

# STATES OF JERSEY



## DRAFT DAMAGES (JERSEY) LAW 201-

---

Lodged au Greffe on 24th October 2018  
by the Chief Minister

---

STATES GREFFE





Jersey

## **DRAFT DAMAGES (JERSEY) LAW 201-**

### **European Convention on Human Rights**

In accordance with the provisions of Article 16 of the Human Rights (Jersey) Law 2000, the Chief Minister has made the following statement –

In the view of the Chief Minister, the provisions of the Draft Damages (Jersey) Law 201- are compatible with the Convention Rights.

Signed: **Senator J.A.N. Le Fondré**

*Chief Minister*

Dated: 19th October 2018

# REPORT

---

## SUMMARY

The Draft Damages (Jersey) Law 201- (the “draft Law”) addresses 2 issues relating to awards of damages for those who suffer long-term injuries and require care for years into the future, if not for the rest of their lives.

The draft Law will –

- (a) set a statutory discount rate, to be used when determining damages that are awarded as a single lump sum;
- (b) create a statutory power to award damages by way of Periodical Payment Orders. This would provide for annual payments to cover future care costs and lost earnings as they arise, as distinct from a single lump sum payment.<sup>1</sup>

## 1. BACKGROUND

### Principles of compensation

The draft Law concerns awards of damages for personal injury where damages need to be sufficient to cover future loss and expenses caused by the injury. For example: if someone is injured in a road accident and cannot work again, they can claim for lost future income; if someone is injured so that they need care and treatment in the future, the damages awarded should be sufficient to pay for that.

The difficulty in awarding damages is that it is impossible to know exactly how much the claimant will need. Whilst working-years can be predicted with reasonable accuracy in respect of lost earnings, this is not the case for life expectancy or future care costs.

In matters of damages for personal injury, Jersey’s courts have generally adopted English common law. The principle is that: “*the claimant should receive full compensation for the loss which he has suffered as a result of the defendant’s tort, not a penny more but not a penny less*”<sup>2</sup> – i.e. the claimant should be fully, but not overly, compensated for their loss.

The court must determine the amount the injured person needs to cover their loss, but that calculation must include both the capital sum and income earned on that sum. If not, the injured person, or those who inherit their estate, may be over-compensated.<sup>3</sup>

In simple terms, if someone needs £100,000 per year for the next 20 years to pay for their care, it would be wrong to give them a £2,000,000 lump sum (i.e. £100,000 for each of those 20 years), on the grounds that the £2,000,000 will itself earn money and, at the end of the period, there will be a sizeable sum left over.

---

<sup>1</sup> The question of whether Jersey customary law permits the making of Periodic Payment Orders is under litigation at the time this Report was written. The making of this Proposition is without prejudice to what might arise from that litigation.

<sup>2</sup> *Simon v Helmot* – Baroness Hale; an appeal to the Privy Council from Guernsey with the court following English common law principles.

<sup>3</sup> Lord Oliver: *Hodgson v Trapp* – 1988: “*Essentially what the court has to do is to calculate as best it can the sum of money which will on the one hand be adequate, by its capital and income, to provide annually for the injured person a sum equal to his estimated annual loss over the whole of the period during which that loss is likely to continue, but which, on the other hand, will not, at the end of that period, leave him in a better financial position than he would have been apart from the accident.*”

However, the assessment of awards is not a simple matter, as it is necessary to take account of –

- the likelihood that the cost of care will increase year by year;
- how long the victim will need care (the uncertainty of life expectancy) and whether their situation might improve or deteriorate
- advances in medical science that might increase or reduce care costs.

The difficulty of determining the correct award is demonstrated by the medical negligence case of *Lim Poh Choo*, which was settled in 1980 for the sum of £250,000. At the time of settlement, her care costs were calculated at £8,000 a year. According to the RPI, that £8,000 should now be £25,000, whereas by 2005 her actual care costs had actually risen to £65,000 a year. The court significantly underestimated her future care costs yet, despite that, her care fund still increased to £1.375 million as a result of investment income. *Lim Poh Choo* was over-compensated.

### **The discount rate**

Ultimately, in determining a lump sum award, the court must come to a view as to –

- (a) life expectancy;
- (b) costs of care for the future;
- (c) effect of inflation on costs of care (both in terms of retail price inflation and wage inflation);
- (d) investment return (which includes considering both what sort of investments are appropriate in terms of risk and the returns that would be gained on those investments).

The “discount rate” concerns (c) and (d) – the predicted effect of inflation and investment return on what the court needs to provide for full and adequate damages. It is the amount which, including any interest on the award or other investment return, would run out at the point it was no longer needed to pay for care costs or compensate for loss of earnings.

In 1996, the Damages Act was introduced in England and Wales, with the express intent of allowing the Lord Chancellor to set that discount rate, thus negating the requirement for the Court to determine the rate.

This was first done in 2001, when the discount rate was set at 2.5%. It remained at 2.5% until 2017, when the Lord Chancellor set a revised rate of -0.75%. The revised rate reflecting the fact that returns had deteriorated relative to inflation, so that the value of a lump sum award was eroding over time rather than being supplemented by investment returns – meaning that the claimant may be left with insufficient funds to meet their needs, which is contrary to the principle of full and adequate compensation.

The new discount rate created controversy; however, given the effect on insurers and on the NHS where medical negligence claims impact its budget. As a result –

- amendments have been proposed to the Damages Act to create a statutory system for reviewing the discount rate – which is a feature of the proposed draft Law; and
- a consultation was launched jointly by the Ministry of Justice and the Scottish Government into the discount rate. This consultation included detailed analysis by the UK Government Actuary’s Department into investment returns, which has helped inform the proposed Jersey rate (see **Appendix 2 to this report**).

### **Court determined discount rates**

As set out above, it is necessary to have a discount rate when calculating a lump sum award in order to ensure the claimant is neither over-compensated nor under-compensated. However, problems can arise when the rate is determined by the courts, as is currently the case in Jersey, as opposed to the rate being set out in statute. These problems include –

- (a) The court must decide the discount rate on the basis of expert evidence presented at court. If the claimant presents expert evidence which is not challenged by contradictory defence evidence, this must be reflected in the court determination. This is demonstrated by *Simon v Helmo*<sup>4</sup>, a case which has been relied on as the authority for the discount rate in the Channel Islands for the last few years, despite it being based on expert evidence that worked on the assumption that the economic conditions that prevailed before 2009 would continue post-2009. This was demonstrably not the case.
- (b) A rate set by a leading case such as *Simon v Helmo* is effectively set for many years and the court could be expected to apply that rate in other cases, even where concerns remain about the basis for determination. The alternative to allowing a leading case to set the discount rate would be for the court to hear fresh expert evidence in each and every case, in order to determine the rate in each and every case.

Relying on the rate set in leading cases leaves future litigants in the hands of those who made the decisions in those leading cases. On the other hand, revisiting the rate in each case creates chaos and uncertainty, as well as significant expense in terms of calling witnesses. Ultimately, both approaches require non-expert judges of fact to choose between experts.

The draft Law will resolve these issues by setting the discount rate in law. A similar approach has already been taken in England and Wales, except there the discount rate is set by the Lord Chancellor using statutory powers, as distinct from being set in law.

### **Periodical Payment Orders**

Periodical Payment Orders provide for damages to be paid periodically as opposed to being paid in a single lump sum. If a court decides that the claimant will need £100,000 per year to pay for care costs for the rest of his or her life, the court does not need to worry about investment returns or life expectancy. The court can order that £100,000 per year (increased annually by inflation) should be paid for the rest of the claimant's life.

The result is that certain problems with lump sum awards are avoided, as –

---

<sup>4</sup> In 2009 *Simon v Helmo*, the Royal Court of Guernsey considered the discount rate for a catastrophic injury case. The insurance company in the case provided no expert evidence of relevance, whilst the evidence provided on behalf of the plaintiff argued that there should be two discount rates:

- (a) 0.5% in respect of future costs that would be affected by inflation for retail prices; and
- (b) -1.5% in respect of future costs that would be affected by earnings inflation (e.g. cost of paying for carers).

The Jurats in the Royal Court of Guernsey rejected the plaintiff's expert evidence. However, on appeal, it was held that the Jurats should have decided the case based on the evidence before them (i.e. they should not have rejected un-contradicted expert evidence). As a result, a discount rate was set on the basis that there was a permanent gap between Guernsey and UK inflation based on the assumption that pre-2009 trends would continue for decades into the future, regardless of the fact that economic conditions were changing considerably at that time.

- (a) it is not necessary to estimate life expectancy;
- (b) there is no worry that damages will run out before the claimant or injured person dies;
- (c) there is no need for the court to speculate on investment returns;
- (d) there is no concern that there will be a surplus. As courts err on the side of the claimant in making lump sum orders, there is frequently a considerable amount of money left at the time claimant dies. Any lump sum award made on the assumption that its real value will depreciate over time will make a substantial surplus, if instead, there is a positive return on investments.

There are, however, legitimate issues to consider when awarding damages by way of periodical payments, as detailed below –

- (a) An award of damages by periodical payments can only compensate the claimant fully if those payments are secure for the entire term required, usually the remainder of his or her life. Hence, in England, such orders can only be made against public bodies or (as even insurers can go bankrupt) insurers whose liabilities are guaranteed by a statutory scheme.
- (b) Insurers will often prefer to pay a single lump sum as it gives certainty of exposure. In addition, some claimants prefer payment of a lump sum<sup>5</sup>, wanting to decide for themselves how to use the award, potentially prioritising their present needs, given their uncertain life expectancy. In some cases, where a claimant lacks capacity, the court might conclude that the claimant's best interests lie with periodic payments, even where that is contrary to the position of the claimant's representative.
- (c) Periodic Payment Orders in England have sometimes proven inflexible, because it is only possible to vary the Order once in the lifetime of the Order. Given that care costs may rise faster than expected, or a claimant's health may improve unexpectedly, there is need to be able to revisit orders if they are to achieve their purpose. This is addressed in the draft Law, which does not limit the number of times an Order can be varied.
- (d) A lump sum ends all relationship between the claimant and the defendant. An order for periodic payments requires that there is a continued relationship between the claimant and the defendant, and a line is not drawn under the matter.

In England, the Damages Act 1996 already provides for Periodic Payment Orders.

## **2. THE DRAFT DAMAGES (JERSEY) LAW 201-**

### **The discount rate**

The draft Law follows England and Wales in setting a statutory discount rate. A review of the proposed discount rate has been conducted by the States of Jersey's Senior Economist and the Director of Treasury Operations and Investments (see **Appendix 2 to this report**). Their advice is summarised below.

- (a) Fifteen-year data in respect of inflation shows that there is no long-term difference between Jersey inflation and that of the United Kingdom.
- (b) The UK Government's Actuary Department conducted a thorough analysis of investment returns in personal injury cases. There is no reason to believe that

---

<sup>5</sup> As the House of Lords observed in *Wells v Wells*.

a different investment return to that identified by the UK Government's Actuary Department would be applicable to Jersey, nor that there would be anything to be gained in duplicating this. The ground has been covered thoroughly in the UK Government's Actuary Department analysis by its experts, using considerable time and resources.

- (c) The analysis by the UK Government Actuary's Department demonstrates that the current approach to investment return taken in setting the discount rate does not follow the actual investment strategies followed by claimants. The assumption since the case of *Wells v Wells* in the 1990s has been that claimants would invest money with as low-risk as possible. In fact, claimants adopted a "low-risk" as opposed to a "very low-risk" strategy, which makes a considerable difference.
- (d) On the basis of how lump sum damages would actually be invested by claimants, the appropriate discount rates would be –
- where the lump sum is to cover a period of up to 20 years, the discount rate should be +0.5%;
  - where the damages will cover a period of more than 20 years, the discount rate should be +1.8% (and this rate should be applicable to the whole of the award, not just that aimed at meeting costs arising later than 20 years after the award).

#### **Future changes in methodology for the discount rate(s)**

The draft Law provides for the Chief Minister to change the discount rate by Order, after consulting the Bailiff. It also allows the States to provide for Regulations related to the setting of the discount rate in future.

The proposed discount rate is set on the basis that it will fulfil the principle of full compensation<sup>6</sup>.

There are, however, differing views on whether other issues – in addition the principle of full compensation – should be taken into account when setting discount rate, such as –

- how to adjust for the management fees paid to investment managers;
- how to account for insurers' concerns about the economics of the discount rate (for example, in Australia the discount rate tends to be 5 or 6%, accounting for insurers' concerns).

The Regulations and Order-making powers set out in the draft Law are, therefore, important. They provide mechanisms to amend the discount rate, thus allowing for this draft Law to be brought forward in a timely manner ahead of any consequential consideration of supplementary issues related to the discount rate.

---

<sup>6</sup> The only substantive point on which the draft Law may be perceived to move away from the principle of full compensation is that the discount rate may not be negative (i.e. less than 0%). In the event of extreme economic conditions, in which inflation exceeds investment returns, a negative rate would work to help ensure adequate compensation as opposed to under-compensation. However, in the event that such conditions were to arise, it would be necessary to ensure appropriate balance between the right of the claimant to adequate compensation and the public interest; it would not be in the public interest for damages awards to be 'recession-proof' when all other areas of public provision and private services are not. The balance of interests argument applies to other areas of public policy, such as an individual's right to privacy except for where it is not in public interest. Furthermore, the advice on the Personal Injury Discount Rate at **Appendix 2 to this Report** concludes that information on investment returns demonstrate that a 0% discount rate would not be used.

