



# The roles of the independent actuary in the assessment of damages caused to persons by traffic accidents according to the Spanish legal framework

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# About the speaker

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- Fully Qualified Actuary (1996) and PhD in Economics and Business Administration (2000). Director of the Master in Actuarial and Financial Sciences of the *Universidad de Málaga* (2012), Director of the *Escuela de Práctica Actuarial y Financiera* of the Instituto de Actuarios Españoles (2016), Chair of the Actuarial Educators Network of the International Actuarial Association (2018)



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# 1. Introduction to the Spanish legal framework for assessment of damages caused to persons in traffic accidents (“Scale for Traffic Accidents”)



- In the previous legal scheme, compensations were not clearly structured so there wasn't room for actuarial assessment of patrimonial damages
- *Ley 35/2015, de 22 de septiembre, de reforma del sistema para la valoración de los daños y perjuicios causados a las personas en accidentes de circulación*
- New procedure for drafting/editing the legal text: “Experts Committee”, with the participation of the interested parties and independent advisors, under the umbrella of the insurance supervisor and the Ministry of Justice
- It started in force 1/1/2016

# 1. Introduction to the Spanish legal framework for assessment of damages caused to persons in traffic accidents (“Scale for Traffic Accidents”)



- Actuarial Basis for assessment of patrimonial damages: *Bases Técnicas Actariales del sistema para la valoración de los daños y perjuicios causados a las personas en accidentes de circulación*
- “Monitoring Committee”
  - Also with the participation of the same parties and independent advisors and under the umbrella of the insurance supervisor and the Ministry of Justice
  - It works on a continuous basis:
    - Producing the “Guidelines of Good Practice for the implementation of the Scale for Traffic Accidents” (*Guía de Buenas Prácticas para la aplicación del Baremo de Autos*)
    - Reviewing the whole scheme (right now)



