting, anonymizing and publishing of loss data for nearly all perils, lines of business and types of risk including cause of loss

Net risk premium tariffs

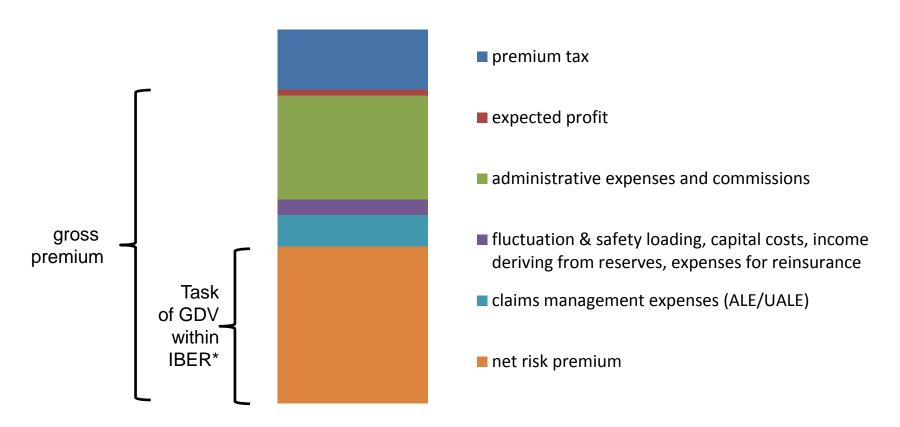
 Calculation of net premium rates, this is the amount of premium an insurer needs just to pay the average net loss (⇒ in detail: next slides)

Studies

- NatCat modelling of storm, flooding etc.
- Conversion of data into GIS (Geographical Information Systems)
- Co-operation with authorities and the scientific community



Making statistics work: The net risk premium tariff in detail



IBER: Insurance Block Exemption Regulation

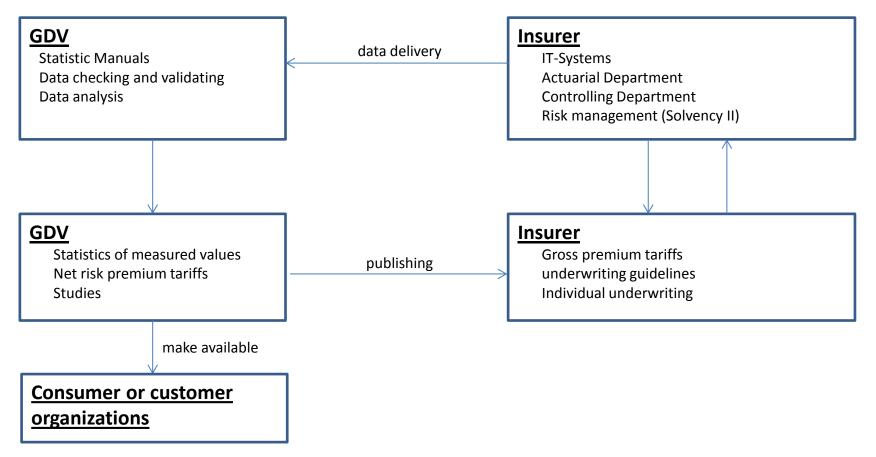


Making statistics work: The Insurance Block Exemption Regulation

- The IBER is a sector-specific legal instrument that allows (re)insurers to benefit from an exemption to the prohibition of anti-competitive arrangements laid down in Article 101 (1) of the Treaty on the Functioning of the European Union.
- At present, the exemption covers two types of agreements between (re)insurance undertakings
 - Agreements with respect to joint compilations, joint tables and studies
 - Common coverage of certain types of risks Co(re)insurance pools.
- "Horizontal Guidelines" as a follow-up to former IBER-regulations exists for
 - Terms and conditions
 - Loss prevention
- Renewal in 2017
 - Or "horizontal guidelines" for statistics and / or pools

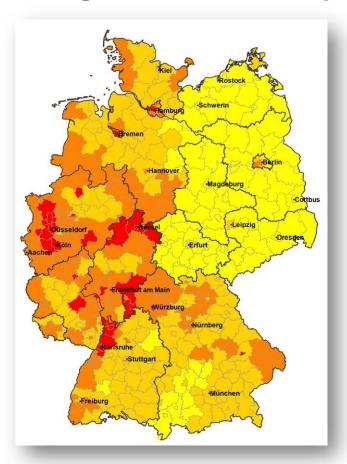


Making statistics work: A transparent loop





Making statistics work: Output of the standard data analysis



- Graphical analysis of the EOW-losses in Germany
 - Long term timeline
 - Resolution: 3-digit zip code

Surprise

 Even 25 years after the German reunification, the long term EOW-losses in former Eastern Germany are lower than in the former western part.