It is proposed that detailed Regulations, providing for matters relating to the setting of the rate in future, will be brought forward for debate within 12 months of the draft Law coming into force.

Article 3 of the draft Law also provides that the Assembly may, by Regulations, amend the [Income Tax \(Jersey\) Law 1961](#), to make provision for the taxation of lump sum payments for future pecuniary loss awarded in personal injury cases. This includes exemption from taxation.

### **Periodical Payment Orders**

Periodical Payment Orders can only be made under the draft Law if future payments are secure. The Order needs to be made against either a Minister or an insurer who is backed by a sufficiently strong statutory compensation scheme. Orders can be made against other public sector bodies, but only where payment is guaranteed by the Minister for Treasury and Resources. This broadly reflects the position under UK legislation, where Periodic Payment Orders require a Minister to guarantee payment, except where the order would be made against a Minister or the health service.

The draft Law does not limit the number of applications that can be made to vary a Periodical Payment Order, although an application can only be made if there is a material change of circumstances. As set out above, in English legislation, variation is only possible once in the lifetime of an Order, which limits what can be done to deal with the under- or over-compensation of the claimant.

## **3. TRANSITIONAL ARRANGEMENTS**

From the date on which the draft Law comes into force – that date being 7 days after registration in the Royal Court if adopted by the States and sanctioned by the Privy Council – a court, including an appeal court, will apply the new provisions.

Where there is ongoing litigation (i.e. a damages case has commenced, but has not been concluded before the draft Law comes into effect), the introduction of statutory provision for Periodic Payment Orders is not problematic. A Periodic Payment Order changes the way an award is paid in order to eliminate over-compensation – annually as opposed to a lump sum – but it does not alter the claimant's right to full compensation. The value of lump sum damages and periodic payments should be the same; both should exactly meet the claimant's losses.

The statutory discount rate may, however, give rise to objections in ongoing litigation. Hence the draft Law provides the Court with a power not to apply the statutory discount rate where it disproportionately interferes with ongoing litigation, or where it may be contrary to Article 6 of the European Convention on Human Rights.

## **4. CONCLUSION**

The draft Law is intended to bring Jersey into line with the British Isles and a number of other jurisdictions with regard to a statutory discount rate and Periodic Payment Orders – albeit with enhanced provisions relating to revisions of such Orders. It is not intended to address other matters relating to personal injury compensation, such as compensation for injury without involving questions of legal liability and negligence, or payments for private care provision even where public care provision will be used.

## **5. FINANCIAL AND MANPOWER IMPLICATIONS**

The Draft Damages (Jersey) Law 201- brings forward statutory provision for the setting of a discount rate and for Periodic Payment Orders. The draft Law upholds the existing common-law principle that a claimant should be fully compensated, but not over-compensated, for their losses. For this reason, the adoption of the draft Law has no financial or resource implications for the States.

## **6. HUMAN RIGHTS**

The notes on the human rights aspects of the draft Law in **Appendix 1 to this report** have been prepared by the Law Officers' Department and are included for the information of States Members. They are not, and should not be taken as, legal advice.

**Human Rights Notes on the Draft Damages (Jersey) Law 201-**

These Notes have been prepared in respect of the Draft Damages (Jersey) Law 201- (“the draft Law”) by the Law Officers’ Department. They summarise the principal human rights issues arising from the contents of the draft Law and explain why, in the Law Officers’ opinion, the draft Law is compatible with the European Convention on Human Rights (“ECHR”).

**These notes are included for the information of States Members. They are not, and should not be taken as, legal advice.**

The draft Law does 2 things –

- (a) It introduces a statutory discount rate in personal injury cases, and allows for the States by Regulations to determine how that rate should be fixed. Pending such Regulations, the rate will be fixed by the Chief Minister in consultation with the Bailiff.
- (b) It introduces a statutory power for the making of Periodical Payment Orders (“PPOs”) in Jersey. (This is without prejudice to all arguments as to whether equivalent provision can be made under Jersey’s customary law.)

**1. Compatibility of substantive provisions**

In respect of the substantive provisions of the new Law, no human rights concerns arise.

It is clear from *Z v United Kingdom* (2002) 34 EHRR 3, that the ECHR does not determine issues of substantive tort law (e.g. when an action lies, and for what damages). An individual has no property right to damages save that which the law allows. Article 1 of Protocol 1 to the ECHR (“A1P1”) provides for a person’s right to their property.

The Convention only comes into play if a situation is created that of itself creates a violation of a substantive right. Whilst a Law that forces an individual into a position of destitution may create a violation of Article 3 (“inhuman or degrading treatment”), a Law to adjust how substantial sums in compensation are to be calculated cannot be said to do that.

**2. Transitional issues**

The human rights question that arises is as to the application in respect of injuries that have already happened.

If B causes an injury to A on 1 January 2018, then B and A can expect any claim for damages to be dealt with under the Law as it existed at that date. This can be analysed in 2 different ways –

- (a) A has a property right to the compensation which arises under the Law as of 1 January 2018, and B has a property right not to have to pay any more than that Law requires. These rights arise from A1P1; or

- (b) If A has started a claim in respect of that loss on, for example, 30 June 2018, then A and B have a right to a fair determination of the claim under Article 6 (“right to a fair trial”), which would be infringed if the Law was changed whilst the claim was in progress.

Under A1P1, legislatures have a wide margin of appreciation in respect of deciding if interference in property rights is justified. The standard applied under A1P1 is whether there is a “fair balance” between potentially competing interests of the person and the state.

However, under Article 6 interference by the legislature is precluded unless the higher standard of “compelling grounds of general interest”<sup>7</sup> is met.

As is often the case in human rights compatibility, what matters is the acceptability of the justification for a measure. If interference with ongoing cases can be justified “on compelling grounds of the general interest” then the lower Article 1 standard of “fair balance” will easily be met, see *R (Reilly) v Secretary of State for Work & Pensions* [2017] QB 657 (“*Reilly*”).

*i. The making of PPOs*

There are no concerns as to creating a statutory regime for a court to order that damages be awarded by way of PPOs. PPOs do not alter the principle of “full compensation” on any view.

*ii. The discount rate*

There are scenarios where there may be objections to changing the discount rate for ongoing cases. For example, if the aim of the discount rate were changed whilst a case is ongoing, so that it no longer set out to achieve full compensation.

However, where a legislature brings in a discount rate that seeks to provide full compensation, and the legislature does so because the rate is right according to present circumstances, those objections are not valid. Hence, changes to the discount rate in England and Wales have taken immediate effect, applying to ongoing litigation, and this will remain the case when the UK’s current discount rate review is put into effect.

As such, the draft Law is compatible with the Human Rights (Jersey) Law 2000 in respect of bringing the changes to the discount rate in immediately.

*iii. Particular comments in respect of the draft Law*

The Law Officers, assuming a change of discount rate by statute creates Article 6 issues, have considered the following in respect of whether there is a compelling reason to justify the Law change –

- (a) The change is general in nature. Applying the recent case of *AXA v HM Advocate* [2012] 1 AC 868 (and 2010 S.L.T. 179 at [155]), this means that the *Zielinski* would not apply. Justification would be considered under A1P1 (i.e. “fair balance”), which would not pose any difficulty.
- (b) Whilst a current litigant might expect a Court process, they have no expectation regarding the result. This is not a case, such as *Reilly*, where the draft Law would change the position with regard to cases whose outcome was known.

---

<sup>7</sup> The *Zielinski* principle (*Zielinski v France* (1999) 31 EHRR 19):

“[T]he principle of the rule of law and the notion of fair trial enshrined in article 6 preclude any interference by the legislature—**other than on compelling grounds of the general interest**—with the administration of justice designed to influence the judicial determination of a dispute.”

- (c) The creation of certainty and stability in this area is of importance in any jurisdiction. It is of particular importance in Jersey where the sums involved in a single case are of greater local economic significance than equivalent cases in the United Kingdom.
- (d) The recent judicial approach in Jersey does not follow the conclusions of the Ministry of Justice and the UK government Actuary's Department as to investment returns, nor does it conform to the up-to-date analysis of the States of Jersey's experts as to earnings-inflation or long-term retail price inflation. There is a compelling reason to legislate to ensure that the discount rate is calculated with such factors to the fore, as opposed to leaving the matter to the vicissitudes of litigation in each case as it arises.
- (e) A human rights backstop has been included at Article 6 of the draft Law. Modelled on the legal aid backstop in section 10 of the Legal Aid, Sentencing and Punishment of Offenders Act 2012, it will permit human rights challenges for those whose claims had been commenced prior to the lodging of the draft Law. Those who commenced proceedings before the Law comes into effect, but after lodging, would have no complaint under any human rights principle as: (a) they brought the claim after it was known that the law would change, and (b) the change was introduced without knowledge that they had brought a claim.

### **3. Future Regulations**

It is noted that there is a general power for the States to make Regulations to regulate the setting of the discount rate. This allows for an improvement from the current position in England and Wales, and in the Isle of Man, where there is a general power to set the rate by regulations/statutory instrument made by the executive.

There can be no human rights compatibility problems with the States Assembly having the power to regulate the setting of the discount rate if, as is plainly the case, there would be no objection in an unregulated power for the executive to set the discount rate.

Although the States of Jersey may provide by Regulations to consider factors other than those seen as relevant to "full compensation", in such a case the Regulations would need appropriate transitional measures.

### **4. The 0% floor**

The draft Law at Article 2(7) prevents the Minister from revising the discount rate to below 0%. This will not apply in respect of cases to be considered in the foreseeable future. The analysis set out in the Report within this Projet shows that higher rates should be set at present.

Should matters change to mean that the long-term economic position of Jersey means that a negative discount rate would be required for "full compensation", then this would represent a severely negative economic prognosis for the Island. This would be a compelling reason to deviate from "full compensation".

## **5. Conclusion**

The Law Officers have given the draft Law close scrutiny due to the sensitivity of the human rights issues involved, and noting the sensitivities created by the recent *Reilly* decision.

For the reasons given above, the Law Officers believe that the draft Law is compatible. The effect of the draft Law will be to ensure – regardless of the outcome of ongoing litigation – that PPOs can be ordered where lump sum orders are unsatisfactory. The draft Law will bring in a discount rate which follows the Ministry of Justice’s analysis of relevant factors, with appropriate local changes.

## SETTING THE DISCOUNT RATE FOR JERSEY

### Terms of reference

As part of the consultation on potential changes to the legal framework by which the Personal Injury Discount Rate (“PIDR”) is set, the Chief Minister (“CM”) asked the Treasurer of the States and the Chief Economist to analyse outcomes for claimants in receipt of a lump sum award of damages for future financial loss, and in particular to review the analysis undertaken by the UK Government Actuary’s Department (“GAD”) to determine the extent to which that analysis is relevant in Jersey.

In practice, claimant outcomes will depend on a number of factors, including the decisions they make and factors that are beyond their control. Where lump sum damages are awarded for future loss (e.g. cost of future care, loss of income), the aim is that the lump sum and investment return will be sufficient to meet all such loss and be exhausted when the Plaintiff dies. The PIDR for Jersey will be used to adjust the lump sum award to take account of –

- the predicted return on investing the lump sum; and
- any inflation considerations on future losses.

This report considers the appropriate return on investment, and any appropriate rate of inflation in respect of future losses, and makes recommendations as to the appropriate PIDR(s) to be applied in Jersey. The effect of the PIDR on insurance/defendant interests are not to be treated as relevant.

### Background

It is recognised that the setting of a PIDR for use in personal injury cases is not a straightforward exercise, and that the outcome is very important for those affected. The PIDR is an important part of calculating the compensation payable to individuals who have suffered life-changing injuries as a result of the negligence of another person.

Personal injury discount rates already exist in a number of jurisdictions around the world; for example, Australia, Canada, France, Ireland and South Africa. There are a wide variety of discount rates and approaches to setting them, but the majority give the claimant the benefit of a defensive investment strategy. There is also a broad range of rates from 6% (Australian State of Victoria) through to the current negative 0.75% rate in the United Kingdom. In some cases different rates exist depending on the period the award is required to cover.

For the most recent and relevant research on the setting of discount rates, we can look to the UK Ministry of Justice and Scottish Government’s consultation: “*The Personal Injury Discount: How it Should be set in the future*” (September 2017). This consultation received contributions from a wide range of participants, including the Association of British Insurers, the Institute and Faculty of Actuaries, and the Wealth Managers’ Association (now the Personal Investment Management and Financial Advice Association).

## Recent consultation

Under the UK Damages Act 1996, the discount rate taken into account by the court in assessing the rate of return to be expected is set by the Lord Chancellor on the basis of principles set out in case law. Under these principles, the injured person is assumed to be a very cautious investor, different from other ordinary investors because they are required to invest their settlements to secure their future financial position. In practice, this led to the discount rate being set largely by reference to returns on Index-Linked Gilts (“ILG”), considered to be a “very low-risk” portfolio.

