ASSOCIATION ACTUARIELLE INTERNATIONALE
INTERNATIONAL ACTUARIAL ASSOCIATION

5 December, 2013

Mr. Pablo Antolin

Organisation of Economic Cooperation and
Development

E-mail: pablo.antolin@oecd.org

Dear Mr. Antolin

**Re: Funding rules in OECD Revised Core Principles of Private Pension Regulation**

We appreciate the opportunity to comment on the **Funding rules in OECD Revised Core Principles of Private Pension Regulation**. I am pleased to transmit, on behalf of the Pensions and Employee Benefits Committee of the International Actuarial Association (IAA), our comments and recommendations.

These comments have been prepared by the Pensions and Employee Benefits Committee of the IAA. If, upon reading these comments, you identify any points that you wish to discuss or obtain further insight regarding them, please do not hesitate to contact Tom Terry or me, care of the IAA Secretariat. The Pensions and Employee Benefits Committee of the IAA will be pleased to develop these ideas further with you.

Yours sincerely,

Esko Kivisaari
Vice-Chair of the Pensions and Employee Benefits Committee of the IAA

Attachment: comments by the Pensions and Employee Benefits Committee of the IAA

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# Comments by the Pensions and Employee Benefits Committee of the International Actuarial Association on the Funding rules (section 7) in OECD Revised Core Principles of Private Pension Regulation

## International Actuarial Association and its Pensions and Employee Benefits Committee

The International Actuarial Association (the "IAA") represents the international actuarial profession. Our sixty-four Full Member actuarial associations, listed in Appendix A to this statement, represent more than 95% of all actuaries practicing around the world. The IAA promotes high standards of actuarial professionalism across the globe and serves as the voice of the actuarial profession when dealing with other international bodies on matters falling within or likely to have an impact upon the areas of expertise of actuaries.

We appreciate the opportunity to comment on the **Funding rules (section 7) in OECD Revised Core Principles of Private Pension Regulation** and provide our comments below which are broadly supportive of the proposed revised core principles (CPs) but identify areas where they can be improved. In Appendix C, we provide a mark-up of the current CPs reflecting the changes we consider should be made in the near term and our reasons for proposing those changes are discussed in part E below.

We would be pleased to consider preparing educational material on funding theory and practical approaches used around the world to help inform discussion. This could take a similar form to the IAA monograph on Discount Rates in Financial Reporting.

These comments have been prepared by the Pensions and Employee Benefits Committee, the members of which are listed in Appendix B to this statement. It has not been subject to the due process required for it to constitute a formal view of the IAA. These comments are thus informal comments by an individual committee of the IAA.

## General comments

### A. Scope

In considering section 7 of the current Core Principles (CPs), we surmise that the OECD is considering their application to "Private Pensions" as a whole, including occupational plans that may have only one individual as beneficiary, insured annuity products and to occupational pension plans for public sector workers. Such plans may pay income or lump sums on retirement or earlier leaving.

Although CPs are a recommendation for OECD countries, the indication is that the CPs might become a somewhat higher level recommendation because paragraph 6 says "The Core Principles are also being used as part of the accession review of private pension systems in the candidate countries using a methodology developed for this purpose".

Regarding CP7, the first sentence was changed from "Private occupational plans should be funded." to "Occupational pension plans should be adequately funded". Also, Paragraph 9 says "Notwithstanding the broad scope of the general principles, countries may decide to restrict

their application to occupational pension arrangements (including or excluding arrangements for public sector workers) and, in general, pension plans that are financed via pension funds".

We are not against this extension of the scope but we feel that the OECD should elaborate on this subject and its consequences.

*Application to DC plans*
We also note that CP7.2 references DC plans but the other CPs appear to be motivated for DB plans. Concepts like measurement of the liabilities can be applied to DC plans by defining the liability being measured to be the projected benefit payable by the DC plan at retirement (or earlier leaving), i.e. a meaningful measure of a DC plan is the likely benefits payable. Concepts such as funding status can be translated as the extent to which the projected benefits payable (based on accumulated contributions or projected contributions) are on track to provide the member's desired level of income in retirement and what level of savings is needed to get back on track. Projected benefits could be expressed in absolute terms, real terms (relative to price inflation) or as a target income replacement (relative to projected salary) as appropriate.

We would be pleased to discuss further how members of DC plans can understand and plan better for their retirement.

In the following, we will discuss funding in three stages:

a) measurement of the liabilities, i.e. what to take into account to put a value on the liabilities
b) the actual funding of part or all of those liabilities, i.e. what to take into account when covering part or all of the liabilities with assets, contingent assets or other sources of actual or potential funding, and
c) solvency issues, i.e. how a) and b) help to maintain the security of members and beneficiaries.

## B. Liabilities

Actuaries are experts in the determination of liabilities. When looking at funding and solvency, actuaries can provide essential tools to identify and help alleviate risks. However the question of what represents an adequate or prudent funding level is in the end a political question driven by social objectives. It is important therefore that members and beneficiaries understand what is guaranteed (in the common language meaning of the world) and what is promised subject to the continued financial health of the plan and its sponsor. This in turn means that information should be given to regulators and members that provide as transparent and reliable as possible a view on the plan's finances and operation. Actuaries can assist in this.

There is no unique methodology for the calculation of pension liabilities. There are good reasons for this:

- firstly, the calculation of liabilities depends on the purpose for which these liabilities are calculated – they can be calculated for example for financial reporting or for prudential purposes or management decision making and one can also think of other purposes like limits on tax deductibility; and
- secondly, it is important to understand that the characteristics of pension plans differ from plan to plan and from country to country. The nature of the benefits, whether the

plan pays income or lump sums, risk sharing and other particulars of the arrangements, including local law, need to be taken into account.

The purpose will also have regard to the perspective of the interested parties. For example, a sponsor may take the view that the pension promise is only as strong as the sponsor so it needn't finance the obligations like an insurance company would. The payee however may take the view that they have been promised a pension and it should be financed to ensure its payment in all circumstances.

Our understanding is that the CPs aim to increase and harmonise member and beneficiary protection. We feel it is important that this should be stated more clearly and form the basis for the rest of the document.