Second task:

Where do these differences come from? Terms and conditions? Technical issues?



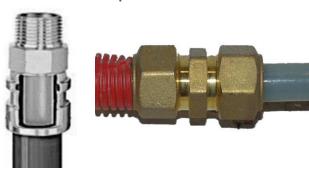
Making statistics work: Output of the standard data analysis

- Cause of loss data analysis reveals two major EOW-scenarios
 - Pitting of copper pipes





Faulty crimp connections

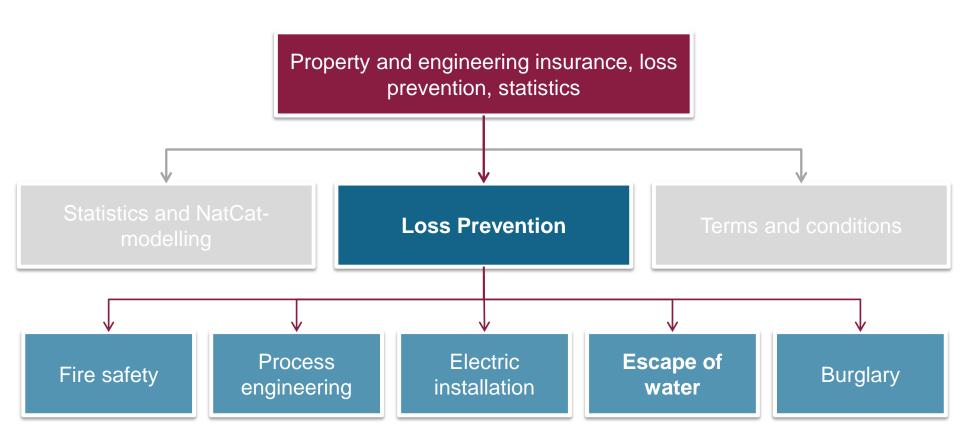


Third task:

Is there any link between the graphical analysis and these findings?



Prevention is a "must": Engineering expertise meets statistical analysis



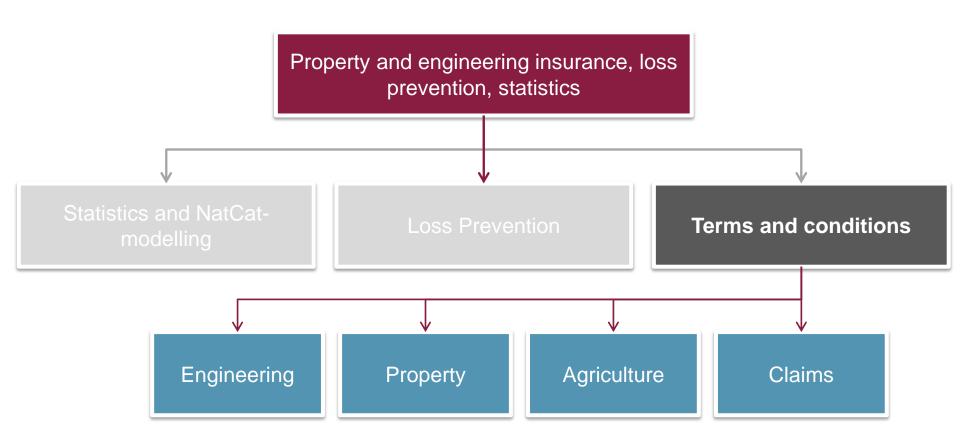


Prevention is a "must": Engineering expertise meets statistical analysis

- Connecting graphical analysis and cause of loss data analysis with the engineering expertise of the loss prevention team reveals
 - Buildings in the eastern part of Germany have a higher number of wall-mounted installations. Leaks are therefore detected earlier, the losses are lower.
 - When copper fittings were "state of the art" during the late 1970s and 1980s, those fittings were not installed in the eastern part of Germany
 - When crimp connections entered the market in the late 1980s, those were installed in the western part first. "Prototyping" and "early-adopter-losses" took their toll there. When the reunification came, the worst was over.
 - Houses in the eastern part of Germany were heavily reconstructed after reunification. This includes the freshwater and wastewater systems. Reconstruction of this magnitude never happened in the western part.
 - The training of craftsmen was intensified in the last two decades to cope with the technical development in construction work as well as pipes and fittings