Definition of an investor’s risk profile can vary amongst wealth managers, as risk appetite is defined by a number of factors such as time horizon, investment goals, individual experience and acceptance of losses. For an industry standard of investment portfolio construction we can look to the MSCI Wealth Management Association Private Investor Indices.

					
Asset class	Conservative	Income	Balanced	Growth	Global Growth
UK Equities	17.50%	30.00%	30.00%	35.00%	90.00%
Overseas Equities	15.00%	22.50%	32.50%	42.50%	5.00%
Fixed Interest Gilts	10.00%	5.00%	5.00%	2.50%	0.00%
Index-Linked Gilts	5.00%	2.50%	2.50%	0.00%	0.00%
Corporate Bonds	25.00%	17.50%	10.00%	5.00%	0.00%
Cash	5.00%	5.00%	5.00%	2.50%	2.50%
Property	5.00%	5.00%	5.00%	5.00%	0.00%
Alternatives (Hedge Funds)	17.50%	12.50%	10.00%	7.50%	2.50%
<b>TOTAL</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

Evidence from research and the recent UK consultation shows that claimants generally invest in low-risk diversified portfolios rather than ILG.

Based on the outcomes of the consultation, it was concluded that the PIDR should be set by reference to expected rates of return on a low-risk diversified portfolio of investments rather than very low-risk investments. Low-risk is less risk than would be taken by an ordinary prudent investor, but more risk than very low-risk.

The key principle will be that the rate(s) should be the rate(s) that a recipient of a lump sum of damages for future financial loss, under proper advice, could be expected to achieve if they invested the lump sum in a diversified low-risk portfolio with the aim of securing that –

- (a) the lump sum and the income derived from it would meet the losses and costs for which they are awarded when they are expected to fall due; and
- (b) the relevant damages would be exhausted at the end of the period for which they are awarded.

### A diversified low-risk portfolio

As part of the GAD analysis, 2 assumed investment strategies were considered based on information provided by the investment advisers and wealth managers, in which claimants have invested their awards and the way in which they are advised to invest their awards.

These represent a range of strategies to reflect potential different risk preferences amongst claimants, these have been grouped by risk tolerance to provide ‘average’ or ‘representative’ portfolios.

Asset class	GAD Portfolio A (low risk)	GAD Portfolio B (medium risk)	WMA Conservative
UK Equities	13%	29%	17.5%
Overseas Equities	15%	28%	15%
Fixed Interest Gilts	15%	7%	10%
Index-linked Gilts	5%	3%	5%
Corporate Bonds	21%	14%	25%
Cash	10%	5%	5%
Property	4%	5%	5%
Alternatives (Hedge Funds)	18%	8%	17.5%
<b>TOTAL</b>	100%	100%	100%

*May not sum to 100% due to roundings*

Portfolio A represents an average or typical portfolio invested by a personal injury claimant corresponding most closely with a “low-risk” investment strategy

Portfolio B represents an average or typical portfolio invested by a personal injury claimant who takes more risk than a claimant adopting Portfolio A. It is representative of the highest-risk strategy used by personal injury claimants.

We also show, for comparative purposes, the Wealth Management Association’s Conservative Index, which is the lowest-risk portfolio.

### Setting the Jersey PIDR

In personal injury cases, the PIDR should be a fair assessment of the rate of return that can realistically be expected from the investment of a lump sum award; and evidence of returns from such investments is relevant to the process. Furthermore, the basis for setting the rate should not follow an unrealistic “no risk” approach, e.g. through investment solely in ILG.

The objective of a damages award is to put the claimant in the position they would have been in had the negligence not taken place. Damages are calculated on the basis of an assessment of needs at the time; however, actual claimant outcomes will depend on the decisions made by the claimant and factors that are beyond their control. Some of the choices and factors that will influence claimant investment outcomes include: the investment strategy selected, the investment returns achieved, mortality rates, damage needs and profiles, the rate of inflation, and capacity of loss.

For the purposes of determining the Jersey PIDR, we focus on the most important consideration, which is the investment risk and the potential investment returns.

The table below shows the median annualised effective real return on the assumed portfolio over different award periods. The real return is the expected level of return above inflation. The calculation of portfolio return in real terms means that the level of inflation does not directly influence the results of the analysis, and it is the real returns (i.e. the level of return in excess of inflation) which ultimately drives the results and subsequent determining of the PIDR.

By viewing the portfolio’s performance in real terms, the inflationary impact on the claimant’s costs are also negated.

The table below highlights the difference in returns over different periods, with higher returns expected over longer time periods. This table demonstrates the importance that the duration of the award is likely to have on claimant outcomes, and leads to the conclusion that a different PIDR is appropriate for longer-term awards.

	5 years	10 years	15 years	20 years	30 years	50 years
Portfolio A	0.0%	0.6%	1.0%	1.2%	1.3%	1.6%
Portfolio B	0.0%	1.3%	1.7%	1.9%	2.0%	2.3%

*Note: returns are in excess of RPI and are gross of investment fees, management charges, adviser fees and taxes*

Based upon the average return of both portfolios over periods of time, we recommend breaking down the PIDR into 2 different time frames: (a) 20 years and less; and (b) greater than 20 years.

On this basis, the average return for 20 years and less is 0.9625%; and for greater than 20 years it is 1.8%. For simplicity, we therefore recommend the PIDR is set at 1.0% and 1.8% for these 2 different timeframes.

**Inflation: Jersey vs. UK**

We now consider whether we need to take account of any difference in the rate of inflation between Jersey and the UK. The table below provides a comparison of the annual average change in the Jersey Retail Price Index (Jersey “RPI”) against a similar UK Index (UK “RPIJ”) over various time periods up to June 2018.

Growth over last:	Jersey RPI	UK RPIJ	Differential (percentage points)
1 year	3.4%	2.7%	0.7
2 years	3.4%	2.7%	0.7
5 years	2.4%	1.7%	0.7
10 years	2.6%	2.0%	0.6
15 years	3.0%	2.4%	0.5

*(Source: Statistics Jersey)*

An analysis of the data demonstrates that prices in Jersey have risen slightly more than the UK on a comparable basis, particularly in the short term (less than 15 years). Over longer time periods this differential reduces, and more detailed analysis demonstrates that historically (pre-2010), the differential consistently averaged only 3 percentage points.

The short-term data suggests that an adjustment to the PIDR to reflect the difference in inflation rates might be appropriate, and that this adjustment should be in the region of 0.5%. Over the longer term (greater than 20 years), it is expected that the inflationary differential between Jersey and the UK is anticipated to revert to historic norms and no adjustment should be made. A review of this data should be undertaken on a regular basis as permitted by the legislation.

### **Average earnings in real terms in Jersey**

It is also useful to consider the change in average earnings in ‘real terms’, i.e. adjusting them for retail price inflation. Statistics Jersey produce an annual Average Earnings report in June each year, and the following is taken from their June 2018 release.

The most informative data is over longer time periods, rather than simply reviewing annual changes. The 2 key highlights are as follows –

- Between 2001 – 2018, average earnings have remained relatively flat in real terms, increasing by 0.3% over the 17-year period.
- Since 2011, there has essentially been no change in real-term earnings in any rolling 10-year period.

We can therefore conclude that, whilst it could be argued that there may be some minor fluctuations in real terms from time to time, it is not realistic to expect significant differences over the long term.

### **Other factors**

The results of this analysis demonstrate the wide range of potential outcomes, but they do provide a reasonable illustration of a claimant’s potential investment strategies and the real returns associated with them.

For the purposes of this exercise, certain factors such as mortality rates, investment fees, management charges, adviser fees and taxes, have not been considered. Allowances for these factors would require significant further work and a degree of judgement. However, it should be noted that the specific grant of an award in Jersey is considered as a tax-free event.

### **Summary**

In summary, the following conclusions can be drawn –

- Claimants generally invest in low-risk diversified portfolios, i.e. a blend of equities, gilts, bonds and alternative assets.
- The PIDR should be a fair assessment of the real rate of return that can be realistically expected from the investment of a lump sum award into such a portfolio.
- The calculation of portfolio return in real terms means that the level of inflation does not directly influence the results, and the inflationary impact on the claimant’s costs are also negated.
- Higher portfolio returns can be expected over longer time periods.
- An adjustment to the PIDR is required for inflationary differentials between Jersey and the UK for short-term awards (20 years or less), but no such adjustment is required for awards of greater than 20 years.
- There is no requirement to make an adjustment to the PIDR for any differential between Jersey average earnings and inflation.

- Any differential between Jersey average earnings and UK inflation is provided for through the adjustment for inflationary differentials mentioned above. This is due to there being essentially no change in real-term earnings in any rolling 10-year period since 2011, and an increase of only 0.3% over the 17-year period between 2001 and 2018.

## **Recommendations**

Following the key principle that the PIDR should be the rate(s) that a recipient of a lump sum of damages for future financial loss, under proper advice, could be expected to achieve from the investment of such an award, we reach the following recommendations –

1. It is most appropriate to consider the investment returns of a low-risk diversified portfolio.
2. Reflecting that the expected real return on investments is higher over longer time periods, 2 levels of PIDR should be set as follows –
  - (a) 1%, adjusted for the inflationary difference between Jersey and the UK (currently 0.5%) to cover the whole of an award when it is made for a period of 20 years or less;
  - (b) 1.8%, unadjusted for any inflationary difference between Jersey and the UK, to cover the whole of an award when it is made for a period of more than 20 years.
3. No adjustment is required for any differential between average earnings and RPI in Jersey, any difference between Jersey average earnings and UK RPI is dealt with by the adjustment made in point 2.
4. The ability to review the PIDR should be made available to reflect factors such as changes in expected real returns on investments, changes in the asset allocation in investors' portfolios, and changes in the inflation differential between Jersey and the UK and any other factors considered relevant.



# Government Actuary's Department

## **Ministry of Justice**

Personal Injury Discount Rate Analysis

Date: 19 July 2017

Authors: Stephen Humphrey FIA  
Andrew Jinks FIA

## Contents

<b>1</b>	<b>Executive Summary</b>	<b>1</b>
<b>2</b>	<b>Background and Scope</b>	<b>5</b>
<b>3</b>	<b>Methodology and metrics</b>	<b>7</b>
	Outline of calculations	8
<b>4</b>	<b>Assumptions: damage profile and investment strategy</b>	<b>11</b>
	Damage profile	11
	Investment strategies	11
	PI discount rates	13
<b>5</b>	<b>Assumptions: economic scenarios</b>	<b>14</b>
	Inflation	14
	Real returns on investment	15
	Index-linked gilts	16
	Other considerations	17
<b>6</b>	<b>Results</b>	<b>18</b>
<b>7</b>	<b>Expenses and tax</b>	<b>25</b>
<b>8</b>	<b>Sensitivities</b>	<b>26</b>
<b>9</b>	<b>Limitations and professional compliance</b>	<b>27</b>
	<b>Appendix A: Assumed Investment Strategy</b>	<b>28</b>
	<b>Appendix B: Modelling Index-Linked Gilt Positions</b>	<b>30</b>

---

*At GAD, we seek to achieve a high standard in all our work. We are accredited under the Institute and Faculty of Actuaries' Quality Assurance Scheme. Our website describes the [standards](#) we apply.*

## 1 Executive Summary

- 1.1 As part of the consultation on potential changes to the legal framework by which the Personal Injury Discount Rate ('PI discount rate') is set, the Ministry of Justice ('MoJ') has asked the Government Actuary's Department ('GAD') to analyse outcomes for claimants in receipt of a lump sum award of damages for future financial loss under different illustrative PI discount rates which, based on information gathered during the consultation, reflect the way that claimants invest their award and the way in which they are advised to invest their award by their investment advisers.
- 1.2 In practice claimant outcomes will depend on a number of factors including the decisions they make and factors that are beyond their control. For example, these factors will include:
- > The investment strategy adopted.
  - > The returns achieved on the portfolio.
  - > How long the claimant lives for, relative to the term of the award.
  - > The rate at which the claimant makes withdrawals from the fund to meet their damage needs and how this compares to what was expected at the outset.
- 1.3 The MoJ have asked for the analysis of claimant outcomes in this report to focus on the investment risks faced by the claimant. We have done this by simulating a representative individual claimant's fund under 1,000 economic scenarios. In particular, we have used simulations of future asset returns and inflation from an Economic Scenario Generator to assess:
- > scenarios of the future in which the claimant, in retrospect, was 'over-compensated' in so far as the award proved to be larger than required and the claimant was left with surplus funds at the end of the award period; and
  - > scenarios of the future in which the claimant, in retrospect, was 'under-compensated' in so far as the award proved to be smaller than required and the claimant had inadequate funds to meet all damages throughout the award period.
- In both cases we are not only interested in whether the claimant is over- or under-compensated but also on the level of over-/under-compensation.
- 1.4 The analysis depends critically on a number of key assumptions:
- > **Investment strategy** – The MoJ have calculated two assumed investment strategies that were based on the information provided by investment advisers and wealth managers during the consultation period on the way in which claimants invest their awards and the way in which they are advised to invest their award.

