



CEIOPS-DOC-02/07

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## **Report on the Impact of Solvency II on supervisory authorities**

### **General Conclusion**

#### ***Introduction***

1. During the Members' Meeting of 22 February 2006, the European (EU) Commission asked CEIOPS to deliver input for its impact assessment of the Solvency II (SII) project on supervisory authorities.
2. Accordingly, CEIOPS has drafted a questionnaire to its Members, with the intention to obtain an overview on how the new supervisory framework will affect supervision and how supervisory authorities intend to organise themselves to face the new challenges posed by SII.
3. CEIOPS' Members were asked to answer questions on the impact of SII on their general supervisory methodology, including their supervisory tools, on the institutional organization of the supervisory authority and on human resources, both in terms of staff numbers and skills. The answering of the questions took place during the second and third quarter of 2006.
4. The questionnaire has been sent to 30 CEIOPS' Members supervising insurance undertakings. 26 supervisory authorities have answered the questionnaire.<sup>1</sup> Among them are supervisory authorities of different sizes, working in different markets as from the size and integrated as well as non-integrated supervisors. There are 13 smaller supervisory authorities with less than 40 employees, 7 medium-sized supervisory authorities with 40-100 employees and 6 larger supervisors with more than 100 employees. Also the insurance markets where these supervisory authorities work in differ, 8 supervisory authorities are working in smaller, 5 in medium-sized and 6 in larger markets. 15 supervisory authorities were labelled as integrated supervisory authorities and 11 as non-integrated.
5. In essence, the results of the questionnaire give a broad overview on the efforts (to be) made by supervisory authorities and by CEIOPS. The

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<sup>1</sup> Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, United Kingdom.

report, after having addressed the general state of preparedness of supervisory authorities moves on to changes in the day-to-day supervision including the expected changes in the different tools used by supervisory authorities. Then in the report attention is given to the effect SII is expected to have on human resources. Finally the report describes the expected costs and benefits of SII, i.e. it gives a first impression on the costs and benefits of the new supervisory approach.

### ***General remarks***

6. This impact assessment takes only into account the impact SII will have on the supervisory authorities. This can vary from the concerns the insurance industry may have. The answers show that items such as for example the supervision of smaller and medium-sized undertakings or the choice of eligible elements as such are not considered by supervisory authorities to have a large impact on their activity. This does not mean that the outcome of SII in this regard would not affect the industry. Only the impact on the operations of supervisory authorities has been assessed in this study.
7. Furthermore, it is difficult for the supervisory authorities to distinguish SII related impacts from other developments. In their answers, many supervisory authorities refer to the evolution in market practices, the general move towards risk-based supervision and the impact of other financial regulation (for example the Directive on the activities and supervision of Institutions for Occupational Retirement Provision, Basel II, International Accounting Standards).
8. Regardless of the coming into force of SII, many supervisory authorities have already been modernizing their supervisory methodology towards a risk-based approach. They have made various changes to their reporting systems and IT applications, have recruited staff and have made organizational changes. One could therefore say that the SII project encapsulates the general trend towards risk-based supervision.

### ***General state of preparedness***

9. From the answers concerning the general state of preparedness with regard to SII, 38% of the supervisory authorities indicate that they recognize that SII will require material changes to their supervisory system, tools and resources, but they are waiting to see the details of the SII Framework Directive proposed. 30% of the supervisory authorities indicate they are currently planning to adapt their supervisory system to the coming into force of SII. Many of these supervisory authorities indicate they have already started modernizing their supervisory tools and procedures following the implementation of recent Directives, the experience of Basel II, the application of International Accounting Standards/International Financial Reporting Standards (IFRS) or the assessment of the insurance supervisory system by the International Monetary Fund. These changes have not

been made in anticipation of SII, but aim in general for risk-based supervision and are expected to be in line with the new SII framework. For most supervisory authorities, the decision adapting their current supervisory methods in anticipation of the coming into force of SII ultimately depends on the level of detail of SII.

10. 23% of the supervisory authorities will deal with potential changes as part of the implementation of SII. Only a minority (2 supervisory authorities) that answered the questionnaire considers it has already implemented the relevant changes which should enable it to deal with the SII related changes.
11. No obvious relation can be found between the answers as to the general state of preparedness and the size or relative importance of the insurance market, the size of the supervisory authority or its organizational structure.<sup>2</sup>
12. Supervisory authorities of varying size, with different market sizes or organizational structure have indicated the same level of preparedness. At the same time, supervisory authorities with comparable sizes/market sizes or organizational structure have indicated different levels of preparedness.
13. The analysis of some potential changes to the supervisory tools shows that various adaptations will need to be made in order to supervise according to the SII Framework Directive - and its future implementing measures. These changes often depend on the individual characteristics of supervisory authorities. Nevertheless, some general trends in supervision can be detected.