Legal background – terms and conditions





Legal background – terms and conditions

- An analysis
 - of former terms of conditions of the regulated West German Market,
 - the terms and conditions of the state run monopoly insurer of the German Democratic Republic and
 - the various terms and conditions of the deregulated common German market after July 1994

revealed:

- Nothing uncommon
- The terms and conditions were very similar
- They are most likely not the source of a different behavior of the insured, that could explain the statistical analysis



Bringing it all together

Output for our members









General Charts / Tables

General Info

Tech. Guidelines

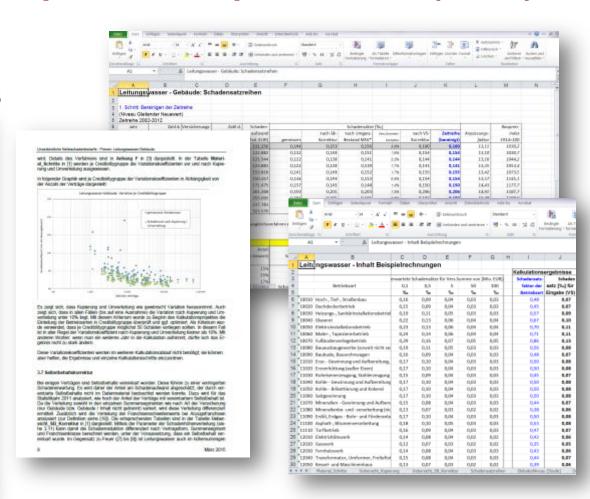
Workshops



Bringing it all together

Output for our members





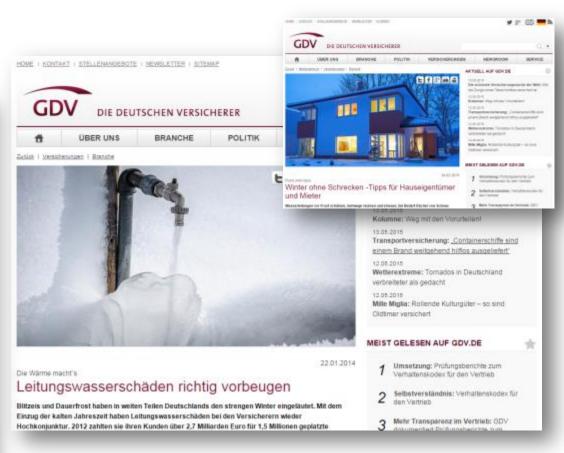
Detailed net loss calculation of EOW



Bringing it all together

Output for the public





Guidelines, loss prevention tips, general information about EOW-insurance



Our challenge

- BRG-Losses fell until 2007
- Sharp rise of BRG-losses after 2007
- Lawmakers in the public spotlight
 - Insufficient work of the police force?
 - Public pressure on lawmakers in their electoral districts
- Insurance industry asked by lawmakers
 - to "incentivize" the installation of mechanical or electronic prevention measures by the insured
 - to come forward with experts experience and ideas to change the situation



First tasks:

Take all available data and analyze it thoroughly.

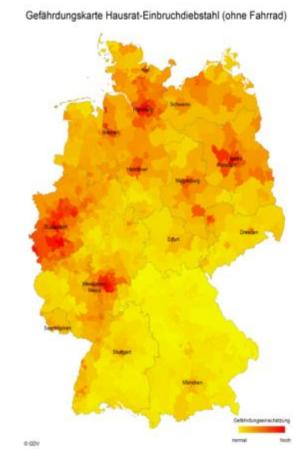
Prepare for media asking for an insurance industries position on BRG.



Making statistics work



- Collecting data from the GDV members
- Separating BRG-data from bike theft-data
- Statistical analysis of BRG losses
- Study: Long-term loss distribution all over Germany
- Net-loss calculation of BRG
- Comparing the statistical data of the German police force with the insurance data





Making statistics work

- Preparing basic tables and graphs for the communication department
- Processing of the tables / graphs with professional publishing tools
- Generating first content for our website

Second task:

Why has the situation changed in 2007?
What is needed for a turnaround in losses?







BRG-protection is currently the "fifth wheel"

Burglary

- No legal requirements for BRGbuilding safety of residential buildings
- Insufficient interest of the private and commercial policyholders to invest in prevention measures
- Only numerous voluntary awareness campaigns.

Fire

- Binding legal requirements and building regulations as well as an endless set of technical rules
- Private and commercial policyholders follow these requirements. A "minimum standard" can therefore be found everywhere
- Established, professional fire protection market (fire protection experts, inspection by authorities)

Motor: Three successful generations of car immobilizers since 1991...



