TPR: Innovation and regulation
Introduction
The Pensions Regulator, established under the Pensions Act 2004, is the UK regulator of work-based pensions. We are a non-departmental public body sponsored by the Department for Work and Pensions (DWP), which is also responsible for developing the policy around our objectives and functions and preparing relevant legislation. The legal framework within which we regulate is set by Parliament.

We regulate occupational defined benefit and defined contribution schemes, limited aspects of work-based personal pensions, and the governance and administration of public service pension schemes. We are also responsible for maximising employer compliance with their duties relating to automatic enrolment into workplace pensions.

On 10 July 2015, the government launched its plan to raise UK productivity. Part of this plan was to look at how the UK regulatory framework is set up to support innovation and disruptive business models. Departments were asked to work with regulators to consult on and publish innovation plans. These plans specifically set out the following:

- An assessment of how new technology is likely to shape the sectors being regulated.
- How legislation and enforcement frameworks could adapt to new technologies and disruptive business models to encourage growth.
- Actions for how regulators could better utilise new technologies to generate efficiency savings and reduce burdens on business.

Our response to each of these issues (formulated in conjunction with DWP) is outlined in this plan.

An assessment of how new technology is likely to shape the sectors being regulated
New technology is changing the pensions landscape from operational design and administration to the way schemes communicate with their members.

Automatic enrolment is a driver for change across all business sectors of the UK because it affects all employers with at least one worker. This has energised the pension and service industries to provide new technology and product solutions to support employers with compliance, and scheme members with timely and accurate information about their savings.
Successful automatic enrolment relies on the efficient management and flow of data. Employee data is provided to pension schemes alongside employee and employer contributions. Standardised data formats will allow the streamlined transfer of data between these parties and potentially increase the range of employer choice. We encourage employers to use payroll software to transfer this data and have supported the development of industry initiatives to develop solutions for standardised transfer of data between payroll systems and pension providers.

Consensus in the industry is that the development of a single and common application programming interface (API) is essential to the development of the pensions industry. We also recognise that an API is a more effective way for us to share data, both with other government departments and externally. Examples of our use of APIs include providing data to DWP for their cloud-based Pension Tracing Service, and providing automatic enrolment staging date information to payroll providers and others.

Engaging scheme members in the saving process is a priority for many employers, and some have used ‘gamification’ techniques where apps are used to help members understand how much they need to save and to model outcomes for the savings they already have.

For example, one large pension scheme has created a game where a family of characters have to collect as many coins as possible, with the youngest family members being given the most time to collect their coins. Pension scheme modellers such as these are likely to develop into more advanced ‘robo advice’ although care needs to be taken that such products are closely tied to customer outcome analysis. More importance is also being placed on pension scheme members being given timely and accurate information. Employers are increasingly using digital technology such as intranets and webinars in order to achieve this.
Future innovations driven by industry and government may help provide a complete picture and planning tool for an individual’s pension savings held across different providers and link it to their expected state pension provision. This will be particularly helpful to individuals in pension saving for the first time as a result of automatic enrolment and those who have built up several small pension pots over time as a result of multiple employments. Development of these pension ‘dashboards’ is at an early stage, although some of the infrastructure needed to make it happen already exists or is being built. We see this development as being industry-led with support from both regulators and government helping to drive the process forward. We welcome the current industry innovations in this space which has seen pension providers develop tools utilising existing and newly developed functionality. These allow a user to input details such as current pension savings, other retirement investments and expected retirement income in order to obtain an indication of the adequacy of their prospective pension.

The administration of pension schemes is also benefiting from new approaches, with technology being used to aid the transfer of data between schemes. Trustees, administrators and managers are beginning to realise the benefits of ‘big data’ available across the industry. This data could be used to compile profiles of scheme members which would help trustees make decisions regarding fund choice, such as the most appropriate default fund. Also gaining popularity is the use of real-time investment information which, when used alongside a clear long term strategy, may allow trustees to make more timely investment decisions. Although in its infancy, robotic process automation is starting to be used in pension administration as a quick, effective method of carrying out repeatable, transactional and rule-based activities.