## 2. Basic principles of the system

**1. Full compensation**

**2. Structured indemnities**

**3. Objective/unbiased assessment**



✓ Fair compensation to damaged parties

✓ Prompt settlement of claims

✓ Mitigation of uncertainty for the parties

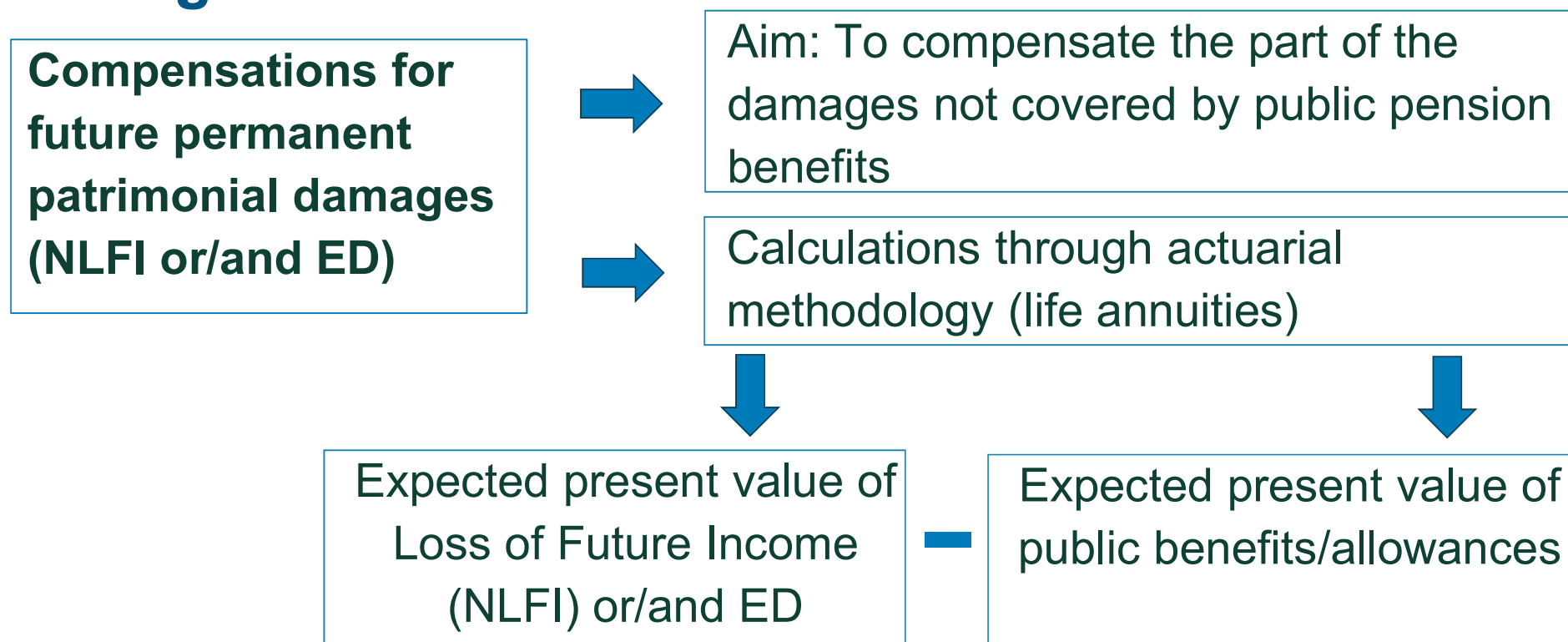


- General approach: Compensations in Scales
- Cases of patrimonial damages where specific assessment is needed

### 3. Types of damages

<b>“Personal” damages</b>	<ul style="list-style-type: none"> <li>• “Basic personal damage”</li> <li>• “Particular personal damage”</li> <li>• “Exceptional damage”</li> </ul>	
<b>“Patrimonial” damages</b>	<ul style="list-style-type: none"> <li>• Temporal injuries (until cure or stabilisation of sequelae)</li> </ul>	<ul style="list-style-type: none"> <li>• Occurred net loss of income</li> <li>• Incurred expenses</li> </ul>
	<ul style="list-style-type: none"> <li>• Permanent sequelae (after stabilisation)</li> </ul>	<ul style="list-style-type: none"> <li>• Net Loss of Future Income (NLFI)</li> <li>• Emerging Damages (ED)</li> </ul>
	<ul style="list-style-type: none"> <li>• Death</li> </ul>	<ul style="list-style-type: none"> <li>• Net Loss of Future Income (NLFI)</li> <li>• Incurred expenses</li> </ul>

## 4. The –actuarial- valuation model for patrimonial damages





## 4. The -actuarial- valuation model for patrimonial damages: assumptions



### I. Net Loss of Future Income:

- **Wide definition:** loss of the capacity to obtain future incomes (housekeepers, unemployed people, victims under 30 still not working)
- **Period of time:** term, in general
- **Estimation of future incomes:**
  - a. Victims who receive incomes: uniform/regular and full professional career until retirement at 67
  - b. Victims who don't receive incomes: according to annual legal minimum wage
  - c. Annual legal minimum wage is, in any case, the minimum income
  - d. Incomes are estimated net of taxes and social security contributions

## 4. The -actuarial- valuation model for patrimonial damages: assumptions



- e. In case of death, victim's age is set as a function of injured's age. This is just for incomes projection and the aim is to simplify and to get the compensations on a table
- **Estimation of loss of future incomes:**
  - a. In case of death: according to the applicable quota to each type of injured
  - b. In case of permanent disability: according to the type of disability and the regulations of Social Security
- **Public pension benefits** for victims/injured people are estimated under the regulations of the General Social Security Scheme (employees).