Show stopper: German civil law

- The legal relationship between landlords and tenants when carrying out structural BRG-prevention measures poses special problems in Germany.
- Actions of the tenant (e.g. installation of a burglar alarm) are
 - usually dependent on the consent of the landlord and
 - must usually be removed when the tenant moves out.
- Only for conversions to ensure accessible housing for the handicapped German civil law provides an explicit exception (§ 554a BGB – German Civil Code).
- All other measures such as improving the BRG-protection: No chance...
- Case law on the question of conversions: As extensive as uneven...
- Thought-provoking impulse for lawmakers: Supplementing the § 554a BGB?

Third task:

Highlighting prevention measures to the lawmakers



Highlighting the insurance industries work on prevention measures

- Advising customers (private and professional) in all matters of
 - mechanical
 - and electronic
- BRG-protection of buildings (safety technology)
- Providing comprehensive, up-to-date and target group-oriented publications on all technical issues of BRG-prevention-measures (barrier-free and free of charge: www.vds.de)



 Insurance industry supports nationwide and regional initiatives for BRG-prevention

Fourth task:

Showing that incentivizing content insurance has no leverage effect

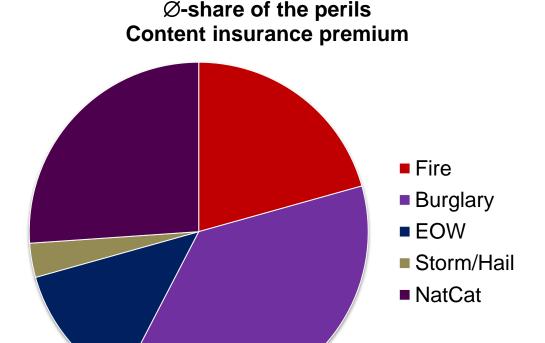


Clarifying the "effects" of incentivized content insurance

- BRG-premium is already risk based
 - Consideration of additional preventive measures depends on the product (market is deregulated since 1994!)
 - In high-value households prevention measures are already compulsory by policy
 - Due to market deregulation no fixed sum limits. Thresholds start at about 100,000, -EUR sum insured.
 - The same applies to more individual objects of high value. Thresholds start at about 3,000, per object.
- Below these thresholds, any premium incentive depends directly on the sum insured and the corresponding insurance premium.
- Lower premium ⇒ low premium incentive ⇒ less stimulus for any investment in prevention measures



Clarifying the "effects" of incentivized content insurance



Ø-sum insured 2013: approx. 64.000,- EUR

Premium (∅- random market sample): Approx. 180,- EUR

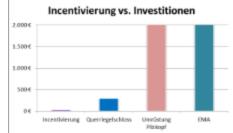
BRG-share of the premium: approx. 66,- EUR

Even if prevention measures taken by the policyholder cut the BRG-risk by 50 percent, the insurer may incentivize the content insurance premium by 33,- EUR at most...



Clarifying the "effects" of incentivized content insurance

- Possible premium reduction vs. the cost of additional preventive measures. Examples:
 - Cross lock without professional installation: more than 300, - EUR.
 - Retrofitting house with "mushroom head locks"
 per window approx. 300, EUR, per door approx. 500, EUR.
 - Burglar alarm with monitoring of windows and doors:
 more than 2,000, EUR



- Incentivizing content insurance will not necessarily foster policyholders investments in BRG-prevention measures.
- At lower sums insured (most households) there are no prevention-promoting effects at all.

Fifth task:

Preparing a position of the insurance industry

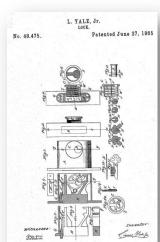


Drafting political positions / demands

- <u>Existing buildings</u>: Financing of technical BRG-prevention measures by the German Development Bank is welcomed.
- Future construction work: Defining mandatory technical standards for the BRG-prevention. Two steps:
 - For all government-subsidized buildings or public buildings
 ("role model"; make developers / architects awareness of the problems)
 - Introduction for all new buildings

Prevention

- Strengthening the resources of the police force BRG-counseling services
- Sensitization of all insurance customers through information bulletins
- Stabilize, professionalize and expand campaigns and initiatives



