ICO’s call for views on building a sandbox: summary of responses and ICO comment

Introduction

In September 2018 the ICO issued a call for views to inform the development of our regulatory sandbox. A copy of the survey we used is at Annex A.

Our survey covered what we considered to be some of the key issues we needed to consider in starting to take forward this work, and posed a number of open questions.

Overall we received 65 responses, broken down as follows:

- Data subjects – 5
- Business/commercial enterprises – 41
- Public authorities – 3
- Third sector/voluntary organisations – 6
- Trade associations/representative bodies – 6
- Other – 4

A wide variety of issues were raised with considerable detailed thought having been given to many of the responses. There were many detailed practical suggestions on how the sandbox might function and we are grateful to all those who took time to provide input.

Some respondents provided detailed case studies and examples of where they had undertaken work in similar areas, such as in creating incubators or accelerator programmes for start-ups, and these will be helpful in informing our development of the sandbox.

Similarly a number of respondents gave examples of key innovations that would have benefited from sandbox involvement or might in the future, and these too will provide a very helpful set of ‘use-cases’ for us to think through as we test and develop sandbox mechanisms.

Whilst we cannot reply to each respondent we have provided an analysis of the key themes raised, and some comments throughout on our emerging thinking, in each of the key areas covered by the survey.

Key themes

General themes

Across the responses some general themes emerged over and above the specific questions we posed.
Firstly, we had an overwhelmingly positive response to the concept of us creating a sandbox. Many welcomed the opportunity to work in this way – sharing the goals of both supporting privacy and innovation - and recognising that spaces and investment like this are needed to support innovation.

Many also acknowledged the Financial Conduct Authority’s (FCA) Sandbox as a sensible point from which to start, but were keen to highlight the differences it and an ICO sandbox; and in particular the differences in the regulatory regimes – and in some of the specific requirements in dealing with personal data. A large number of responses, in various forms, expressed the desire to proceed along a basis of constructive engagement between the ICO and those that might participate in the sandbox - and the desire to see the sandbox itself evolve and develop over time as result. A few respondents wanted to make sure that we didn’t end up seeing the sandbox as its only way of providing constructive engagement, but that we should see it as one up a number of possible channels.

Many responses reflected the need to ensure that there were specific safeguards in place covering eligibility and conduct whilst in the sandbox, and in what can and can’t be communicated about participation in the sandbox. Clarity over the relationship between our work with the sandbox and our wider regulatory action such as enforcement and requirements such as Data Protection Impact Assessments (DPIAs) was also requested. A number of organisations highlighted the need to consider carefully the commercial confidentiality of participants and the implications of the sandbox for freedom of information.

We received a very small number of critical comments, which mainly raised concerns that the sandbox could be used to endorse non-compliance with data protection legislation.

**ICO Comment**

We are encouraged to see the levels of support for this initiative and recognise the key points made and the differences with the FCA Sandbox. We will ensure robust safeguards, clarity over the relationship with our other powers and regulatory requirements, and put in place mechanisms to protect the commercial confidentiality of participants whilst meeting our requirements under freedom of information. The sandbox will not be used to endorse non-compliance with DP legislation but to support innovation in a manner that is compliant.

We fully expect the sandbox itself to evolve and change over time. We see the creation of the sandbox as an enhancement of our role and not therefore a substitution of our other ‘constructive engagement’ based activity.
Perceived barriers and challenges to innovation

Views varied as to whether the General Data Protection Regulation (GDPR), Data Protection Act 2018 (DPA2018), or the ICO’s approach to its role as a supervisory body, presented particular challenges to innovation.

The overwhelming majority of perceived barriers raised pertained to understanding what the correct application and interpretation of GDPR and DPA2018 should be in particular contexts and hence what should be permitted.

These included a number of interesting and challenging areas that related to innovation, such as:

- use of personal data in emergent or developing technology including biometrics, internet of things, wearable tech, cloud-based products;
- using live personal data and building in privacy into live test environments;
- complexity of sharing data at any and all levels, whether within country or in cross-border transfers and dealing with different jurisdictions;
- balancing good user experience and public trust with ensuring transparency, clarity and ‘explainability’ of data use;
- perceived limitations, or lack of understanding of, implications of GDPR and DPA18 for automated decision making, machine learning or artificial intelligence (AI);
- utilising and repurposing existing data - often at scale and in linking data - for new uses such as learning analytics, health research, or tailored product or service development;
- achieving privacy by design early in product development, when this may generate costs or not be possible until testing has been undertaken.