### ***Changes in the day-to day-supervision***

14. The impact assessment shows that the vast majority (88%) of supervisory authorities expects it will need to change its supervisory tools because of SII. 34% of these supervisory authorities indicate that they have already partly changed or started changing their tools in view of SII.
15. The ranking of the Calls for Advice received from the EU Commission on SII according to their expected impact shows that supervisory

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<sup>2</sup> For the relative importance of the insurance market (market penetration) premiums written as % of GDP were used as a benchmark. <4% are defined as having a smaller insurance market, 4%<x<8% means a medium-sized market and > 8% indicates a larger market.

For the size of the supervisory authority, the number of employees was taken as a benchmark: 0-40 employees are defined as smaller supervisory authorities, 40-100 as medium-sized supervisory authorities and > 100 employees are labelled as larger supervisory authorities.

For the purpose of this questionnaire an integrated supervisory authority is defined as a supervisory authority conducting both banking and insurance supervision.

authorities consider that technical issues will have the greatest impact on their daily supervisory practices.

16. Internal controls and risk management broadly rank as having the second most important impact.
17. This is followed by group and cross-sectoral issues, supervisory reporting and public disclosure, the Supervisory Review Process, peer reviews and supervisory co-operation (not listed exhaustively).
18. Supervisory authorities were asked to depict the changes they expect some specific supervisory instruments and procedures will undergo under SII. The answers show that various aspects of the supervisory practices will definitely change.

#### Internal models

19. Supervisory authorities expect the largest impact on their supervisory practices to be caused by the internal models and their validation, the introduction of the standard formula and the calculation of the technical provisions. They expect they will need to add new tools and adapt existing tools for the validation and monitoring of internal models. They also expect they will need additional or different supervisory powers to approve the internal models and give permission to (partially) use the internal models to calculate the Supervisory Capital Requirement (SCR) or to require changes in the model. This impact is reflected in the profile of potential new staff which supervisory authorities expect to recruit for SII. Most supervisory authorities expect to hire in the first place mathematicians and actuaries with knowledge about Asset-Liability Management (ALM) and risk models. This is also reflected in the training needs identified by the supervisory authorities: training on technical issues (ALM and risk models).

#### Reporting and disclosure

20. Most supervisory authorities (88%) expect they will have to change their reporting system in one way or the other, be it to cope with changes in reporting requirements or to improve their analysis of reported data.
21. 8 supervisory authorities have already adapted (to some extent) their reporting systems, or are currently making changes or planning them. These changes are not necessarily in anticipation of SII. 2 of those supervisory authorities indicate explicitly that they see no need to change their reporting requirements any further, as they have been reviewing their reporting requirements recently and the changes made during that exercise would be sufficient to work under SII.
22. At various occasions supervisory authorities indicate the need for a discussion at EU level on a common information exchange format or a harmonized reporting system.

23.The alignment of public and supervisory reporting also raises the interest of some supervisory authorities.

#### Information and co-operation

24. 57% of the supervisory authorities point out the need for deeper and more information exchange under SII (2 of them indicate that they have already started changing or partly changed their procedures in view of SII). This need is felt particularly with regard to the validation of internal models or the exchange of information on intra-group transactions concerning cross-border groups. Increased co-operation and supervisory convergence are especially needed in the context of insurance groups and financial conglomerates.

25. Some supervisory authorities mention Memoranda of Understanding and the Protocols (Siena Protocol and the Helsinki Protocol) as good platforms for developing the exchange of information and co-operation. The establishment of Co-ordination Committees has also been developing for some time. 42% of the supervisory authorities do not expect they will have to change their tools and procedures significantly in order to develop the exchange of information and co-operation with other EU supervisory authorities under SII.

#### On-site and off-site supervision

26. The vast majority (88%) of supervisory authorities sees a potential impact on its inspection activity, be it on-site or off-site (4 of them indicate they have already partially changed or started changing their procedures in view of SII).

27. The largest impact foreseen by the supervisory authorities in this area is the enhanced frequency of on-site inspections (during the initial phase). At the same time, the scope of on-site inspections would become broader and more focused: specific areas of risk management, risk valuation, SCR calculation, specific tools for risk analysis, more frequent contact with senior management, implementation of the SCR formula and validation and review of internal models. This could result in more and/or shorter visits with the focus on specific risk aspects.