If our understanding of the purpose is correct we must acknowledge that there still is currently no single globally accepted method for the calculation of liabilities. This does not mean that one could not be created but we would need to be clear what purpose the calculation of the liabilities is seeking to achieve. The IAA would be pleased to work with the OECD in leading such a process.

One could argue that the IASB has created a global standard for pension accounting and liabilities determined according to IAS 19, and this accounting standard could be used as the basis for the CPs. However, the aim of IAS 19 is only in respect of financial reporting and it provides a comparable and transparent way of handling pension obligations in meeting that goal. IAS 19 is, however, based – amongst other things – on the concept of going concern which might not always be the most appropriate way of disclosing member and beneficiary protection. Also, IAS19 is not without its critics, even within the area of financial reporting.

With liabilities we could start from different standpoints, for example:

i. Ongoing model – adopt a projected unit approach[1] including projected demographics and projected inflation/salary (PBO)
ii. Ongoing model – projected demographics but not projected (non-guaranteed) inflation/salary (ABO)
iii. Termination model – cost of extinguishing benefits through purchase of annuities with an insurer or lump sum payments direct to members. This is also called the *winding-up* position.

Ongoing models suffer from the problem that they presume that the supporting entity (the 'sponsor') is, and remains, a "going concern". They do not take account of sponsors failing. Bearing in mind that the main reason for funding is to provide security in case the sponsor fails, a "going concern" premise appears incongruous with this.

The CPs give the impression that every country has defended its own way of measuring liabilities (and assets) with resulting home-biased funding models and the text is a compromise

[1] The current or projected unit methods are the most commonly used actuarial methods for funding as they accord with the concept of an accrued benefit and a uniform cost of one year's benefit accrual. International and US pension accounting standards use these methods also. Other actuarial methods are used to achieve other funding objectives, e.g. entry age methods are common in Japan.

across them all. The challenge is probably whether we could have an overarching view that could be accepted generally. The IAA would be happy to assist in trying to build such a model.

The model would need to be principles based so that it could then be applicable to differing characteristics of pension arrangements and different country social objectives. We could try to establish an actuarial method and a framework for setting economic assumptions that could be applied in every country, for example, for a PBO model, one based on real rates (discount rate and salary increase rate in excess of general price inflation) which are then applied to expected price inflation.

As noted above, while the measurement of liabilities is not a political question the level of funding that is considered adequate/appropriate is.

- The measurement of the liabilities starts from observing the nature of the pension promise and the characteristics of the plan membership. The measurement of the liability typically assumes the sponsor/plan will pay the benefits (or at least that part of the liability that is fixed: contingent or discretionary benefits may not be included in the liability depending on the purpose of the measurement). However, depending on the purpose, the measurement could include an explicit assumption for sponsor default.

- However, under local corporate and employment law, the pension promise is often no stronger than the financial strength of the sponsor. Put another way, pension plans are not subject to the same legislation and regulation as insurance. It is then a political decision what level of collateral (assets, contingent assets, insolvency insurance type arrangements etc) is required to back the liabilities. The level of collateral required can be termed the funding target.

## C. Funding and Sustainability

Funding addresses the question of having dedicated assets to cover the liabilities and how quickly those assets are built up. This does not mean that funding needs to represent 100% solvency[2] which is a political and not an actuarial decision. Whatever level of funding is determined, all parties should be clear about the level of security provided. Furthermore, that funding level may also be influenced by corporate insolvency legislation, i.e. whether the plan is covered by an insolvency guarantee or may have a call on the broader assets of the sponsor (*sponsor covenant*) or the plan may only be able to rely on the assets it directly holds.

Considerations on funding do not of course preclude risk sharing structures where benefits can be linked to the performance of investments or other factors, so long as it is clear to all parties which benefits are fixed and which benefits can go up and down with investment performance or other factors. The political approach taken to "collective DC plans" in the Netherlands is a good example.

[2] The term *solvency* does not have a universal meaning. In many countries, the term is an assessment of the ability of the plan to meet its obligations in an absolute sense, usually on winding up, without further recourse to the sponsor. In others, the term may mean that a plan has sufficient cashflow to cover its benefit outgo in the short term or that full-funding has been achieved on a particular set of actuarial assumptions. Solvency can also mean an extra capital buffer that is sufficient to cover investment and actuarial losses with a pre-defined credibility. Throughout this paper, we take the term to mean an absolute test of being able to secure benefits on winding up of the pension plan.

However, if we start with any of the approaches to liabilities in Bi to Biii, then there are consequences for other choices we make. For example, if one measures liabilities based on Bi, one could have a less prudent discount rate than what is needed for scenario Bii to achieve the same overall security in both plans (relative to Biii). In assessing prudence, the choice of actuarial method and assumptions need to be considered as a whole as well as each assumption individually.

One area where more could be said is disclosure/communication of the funding position (this could also be formulated as increasing transparency) and how the funding position changes with time and the factors and risks that influence the funding position, i.e. the sustainability of the plan. For example

- in the UK the funding regime requires that whatever your funding policy/basis (methodology, assumptions, technical provisions, funding target, recovery period etc) is you have to disclose to plan members what % of accrued pension participants will get if the pension plan is wound up tomorrow with no terminal funding from the employer.
- In Australia the focus is on asset coverage of vested benefits. The regulator has introduced the concept of a fund being in an "unsatisfactory financial position" – where the assets do not cover the vested benefits – and takes a close interest and requires corrective action in those circumstances. Disclosure to members is also required if the fund is in an "unsatisfactory" position.

It is important also not to mix funding considerations, like whether it is politically or economically desirable to smooth contributions over time, with the determination of the liabilities themselves (which are dependent on the nature of the benefits and the characteristics of the plan membership). Many of the changes we propose to the CPs in Appendix C decouple the concepts.

Decoupling the concepts also enables a view to be taken on sustainability, i.e.

- whether as a result of the smoothing of contributions the plan is moving towards target funding or away from it
- What risks impact the funding position and what is the cost of removing/mitigating those risks.

Risk sharing type plans aside, the liabilities of a plan on an ongoing basis are the same whether that plan is unfunded or funded by dedicated assets.