How legislation and enforcement frameworks could adapt to new technologies and disruptive business models to encourage growth

We act within the legal framework set by Parliament and have been working closely with other regulators and the pensions industry as a whole to identify trends. This ensures that both we and our partners in government are aware of any developments that may warrant changes to our processes or the legislation owned by particular departments. Only recently, our statutory objectives were amended to reflect the need to minimise adverse impacts on the sustainable growth of sponsoring employers in funding pension schemes. This new objective, and our revised code of practice on funding defined benefits, has been warmly welcomed by employers during this period of challenging economic conditions.
Innovation Plan

We use a range of regulatory options to drive compliance and prioritise our resources on the basis of risk. We are outcome-focused and work with other regulators, such as the Financial Conduct Authority, to ensure a joined-up approach to compliance, share best practice and ensure that the pensions industry is regulated effectively. We review our services, processes and enforcement approach regularly to ensure that they are fit for purpose, adaptable to new technologies and business models and continue to support the achievement of our statutory objectives.

In particular, we have taken advantage of the fact that new technology is becoming more accessible and used this to our benefit and our stakeholders: providing more user-friendly online tools and guidance such as the automatic enrolment duties checker and the Trustee toolkit. These are helping trustees and employers to better understand the pensions system, its requirements and flexibilities, and our role within it – making it easier for them to comply with the law.

We have an open risk appetite for taking well-managed risks where innovation and change create opportunities for discernible benefits. In particular, we appreciate that for automatic enrolment to be a success there is a significant dependency upon the market to develop supporting products (e.g., payroll software). As such, we will seek to actively work with these bodies to help understand any innovations, ensure they are supportive of automatic enrolment and enable availability of such products to employers to maximise their compliance.

As part of the Innovation Plan we intend to use existing stakeholder forums to discuss innovation with representatives from across the pensions industry.

The aim of the forum will be to better understand potential developments in the industry and encourage and support those that lead to improved scheme member outcomes, to share learning, and to promote new technology and business models. Through the forum we hope to facilitate the development of pension dashboards and encourage the industry to share its data more widely.

We will continue to look at what opportunities technological advances provide, so that we might better support our stakeholders. However, we must carefully weigh up the cost benefits of any proposed changes, bearing in mind that we are funded by a levy on pension schemes and a grant-in-aid from general taxation.
**Innovation Plan**

**Actions for how regulators could better utilise new technologies to generate efficiency savings and reduce burdens on business**

We are already responsive to technological changes in the pensions industry and support the development of new technology and growth. We also recognise the importance of keeping up with the latest developments in order to increase our effectiveness as a regulator.

Our website has evolved to be able to provide information to all UK employers, many of whom will be new to pensions provision. We have taken account of the latest trends in information sharing and delivery and have optimised our web offering for mobile and tablet technology. All our web deployments are thoroughly user tested and we will shortly be rolling out an interactive prototyping web-based tool that will enable customers to provide better and more complete feedback, resulting in a more user-centric solution.

A wealth of information is available via our website and we are continually working to tailor the way it is presented. For example, we have recently developed simple step-by-step guidance and interactive tools, and are in the process of revisiting key documents currently only available in PDF format to make them more accessible and dynamic for the web user.

We aim to offer as many services as possible online and a recent example of this is our tool for pension providers to ask us to appoint a trustee. By moving this tool online, we have minimised the burden on providers and improved the efficiency of the process for both parties.

We also gather data from pension schemes and employers in support of our regulatory activity. Increasingly, we are making use of online tools which pre-populate known information where possible, to drive efficiency and help to minimise burden. We share our data with a number of partner organisations (for example DWP and the Pension Protection Fund). We have now started to do this by providing APIs which are a more flexible and efficient way to share data compared to legacy data transfer mechanisms.
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Social media is playing an increasingly important role in our communications activity. We align our social media presence to that of our audiences and now use LinkedIn, Twitter, Google+, Facebook and YouTube. Two way dialogue via social media has been slower to develop but we are conscious that this may change amongst our newer audiences. Inbound web traffic from social media platforms has increased each quarter and we now hold live Q&A sessions and webinars with our business adviser audience. We also produce our own short educational videos which we have made available on our YouTube channel as well as on our website.