28. As a benefit, the more efficient use of resources by allocating the supervisory capital according to risk profile and risk management is expressly mentioned.

29. Some supervisory authorities also mention the extension and sophistication (integrated risk-based analysis, risk valuation) of off-site inspections.

## ***Human resources***

### Recruitment

30. The questionnaire asked the supervisory authorities to describe the profile, number and average cost of staff that is currently involved in the supervision of insurance companies.
31. 25 supervisory authorities describe their current employment status and answer the question on the expectations of possible staff recruitment.<sup>3</sup> The answers show that almost 1.800 employees are currently involved in insurance supervision. Out of these 25 supervisory authorities, 14 specify the profile of their current employees. Almost 36% of the overall staff of these authorities have a financial background (economists, financial analysts, auditors, accountants); 19% are lawyers, 19% are administrative staff and IT specialists and 18% have a mathematical background (mathematicians and actuaries). For 7% of the staff, the exact profile could not be deducted from the information given (for example mixed profile for management or support functions).
32. On the expectations recruiting new staff members, 6 supervisory authorities (27%, 2 out of the medium-sized supervisory authorities and 4 out of the 6 larger supervisory authorities) expect not to recruit any new staff members in view of SII compared to their current employment status.
33. 19 supervisory authorities (73%, including 12 out of 13 smaller supervisory authorities, 5 out of 7 medium-sized supervisory authorities and 2 out of 6 larger supervisory authorities) expect they will have to recruit new staff members in view of SII.<sup>4</sup> From these supervisory authorities, 11 supervisory authorities made a quantitative estimate (7 smaller supervisory authorities; 3 medium-sized supervisory authorities and 1 larger supervisory authority; the other supervisory authorities are still uncertain on the number to be recruited).
34. Those estimates range from a 4% increase to a 60% increase in staff number. The increases are especially important for the smaller supervisory authorities.<sup>5</sup> For the larger and medium-sized supervisory authorities the impact of the recruitment would seem to be less important (see also para. 32), except for 2 supervisory authorities (1 medium-sized and 1 larger) who see an increase of almost 30%.<sup>6</sup>

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<sup>3</sup> 1 supervisory authority did not answer the question.

<sup>4</sup> 1 supervisory authority did not answer the question.

<sup>5</sup> The total number of smaller supervisory authorities is 13. 11 of them indicate they expect to recruit new staff. 7 out of these made a quantitative estimate, which ranges from a 7% to 60% increase.

<sup>6</sup> Total number of larger and medium-sized supervisory authorities is 13. Seven of these supervisory authorities indicate they expect to recruit new staff. 4 of these

35. The total number of the estimates amounts to 112 new staff members. Given the range of the individual estimates and the uncertainties surrounding these estimates this figure should be dealt with carefully. Therefore, the estimates made by the supervisory authorities cannot be extrapolated to the whole supervisory community.
- 36.7 supervisory authorities mention they have already changed their number of staff in anticipation of SII, with increases ranging from 4% to 22%<sup>7</sup>.
37. Concerning the profile of the staff to be recruited, supervisory authorities are most in need of mathematicians/actuaries, followed by economists, accountants and auditors. Additional lawyers would be less required.
38. Almost all supervisory authorities indicate that the main constraint for recruiting new staff in view of SII is the lack of supply of candidates with sufficient skills and/or work experience. This constraint is linked with the competition with the industry that supervisory authorities face when recruiting specialised staff and with the limits on the salary the supervisory authority can offer. Another constraint is often due to the legal limits on the number of staff that can be recruited at the supervisory authority.

### Training

39. Almost all (25) supervisory authorities expect that they will have to train its staff in view of SII. This will concern the whole staff or at least the staff involved in the insurance supervision *stricto sensu*. The number of staff that needs to be trained ranges from 21% to 100% of the overall number of staff.
40. In general (92%), training for SII will be incorporated as part of the ongoing training process but some of the supervisory authorities foresee additional one-off efforts especially for SII. Most supervisory authorities expect to organise training on technical (ALM, risk models) and financial (accounting) issues (17), legal training seems to be less necessary (4). 5 supervisory authorities mention also language training. Another 3 supervisory authorities mention that training is needed on the whole content of SII.
41. Especially the staff involved in the day-to-day supervision needs to receive training (technical, financial), and some supervisory authorities see the need for specialized training, for example by risk-factor, for on-site inspections, etc.

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supervisory authorities made a quantitative estimate, which ranges from a 4% to 28% increase.