- > **Damage profile** – we have only analysed outcomes for a claimant that has to meet damages of £10,000 per annum, linked to the Retail Prices Index ('RPI') for 30 years.
  - > **PI discount rate award basis** – MoJ asked us to consider outcomes for a number of different PI discount rates that range from RPI-1.75% to RPI+1%.
  - > **Other risks** – we have ignored other risks and factors, for example mortality and inflation.
  - > **Economic simulations** – these are based on economic scenarios generated by a proprietary Economic Scenario Generator ('ESG').
- 1.5 The results of the analysis in this report is limited as we do not consider the sensitivity of the analysis to these assumptions. However, the analysis presented in this report is intended to be illustrative – in particular to demonstrate the wide range of potential claimant outcomes and articulate the risks (and potential benefits) of different award sizes for a given investment strategy. We are satisfied that the assumptions and approach taken provide a reasonable illustration of claimant outcomes and risks faced.
- 1.6 The analysis shows the potential returns that may be achieved on the assumed portfolios over different award periods:

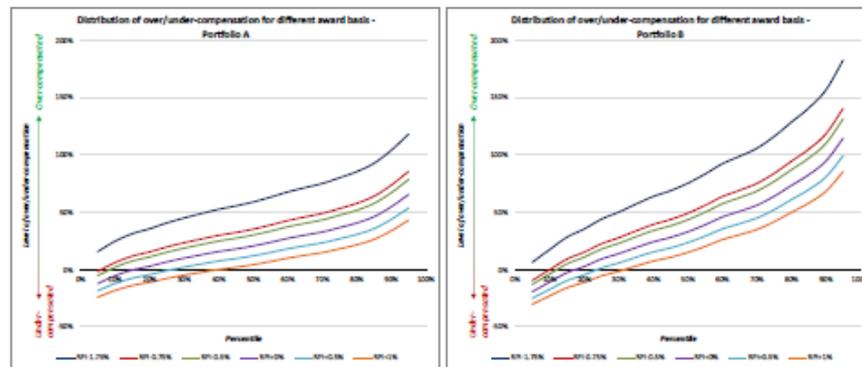
*Table 1 – Expected real returns on claimant portfolios*

Median money weighted real return %pa	Award period / investment horizon					
	5 years	10 years	15 years	20 years	30 years	50 years
Portfolio A	0.0%	0.6%	1.0%	1.2%	1.3%	1.6%
Portfolio B	0.0%	1.3%	1.7%	1.9%	2.0%	2.3%

*Note: returns are in excess of RPI, which over 30 years is projected to be 2.7% pa on average.*

- 1.7 The table demonstrates the importance that the duration of the award is likely to have on claimant outcomes – expected returns over shorter periods are lower, meaning that claimants that adopt a given strategy with shorter awards are more likely to be under-compensated. This feature arises because the distribution of possible future economic scenarios is tilted slightly towards those that follow a "reversion to norm" over time compared to today's low return environment.
- 1.8 The chart below shows the distribution of over-/under-compensation for the assumed investment strategies (Portfolio A and Portfolio B) under different PI discount rate award bases.

**Figure 1 – Distribution of over/under-compensation**



**1.9 The key messages from this analysis are:**

- Under all PI discount rates and both the investment strategies considered, the claimant is over-compensated at the median level (i.e. 50<sup>th</sup> percentile). This reflects the fact that all PI discount rates considered are lower than the median return on the portfolios over the 30 year period (RPI+1.3% pa and RPI+2.0% pa for Portfolio A and B respectively). Under the current PI discount rate (RPI-0.75%), the median level of over-compensation is 35% assuming that the claimant invests in Portfolio A and 49% assuming that the claimant invests in Portfolio B.
- The investment strategies considered are not 'risk free' – even if the PI discount rate is set lower than the expected return (and hence the claimant is given a larger award than is expected to be needed to meet the damages) then there remains a risk that the claimant is left under-compensated.
- Higher PI discount rates produce smaller awards which lead to:
  - Lower 'average' or 'overall' levels of over-compensation. As such, the lowest PI discount rates result in significant levels of over-compensation – such that claimants are over-compensated in the tails of the distribution for the lowest PI discount rates.
  - Bigger risks of the claimant being under-compensated. As such, under higher PI discount rates, the tails of the distributions result in significant levels of under-compensation.

**1.10** As noted above, the analysis does not consider other risks faced by the claimant – in particular mortality and inflation risk and the risk that damage needs are not as originally expected. If these risks are considered in addition to the investment risk then differences between 'lower' and 'higher' risk portfolios are likely to be reduced (because the different risks are to some extent diversified). As a result, even a very risk averse claimant might be inclined to assume more investment risk as a protection against longevity.

- 1.11 The projected returns and analysis outlined above ignore investment fees, management charges, adviser fees and taxes that the claimant will be required to meet. If explicit allowance is not included in the PI discount rate for these factors and the rate is set directly with reference to the analysis above then the claimant will be at greater risk of under-compensation.
- 1.12 The appropriate allowance for expenses and tax is likely to depend on a number of factors and assumptions and will require a degree of judgement. As such further work is likely to be needed to determine the reasonable allowance for expenses and tax. That said, based on an initial high level assessment, we believe that a deduction of around 0.5% pa is likely to be reasonable. Due to the further work required, the current analysis presents the results without adjusting for expenses and tax.

## 2 Background and Scope

- 2.1 The Personal Injury Discount Rate ('PIDR' or 'PI discount rate') is used to determine lump sum damage awards to claimants who suffer a serious personal injury.
- 2.2 In February 2017, the Lord Chancellor changed the PIDR from RPI+2.5% to RPI-0.75%. At the same time, the Lord Chancellor also announced a period of consultation to review whether the current legal framework for setting the rate is fit for purpose or whether changes are necessary.
- 2.3 As part of this consultation and to inform the impact of potential changes to the law, the Ministry of Justice ('MoJ') has asked GAD to analyse outcomes claimants in receipt of a lump sum award of damages for future financial loss under different PI discount rates which, based on evidence collected during the MoJ consultation, reflect the way that claimants invest their award and the way in which they are advised to invest their award by their investment advisers.
- 2.4 This report sets out the findings of this analysis. As discussed and agreed with MoJ, the scope of our analysis has been limited in that:
  - > The analysis presented in this report is intended to be illustrative – in particular to demonstrate the wide range of potential claimant outcomes and to articulate the risks (and potential benefits) of different award sizes for a given investment strategy.
  - > The analysis only considers two investment strategies, which are broadly derived from consultation with wealth managers and investment advisers during the consultation period. In practice, claimants will invest in a wider range of portfolios and strategies.
  - > The analysis focuses on the outcomes for an individual claimant with a particular pattern of damages.
  - > We have only considered a handful of award PI discount rates – all of which assume that damages are inflated with RPI. We have not considered other potential measures of inflation – for example the Consumer Prices Index (CPI) or Annual Survey of Hours and Earnings (ASHE).
  - > For simplicity, the analysis only considers a single PI discount rate. The analysis presented in this report should not be seen as preventing the setting of more than one rate in the future (e.g. rates which vary by the term of loss of any award).
  - > The analysis focuses on the investment risks that claimants are exposed to and although we briefly consider others risks and the interaction of multiple risks, the analysis is limited in this regard.
  - > The analysis is based on the assumptions included and derived from a third-party Asset Liability Model, the ESG. Views on future investment returns are uncertain and subject to a wide degree of judgement and so other views and assumptions are plausible.

- > This report provides one possible way of expressing and comparing claimant outcomes. There are many other methods and approaches by which this could be done and the approach expressed in this report should not prevent other approaches being used or considered in the future.
- > The analysis presented in this report should not be directly or solely relied upon for the basis of determining the rate, nor does it provide a proposal of how the PI discount rate might be determined in the future.

2.5 In the rest of this report:

- > Section 3 outlines the methodology we have adopted in analysing claimant outcomes and introduces the metrics and framework we have derived to quantify these outcomes.
- > Section 4 outlines the assumptions we have made about the claimant, the damages they receive and the way in which they invest their award.
- > Section 5 outlines the economic and financial assumptions used to analyse claimant outcomes.
- > Section 6 outlines the results of our analysis.
- > Section 7 provides a brief comment on allowance for expenses and tax in setting the PI discount rate.
- > Section 8 provides a brief commentary of the potential sensitivity of the analysis shown and discusses some factors that are likely to have a significant impact on the results which have not been considered here.
- > Section 9 outlines some limitations on the reliance of this report and a statement of compliance with professional standards.



### 3 Methodology and metrics

3.1 Whilst personal injury awards are determined based on the expected damages and are expected to leave the claimant fully compensated, actual claimant outcomes will depend on the decisions made by the claimant and factors that are beyond their control. For example, the table below describes some of the choices and factors that will influence claimant investment outcomes:

*Table 2 – Factors influencing claimant investment outcomes*

	Factor	Potential impact / description
1	The investment strategy adopted by the claimant – in particular how this compares to the PI discount rate used in determining the award	A claimant taking more (less) risk than is assumed in the PI discount rate would be expected to be over (under) compensated.
2	The returns that are achieved on the portfolio (for the investment strategy adopted)	Investing in a risky investment strategy is not guaranteed to deliver returns and there is the potential that poor returns will leave the claimant under-compensated.
3	How long the claimant lives for – in particular how this compares to the mortality assumptions used in determining the award	A claimant that lives longer (shorter) than expected will be left under-compensated (over-compensated) other things being equal.
4	Damage needs and profile – in particular how this compares to the pattern of damages that is assumed in determining the award	A claimant may need to make earlier or later withdrawals from their fund which may impact on outcomes.
5	The rate of damage inflation – in particular how this compares to the inflation measure assumed in determining the award (RPI for this analysis).	A claimant whose cost of damages increase quicker (slower) than the inflation measure used will be under-compensated (over-compensated).
6	Capacity of loss	A claimant who has more reliance on the award, has limited alternative access to funds or has more severe damages is likely to have smaller capacity of losses and therefore might adopt a more cautious approach.

3.2 Given the number of factors and issues that can affect claimant investment outcomes, analysing and allowing for all of these is likely to be difficult. As such, and given that the investment risk and return trade-off is the most important consideration for determining the PI discount rate, MoJ have asked us to limit our analysis on the second issue above.

- 3.3 Our analysis does this by consideration of how the claimant's fund might evolve over time under Monte Carlo simulations for future asset returns and inflation. The use of Monte Carlo (or 'stochastic') scenarios allows us to:
- > show the wide range of potential outcomes;
  - > estimate a distribution of outcomes and different percentiles of this distribution; and
  - > estimate the probability of outcomes being worse or better than a given level.

- 3.4 Given that our analysis included in this report focuses on the risk of poor returns, the analysis ignores the other risks faced by the claimant (e.g. mortality risk, inflation risk<sup>1</sup> and the risk that funds are required in a different manner than was expected when the award was granted). These risks are likely to have a significant impact on claimant outcomes and more discussion on these risks is included in Section 8.

#### Outline of calculations

- 3.5 The analysis projects a representative individual claimant's fund over a defined period over 1,000 economic scenarios. In particular:
- > We have used the ESG in a third-party Asset Liability Model to generate 1,000 simulations of future investment returns for a wide range of asset classes. More details on these assumptions are given in Section 5.
  - > The fund is projected into the future under 1,000 economic scenarios, such that the fund at the end of each year in each economic scenario is determined with regard to:
    - o The fund value at the beginning of the year in that scenario;
    - o Increased to allow for the simulated returns<sup>2</sup> (in that scenario/year) on the investments held;
    - o Reduced for withdrawals made from the fund to meet damages (which are inflated in line with RPI according to the economic scenario).
- 3.6 In practice the claimant's initial fund value will be determined based on:
- > The pattern of damages included in the award; and
  - > The assumed PI discount rate.

---

<sup>1</sup> Inflation risk in this sense is defined as the risk of damage inflation not being equal to RPI. The uncertainty inherent in future levels of RPI and the way in which the investments meet (or do not meet) this is included in the analysis because the ESG provides a stochastic projection of RPI.

<sup>2</sup> In this context, returns includes both capital growth and income (e.g. dividends or coupons).

- 3.7 We have compared this award value given to the claimant against the amount required for the claimant to run out of income exactly at the end of the term of his or her award. If the amount awarded in practice is larger than the amount required then the claimant is described as over-compensated and if the amount is less than required than the claimant is described as under-compensated. This comparison is calculated for each scenario, meaning that a distribution of outcomes is derived.
- 3.8 This process is perhaps best illustrated by a simplified illustrative example. We assume that the claimant needs to meet damages of £10,000 in the next two years, that we ignore damage inflation for the time being and that the illustrative returns in the next two years for the purpose of this example are as follows:

*Table 3 – Illustrative investment returns*

Economic Scenario	Returns in year 1	Returns in year 2
1	11%	1%
2	-6%	18%
3	20%	-11%
4	2%	3%
5	-3%	-10%

*Note: these scenarios are only illustrative and are not intended to be representative of the projected range of returns.*

- 3.9 Assuming that withdrawals from the fund occur half-way through the year, and investment returns on the fund are achieved uniformly over the year, then we can determine the initial fund value required in each scenario to leave the fund fully exhausted after two years:

*Table 4 – Example fund projections*

Economic Scenario	Initial Determined Fund Value (£)	Fund value at end of year 1 (£)	Fund value at end of year 2 (£)
1	18,456	9,950	0
2	20,108	9,206	0
3	17,962	10,600	0
4	19,562	9,853	0
5	21,020	10,541	0

- 3.10 For example, the fund value at the end of year 1 in scenario 1 is determined as:

$$£9,950 = £18,456 \times (1.11) - £10,000 \times (1.11)^{\frac{1}{2}}$$

*Note: recall that we are ignoring inflation in this example so damages are assumed to be £10,000. See paragraph 3.13 below.*

- 3.11 The initial fund values in each scenario are compared against the actual award size to determine the level of over or under-compensation.