The CPs state that a plan should be adequately funded. In 7.14, this is translated into assets sufficient to meet accrued benefits which may be intended to mean "full funding"? This seems to forbid pay as you go and book reserve plans like income plans in Germany and certain types of lump sum plans in Japan. Many German companies have established mechanisms to finance their pension obligations through forms other than standalone pension funds, for example dedicated assets held directly on their balance sheets, and of course an efficient insolvency guarantee system exists which adds to sustainability. CP7.4 recognises this but the question remains whether such models backed by insolvency guarantee arrangements are considered under these principles to be acceptable versions of funding.

In CP7.14, from the perspective of the plan member, it can be said that an "adequately" funded pension scheme is one which will deliver to its objectives. In the absence of other communications a member would expect this to mean paying out benefits in full if the supporting entity fails (if and whenever it fails). The wording in the bracket is key. It points to determining the liability on a solvency basis and funding accordingly to achieve that objective. This may not be economically affordable of course, either at a company level[3] or across an economy[4]. So the level of "adequate" funding is necessarily a political decision, and the more optimistic the view on adequacy, the higher the risk of significant reductions to the pension promise in the event of a corporate failure. We suggest therefore that the CPs do not reference loose language like "adequately funded" or "sufficient to meet accrued benefit payments" unless these terms are clearly defined and communicated to plan members[5].

We propose rewording CP7.14 to refer to target funding and the funding objective instead.

Similar concepts apply when considering what a *prudent* assumption is. In simple terms, prudence should mean what you as an individual would do when looking after someone else's property (or what you should reasonably expect from someone looking after your property). It is <u>not</u> prudent to have a funding mechanism which does not deliver to its objectives (e.g. if those objectives are the full protection of members' benefits in the event of insolvency). However a funding mechanism which only delivers, say, 60% of members' benefits in the event of insolvency can still be considered (politically and socially) to be "adequate" or "prudent" if it is clear to all parties that this is the level of security provided and "adequate"/ "prudent" means targeting 60% benefit coverage if the sponsor fails. In practice, when it is said that a plan is adequately or prudently funded this is often a euphemism for the plan being funded at less than the cost of securing the benefits (with an insurer or the lump sum payout value of the benefits to the member if the plan rules provide for such a payout on termination of the plan).

Returning to CP 7.14, the text says that "The funding target should balance the need for benefit security and the affordability of pension provision". We agree that there has to be a balance between what is theoretically desirable and what is practicably possible. This could be in relation to acceptable funding levels in the short to medium term[6] and acceptable contributions payable in the short term. If security is the objective, we contend that the solution is not to certify that a lower level of assets represents 100% funding but through transparency to acknowledge and accept that whilst full funding might be desirable it might not be possible. We would argue that it is better for all to understand that a pension plan is currently funded at a level that would provide 60% security, for example, in the event of insolvency. This would provide clear and valuable information to plan members : the plan is as strong as the sponsor and, if the sponsor fails, members will get a proportion (60%) of their expected benefits. As noted above, the UK requires this information be disclosed to plan members.

[3] Indeed, the dire situation in Detroit highlights that it's not just companies that can fail. Public sector bodies can, and do, too.
[4] For example, concerns expressed to EIOPA's consultation on applying a pillar one capital requirement for pensions based on Solvency II for insurers.
[5] If the plan is backed by insolvency protection arrangements, the concern is less for plan members.
[6] There may not be enough investments available to deliver 100% security on all the pension promises that have been made around the world, including occupational plans in the public sector, even if the corporate sector could afford the cash contributions arising.

Regarding CP 7.5, it is an open question whether guarantee arrangements increase or decrease prudential requirements. On the one had it can be argued that since guarantee arrangements increase member protection, less prudence is needed in the level of funding. On the other hand it can be argued that guarantee arrangements increase moral hazard (a sponsor may be inclined to make lower contributions to its pension plan than it might otherwise do in the knowledge that if the sponsor goes bankrupt the guarantee arrangement will take on the pension obligations) and accordingly prudential rules on plan funding should be stricter as otherwise others participating in the arrangement will have to pay costs due to one reckless actor. We agree that guarantee arrangements achieve their aims if they are fairly priced and managed in such a way that moral hazard is addressed. These aims may include justifying lower levels of funding (relative to a solvency basis).

**D. Solvency**

The third part of funding is how the security of a pension fund is evaluated. We do not necessarily support the contention that solvency means having assets in the plans in addition to those covering the actual liabilities. This is again a political and not an actuarial question: the extra assets could take the form of the sponsor's balance sheet/covenant or insolvency guarantee arrangements. There is, however, very much that can be done in this area to strengthen member protection.

We suggest the OECD to consider whether it would make sense to build pension fund supervision on the concept of "lines of defence". In ICP 8 (Insurance Core Principles on Risk management and internal controls) the IAIS set the following order (8.1.16):

- first line of defence = management and its actions
- second line of defence = control functions (other than internal audit) like risk management function or actuarial function
- third line of defence = internal audit.

The "line of defence" thinking continues in ICP 17 (Capital Adequacy) where in 17.11.5 the IAIS talks of capital requirements. Especially the assets covering the minimum capital requirement are thought to be the last line of defence.

We do not think that minimum capital requirements should be the general approach in pension supervision. This is because pension funds are very different from insurance and in addition pension funds in different jurisdictions have many (different to insurers) options to respond to financial and other pressures. Such flexibility makes a uniform international solvency structure impractical if not impossible. The principles should however advocate some form of triggers for supervisory action (e.g. insolvency projections). Along with risk based supervision, OECD recommendations could try to incentivize the pension plan to create its own risk management to the direction of improving how it functions.

Whilst observing the principle of proportionality, we support having in the second line of defence the concept of the actuarial function. The actuarial function should utilize a qualified actuary whose work is subject to professional standards, i.e. a member of a full member association of the IAA (International Actuarial Association).

We would also like to point to the fact that the European IORP directive (DIRECTIVE 2003/41/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 3 June 2003), in its article 9, states that "all technical provisions are computed and certified by an actuary or, if not by an actuary, by another specialist in this field, including an auditor, according to national legislation, on the basis of actuarial methods recognised by the competent authorities of the home Member State". In many European countries this has been implemented to mean a fully qualified actuary.