<sup>7</sup> We have counted these staff members as 'current staff'.

42. As to the format of training, a minority of supervisory authorities relies solely on in-house training, when needed supplemented by outsourced training activities. 46% of the supervisory authorities would favour a combination of in-house training, outsourced training and training possibilities offered by CEIOPS.
43. Many supervisory authorities see a role for CEIOPS on the training issue, some suggesting that CEIOPS could provide a framework for peer training, organizing conferences or developing tools for training (e.g. e-learning).

### ***Cost and benefits to be derived from SII***

44. At this stage of development of SII, most supervisory authorities find it difficult to quantify the potential costs and benefits arising from the implementation of SII. Various supervisory authorities are waiting for further details on SII before investing. Further, it is not always easy for supervisory authorities to distinguish between the costs they would have made anyway due to the modernization of their supervisory practices and the costs of specific SII-related changes. Additionally, some costs will be one-off implementation costs, others will be recurrent -for a few years- or structural. Therefore, the estimates made by the supervisory authorities cannot be extrapolated to the whole supervisory community. Benefits of SII - more effective and efficient supervision in the long run- are even more difficult to quantify. A last general remark is that the current impact assessment is a partial assessment focussing on supervisory authorities only and not looking at benefits that could arise in the environment of the other stakeholders.
45. In general, the main cost drivers concern the sophistication of the (quantitative) supervisory tools and methods, changes in the reporting framework, more elaborated qualitative supervision, the increase in the number of staff and the increased need for specialised skills and training of staff (not ranked by importance).

### **General costs for adapting to SII**

46. The first part of the questionnaire asked the supervisory authorities to estimate the range of expected costs and benefits for adapting their supervisory methodology to SII. 5 supervisory authorities, including 1 smaller supervisory authority, 2 medium-sized and 2 larger supervisory authorities made a general estimate for the annual costs and benefits. The estimates range from €1.500.000 to €2.220.000.
- One larger supervisory authority indicates an increase in the annual costs of 20% which would partially be off-set by estimated benefits of 5%.
  - The other larger supervisory authority makes an estimate for adapting the reporting system in view of SII, the estimate being based on cost estimates for Basel II and the implementation of modernised occupational pensions fund supervision. The cost

would range between €220.000 and €300.000, depending on the number of reporting forms and their complexity.

- One of the medium-sized supervisory authorities indicates a general cost of €2.200.000 for all changes to its methodology and staff. In addition to its general estimate a one-off starting cost of €500.000 and a potential benefit of €260.000, arising from cross-sectoral synergy with the banking part of its supervisory authority.
- The other medium-sized supervisory authority gives the following breakdown of its costs for adaptation: 600.000 €/year for wages, 80.000€/year for training, 60.000€/year for IT development, 40.000€/year for travel costs (participation in CEIOPS working groups).
- The smaller supervisory authority indicates annual cost of €1.500.000.

#### Cost of recruitment of staff

47.11 supervisory authorities indicate their current cost of staff (5 smaller supervisory authorities, 3 medium-sized supervisory authorities and 3 larger supervisory authorities).<sup>8</sup> According to the numbers given by these supervisory authorities, on average, the current cost of staff per person per year ranges from €18.000 euro to €130.826.

48. In total, 8 supervisory authorities indicate the expected cost for recruiting new staff members. On average, the cost per person per year for hiring new staff members ranges from €12.000 to €150.000. Not all supervisory authorities that indicated their current cost of staff also estimate the cost of new staff. One cannot draw the general conclusion that the cost of staff necessarily increases due to SII, because for only 5 of the supervisory authorities that indicated the expected cost for recruiting new staff (2 smaller supervisory authorities and 3 medium-sized supervisory authorities) also indicate the current cost of staff, which allows a comparison of the relative costs. When comparing the average cost per person per year of the current and new staff, the costs vary: from less expensive (less senior staff), to slightly more expensive. 1 medium-sized supervisory authority indicates a 72% increase of the cost of the new staff compared to the cost of the current staff. This would be due to the specific experience and the seniority expected from new staff.