- 3.12 For example, if the award PI discount rate is 0% then the claimant would be awarded £20,000 to meet the payments above. This is compared against the initial determined fund value in each scenario to determine the level of over or under-compensation. In the first scenario the claimant would be over-compensated by 8.4%.

*Table 5 – Example of over-/under-compensation determination*

Economic Scenario	Initial Determined Fund Value (£)	Initial Fund value under award basis of 0%	Over / under-compensation
1	18,456	20,000	8.4%
2	20,108	20,000	-0.5%
3	17,962	20,000	11.3%
4	19,562	20,000	2.2%
5	21,020	20,000	-4.9%

- 3.13 Whilst this example ignores the inflation indexation that is applied to the damages, the principle is the same if inflation is included in the calculations and we have assumed that the damages are linked to RPI in our analysis.
- 3.14 These calculations result in a distribution of claimant outcomes which can be used to assess the extent of any 'extreme' or 'poor' outcomes or to assess the probability of outcomes being worse than a specified level.
- 3.15 In our analysis and when comparing different PI discount rates, we have focused on:
- > The median level of under/over-compensation at different percentiles – we believe that the median provides the best measure of the 'average' scenario or outcome as means can be distorted by distributions with long tails.
  - > The lower tails of the distribution, in particular the 5<sup>th</sup> and 10<sup>th</sup> percentiles – to give an indication of the tail risks faced by claimants.
  - > The upper tails of the distribution, in particular the 90<sup>th</sup> and 95<sup>th</sup> percentiles – to give an indication of the potential upside claimants might receive.
  - > The probability of claimants being under-compensated by 5% or more and 10% or more<sup>3</sup> – to give a feel for how much 'weight' is in the lower tail.
  - > The probability of claimants being over-compensated by 5% or more and 10% or more – to give a feel for how much 'weight' is in the upper tail.
- 3.16 These metrics are only chosen to be illustrative and in particular to demonstrate the different parts of the distribution. We don't have a view on which measure should be focused on to inform policy decisions and other measures and metrics are possible and may be better at informing or framing policy decisions.

<sup>3</sup> Note that references in this report of a claimant being under-compensated often describe the claimant as being "under-compensated by x% or more". In this description, we have removed the negative sign from the level of compensation and 'more' is taken to describe a more extreme negative outcome. As such, "under-compensated by 5% or more" is equivalent to "over-compensated by -5% or less" and both can be taken to describe the left hand tail of the distribution.



## 4 Assumptions: damage profile and investment strategy

- 4.1 This section outlines the assumptions we have made with regard to the claimant's pattern of damages and the investment strategy they adopt. The assumptions made in this section are likely to have a significant impact on the outcomes of the analysis. However, as agreed with MoJ we have limited our analysis to a single individual claimant.

### Damage profile

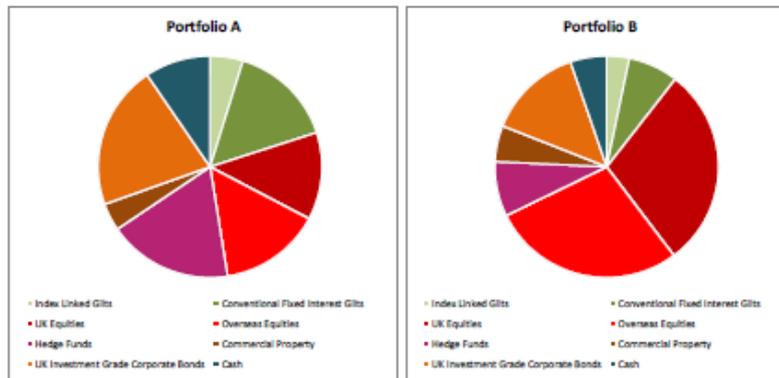
- 4.2 In carrying out the analysis we assume that a claimant has to meet damages of £10,000 per annum, linked to RPI for an assumed period of 30 years. We do not include mortality risk and so ignore the possibility of the claimant dying before the end of the 30 year period or surviving beyond the 30 years. We also ignore the possibility that damage inflation does not perfectly match RPI or that the claimant needs to draw down from the fund in a different pattern to 30 regular payments of £10,000.
- 4.3 In practice this approach is a significant simplification of the claimant's position – for example the award is likely to be based on a 'rest of life' basis. However this approach allows us to isolate the impact of investment risk on claimant outcomes.
- 4.4 One of the key assumptions made with regards to the damage profile is the length of time over which damages are applicable. This is because return expectations are different over different time periods – for example return expectations over the short term might (as now) be lower than return expectations over the longer term. As a result of this, claimants currently with shorter award periods will typically achieve lower investment returns than claimants with longer award periods.
- 4.5 This means that the claimant outcomes considered in this report are likely to be highly sensitive to the length of the award and the 30 year award period presented is intended to be illustrative rather than representative. That said 30 years can broadly be considered as somewhere between "short" awards (for example given to those with severe injuries, lower life expectancy or older claimants) and "long" awards (for example given to younger claimants). The award is also broadly consistent with "loss of earnings" damages awarded to a claimant in their mid-late 30s (as included in the consultation document).

### Investment strategies

- 4.6 During the consultation period, MoJ consulted with wealth managers and investment advisers on the way in which claimants invest their awards and the way in which they are advised to invest their award. Based on this information, MoJ has provided GAD with two assumed investment strategies to be used for the basis of our analysis.

- 4.7 Our understanding is that the advisers gave a range of strategies to reflect potential different risk preferences amongst claimants. MoJ grouped these recommendations by risk tolerance and have provided us with an 'average' or 'representative' investment strategy for two portfolios:
- > Portfolio A – this is an average or typical portfolio invested in by personal injury claimants, based on evidence from wealth managers and investment advisers of what claimants do and are advised to do, which corresponds most closely with a "low risk" investment strategy for personal injury claimants; and
  - > Portfolio B – this is an average or typical portfolio invested in by personal injury claimants, based on evidence from wealth managers and investment advisers of what claimants do and are advised to do, which corresponds to claimants who were described as taking more risk than claimants adopting Portfolio A. It is based on MoJ's interpretation as being representative of the highest risk investment strategy that wealth managers and investment advisers would recommend or have recommended to personal injury claimants.
- 4.8 The assumed investment strategies included in our analysis are shown below:

*Figure 2 – Assumed Investment Strategies*



- 4.9 More details on the investment strategies is shown in Annex A.
- 4.10 We have not independently verified the strategies above from the consultation responses. However during discussions with MoJ we have commented on the assumptions made by them in deriving these strategies and we are satisfied with the approach and assumptions in deriving these strategies.
- 4.11 However, we would stress that the strategies shown and analysed in this report are just two possible strategies and that there is no universally accepted definition of, say, a 'low risk investor' or a 'low risk investment strategy'. That said, we are satisfied that the strategies shown provide a reasonable range of the strategies advised to claimants and as this analysis is only intended to be illustrative, we think it is appropriate for demonstrating the potential range of outcomes.

- 4.12 The portfolios included in the analysis are based on the information provided by wealth managers and investment advisers. As such the portfolios may not be 'optimal' in that the strategies may not optimise the metrics considered (i.e. the portfolios may not deliver the best average outcome for a given level of tail risk). However again, given that the analysis is intended to be illustrative and the analysis is not being used to advice on claimant strategies we believe that the approach is appropriate.
- 4.13 The investment strategies included in the modelling is assumed to be 'static' in that the claimant is assumed to rebalance the portfolio each year to maintain the allocations above<sup>4</sup>. In practice claimants are likely to change their strategy over time – for example reduce levels of risk to 'bank' periods of good returns, increase levels of risk to recover from periods of poor returns or to reduce the level of risk as the remaining period of the award reduces. Whilst it is possible to model these features within the analysis we have not done so to keep the analysis as simple as possible – as such the range of outcomes shown is likely to be wider than that which claimants might achieve should they adopt these approaches.

#### PI discount rates

- 4.14 MoJ asked us to compare claimant outcomes on the investment strategies above, assuming that the award is determined using the following PI discount rates:

*Table 6 – Assumed PI discount rates*

Discount Rate	Description
RPI-1.75%	As an indication of what possible outcomes might be in the next 2 to 3 years if no change is made to the law, gilt yields remain at current levels, and the rate is set again by reference to a three year average of index-linked gilt yields.
RPI-0.75%	To illustrate outcomes under the current PI discount rate.
RPI-0.5%	To give an indication of the range of possible outcomes, assuming that the PI discount rate is set with more regard to the expected return on the way in which claimants might invest their fund.
RPI+0%	
RPI+0.5%	
RPI+1%	

- 4.15 In determining the award, uninflated (i.e. real) damages are discounted at the real PI discount rates given in the table above. In each future projected scenario, damages are inflated by the simulated RPI series, which over 30 years is projected to be 2.7% pa on average.

<sup>4</sup> Apart from the index-linked gilt portfolio, which is assumed to rebalance between index-linked gilts of different maturities to provide a better match to the damage profile – see section 5 and Appendix B for more details.

## 5 Assumptions: economic scenarios

- 5.1 The economic scenarios used in this analysis are generated from the ESG in a proprietary third-party Asset Liability Model. We have generated 1,000 simulations of future investment returns starting from, and based on market conditions as at 31 December 2016.
- 5.2 The ESG methodology used to generate the simulations is similar to other standard approaches and the scenarios include a wide range of plausible outcomes (for example 'booms' and 'crashes') and is calibrated to historical data. The simulated return paths for each asset class reflect the characteristics, riskiness and expected return of the asset class. Simulated returns for different asset classes also reflect the assumed correlation between the asset classes.
- 5.3 The calibration of the economic scenarios – including views on expected returns, inflation and correlations – is provided by our third party Asset Liability Model provider as at 31 December 2016. We believe that the assumptions are within a range that could be considered reasonable, are still broadly reflective of current market conditions and are appropriate for use in illustrating potential claimant outcomes. However, alternative views that cover both higher and lower simulations of returns and inflation do exist.

### Inflation

- 5.4 The table below shows the median level of RPI inflation which was used to inflate damages in this analysis. The table shows that inflation expectations are not flat – with lower levels of projected inflation in the shorter term.

*Table 7 – Median RPI simulations*

Rate of inflation over the period <sup>5</sup> %pa	5 years	10 years	15 years	20 years	30 years	50 years
RPI	2.2%	2.2%	2.4%	2.6%	2.7%	2.9%

Source: Economic Scenario Generator

- 5.5 Note that because all of the calculations are done in real terms, the assumed level of inflation does not directly influence the results of the analysis and it is the real returns (i.e. level of return in excess of RPI) which ultimately drives the results of the analysis.

<sup>5</sup> Note that the table records the rate of RPI over the period shown and not the rate of RPI inflation in the year shown. In other words, the 2.9% rate of inflation shown over 50 years will include RPI of 2.2% in the first 5-10 years and hence include higher RPI in the later years.

### Real returns on investment

- 5.6 Making regular withdrawals from a fund can have a significant impact on the effective returns achieved – for example, making a significant withdrawal from the fund following an early fall in asset values will hinder an investment manager's ability to recover the fund in subsequent periods<sup>6</sup>. This feature is a significant risk for the assumed claimant included in this analysis as we are assuming that they have to finance 30 regular withdrawals from the fund.
- 5.7 As such, references to projected returns in this report allow for the specified assumed withdrawals from the fund and the table below shows the median annualised effective real return achieved on each asset class. These returns are real (in excess of RPI) and essentially assume that regular withdrawals are made from a fund that is solely invested in a representative broad index for each asset class.

*Table 8 – Median asset class return simulations*

Median money weighted real return %pa	5 years	10 years	15 years	20 years	30 years	50 years
Index-Linked Gilts <sup>7</sup>	-2.2%	-2.8%	-2.8%	-2.3%	-1.8%	-1.1%
Conventional fixed-interest Gilts	-1.3%	-1.5%	-1.4%	-1.2%	-0.9%	-0.3%
UK Equities	-1.3%	0.7%	1.3%	1.8%	2.0%	2.2%
Overseas Equities	0.3%	2.2%	2.7%	2.7%	2.7%	2.6%
UK Investment Grade Corporate Bonds	-0.2%	-0.1%	0.1%	0.2%	0.4%	0.9%
Cash	-2.1%	-1.5%	-1.3%	-1.2%	-0.9%	-0.5%
Commercial Property Funds	-1.9%	0.2%	1.2%	1.7%	2.1%	2.4%
Hedge Funds <sup>8</sup>	0.3%	1.0%	1.1%	1.1%	1.0%	0.9%

*Source: Economic Scenario Generator*  
*Note: returns are in excess of RPI*

- 5.8 For example, if the entire fund were invested in UK equities and used to provide regular RPI-linked damages over a 30 year period then the median effective real return is RPI+2.0%. Or equivalently, a PI discount rate of RPI+2.0% with an assumed investment strategy of 100% UK equities would result in the median level of over/under-compensation of 0%<sup>9</sup>.