We would like to draw your attention to the work the IAA has, over the years, done with the IAIS in issues concerning insurance. Maybe the most extensive work by the IAA in this area has been the publication of the so-called blue book, A Global Framework for Insurer Solvency Assessment. The IAA blue book proposes the following:

- Three pillar approach:
    - minimum financial requirements
    - supervisory review process
    - measures to foster market discipline
- support to principles based approach
- total balance sheet approach
- degree of protection should be transparent
- appropriate choice of time horizon
- definition of what risks are included
- definition of appropriate risk measures
- recognition of risk dependencies
- role of risk management
- possibility for standardized approaches but support for advanced company-specific approaches
- market efficient capital requirements.

Some of these issues are difficult to frame for pension plans. However, aspects of the insurance framework could be adapted to have application to enhance pension supervision. One central issue is whether the requirements should look at the pension plan in isolation or whether one should think of the combination of the employer and its pension plan/fund[7]. Looking just at the pension plan could have the effect of increasing, or taking actions that give the impression of increasing, the priority creditor status of pension plan beneficiaries above other stakeholders in the company, which often would be in contradiction with local company law.

When the IAA talks of the three pillar approach and the first pillar of minimum financial requirements, it addresses three things:

- appropriate technical provisions (i.e. determination of the liabilities)
- appropriate assets supporting those obligations, and
- a minimum amount of capital (developed from a set of available and required capital elements).

[7] Please see the IAA Note on Enterprise Risk Management for Pensions dated February 2011

We have seen at least in connection to Solvency II in Europe that it is difficult even to start discussion of the third issue[8]. The first two elements, however, seem to be a logical and undisputable component of pension supervision.

We would like to close our general thoughts by considering a topical and typical example of the issues in practice. What is an appropriate level of funding/security for a pension plan that is closed to further accruals and is running down its assets as members retire/pensions are paid? The plan sponsor does not want to risk the plan being overfunded when the last member leaves/dies, as it is a costly and lengthy process (with tax consequences) to return surplus to the employer - even where law permits such. So plans risk continuing in an "unsatisfactory financial position" (in Australian terminology) with the parties talking about what it is they are relying on to think they will ultimately be able to pay the full benefit – typically, favourable future investment returns and/or the sponsor's covenant. Plans in such circumstances highlight the interaction between funding requirements, including the measurement of technical provisions and/or any capital (or "quasi-capital" requirements), disclosure requirements, tax and legal requirements – these must all be considered in combination when articulating funding principles.

## E. Proposed changes to core principles on funding (section 7)

In the short term, we propose the changes set out in Appendix C and as commented on below. We have suggested a consistent use of certain terms, e.g. "plan", through section 7 and the CPs currently seem to use a number of similar meaning terms[9] which suggests some of these terms can be simplified.

Subject to a broader discussion of the points made in parts B to D inclusive of this letter, further changes may be appropriate to the CPs on funding.

7.1 This principle says "occupational pension plans should be adequately funded". But there is no expression of what adequate means. In our view, adequacy relates to the level of assets held. The liabilities depend on the benefits to be provided by the plan, determined according to appropriate (actuarial) standards. The minimum level of assets held is determined by country social policy. The parties to the plan may wish to hold assets in excess of those minimum requirements.

7.3-7.4 We agree that funding should be protected through mechanisms such as funding rules, winding-up provisions, and insurance. This can lead to a broad understanding of what constitutes "assets".

The principles qualify that "occupational unfunded plans should generally be prohibited"[10]. We suggest the last sentence of 7.4 is generalized to cover both book reserved and pay as you go plans, being both examples of unfunded plans.

[8] At least, starting from the perspective of applying insurance capital requirements to pensions

[9] For example, *funding policy, funding principle, funding target, funding objective, funding requirement, funding rule, funding method, actuarial method*.

[10] The German book reserve issue was handled already earlier in this submission. The Guidance document gives the example of executive top up plans.

7.5 We suggest that the word "guaranteed" is replaced by 'protected' for greater transparency. Arguably, the term "guarantee" has been misused in relation to pensions, and certainly misconstrued. A "guarantee" is only as good as the assets[11] backing it and this is what needs to be communicated to plan members.

7.6 Pension plan members ought to be able to understand the implications of the funding policy and be able to answer for themselves the question "what will I get if my employer goes bust". We have rephrased 7.6 to stress transparency of objective over technical matters like what actuarial method was used.

7.7-7.8 We felt that the liability definitions used here could be worded more precicely (we have similarly clarified the definitions in 7.20 – 7.22). Further, increasing numbers of defined benefit plans have closed to accruals since these principles were first written and it seems appropriate to cover this category explicitly too. We have also reordered to CP 7.7 the provisions on vesting in CP 7.8 and on salary growth in CP 7.15 as we feel that they fit better in CP 7.7.

7.9 It is confusing what is meant by "amortisation rules" here. This group of principles (CP7.7 to 7.13) is about liabilities, neither smoothing nor pacing of contributions. The second sentence could be read to imply that the regulator would only take action if "actuarial standards" were unacceptable but not if the other "appropriate calculation methods", whatever they may be, mentioned in the first sentence were unacceptable.

7.10-11 The term 'prudent' is widely used throughout these principles. Is the intention that it is defined by the parties to the pension plan, subject to a minimum of local law requirements?

When looking at actuarial assumptions, prudence would be assessed relative to the purpose of the valuation – e.g. the discount rate could be assessed relative to expected asset return assumptions, to nil risk rates, or the nature of the liabilities etc. Prudence could also be defined relative to a standard basis, e.g.IAS19/IFRS4, or an absolute basis that takes account of plan characteristics such as a proportion of the liabilities on a solvency basis[12].

7.11 It is unclear what is intended by the wording "the use of prudent discount rates for determining liabilities that are consistent with the methodologies used in the valuation of the assets". We have rephrased accordingly to refer to the discount rate being consistent with market conditions and expectations. This would seem to cater for scenarios where the discount rate is being determined relative to the nature of the liabilities (or, where it can be justified, the plan's assets e.g. in certain risk based plans or where part of the benefits provided by a plan are contingent or discretionary in nature), whilst avoiding use of non-market consistent measures that do not add to transparency.