49. It is difficult at this stage to estimate a global average cost for the recruitment for the whole supervisory community, as the total number of new staff to be recruited (112) is compiled from the answers of only 11 out of the 19 supervisory authorities that indicated they would need

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<sup>8</sup> The numbers include the staff that has already been recruited in view of SII, see para 36.

to recruit new staff members, and not all these supervisory authorities made quantitative estimates as to the cost of this new staff.<sup>9</sup>

50. It can also be pointed out that some supervisory authorities have already changed the number and/or profile of their staff, be it in anticipation of SII or for modernising their supervisory practices in general, and therefore their costs are already assumed.<sup>10</sup>

#### Cost of training

51. 8 supervisory authorities (2 smaller supervisory authorities, 3 medium-sized and 3 larger supervisory authorities) provide quantitative estimates of the anticipated training costs, which range from €20.000 per year in total to yearly €430.000 in total. As to the breakdown of the costs, some supervisory authorities –such as for the latter cost- include in this cost the time spent by the staff on attending training.

52. Some countries provided the costs involved in participating in the CEIOPS working groups, Members' Meetings and other preparatory work in the draft of the SII project, which to some extent are considered as training. 2 supervisory authorities (medium-sized and larger) gave an estimate of about €500.000 on average as current annual global cost. Smaller to medium-sized supervisory authorities mention that the preparation for CEIOPS' meetings requires a significant amount of resources.

#### Benefits to be derived from SII

53. The main benefits supervisory authorities expect from the implementation of SII, are of a structural nature. SII would lay the basis for a better regulatory framework, which enables supervisory authorities to obtain a better understanding of the risks born by insurance companies and of the risk management by the insurers. This way, SII would help realising more efficient and effective supervision, which would generate a preventative effect by enabling timely intervention. The better allocation of capital, the increased co-operation and harmonisation of reporting systems and the harmonisation and transparency of supervisory tools in general were identified as potential benefits.

#### Split of the burden

54. As to how supervisory authorities will deal with the expected costs, from the supervisory authorities that answered this question (23) some supervisory authorities (7, 27%) expect they will not need any additional funding. One important reason for this is that the budget

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<sup>9</sup> We assumed this to be equal to the number of full time equivalents. This does not include the staff supervisory authorities already recruited in anticipation of SII, which as mentioned above has been taken into account as current staff.

<sup>10</sup> See para 36.

would already foresee a potential increase in costs. Another reason is the expected off-setting of the costs by more effective and efficient supervision and a more efficient use of the resources.

55. However, most supervisory authorities (16, 62%) expect that additional funding will be needed. The costs due to the implementation of SII will mostly have to be met by an increase in the budget, subject to approval by the government. Given the current funding structure, in most cases this would be met by higher contributions from the industry (9), government subsidies (3) or a combination (3).

### ***Follow up of the outcome of the impact assessment***

56. The answers to the questionnaire show that supervisory authorities already take various initiatives in anticipation of the outcome of SII.

57. The issuing of this questionnaire and the discussion between CEIOPS' Members on the results has led to an improvement of the awareness of the possible issues and (peer) solutions implementing SII.

58. In the light of the need for a harmonized supervisory framework, the need for developing convergent practices is becoming more important with every stage of development of SII. The results of this impact assessment are a starting point for defining in which areas supervisory authorities will have to make an effort and where they can benefit from common initiatives. This helps CEIOPS in detecting areas where it could develop educational tools and potential implementation measures to tackle the needs of the supervisory authorities.

59. Therefore the results of this questionnaire will be used to strengthen supervisory convergence by the following means:

60. Some subjects for training have emerged from this impact assessment. This information will be used for defining the educational needs of CEIOPS' Members and especially develop CEIOPS' training programme for 2007. For the moment, the technical subjects concerning the (validation of the) internal models, the analysis of risk management in the insurance companies, ALM and other risk identification and management issues (stress testing, risk analysis tables...) and technical provisions seem important in this respect. Training on financial and accounting subjects concerning the implementation of IFRS rules and reinsurance could also be organised.

61. Many supervisory authorities see a role for CEIOPS in the training field, some suggesting that CEIOPS could provide a framework for peer training, organizing conferences or developing tools for training (e-learning). CEIOPS will take up these suggestions and include them in its current and future training activities.

62. Some potential future implementing measures can already be detected in the answers to the questionnaire. This could be a start in gathering the information on potential implementation measures effects of SII.

Processing such information will help CEIOPS and supervisory authorities in identifying the needs for implementing measures and planning CEIOPS' activities accordingly. For example, various supervisory authorities mentioned that implementing measures could be developed in the area of supervisory reporting, where the need for a common framework for the exchange of information is felt. At the same time, areas where supervisory authorities could initialize common or even cross-border three Level 3 initiatives, such as for example in the field of IT and supervisory reporting have been detected.

63. The supervisory authorities indicate that the impact analysis could be repeated, once more details on SII are known, however not necessarily on a yearly basis.