<sup>6</sup> In technical terms – this is essentially the difference between Time-Weighted Rates of Return (which ignore withdrawals from the fund) and Money-Weighted Rates of Return (which are affected by withdrawals and additions to the fund).

<sup>7</sup> See Appendix B for further details on the assumptions made in modelling the index-linked gilt portfolio

<sup>8</sup> Hedge funds are an investment fund that invest in a variety of assets and sub-pools and are constructed to take advantage of certain identifiable market opportunities. There is a wide range of different types of hedge fund available. Hedge Funds are used as a proxy for investments in 'alternative asset classes' – see Appendix A for further details.

<sup>9</sup> Ignoring other risks and ignoring any allowance for expenses and tax.

5.9 The table shows that:

- > Higher risk assets, such as equities and property have higher expected returns.
- > Returns over shorter periods are typically smaller than returns over longer periods. This feature arises because the distribution of possible future economic scenarios is tilted slightly towards those that follow a "reversion to norm" over time compared to today's low return environment.

5.10 Although not shown in the table, assets with higher returns also have higher risk. As a result, although an investor would expect to benefit from investing in an asset with a higher expected return they are also increasing the probability of experiencing poor returns and hence incurring poor outcomes.

#### **Index-linked gilts**

5.11 Currently, the PI discount rate is set with reference to returns on index-linked gilts (or 'ILGs') on the grounds that this type of investment represented virtually 'risk-free' investment, specifically designed to keep pace with inflation. We would note that in practice, the 'risk free' portfolio is likely to be only a theoretical construct and even a portfolio invested in 100% ILGs would not lead to 'risk free' claimant outcomes.

5.12 In particular, the claimant would face the following challenges from adopting such an approach:

- > the fact that the claimant cannot be 100% certain of their damage pattern and the rate of damage inflation;
- > even if we ignore this feature, there is not a 'full curve' of index-linked gilts – i.e. it is not the case that there is an index-linked gilt that redeems in each year in the future; and
- > using index-linked bonds to hedge or reduce investment risks requires considered selection of which gilts (or gilt funds) to invest in – an investment in index-linked gilts of the wrong maturity can leave the claimant exposed to significant investment risks.

5.13 As a result, we have made further assumptions on the way in which claimants make investments in index-linked gilts in order to manage the risks associated with investing in index-linked gilts which are outlined in Appendix B.

#### Other considerations

- 5.14 The table below shows the median annualised effective real return on the assumed portfolios over different award periods. The table highlights the difference in returns over different periods – with higher returns expected over longer time periods

*Table 9 – Median assumed portfolio return simulations*

Median money weighted real return %pa	Award period / investment horizon					
	5 years	10 years	15 years	20 years	30 years	50 years
Portfolio A	0.0%	0.6%	1.0%	1.2%	1.3%	1.6%
Portfolio B	0.0%	1.3%	1.7%	1.9%	2.0%	2.3%

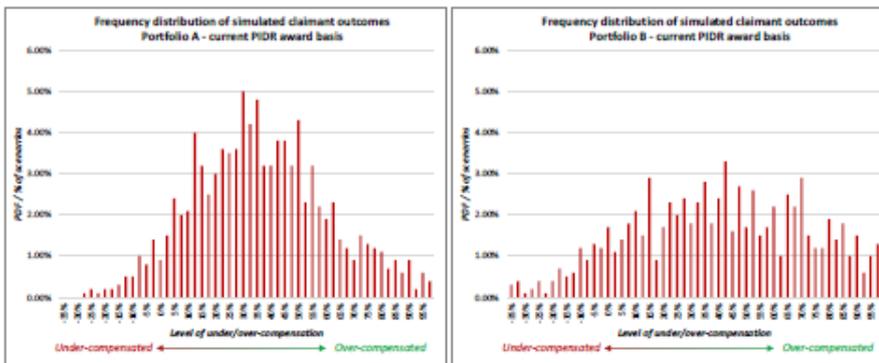
*Note: returns are in excess of RPI*

- 5.15 It should be noted that returns shown above are gross of investment fees, management charges, adviser fees and taxes. As a result, we would recommend that it is appropriate to make suitable adjustment to the PI discount rate for such factors. This is discussed in further detail in Section 7 below.

## 6 Results

- 6.1 After carrying out the calculations set out in previous sections, we are left with 1,000 simulations of claimant outcomes.
- 6.2 For example, the chart below shows frequency distribution of simulated claimant outcomes, assuming that the claimant invests in the two assumed portfolios outlined in Section 4 and that the lump sum award is determined using the current PI discount rate (RPI-0.75%).

*Figure 3 – Frequency distribution of simulated claimant outcomes*

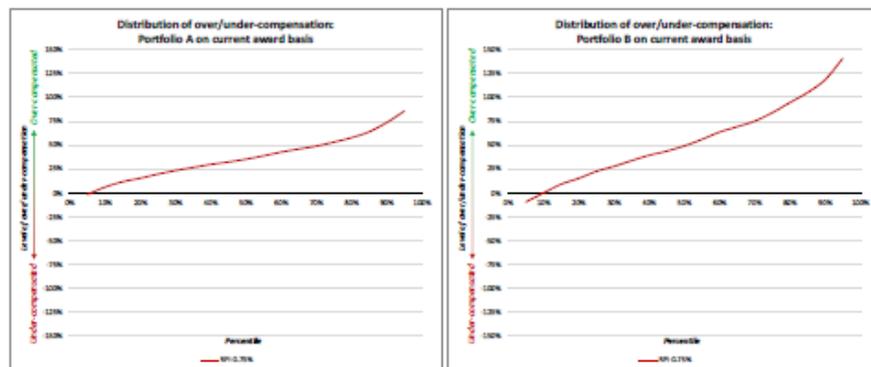


*Note: that a positive figure represents a scenario in which the claimant is over-compensated, whilst a negative figure represents a scenario in which the claimant is under-compensated*

- 6.3 Given that the expected return on the investment strategies (RPI+1.3% pa over 30 years for Portfolio A and RPI+2.0% pa over 30 years for Portfolio B) exceeds the current PI discount rate (RPI-0.75%) then most of the distribution is above zero and 'on average' we expect claimants to be over-compensated. However the left hand tail of the distribution shows that there are a few scenarios in which the actual returns are lower than expected and lower than is assumed in determining the award and so the claimant is accordingly left under-compensated.

6.4 This distribution can also be shown as in the chart below – which shows the level of over/under-compensation (on the y-axis) at different percentiles of the distribution (on the x-axis):

**Figure 4 – Distribution of over/under-compensation for assumed portfolios**



6.5 Analysing the charts and distributions above, under the current PI discount rate:

- > The median level (i.e. the 50<sup>th</sup> percentile) of **over-compensation** is 35% if the claimant invests in Portfolio A. The corresponding figure for a claimant investing in Portfolio B is **over-compensation of 49%**.

Considering the percentiles of the distribution:

- > There is a 10% probability of the claimant being **over-compensated by 6% or less<sup>10</sup>** if the claimant invests in Portfolio A (i.e. the 10<sup>th</sup> percentile). The corresponding figure for a claimant investing in Portfolio B is **over-compensation of 0% or less<sup>10</sup>**.
- > There is a 5% probability of the claimant being **under-compensated by 1% or more<sup>11</sup>** if the claimant invests in Portfolio A (i.e. the 5<sup>th</sup> percentile). The corresponding figure for a claimant investing in Portfolio B is **under-compensation of 9% or more<sup>11</sup>**.
- > There is a 10% probability of the claimant being **over-compensated by 74% or more** if the claimant invests in Portfolio A (the 90<sup>th</sup> percentile). The corresponding figure for a claimant investing in Portfolio B is **over-compensation of 119% or more**.

<sup>10</sup> Note that at the 10<sup>th</sup> percentile, the claimant is projected to have a small level of over-compensation, but that outcomes to the left of this in the distribution will leave the claimant under-compensated.

<sup>11</sup> See footnote 3

- > There is a 5% probability of the claimant being **over-compensated by 86% or more** if the claimant invests in Portfolio A (the 95<sup>th</sup> percentile). The corresponding figure for a claimant investing in Portfolio B is **over-compensation of 141% or more**.

Considering the probability of over-/under-compensation exceeding certain thresholds:

- > There is a 4% probability of the claimant being **under-compensated by 5% or more**<sup>12</sup> if the claimant invests in Portfolio A. The corresponding probability for a claimant investing in Portfolio B is 7%.
- > There is a 2% probability of the claimant being **under-compensated by 10% or more**<sup>13</sup> if the claimant invests in Portfolio A. The corresponding probability for a claimant investing in Portfolio B is 5%.
- > There is a 91% probability of the claimant being **over-compensated by 5% or more** if the claimant invests in Portfolio A. The corresponding probability for a claimant investing in Portfolio B is 88%.
- > There is a 87% probability of the claimant being **over-compensated by 10% or more** if the claimant invests in Portfolio A. The corresponding probability for a claimant investing in Portfolio B is 84%.

---

<sup>12</sup> See footnote 3

<sup>13</sup> See footnote 3



6.6 The table below shows the level of over/under-compensation at different percentiles of the distribution for the different award basis and investment portfolios considered.

**Table 10 – Percentile distribution of over/under-compensation**

Award basis	Percentile of over/under-compensation for a claimant with a 30 year award																			
	5th	10th	15th	20th	25th	30th	35th	40th	45th	50th	55th	60th	65th	70th	75th	80th	85th	90th	95th	
Portfolio A	RPI-1.75%	16%	25%	31%	36%	41%	45%	49%	53%	56%	59%	63%	68%	72%	75%	80%	86%	93%	104%	118%
	RPI-0.75%	-1%	6%	12%	15%	20%	23%	27%	30%	32%	35%	38%	43%	46%	49%	53%	58%	64%	74%	86%
	RPI-0.5%	-5%	2%	7%	11%	15%	19%	22%	25%	27%	30%	34%	37%	40%	43%	47%	52%	58%	67%	79%
	RPI+0%	-12%	-5%	0%	3%	7%	10%	13%	16%	18%	21%	24%	27%	30%	33%	37%	41%	46%	55%	66%
	RPI+0.5%	-18%	-12%	-7%	-4%	-1%	2%	5%	8%	10%	12%	15%	18%	21%	23%	27%	31%	36%	44%	54%
Portfolio B	RPI+1%	-24%	-18%	-14%	-11%	-8%	-5%	-2%	0%	2%	4%	7%	10%	12%	15%	18%	22%	28%	34%	43%
	RPI-1.75%	6%	17%	28%	35%	44%	50%	57%	64%	69%	75%	83%	92%	98%	105%	116%	129%	141%	157%	183%
	RPI-0.75%	-9%	0%	9%	15%	23%	28%	34%	39%	44%	49%	56%	64%	69%	75%	84%	95%	105%	119%	141%
	RPI-0.5%	-13%	-4%	5%	11%	18%	23%	29%	34%	38%	44%	50%	57%	63%	69%	77%	87%	97%	110%	132%
	RPI+0%	-19%	-11%	-3%	3%	9%	14%	19%	24%	28%	33%	39%	46%	51%	56%	64%	73%	83%	96%	115%
RPI+0.5%	-25%	-17%	-10%	-5%	1%	6%	11%	15%	19%	24%	29%	35%	40%	45%	52%	61%	70%	81%	96%	
RPI+1%	-30%	-23%	-16%	-11%	-6%	-2%	3%	7%	11%	15%	20%	26%	30%	35%	42%	50%	58%	68%	80%	

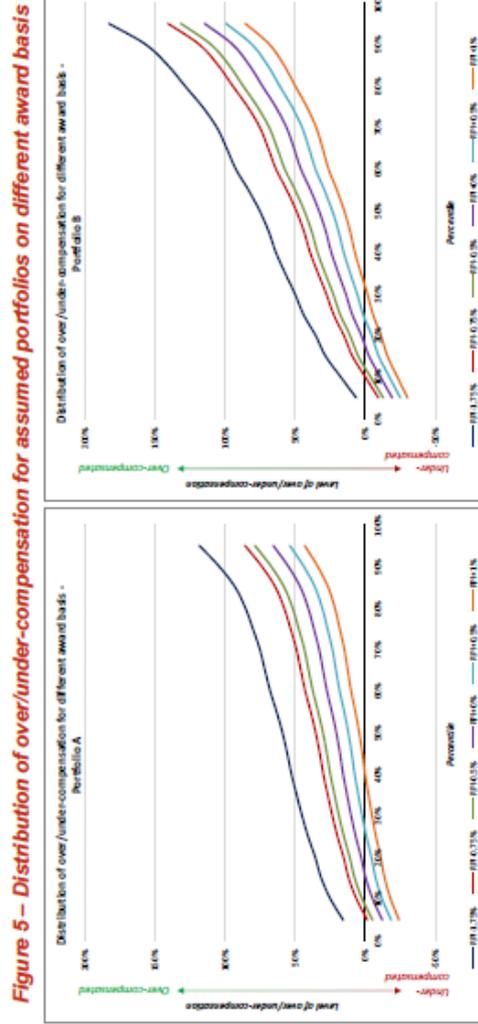
6.7 The main points to note are:

- > Under all PI discount rates and both investment strategies considered, the claimant is over-compensated at the median level (i.e. 50<sup>th</sup> percentile). This reflects the fact that all PI discount rates considered are lower than the median return on the portfolio over the 30 year period (RPI+1.3% pa and RPI+2.0% pa for Portfolio A and B respectively).
- > The investment strategies considered are not 'risk free' – even if the PI discount rate is set lower than the expected return (and hence the claimant is given a larger award than is expected to be needed to meet the damages) then there remains a risk that the claimant is left under-compensated.