[11] In the plan, on the sponsor's balance sheet (if the plan has a legal call on the sponsor's balance sheet) or insurance/guarantee arrangements.

[12] It is a very human trait to seek to re-express a funding status of say 80% of winding up liability as 100% of a weaker funding target.

7.14 We are not clear what is meant here by the "the link between the pension plan's assets and its liabilities". Is this about the extent to which the assets match the liabilities?

7.15-19 These principles consider impacts on funding of smoothing, amortizing surplus and deficits, dampening the level of contributions payable in the short term, countercyclical approaches etc. We consider that the funding policy in 7.6 needs to state clearly what contributions are payable and how this will likely impact the funding level in the short term. If smoothing is used, to ensure transparency outputs (e.g. contributions) should be smoothed, not inputs (method and assumptions to determine the liabilities). This is another reason why we deleted "amortization rules" from 7.9 which deals with determining the liabilities. Amortization and (maximum) amortization periods are a political matter pertaining to what is affordable for individual sponsors or collectively for the economy – long amortization periods for a plan in deficit mean lower member security. It was also not clear to us why countercyclical approaches should be incentivized relative to other approaches that meet the funding objective.

It would further add to transparency were there to be a test of the likelihood that future sponsor (and member) contributions can cover the deficit in the plan (this could form part of the ORSA – own risk and solvency assessment – being considered by the European Commission for regulating pension funds in Europe).

7.i This principle may be too restrictive in referencing temporary suspension of contribution obligations to circumstances of high levels of overfunding only. A better reference point may be the target funding level consistent with the funding objective. However if the principle is designed to address the apparent asymmetry between contribution holidays (which seem to happen fast) and deficits (which are recouped over time) then this may be a good principle to make politically. We do though think that matters to do with reimbursement of excess assets have to have regard to the winding up liability as well as the ongoing liability. The principle is akin to thinking on the treatment of excess capital for proprietary insurance companies.

7.20 We support the principle that where the pension plan underwrites the liability without support from plan sponsors or members, the plan "should be required to hold additional assets over and above those necessary to fully fund the pension liabilities on a plan termination basis". One could think such an entity should generally be treated in a similar manner to an insurance company, subject of course to the extent to which the plan rules provide if and when benefits can be cut back if the plan is in deficit (in insurance the guarantee is full and, in some countries, an insolvency guarantee arrangement applies across insurers which protects policyholders if an insurer were to default).

## F. Definitions

As stated, this letter concerns section 7 on funding. We would be pleased to comment also on other parts of the document if this would be of help.

The definitions are a central issue and we would like to focus on the definitions of "pension entity" and "pension fund"– reproduced below

The definitions are as follows:

- **Pension entity** – The independent legal entity with legal capacity that has ultimate legal responsibility for the pension fund. It can take the form of an independent legal entity acting as a pension trustee (such as a corporate trustee in the case of pension funds established as trusts), or a pension fund with legal capacity (such as foundations and mutual associations) or a pension fund management company. An insurance company or other financial institution may be considered a pension entity insofar as it is legally responsible for a pension fund and otherwise fits the definition of the first phrase of this definition. The term "pension entity" does not refer to plan participants, the plan itself, or the employer (unless the employer is also the pension fund management company or has directly contracted a management company to handle the corporate pension).

- **Pension fund** – The pool of assets forming an independent legal entity that is bought with the contributions to a pension plan for the exclusive purpose of financing pension plan benefits. The plan/fund members have a legal or beneficial right or some other contractual claim against the assets of the pension fund. Pension funds take the form of either a trust, an independent entity with legal capacity (such as a foundation or mutual association) or a legally separated fund without legal capacity managed by a dedicated provider (pension fund management company) or other financial institution on behalf of the plan/fund members. The term "pension fund" does not refer to individual pension contracts.

The paper no longer has a definition of a pension plan although the term is used widely through the document. In defining the pension plan, we suggest to talk of the legal or contractual setting of the pension arrangement defining who is responsible for what. We would then express a pension fund (if that term is still needed) as a form of financing vehicle for the pension plan that holds collateral assets in support of delivering the pension promise.

Finally, we comment that CP 7.12 references the actuary (or equivalent specialist). You may want to consider a definition for an actuary. The OECD Guidelines on Insurer Governance contain the following

> "*c. Fitness and propriety*
> *The actuary should, in addition to having requisite integrity and expertise, be a member in good standing in a professional association that requires adherence to sound standards of actuarial practice, quality control and ethics.*"

Further we would reference that the professional association is a full member of the International Actuarial Association.

## Appendix A

### Full Member Organizations – 64

Caribbean Actuarial Association
Consejo Profesional de Ciencias Económicas de la Ciudad Autónoma de Buenos Aires (Argentina)
Actuaries Institute Australia (Australia)
Aktuarvereinigung Österreichs (AVÖ) (Austria)
Institut des Actuaires en Belgique (Belgique)
Aktuarsko Drustvo U Bosni I Hercegovini (Bosnia and Herzegovina)
Instituto Brasileiro de Atuária (IBA) (Brazil)
Bulgarian Actuarial Society (Bulgaria)
Canadian Institute of Actuaries/Institut Canadien des Actuaires (Canada)
China Association of Actuaries (China)
Actuarial Institute of Chinese Taipei (Chinese Taipei)
Asociación Colombiana de Actuarios (Colombia)
Institut des Actuaires de Côte d'Ivoire (Côte D`Ivoire)
Hrvatsko Aktuarsko Drustvo (Croatia)
Cyprus Association of Actuaries (Cyprus)
Ceská Spolecnost Aktuárù (Czech Republic)
Den Danske Aktuarforening (Denmark)
Egyptian Society of Actuaries (Egypt)
Eesti Aktuaaride Liit (Estonia)
Suomen Aktuaariyhdistys (Finland)
Institut des Actuaires (France)
Deutsche Aktuarvereinigung e. V. (DAV) (Germany)
Hellenic Actuarial Society (Greece)
Actuarial Society of Hong Kong (Hong Kong)
Magyar Aktuárius Társaság (Hungary)
Félag Islenskra Tryggingastærðfræðinga (Iceland)
Institute of Actuaries of India (India)
Persatuan Aktuaris Indonesia (Indonesia)
Society of Actuaries in Ireland (Ireland)
Israel Association of Actuaries (Israel)
Istituto Italiano degli Attuari (Italy)
Institute of Actuaries of Japan (Japan)
Japanese Society of Certified Pension Actuaries (Japan)
The Actuarial Society of Kenya (Kenya)
Latvijas Aktuaru Asociacija (Latvia)
Lebanese Association of Actuaries (Lebanon)
Lietuvos Aktuariju Draugija (Lithuania)
Persatuan Aktuari Malaysia (Malaysia)
Colegio Nacional de Actuarios A. C. (Mexico)
Association Marocaine des Actuaires (Morocco)
Het Actuarieel Genootschap (Netherlands)
New Zealand Society of Actuaries (New Zealand)
Den Norske Aktuarforening (Norway)