We already publish a large amount of the data we hold (for example via ‘DC Trust: a presentation of scheme return data’). However, by their very nature, these publications are reports based on specific data cuts. It has been suggested that we should make our data more accessible so that external parties can use it in a variety of innovative ways to the benefit of the pensions market (for example to aid the development of new market entrants). Therefore, as part of creating our data strategy, we will consider the feasibility of making more of our data public, such as employer declarations of compliance. We would of course ensure that such data was anonymised and/or aggregated as appropriate.

Furthermore, to ensure technology is used effectively to increase efficiency savings and improve customer service we plan to:

- use IT services to extend access to services and information for our customers and staff, streamline processes and reduce cost. This will include the introduction of a customer relationship management system that integrates existing technologies
- continue to develop our website to improve our provision of a single, reliable and consistent knowledge base, enabling people to access the information they require easily
- develop and enhance the website as a facility for carrying out online transactions and a vehicle for interactive communication with stakeholders. This will be achieved by maximising the use of contact via the internet and social media and ensuring customers who are contacting us via these channels continue to receive a consistent message. In the longer term, we are exploring the viability of online accounts for customers who regularly transact with us
- maximise the use of the data we hold by providing APIs to share our data with other government departments/agencies and members of the regulated community
Innovation Plan

- improve our data analytics capability to increase our ability to predict high risk groups within the regulated community and target our resources more effectively
- build on our existing relationships with other government departments/agencies to improve the quality and scope of data that is available to us
- increase our use of cloud-hosted IT services to improve the efficiency of our operations and our ability to respond to change
- deliver new IT services to enable us to work more flexibly, including deploying more portable devices, allowing staff to work more effectively outside our offices

The milestones for these goals are set out in the table below.

<table>
<thead>
<tr>
<th>Goal</th>
<th>Milestones</th>
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<tbody>
<tr>
<td>Enterprise customer relationship management system</td>
<td>Delivery will be phased, with key phases expected to have implemented by Q4 2018.</td>
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<tr>
<td>Website development – Provision of information</td>
<td>At various points each year we release new online journeys and/or tools for our key customers. The milestones are not pre-set but usually emerge from a requirement to improve an element of operational efficiency or a new strand of customer insight.</td>
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<tr>
<td>Website development – online transactions and interactive communications</td>
<td>We have a selection of technology improvements planned for 2017 including enhancing interactive features and improving online help and contact functions.</td>
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<td>APIs</td>
<td>Pension Tracing Service API: implementation completed.</td>
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<td>Staging date API: First release complete December 2015. Any further releases will be performed as required.</td>
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<td>Goal</td>
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<tr>
<td>Improving our data analytics capability</td>
<td>We are planning to mobilise a project in 2017 to implement a data warehouse capability. This is expected to be implemented as a phased delivery, ending in Q1 2018.</td>
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<td>Improving quality and scope of shared data</td>
<td>We are currently working with HM Revenue &amp; Customs to look at how the information they receive from employers through payroll submissions may further assist us in targeting our regulatory responses to automatic enrolment compliance breaches. The first phase of this work was delivered in October 2016. Any further milestones are to be confirmed.</td>
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<tr>
<td>Increase in cloud-hosted IT services</td>
<td>Whilst we already have a number of cloud-based software solutions, we will be migrating the remainder of our onsite infrastructure to a fully cloud-hosted solution.</td>
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<td>Flexible IT services</td>
<td>From 2016 we will be implementing new cloud-based telephony supported by Skype for Business to increase portability and remote collaboration. We also intend to improve the range of systems that our staff can access remotely outside the office by upgrading mobile handsets and tablets over the next two years.</td>
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Hackers continue to present a full spectrum of threats to government and the private sector. To mitigate those threats we use various tools and techniques to protect and secure our information. We comply with the Cabinet Office’s ‘10 Steps’ Communications-Electronics Security Group (CESG) guidance which is necessary for connection to the Public Services Network (PSN) and is certified to the ISO 27001:2013 framework, an international information security standard.