- > Whilst a 'riskier' investment strategy delivers a higher expected (i.e. median) level of over-compensation and better outcomes in the upper tails, it comes with more risk on the downside – in that the lower tails have more extreme/severe levels of under-compensation.
- > Higher PI discount rates produce smaller awards which lead to:
  - o A lower 'average' or 'overall' level of over-compensation.
  - o A bigger risk of the claimant being under-compensated.
  - o More significant levels of under-compensation at the tails of the distributions under higher PI discount rates.
- > Equally, lower PI discount rates produce larger awards which lead to:
  - o A higher 'average' or 'overall' level of over-compensation.
  - o A lower risk of the claimant being under-compensated.
  - o Significant levels of over-compensation particularly in the tails of the distribution for the lowest PI discount rates.

6.8 The chart below shows a graphical representation of the results given in the table above – note that the extreme scenarios (i.e. below the 5th percentile and above the 95th percentile) are not plotted.



6.9 Finally, the table below shows selected parts of the distribution and the probability of the claimant being:

- > under-compensated by 5% or more and 10% or more; and
- > over-compensated by 5% or more and 10% or more.

**Table 11 – Summary of results**

Award basis	Median	Probability of being under-compensated by ...		Probability of being over-compensated by ...		Tail percentile (lower)			Tail percentile (upper)	
		...5% or more <sup>14</sup>	...10% or more <sup>14</sup>	...5% or more	...10% or more	5 <sup>th</sup>	10 <sup>th</sup>	90 <sup>th</sup>	95 <sup>th</sup>	
Portfolio A	RPI-1.75%	1%	0%	96%	97%	16%	25%	104%	116%	
	RPI-0.75%	4%	2%	91%	87%	-1%	6%	74%	86%	
	RPI+0.5%	5%	3%	88%	81%	-5%	2%	67%	79%	
	RPI+0%	11%	6%	77%	70%	-12%	-5%	55%	66%	
	RPI+0.5%	19%	12%	65%	55%	-18%	-12%	44%	54%	
	RPI+1%	4%	30%	48%	40%	-24%	-18%	34%	43%	
Portfolio B	RPI-1.75%	2%	2%	95%	94%	6%	17%	157%	183%	
	RPI-0.75%	7%	5%	88%	84%	-9%	0%	119%	141%	
	RPI+0.5%	9%	6%	85%	81%	-13%	-4%	110%	132%	
	RPI+0%	13%	11%	78%	74%	-19%	-11%	95%	115%	
	RPI+0.5%	20%	15%	71%	66%	-25%	-17%	81%	99%	
	RPI+1%	15%	26%	63%	56%	-30%	-23%	68%	86%	

<sup>14</sup> See footnote 3

## 7 Expenses and tax

- 7.1 As outlined earlier, the projected returns from the ESG are gross of investment fees, management charges, adviser fees and taxes. Since an investor will have to meet such deductions, the actual returns achieved by the investor will be less than indicated in section 5 and if allowance for these factors is not included in the PI discount rate for these factors then the claimant will tend to be under-compensated by comparison.
- 7.2 Alternative analysis that includes suitable allowance for expenses and tax will result in different levels of under- and over-compensation to those outlined in the previous section. However we believe that the analysis provides a reasonable representation of the spread of outcomes and that outcomes that include a suitable allowance for expenses and tax can be deduced from the range of results presented on different PI discount rates.
- 7.3 The appropriate allowance for expenses and tax is likely to depend on a number of factors and assumptions and will require a degree of judgement. As such further work is likely to be needed to determine the reasonable allowance for expenses and tax. That said, based on an initial high level assessment, we believe that a deduction of around 0.5% is likely to be reasonable.

## 8 Sensitivities

8.1 The results presented in section 6 are highly sensitive to a number of key assumptions. In particular:

*Table 12 – Sensitivity of analysis*

Assumption	Potential impact / description
Economic assumptions	The analysis has been calculated on one set of economic simulations, calibrated at 31 December 2016. Alternative views on returns and correlations or a calibration based on a different date will result in different simulations for asset returns and inflation and will impact on project outcomes.
Investment strategy	The analysis has been calculated for two given investment strategies. In practice, claimants are likely to adopt a wide range of investment strategies.
Length of award	<p>We have only considered a fixed 30 year award. Claimants with different award periods will have different levels of over/under-compensation because:</p> <ul style="list-style-type: none"> <li>&gt; The impact of compounding means that any difference between the PI discount rate and the rate of return achieved on investments will be larger for claimants with longer awards.</li> <li>&gt; The rates of return over different periods vary in the economic simulations – claimants with shorter (longer) awards would be relatively under-compensated (over-compensated) since expected returns are lower (higher) over the period of the award.</li> </ul>
Mortality risk	We have ignored the mortality risk faced by the investor. The interaction of the different risk factors is likely to have a significant impact on claimant outcomes. For example, even if the claimant invested in a replicating investment strategy that perfectly hedged investment risk then the remaining mortality risk would mean that there is a 50/50 chance that they would be live longer than expected and therefore under-compensated. As a result, even a very risk averse claimant might be inclined to assume more investment risk as a protection against longevity.
Inflation risk	We have assumed that damages are exactly linked to RPI whereas in practice damage inflation will not exactly match the index. As with mortality, the additional risk is likely to impact outcomes.

8.2 Even in the absence of carrying out further sensitivity analysis we can therefore add the following key conclusions to those outlined in section 6:

- > The exact levels of under/over-compensation will be sensitive to the economic assumptions – in particular expected returns and correlations between asset classes.
- > Claimant outcomes are likely to be highly dependent on the term of the award.
- > In practice, the claimant is exposed to other risks (mortality and inflation). If these risks are considered in addition to the investment risk then differences between 'lower' and 'higher' risk portfolios are likely to be reduced (because the different risks are to some extent diversified).



## 9 Limitations and professional compliance

- 9.1 The analysis outlined in this report has been carried out in accordance with the applicable Technical Actuarial Standard: TAS 100 issued by the Financial Reporting Council (FRC). The FRC sets technical standards for actuarial work in the UK.
- 9.2 This report has been prepared for the use of MoJ and must not be reproduced, distributed or communicated in whole or in part to any other person without GAD's prior written permission.
- 9.3 Other than MoJ, no person or third party is entitled to place any reliance on the contents of this report, except to any extent explicitly stated herein, and GAD has no liability to any person or third party for any act or omission, taken either in whole or part on the basis of this report.
- 9.4 This report must be considered in its entirety, as individual sections, if considered in isolation, may be misleading, and conclusions reached by review of some sections on their own may be incorrect.

**Andrew Jinks**  
Fellow of the Institute of Actuaries

**Stephen Humphrey**  
Fellow of the Institute of Actuaries

## Appendix A: Assumed Investment Strategy

- A.1 During the consultation period, MoJ received information from wealth managers and investment advisers on the way in which claimants invest their awards and the way in which they are advised to invest their award.
- A.2 Our understanding is that the advisers gave a range of strategies to reflect potential different risk preferences amongst claimants. MoJ grouped these recommendations by risk tolerance and have provided us with an 'average' or 'representative' for two portfolios:
- > Portfolio A – this is an average or typical portfolio invested in by personal injury claimants, based on evidence from wealth managers and investment advisers of what claimants do and are advised to do, which corresponds most closely with a "low risk" investment strategy for personal injury claimants; and
  - > Portfolio B – this is an average or typical portfolio invested in by personal injury claimants, based on evidence from wealth managers and investment advisers of what claimants do and are advised to do, which corresponds to claimants who were described as taking more risk than claimants adopting Portfolio A. It is based on MoJ's interpretation as being representative of the highest risk investment strategy that wealth managers and investment advisers would recommend or have recommended to personal injury claimants.
- A.3 In deriving these strategies, a number of assumptions and judgements were required. For example:
- > Some of the information provided by the advisers is unclear on the exact type of investment. For example:
    - o It is not clear as to whether 'Fixed Income' refers to conventional fixed interest gilts or corporate bonds. Assumptions have been made that allocate positions between appropriate asset classes.
    - o Allocations to corporate bonds are assumed to be made to investment grade corporate bonds.
  - > In an attempt to keep the modelling simple, we did not generate returns for all possible asset classes. Instead we decided to make some assumptions on reasonable approximations – for example:
    - o Overseas government bonds are modelled as UK gilts.
    - o High Yield bonds are assumed to be modelled as a 50% allocation to overseas equity and a 50% allocation to investment grade credit.
    - o All 'alternative' investments (such as 'commodities', 'alternatives' and 'other') are modelled as a 'Fund of Fund Hedge Funds' within the ESG.
    - o Investment in infrastructure is modelled as property

A.4 During discussions with MoJ we have commented on the assumptions and judgements made in deriving these strategies and we are satisfied that they provide a reasonable approach to deriving the investment strategy. Whilst alternative assumptions might be possible and may provide a more 'accurate' projection of claimant outcomes, we are satisfied that the approach taken provides a reasonable illustration of claimant outcomes.

A.5 The table below shows the representative strategy derived following this process.

*Table 13 – Assumed investment portfolios*

Asset class	Portfolio A	Portfolio B
UK Equities	13%	29%
Overseas Equities	15%	28%
Fixed Interest Gilts	15%	7%
Index-linked gilts	5%	3%
Corporate Bonds	21%	14%
Cash	10%	5%
Property	4%	5%
Alternatives (modelled as Hedge Funds)	18%	8%
Total	100%	100%

*Source: MoJ, GAD – may not sum to 100% due to rounding*

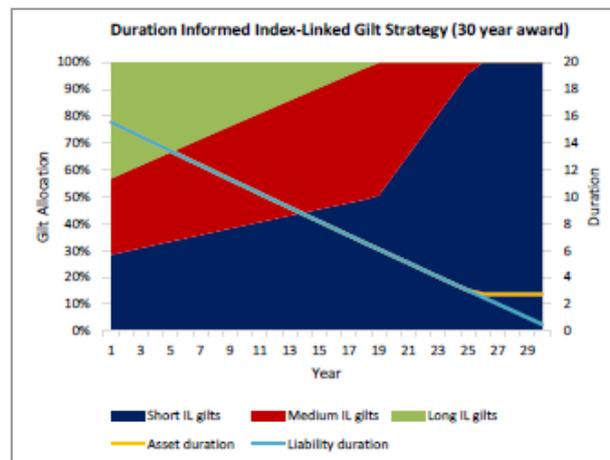
A.6 Note that we have not independently verified the strategy above from the information received.

## Appendix B: Modelling Index-Linked Gilt Positions

- B.1 When simulating investment returns on index-linked gilts, it is important to be clear on what assumptions are made on the way in which the investor constructs the index-linked portfolio. This is because there are wide range of index-linked gilts in issuance, each with different dates of maturity.
- B.2 When interest rates rise (in particular gilt yields), there is a reduction in the capital value of the index-linked gilts which may result in negative investment return for an individual holding those gilts. This impact is more severe for index-linked gilts with longer periods to maturity.
- B.3 As a result of this feature, the 'return' (i.e. the coupon plus any change in capital value) on different gilts will vary significantly for gilts of different maturity. This can lead to a wide range of possible returns on index-linked gilts and a significant risk for an investor who does not construct their index-linked gilt portfolio in a considered way.
- B.4 For an individual investor such as personal injury claimant, investors might gain access to index-linked gilts through investment in a broad ILG fund which invests in a representative broad range of all index-linked gilts in issuance. Whilst this allows easy access for investors, it can mean that the investor is exposing themselves to the investment risks described above.
- B.5 However, an index-linked gilt portfolio can be constructed in a more considered way to hedge or 'match' damages and an investor who uses gilts in this way, manages and reduces the risks posed by rising interest rates. This is because index-linked gilts of different maturities can be bought such that the redemptions on the gilts broadly match the damages that are due. Under this approach, any changes in the capital values of the portfolio do not concern the investor – for instance whilst the long dated gilts held may reduce in value, they are still expected to redeem an amount required to meet a need in the future.
- B.6 In our modelling, we have assumed that the claimant adopts a more considered approach to constructing their index-linked gilt portfolio that is intended to broadly follow this approach. We assume that the claimant alters their allocation to 'short', 'medium' and 'long' dated index-linked gilts in accordance with the remaining profile of damages. Initially, a mix of short, medium and long dated gilts are purchased, whilst at the end of the projection period, the claimant only remains invested in short dated gilts.
- B.7 In particular, the ESG produces investment returns on three gilt funds:
- > A short dated index-linked gilt fund that is intended to broadly represent the FTSE Actuaries UK Index-Linked Gilts up to 5 Years Index.
  - > A medium dated index-linked gilt fund that is intended to broadly represent the FTSE Actuaries UK Index-Linked Gilts 5-15 Years Index.
  - > A long dated index-linked gilt fund that is intended to broadly represent the FTSE Actuaries UK Index-Linked Gilts over 15 Years Index.