Pakistan Society of Actuaries (Pakistan)
Actuarial Society of the Philippines (Philippines)
Polskie Stowarzyszenie Aktuariuszy (Poland)
Instituto dos Actuários Portugueses (Portugal)
Russian Guild of Actuaries (Russia)
Udruzenje Aktuara Srbije (Serbia)
Singapore Actuarial Society (Singapore)
Slovenska Spolocnost Aktuarov (Slovakia)
Slovensko Aktuarsko Drustvo (Slovenia)
Actuarial Society of South Africa (South Africa)
Col.legi d'Actuaris de Catalunya (Spain)
Instituto de Actuarios Españoles (Spain)
Svenska Aktuarieföreningen (Sweden)
Association Suisse des Actuaires (Switzerland)
Society of Actuaries of Thailand (Thailand)
Institute and Faculty of Actuaries (United Kingdom)
American Academy of Actuaries (United States)
American Society of Pension Professionals & Actuaries (United States)
Casualty Actuarial Society (United States)
Conference of Consulting Actuaries (United States)
Society of Actuaries (United States)

**Appendix B**
**Members of the IAA Pensions and Employee Benefits Committee**

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| Gary Ryan Hibbard | Chairperson |
| Esko Kivisaari | Co-Vice-Chairperson |
| Thomas S Terry | Co-Vice-Chairperson |

*Members:*

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| Félix Arias Bergadà | Life Section |
| Charles Anthony Cowling | Institute and Faculty of Actuaries |
| Barbara D'Ambrogi-Ola | Suomen Aktuaariyhdistys |
| Philippe Demol | Institut des Actuaires en Belgique |
| Maria Economou | Hellenic Actuarial Society |
| Erik Falk | Den Norske Aktuarforening |
| Yasuyuki Fujii | Japanese Society of Certified Pension Actuaries |
| Alfred E. Gohdes | Deutsche Aktuarvereinigung e. V. (DAV) |
| Kenneth F. Hohman | American Academy of Actuaries |
| Martin Janecek | Ceská Spolecnost Aktuárù |
| Pari Kandhai | Het Actuarieel Genootschap |
| Henry Peter John Karsten | Instituto de Actuarios Españoles |
| Sylvestre Konin | Institut des Actuaires de Côte d'Ivoire |
| Martin Kosztolanyi | Slovenska Spolocnost Aktuarov |
| Åsa Larson | Svenska Aktuarieföreningen |
| Safia Lekehal | Institut des Actuaires |
| Tze Kei Jack Mak | Actuarial Society of Hong Kong |
| Jason J Malone | Canadian Institute of Actuaries |
| José Roberto Montello | Instituto Brasileiro de Atuária (IBA) |
| José Muriel Del Sordo | Colegio Nacional de Actuarios A. C. |
| John Michael Newman | Actuaries Institute Australia |
| Joseph A Nichols | American Society of Pension Professionals & Actuaries |
| Konrad Niklewicz | Association Suisse des Actuaires |
| Masaaki Ono | Institute of Actuaries of Japan |
| Ieva Ose | Latvijas Aktuaru Asociacija |
| Gediminas Rackauskas | Lietuvos aktuariju draugija |
| Ana Margarida Da Silva Ramos Estrela | Instituto dos Actuários Portugueses |
| Ksenija Sanjkovic | Hrvatsko Aktuarsko Drustvo |
| Donald J Segal | Society of Actuaries |
| Anna Vyacheslavovna Selivanova | Russian Guild of Actuaries |
| David Serr | Israel Association of Actuaries |
| Philip Stewart Shier | Society of Actuaries in Ireland |
| Rodrigo Silva | Asociación Colombiana de Actuarios |
| Kollimarla Subrahmanyam | Institute of Actuaries of India |
| Joan Angel Vergés Guerra | Col.legi d'Actuaris de Catalunya |
| Mark Whatley | Singapore Actuarial Society |
| Xiao Qiang Zhao | China Association of Actuaries |

**Appendix C**

## Funding Principles – Proposed Changes

**Core Principle 7: Occupational pension plan liabilities, funding rules, winding up, and insurance**

Occupational pension plans should be adequately funded. The adequacy of funding should be protected through mechanisms such as funding rules, winding-up provisions, and insurance.

While full-funding exists in principle for occupational defined contribution plans, other types of occupational plans should be subject to minimum funding rules or other mechanisms to ensure adequate funding of pension liabilities. Rules based on winding-up approach may be promoted as a minimum level to complement the ongoing approach. Flexibility can be allowed for temporary limited under-funding under restricted circumstances. Consideration should be given to the development of prudent but flexible requirements for minimum ~~capital/guarantee~~levels of assets or insurance guaranty arrangements in pension funds, taking account of the long term nature of their liabilities. Tax and prudential regulations should encourage a prudent level of funding. ~~Private u~~Unfunded ~~pay-as-you-go~~ plans at ~~individual~~ company level should generally be prohibited.

Appropriate calculation methods for ~~asset valuation and liabilities~~ liability ~~funding~~valuation, including actuarial techniques, and asset valuation ~~and amortisation rules~~ must be set up and based on transparent and comparable standards.

Proper winding-up mechanisms should be put in place. Arrangements (including, where necessary, priority creditors' rights for pension ~~funds~~plans) should be put in place to ensure that contributions owed to the ~~fund~~ plan by the ~~employer~~ sponsor are paid in the event of ~~his~~ its insolvency, in accordance with national laws.