Despite this general approach concerning pensions, victims/injured people can demonstrate that the public benefits they receive are different, and then a specific assessment of the compensation of NLFI needs to be developed

## 4. The -actuarial- valuation model for patrimonial damages: assumptions



### II. Need for third-party assistance

- a. Period of time: lifetime
- b. Number of hours of third-party assistance needed per day: it is set as a function of sequelae (medical scale) and victim's age (dynamic coefficients)
- c. Cost of the hour of assistance: it is set as 1.3 times the hour of legal minimum wage per hour
- d. Public allowances are estimated -in a very simple way- in the context of the national public system for constant attendance.

## 4. The -actuarial- valuation model for patrimonial damages: assumptions



### III. Orthosis and prosthesis; technical aid products; home and outpatient rehabilitation

- a. Compensation through a lump sum is accepted (actuarial valuation)
- b. Period of time: lifetime, in general
- c. Limits for compensations

### IV. Mobility and house adequating costs

- a. Actuarial assessment is not considered, in principle
- b. Limits for compensations

## 4. The –actuarial- valuation model for patrimonial damages: hypothesis



### I. Economic:

- Future growth of estimated incomes: 1,5% per year
- Future growth of estimated costs:
  - Cost of the hour of assistance of third-party: 1,5% per year
  - Others: 2% per year
- Future growth of estimated public pension benefits and allowances: 0,5% per year
- Technical rate of interest (3,5% per year)



## 4. The –actuarial- valuation model for patrimonial damages: hypothesis



### II. Biometric:

- Dynamic mortality table for general population (PEB2014)
- Static mortality tables for disabled population (PEIB2014, levels 1-2 and 3-4)

## 5.1. Roles of the actuarial profession in the legislative process

- An actuary nominated by the Instituto de Actuarios Españoles (IAE) participated as independent advisor in the Experts Committee (which drafted the Law). His contribution, together with the other independent advisors in the Committee, was absolutely relevant for the system's adequate equilibrium
- An actuary is also participating as independent advisor in the Committee which is reviewing the system once a period of 3 years of application is completed
- Other members of the IAE are participating as independent advisors in the consultation processes which the Monitoring Committee is running (questionnaire, panels of experts)
- The review is focusing on some of the assumptions and hypothesis. The IAE will -most probably- also be consulted.

## 5.2 Roles of the actuarial profession in the claims and compensations processes



- Guidelines of Good practice for the implementation of the Scale for Traffic Accidents (3.2.1. “Actuarial report”): in the cases where specific assessment of patrimonial damages is needed, the report must be signed by an actuary.
- Insurance companies, victims/injured and lawyers working for them are using actuaries’ services as the independent professionals who:
  - Give advice on the “ strategy” to follow on a certain case/claim
  - Produce actuarial reports where compensations for victims/injured are determined

## 6. Conclusions/Final remarks

- The valuation model for assessment of patrimonial damages is:
  - Focused on estimating the expected value of NLF1 or/and of ED and the expected value of public benefits/allowances
  - Based on a complete set of assumptions and hypothesis (Law and Actuarial Basis)
- Professional body (IAE) and independent actuaries played and are playing important roles giving support first to the Experts Committee and currently to the Monitoring Committee
- According to the Guidelines of Good Practice for the implementation of the Scale for Traffic Accidents, there is a reservation of activity for actuaries in the cases where specific assessment of patrimonial damages is needed
- Being aware of the relevant role that actuaries play in this area, the IAE offers a regular 4 hours CPD seminar on this topic. It is open only to IAE members

## 7. References

- Ley 35/2015, de 22 de septiembre, de reforma del sistema para la valoración de los daños y perjuicios causados a las personas en accidentes de circulación
- Bases Técnicas Actuariales del sistema para la valoración de los daños y perjuicios causados a las personas en accidentes de circulación, elaboradas en 2014 por el Grupo de Trabajo Actuarial constituido en el seno del Instituto de Actuarios Españoles en apoyo técnico a los trabajos de la Comisión de Expertos del Baremo
- Guía de Buenas Prácticas para la aplicación del Baremo de Autos, elaborada por la Comisión de Seguimiento del Sistema de Valoración, versión del 9 de febrero de 2019



**Thank you very much for your attention!**

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