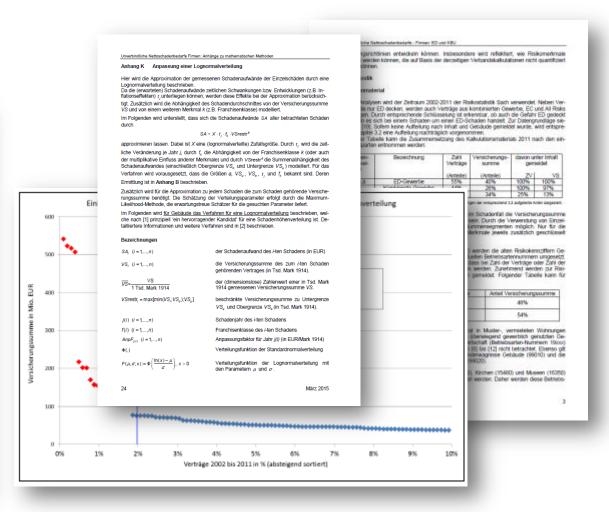
Cylinder Lock patented **1865**



Bringing it all together

Output for our members





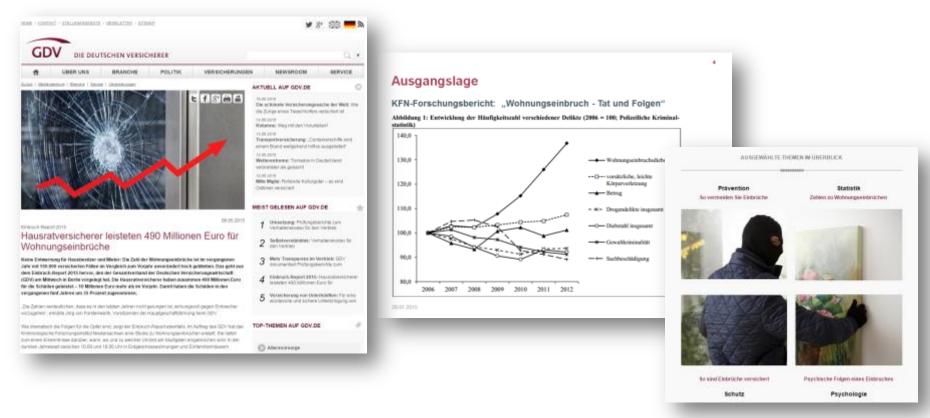
Detailed net loss calculation of BRG





Bringing it all together

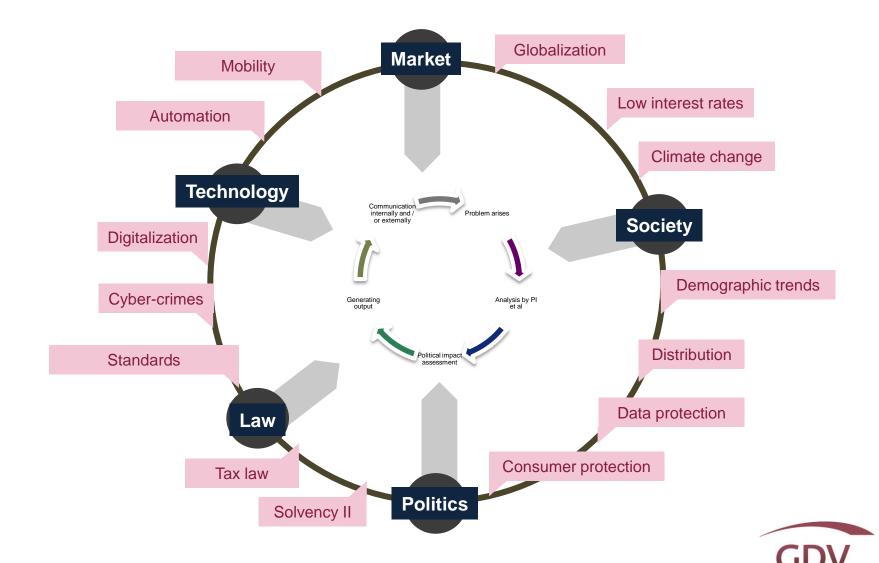
Output for the conversation with lawmakers and authorities



Press release, fact sheet, slides



The workflow: A blueprint for all topics



To put it in a nutshell

The PI-workflow is just an example of GDV's services

- Each and every member of the German Insurance Association
 - large international corporation or small regional mutual
 - multi-line insurer or mono-liner
 - direct or re-insurer

has the right to come up with any kind of problems, questions, tasks etc.

- GDV will integrate this input into the association's workflow and generate output within the legal framework
- The output is open to all of GDV's members
- There is no legal obligation to do this, but a strong will to give the German insurance industry the best possible position in the public discourse





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