The need for insolvency insurance and/or other ~~guarantee~~ guaranty schemes for occupational pension plans has to be properly evaluated. These mechanisms may be recommended in some cases but in an adequate framework. Recourse to insurance mechanisms (group and reinsurance) may be promoted.

### Implementing Guidelines for Core Principle 7

**Funding of occupational pension plans**

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| 7.1 | Occupational pension plans should be adequately funded. The liabilities are determined according to the nature of the benefits provided. The level of assets held that is deemed to be adequate is a matter for the sponsor and governing party to the pension plan, subject to legal minimum requirements based on country social policy. |
| 7.2 | Occupational defined contribution plans should be funded through the establishment of |

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| | pension funds, pension insurance contracts or the purchase of other authorised retirement savings products from financial institutions. |
| 7.3 | Occupational defined benefit plans should in general be funded through the establishment of pension funds, pension insurance contracts or a combination of these mechanisms. Additional protection may be provided through the recognition of creditor rights of the pension ~~fund~~ plan or the plan members and beneficiaries against the sponsor where the sponsor bears the risk of the pension promise, or of the plan members and beneficiaries against the pension ~~fund~~plan [and its shareholders where the pension plan bears the risk of pension promise, and through insolvency guaranty schemes that protect pension benefits in part or in whole in the case of insolvency of the plan sponsor or the pension fund. |
| 7.4 | Occupational unfunded plans should generally be prohibited. The establishment of an insolvency guaranty scheme should [generally be required for occupational defined benefit plans that are financed through the book reserve system or on a pay as you go basis. |
| 7.5 | Insolvency guaranty schemes in occupational plans should rely on appropriate pricing of the insurance provided and limitations on the level of benefits ~~guaranteed~~ protected in order to avoid unwarranted incentives for risk-taking (moral hazard). |
| 7.6 | Occupational defined benefit pension plans should have a written funding policy that specifies the funding objective~~sources of funding~~, the level of target funding on an ongoing and termination liability basis, the sources and mechanisms for fulfilling target funding ~~actuarial method to be used~~, ~~and~~ the level of actual funding, ~~mechanisms for fulfilling legal funding requirements~~and how quickly target funding is projected to be achieved. The policy should be communicated to plan members. |

**Measurement of occupational pension plan liabilities**

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| 7.7 | Legal provisions should be in place requiring the determination of occupational pension plan liabilities corresponding to the financial commitments or obligations which arise out of the pension arrangement.<br><br>The ongoing liability is normally defined as the accrued benefit rights of pension plan members and beneficiaries excluding future service but taking into account the projected benefits to be received under estimated retirement, mortality, and early leaver (also known as membership termination or job separation) patterns and whether plan eligibility and vesting requirements are met at those estimated retirement/death/leaving service dates. The funding objective may include allowance for projected future salaries or discretionary benefit increases (based on past or assumed future practice) in the ongoing liability.<br><br>Alternatively, further accrual of benefits under the plan may have ceased but the plan has not been terminated. The determination of the liability may follow ongoing liability principles if the sponsor remains liable for contributions to fund the accrued benefits due under the plan. If, where law permits, the plan continues to operate but without commitment from the sponsor to fund any deficit arising, the liability will follow the principles in 7.20.<br><br>The termination liability takes into account the pension benefits accrued if the plan itself terminates (winds up)~~were to be terminated~~ at the time of the valuation. The termination |

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| | liability will be equal to the costs of extinguishing benefits at that time (for example, by purchasing annuities with an insurance company or payment of lump sums to members) plus costs of termination. |
| 7.8 | Any definitions of ongoing and termination liability should reflect any benefit indexation factors prescribed by law or plan terms (unconditional indexation) that apply from membership or plan termination to the annuity starting date and, if relevant, after the annuity starting date, provided that these factors are predictable. ~~These definitions should also reflect benefits that become vested upon plan termination.~~ |
| 7.9 | These legal provisions should require that the plan liabilities are assessed using~~e use of~~ appropriate calculation methods, including actuarial methods ~~and amortisation rules~~ that are consistent with generally recognised actuarial standards. The legal provisions should allow the supervisor to require additional prudence or specify additional requirements if ~~using~~ the methods ~~current~~being used ~~standards~~ create~~s~~ an unacceptable risk to member benefits. |
| 7.10 | The legal provisions should require the use of prudent funding methods and demographic and economic assumptions which are considered appropriate for the calculation of the pension plan's liabilities and are consistent with generally recognised actuarial standards. Prudence should be assessed given the funding objective and looking at the funding method and assumptions as a whole. For example, a termination liability for a plan with no future accrual of benefits assessed using a nil risk discount rate may give rise to a higher liability than an ongoing valuation including projected future salary growth but using a discount rate based on the expected return on assets held.<br><br>These assumptions would include, among others, the mortality table (representing the assumed level of mortality of plan members and beneficiaries as at the date at which the plan's liabilities are calculated), future trends in mortality (representing permanent changes in mortality that are assumed to occur after the date at which the liabilities are calculated), ~~and~~ retirement and early leaver patterns at different ages ~~-~~(taking into account the actual retirement and early leaver behaviour of those covered by the plan) and, where the plan design provides members with options how to take their benefits, assumed take up rates that do not give rise to advance recognition of any profit. |
| 7.11 | The legal provisions (referencing generally recognised actuarial standards and methods) should require the use of prudent discount rates for determining liabilities that are consistent with ~~the methodologies used in the valuation of assets~~market conditions and expectations, and are compatible with other economic assumptions. These legal provisions (or the actuarial profession) should provide guidance as to the factors that may be considered in determining the discount rate for ongoing and termination liabilities. |
| 7.12 | The calculation of pension liabilities should take place at least once every three years, while a certification or report of the adjusted development of the liabilities and changes in risks covered should be required for the intervening years. All actuarial valuations should be carried out by an actuary, or by another equivalent specialist, who is required to meet suitability requirements related to competence in the field of pensions and integrity. |
| 7.13 | As part of the process of defining its funding policy, the governing body of the pension |

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| | ~~fund~~ plan should seek the advice of the actuary or other relevant specialist regarding the assumptions and methods to be used in calculating pension liabilities and funding levels. This advice should be provided in a clear and timely fashion. |