- B.8 Allocations to these three funds are assumed to alter over the period of the award – with allocations determined such that the duration of holdings in the three index-linked gilt funds is equivalent to the remaining duration of damages. The chart below shows how the allocations to the three funds alters over time.

*Figure 6 – Assumed Index Linked Gilt Strategy*



- B.9 This strategy reduces the risks of the claimant suffering from projected increases in interest rates. Any allocations to index-linked gilts in the assumed claimant investment strategy are assumed to be invested in this way.
- B.10 The table below demonstrates the difference between the two strategies:

*Table 14 – Median of gilt return simulations*

Median money weighted real return %pa	5 years	10 years	15 years	20 years	30 years	50 years
Index-linked Gilt – all stocks index	-3.5%	-4.7%	-4.4%	-4.0%	-3.4%	-2.2%
Informed ILG strategy	-2.2%	-2.8%	-2.6%	-2.3%	-1.8%	-1.1%
Conventional fixed interest gilts	-1.3%	-1.5%	-1.4%	-1.2%	-0.9%	-0.3%

- B.11 The 'Index-linked Gilt all stocks index' assumes an investment in a broad UK all-index-linked-gilt index fund. The 'informed ILG strategy' adopts a more considered approach to constructing the index-linked gilt portfolio as outlined above that is reflective of the claimant's 30 year damage profile.
- B.12 Note that, given investments in conventional fixed interest gilts are not considered as hedging or matching assets (because they do not protect against inflation risks), we assume that these assets are held for diversification purposes and that any investment in conventional fixed interest gilts are assumed to be in a broad UK all-gilts index.

- B.13 In practice, the claimant might choose to adopt a similar (duration informed) strategy for the conventional fixed-interest gilts to hedge damages which are fixed in price terms. Given that our analysis is focused on index-linked damages, we have not considered these issues further in this report.

## Explanatory Note

---

This Law makes provision for compensation in personal injury cases by requiring courts to apply a specified discount rate to an award of damages and by creating a statutory regime for awarding damages by way of periodical payments.

*Article 1* defines “discount rate” and “periodical payment order”.

*Article 2* requires a court to apply the discount rate when calculating an award of damages for future pecuniary loss in an action for personal injury. The discount rate, as defined in *Article 1*, is the rate of return from the investment of a sum awarded by a court. A discount rate of 0.5% is to be applied if pecuniary loss is expected to be incurred for a period of 20 years or less at the time the court order is made. If the pecuniary loss is expected to be incurred for more than 20 years, a discount rate of 1.8% is applied to the award. The rate can be amended by Order. In addition, Regulations can amend the Law to make provision in relation to discount rates, such as the processes for determining rates and factors which need to be taken into account in determining such rates.

*Article 3* inserts a provision in the Income Tax (Jersey) Law 1961 to allow the States to make Regulations amending that Law to make provision for the taxation (including exemption from taxation) of lump sum payments for future pecuniary loss awarded by a court in personal injury cases.

*Article 4* makes provision for periodical payment orders in respect of personal injury cases. A periodical payment order is an order made by a court for an award of damages to take the form, wholly or partly, of periodical payments. The court must be satisfied that the continuity of payment under such an order is reasonably secure. It will be reasonably secure if enforceable against a Minister or protected by a scheme such as one established in the UK under the Financial Services and Markets Act 2000. If the payments are to be made by a public body as defined in *Article 5*, a court may also be so satisfied if the order is subject to a guarantee given by the Minister for Treasury and Resources.

*Article 5* makes further provision for such guarantees made by the Minister for Treasury and Resources. It defines the “public bodies” in respect of which a guarantee may be given and allows the Minister to specify such other public bodies as he or she specifies by Order.

*Article 6* makes provision for how this Law is to apply in relation to actions started before the date this Law comes into force (“commencement date” as defined in *Article 1*). The discount rate applies to a court order for damages made on or after the commencement date unless the court considers that to do so would breach the rights of a party to the action under Article 6 of the European Convention on Human Rights. However the discount rate cannot be applied to an award of damages after the commencement date if no right of appeal subsists at that date and the mere fact of the court’s power under this Law to apply the discount rate does not itself give rise to a right of appeal. A periodical payment order can be made after the commencement date but, like the provision relating to discount rates, a court cannot make a periodical payment order after the commencement date if no subsisting right of appeal exists and the power of a court to make such an order under this Law does not itself give rise to a right of appeal.

*Article 7* sets out the title of this Law and provides that it will come into force 7 days after the day it is registered.





Jersey

**DRAFT DAMAGES (JERSEY) LAW 201-****Arrangement****Article**

1	Interpretation .....	59
2	Discount rate .....	59
3	Income Tax (Jersey) Law 1961 amended.....	60
4	Periodical payment orders .....	60
5	Guarantees for periodical payment orders made against public bodies .....	61
6	Actions for damages commenced prior to the commencement of this Law.....	62
7	Citation and commencement .....	63





Jersey

## DRAFT DAMAGES (JERSEY) LAW 201-

A LAW to make provision for compensation payments in personal injury cases in relation to the application of a discount rate and periodical payment orders.

*Adopted by the States* [date to be inserted]

*Sanctioned by Order of Her Majesty in Council* [date to be inserted]

*Registered by the Royal Court* [date to be inserted]

**THE STATES**, subject to the sanction of Her Most Excellent Majesty in Council, have adopted the following Law –

### 1 Interpretation

In this Law –

“commencement date” means the date that this Law comes into force under Article 7;

“discount rate” means the rate of return from the investment of a sum awarded as damages for future pecuniary loss in an action for personal injury;

“periodical payment order” means an order under Article 4(2).

### 2 Discount rate

- (1) If a court makes an award of damages for future pecuniary loss, in calculating the award it must apply the discount rate subject to Article 6.
- (2) The discount rate is –
  - (a) 0.5% if, at the time the first court order in an action for damages is made, future pecuniary loss is expected to be incurred for a period not exceeding 20 years; or
  - (b) 1.8% if, at the time the first court order in an action for damages is made, future pecuniary loss is expected to be incurred for a period exceeding 20 years.
- (3) The Chief Minister may, after consultation with the Bailiff, by Order amend the discount rate, subject to paragraph (7).

- (4) The States may, by Regulations, amend this Law subject to paragraphs (6) and (7) to make such provision as the States think expedient in relation to the discount rate, including making consequential amendments to this Law and making provision for any matter to be included in a Schedule.
- (5) Without prejudice to the generality of paragraph (4), Regulations may, in particular, make provision for –
  - (a) the process for determining the discount rate, including any requirements for consultation and who may determine the rate;
  - (b) the creation of bodies who must be consulted during the process for determining the discount rate;
  - (c) different discount rates to be specified for different types of case;
  - (d) factors to be taken into account in determining the discount rate, including different factors in different types of case;
  - (e) the making of rules of Court.
- (6) In making provision in Regulations for determining the discount rate, the States must take into account the return to be expected from a lower risk diversified portfolio of investments.
- (7) The discount rate must not be amended to a percentage less than 0%.

### 3 Income Tax (Jersey) Law 1961 amended

In the Income Tax (Jersey) Law 1961<sup>1</sup> after Article 142 there is inserted –

#### “142A Power to make Regulations relating to personal injury lump sum payments

The States may by Regulations amend this Law so as to make provision for the taxation, including exemption from taxation, of income arising from the investment of lump sum payments awarded by a court by way of damages in respect of future pecuniary loss in personal injury cases.”

### 4 Periodical payment orders

- (1) In respect of personal injury claims this Article is without prejudice to a court’s power under customary law before the commencement date to make an award of damages other than by way of a lump sum before that date, but after the commencement date this Law has effect notwithstanding any customary law.
- (2) A court awarding damages for future pecuniary loss in respect of personal injury may make an order that the damages must wholly or partly take the form of periodical payments.
- (3) A court may not make a periodical payment order unless it is satisfied that the continuity of payment under the order is reasonably secure.
- (4) For the purposes of paragraph (3), the continuity of payment under a periodical payment order is reasonably secure if –

- 
- (a) the order is enforceable against a Minister;
  - (b) it is protected by a scheme, statutory or otherwise, established under any jurisdiction, such scheme being one which the court is satisfied gives protection equivalent to the scheme established under section 213 of the Financial Services and Markets Act 2000 of the United Kingdom; or
  - (c) it is subject to a guarantee given under Article 5(2) by the Minister for Treasury and Resources in respect of that particular order.
- (5) A periodical payment order may include provision for any of the following –
- (a) requiring the party responsible for the payments to use a method (specified in the order or to be selected by the party) under which the continuity of payment is reasonably secure under paragraph (4);
  - (b) about how the payments are to be made;
  - (c) requiring the party responsible for the payments to take specified action to secure continuity of payment.
- (6) Where a person has a right to receive payments under a periodical payment order, or where an arrangement is entered into in satisfaction of an order which gives a person a right to receive periodical payments, that person's right under the order or arrangement may not be assigned or charged without the approval of the court which made the order and –
- (a) the court must not approve an assignment or charge unless satisfied that it is necessary;
  - (b) a purported assignment or charge, or agreement to assign or charge, is void unless approved by the court.
- (7) Any alteration of the method of payment under a periodical payment order is a breach of the order unless the alteration of method has been approved by the court.
- (8) A person who has an interest in the making or receipt of a payment under a periodical payment order may apply to the court for a variation of the provisions of the order on the ground that there has been a material change of circumstances since the order was made.
- (9) For the purposes of paragraph (8) a person may have such an interest if the person –
- (a) is the recipient of the payment;
  - (b) is the person making the payment; or
  - (c) otherwise has an interest in the payment.
- (10) The powers to make Rules of Court under Article 13 of the Royal Court (Jersey) Law 1948<sup>2</sup> includes powers to make Rules with respect to the varying of periodical payment orders.

## **5 Guarantees for periodical payment orders made against public bodies**

- (1) In this Article “public body” means any of the following –

- 
- (a) the States Greffe;
  - (b) a committee or other body established by a resolution of the States or by, or in accordance with, standing orders of the States Assembly;
  - (c) an administration of the States;
  - (d) a Department referred to in Article 1 of the Departments of the Judiciary and the Legislature (Jersey) Law 1965<sup>3</sup>;
  - (e) the States of Jersey Police Force;
  - (f) any body (whether incorporated or unincorporated) prescribed by Order made by the Minister of Treasury and Resources, such body being one which appears to the Minister to exercise functions of a public nature.
- (2) The Minister for Treasury and Resources may, in the name of the States, guarantee the payments to be made by a public body under any particular periodical payment order under Article 4.
  - (3) A guarantee under paragraph (2) is to be given on such terms as the Minister for Treasury and Resources may determine.
  - (4) Any sums required by the Minister for Treasury and Resources for fulfilling a guarantee under this Article are to be defrayed out of the annual income of the States and any sums received by the Minister by way of reimbursement or interest shall be paid into the consolidated fund.
  - (5) Notwithstanding Regulation 9(7) of the Public Finances (Transitional Provisions) (No. 2) (Jersey) Regulations 2005<sup>4</sup>, borrowing by the States is not to be taken to include the giving of a guarantee under this Article.

## **6 Actions for damages commenced prior to the commencement of this Law**

- (1) Subject to paragraph (3), in an action for damages started before the commencement date –
  - (a) the discount rate applies to an award of damages made by a court (whether or not following an appeal) on or after the commencement date unless it appears to the court that to apply the rate would be contrary to the rights of a party to the action under Article 6 of the European Convention on Human Rights; and
  - (b) a periodical payment order may be made by a court (whether or not following an appeal) on or after the commencement date.
- (2) If, in respect of a court order made before the commencement date, there is no subsisting right of appeal on the commencement date, a court has no power to make a periodical payment order or apply the discount rate.
- (3) For the avoidance of doubt, the power of a court under this Law to apply the discount rate or to make a periodical payment order does not itself give rise to a right of appeal in respect of an action for damages started before the commencement date.

**7 Citation and commencement**

This Law may be cited as the Damages (Jersey) Law 201- and comes into force 7 days after the day it is registered.

- 
- <sup>1</sup> *chapter 24.750*
  - <sup>2</sup> *chapter 07.770*
  - <sup>3</sup> *chapter 16.300*
  - <sup>4</sup> *chapter 24.900.81*