Some potentially more basic issues, such as identifying whether data is in fact personal, were also raised. A small number of respondents also indicated that there may be a general chilling effect on people sharing or manipulating data in a way that might be beneficial for innovation.

Very few respondents however indicated that ICO’s approach to regulating presented a specific challenge to innovation; with the clear majority stating that it do not present any particular barriers. Where potential issues were raised they tended to fall into the following main areas:

- requesting more specific and timely guidance on application of the GDPR and DPA2018 in particular contexts;
- greater clarity and consistency in how we will respond to particular circumstances or queries raised, and in doing so publicly so that shared understanding is developed.
Some respondents also indicated that the challenges that small new innovative organisations face innovating with personal data needed particular consideration. These included issues such as:

- dealing with technical complexity created in things like contracts in reaction to GDPR;
- showing that they can be trusted with personal data;
- having the skills and knowledge -whether technical or not - to be able to innovate safely with personal data.

**ICO Comment**

The GDPR and DPA2018 are principle-based and require organisations to take accountability for applying them in their context and demonstrating their compliance. We understand that this presents challenges and are committed to assisting through the provision of toolkits, checklists and where appropriate supporting guidance. We will continue to endeavour to do this in a timely and consistent manner.

Many of the answers as to how best to apply the GDPR will rest with organisations and sectors themselves. The GDPR creates the opportunity for sectors to come together to create codes of conduct that will provide practical application of the GDPR and we welcome dialogue with any sector that wishes to make progress in this manner. The sandbox itself presents an opportunity to test approaches to addressing these challenges and in some circumstances that could then inform the creation of sector-specific codes of conduct.

We are keen to ensure the sandbox develops in such a manner as to be as accessible to small start-up organisations as to large incumbents, and everything in between.

**Scope**

Perhaps understandably many respondents from organisations were keen to see that the sandbox would be open to the organisations like their own, with a small number suggesting that there should be industry-specific sandboxes. Some respondents however were keen that the sandbox was more broad – reflecting the cross cutting nature of personal data and some of the shared challenges.

Sectors that we may have expected to show a strong interest did so, with a clear majority of the business and commercial responses coming from within the digital and technology sectors. Particular sectors referenced where innovation could benefit from the existence of the sandbox included:

- Health and social care sectors.
Online advertising and direct marketing.
Energy.
Telecommunications.
Financial services and Fin Tech.

Particular cross-cutting data protection issues that were raised as areas that would benefit from inclusion in the sandbox included:

- achieving safe data sharing and portability and analysis to support the provision of services or charitable or educational interventions;
- methods of evidencing data protection compliance such as evidencing consent and providing supporting documentation;
- the use of personal data in emerging and developing technologies like internet of things, automated vehicles, artificial intelligence, blockchain;
- the use of special category data, and in particular managing the consent of test groups;
- purpose limitation and compatibility assessment in the context of machine learning.

One recurrent theme was the need to ensure that the sandbox focused on ensuring benefits were delivered to the end users of the products and services – whether these were defined as customers, patients, citizens or the general public.

**ICO Comment**

We are currently of the view that the sandbox should be broad in scope and open to all sectors and to all types of innovation. We are though considering specifying some areas of focus where we would particularly welcome applications - and which these responses will help inform.

We agree – as suggested by some – that we should however limit that scope to those products and services that can demonstrate:

1) that they represent genuine innovation;
2) that they can demonstrate material benefit to data subjects;
3) that they have in place a robust accountability framework for working with personal data.
Benefits of involvement

Respondents recognised the benefits we set out in the call for views as being the key potential benefits. By far the most frequent benefit cited was access to ICO expertise, guidance and support.

Respondents in particular suggested that an open and collaborative approach would be beneficial – solving challenges in a spirit of cooperation and constructive engagement with the regulator. Using the sandbox to come to shared understandings of how the GDPR can be applied in various different contexts was often referred to as being one such key benefit.

Some respondents were keen to emphasise the benefits that involvement might have in mitigating design risk at early stages of product and service development. Others focused on the role that the sandbox could play in enhancing trust – whether that was from investors, the public or from local or national government.