**Funding requirements for occupational defined benefit plans and treatment of any surplus or deficits**

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| 7.14 | The legal provisions require the identification and maintenance of a level of assets that would be at least equal to the target funding level after costs of operation of the plan (if these costs are met by the plan)~~sufficient to meet accrued benefit payments~~. The targeted funding level may be based on the termination or the ongoing liability depending on the funding objective. It should also take account of the plan sponsor's ability and commitment to increase contributions to the pension plan in situations of underfunding, the possibility of benefit adjustments or changes in retirement ages in response to underfunding, as well as the link[13] between the pension ~~fund's~~ plan's assets and its liabilities. The funding target should balance the need for benefit security and the affordability of pension provision. |
| ~~7.15~~ | ~~Approved funding methods (also known as actuarial cost methods) for the ongoing liability should reduce the risk of sharply rising cost curves over time by spreading the actuarial (or accrued) liability over the expected career path of plan members. In order to ensure adequate funding levels over time, ongoing funding methods should take into account factors such as future salary growth, mortality, disability, early leaver (separation) and other relevant events.~~ |
| 7.16 | In addition to the accrual of ~~normal costs~~benefits for service over ~~(the present value of benefits that have accrued on behalf of the members during~~ the inter-valuation period ("normal cost")~~)~~, other benefit liabilities ("supplemental costs") may arise over the inter-valuation period ~~contributions should reflect other factors, including, to the extent appropriate to~~such as the accrual of benefits under the plan for~~,~~ work before a plan's inception or~~,~~ plan amendments that increase liability attributable to past service. These should be recognised in the ongoing and termination liability in accordance with the governing documentation of the plan.<br><br>Additionally there may be surplus or deficit arising from~~,~~ deviations of actual results from assumptions (experience gains and losses)~~,~~ and the effects of changes in assumptions (actuarial gains and losses) when compared with the expected funding level based on the previous valuation.<br><br>~~These supplemental costs should be~~ In addition to any member contributions payable in accordance with the governing documentation of the plan, the governing body of the pension plan should agree with the sponsor what additional contributions the sponsor will pay into the plan and over what period(s) to meet the normal cost, supplemental costs and other sources of surplus/deficit arising over the inter-valuation period. ~~amortised in a manner that appropriately balances the need for adequate funding with the possible consequences of volatile contribution requirements.~~ For example, ~~supplemental~~ contributions to cover ~~costs~~surplus/deficit might be paid as a one-off lump sum |

[13] Does this mean the degree of matching?

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| | contribution, amortised over a period expressed as even currency units or at a minimum as even percentages of payroll to reduce short term volatility in the sponsor's funding contributions. Amortisation periods should be consistent with the funding objective and in general not be longer than the expected future period of service of active plan participants. |
| ~~7.17~~ | ~~The legal provisions should not prevent funding methods that seek to dampen the short term volatility in firms' funding contributions. Prudent amortisation of supplemental costs over time might help achieve a smoother contribution schedule and more stable funding levels.~~ |
| 7.18 | The~~se~~ legal provisions set out acceptable mechanisms and recovery periods for correcting situations of over or underfunding, taking into account the sources of such over or underfunding and the plan's funding objective~~type of underfunding (ongoing or termination basis)~~. The legal provisions should clearly describe the restrictive circumstances, if any, under which reprieve from contribution obligations may be possible or contributions must be accelerated; any such reprieve or acceleration should be subject to defined limits. |
| 7.19 | The acceptable mechanisms in 7.18 ~~Funding requirements~~ should include promoting~~e~~ a countercyclical ~~funding~~approach~~, providing incentives~~ to build reserves against future market downturns. They should also take market volatility into account when limiting contributions (or their tax deductibility) as a certain funding level is reached. Tax regulations should not discourage the build-up of sufficient reserves to withstand adverse market conditions and should avoid restricting the full funding of the ongoing or termination liability. |
| 7.i | Temporary suspension of contribution obligations, [benefit increases??, or a return of the surplus to the plan sponsor should only be permitted in circumstances of high levels of overfunding (calculated ~~on an on-going basis~~against the higher of the on-going or termination liability). Such actions should be subject to restrictions and controls on what is allowed, which take account of both the interests of members and beneficiaries and the security of the benefits promised by the pension plan, and be communicated to members. |
| 7.20 | Funding requirements should take into account the extent to which the pension entity itself as opposed to the plan sponsor or the plan members is directly responsible partly or wholly for the commitments represented by the pension liabilities. Where the pension entity itself underwrites the pension liability without any ~~guarantee~~ commitment from the plan sponsor or members to make good any deficit, the funding objective ~~it~~ should ~~be~~ require~~d~~ ~~to hold~~ additional assets to be held over and above those necessary to fully fund the accrued pension liabilities ~~on a~~if the plan ~~termination~~ terminated and benefits were extinguished~~basis~~. This capital requirement or solvency margin should be determined taking into account all relevant and material categories of risk, ~~the extent to which the risks are addressed in the valuations of assets and liabilities~~, the nature ~~and size~~ of both the assets held and the liabilities due that are the responsibility of the pension ~~fund~~ plan, costs of operation of the plan, risk mitigation measures in place and the extent to which benefits may be reduced. |

**Winding up of occupational pension plans**

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| 7.21 | The allocation of plan assets and the responsibility for underfunding in the event of termination of an occupational pension plan and the extinguishing of the plan's obligation to pay benefits to members and beneficiaries -should be clearly established. In the event that assets exceed ~~promised~~ the benefits set out in the governing documents of the plan together with the costs of terminating the plan ~~on a termination basis~~, there should be rules in place as to the allocation of the funding excess or surplus. In the event that assets are insufficient to cover ~~promised~~ benefits and costs, there should be rules concerning the benefit payment allocation. |
| 7.22 | Whenever the sponsor bears the risk of the pension promise~~plan benefits are guaranteed by sponsoring employers~~, the creditor rights of pension plan members and beneficiaries (either directly, via the pension ~~fund~~plan, or, where relevant, via insolvency ~~guarantee~~ guaranty schemes) should be recognised in the case of bankruptcy of the plan sponsor. Priority rights relative to other creditors should be required for at least due and unpaid contributions. |