A small number of respondents wished to see some form of badge or certificate be awarded for participation in the sandbox.

ICO Comment

We recognise the overwhelming feedback that the main benefit sought would be for ICO expertise, support and guidance and see the sandbox developing with a range of mechanisms that fall largely in this area. We do not envisage providing technological solutions or platforms through the sandbox.

We do also recognise the benefits that participation could bring for organisations in creating enhanced trust in their product or service. Whilst we will not provide a ‘badge’ or certification as a result of the sandbox we are keen to explore what forms of communication, such as letters acknowledging entrance and exit to the sandbox, or other mechanisms there may be to contribute to this enhanced trust.

Sandbox mechanisms

By far the most frequently requested sandbox mechanism was the provision of informal steers, advice, or guidance from ICO. There were many suggestions as to what form this might take including:
• phased or iterative advice – from idea, concept to prototyping and then into supervised product or service testing;
• process walkthroughs – step by step walkthroughs of proposed processing activity;
• video drop-in or workshops with design and development teams at an early stage in order to inform very early thinking;
• advice on risk mitigation at design stage;
• creation of generic guidance from issues raised out of sandbox participants - whilst being careful with commercial confidentiality.

Some respondents actively welcomed the suggestion of letters of comfort or negative assurance if these could be done in timely and clear enough manner and in a way that was meaningful.

A few organisations highlighted the potential for utilising the sandbox to provide an environment in which testing using live personal data may be more accepted.

As in respect of possible benefits a small number of organisations requested some form of certification or positive assurances about the safety of products or services that have been through the sandbox.

Some responses suggested that the sandbox should be a place to explore legislative approaches, contrasting approaches that either remove requirements that may be barriers and those that add support or new legal principles to enable regulatory requirements to be met such as in relation to areas of AI such as machine learning.
**ICO Comment**

The advice or informal steer-based mechanisms raised all seem to have potential. Our current thinking is that sandbox mechanisms will largely be based around such advisory and collaborative processes and that sandbox mechanisms will be developed for each participant in a bespoke sandbox plan – working to defined objectives and timescales and drawing such mechanisms from an indicative list.

Within such plans we see the possibility for permitting testing which makes use of live data, and at this stage envisage considering these on a case-by-case basis and only if risks can be effectively mitigated.

We will also continue to develop our thinking on what role letters of comfort or negative assurance may play.

We do not envisage the sandbox being a place to relax requirements for compliance, or to provide any certification or positive assurances as result of sandbox participation. That said, it should be possible through the sandbox to explore emergent areas and consider what additional provisions may be needed - and to provide support and guidance to organisations working in these areas - in achieving the shared goals of privacy and innovation.

**Sandbox timings**

A clear majority of participants encouraged us to ensure that the sandbox was first and foremost flexible and accessible in its approach to timings. Many stressed the need for an ‘always open’ approach due to the variability of development cycles and the fact that these were unlikely to fit with a standardised cohort model.

Flexibility was also requested by many in the duration of sandbox participation with some wanting to build a relationship iteratively over a long period of time and others welcoming short more intense periods of engagement. Some recognised the need still for ICO to have some boundaries on this, both in terms of managing resource and in terms of ensuring positive meaningful engagement was maintained.

There was some support also for the use of a pilot or test phase - though some notes of caution were also struck particularly in relation to how participants would be treated in any such phase and some uncertainty of the status of steers received within any such phase.
A few respondents wanted to see the sandbox as an opportunity for collaborative innovation with groups of organisations coming together to work on innovative products and services together, and potentially sharing this process with other interested stakeholders from Government or elsewhere. Others were keen to ensure that it was focussed on individual organisations, with a key concern being ensuring commercial confidentiality. Understandably this difference reflected the public and private nature of the organisation responding. One interesting suggestion was to permit both models – either single organisation in closed model or group participation in an open model.

A few respondents – far less than those wanting high levels of flexibility – supported more of a cohort based model, though in all cases this was less of a timing related issue and more of a desire to either see cohorts structured around specific policy goals or around particular sectors.

A few respondents fed back on the notice that organisations would need that the sandbox was opening, with estimates between four to six week as a minimum and three months as the longest.

**ICO Comment**

Our current ambition is to open the sandbox as planned next financial year with a year-long ‘live beta’ phase. Our ambition is then that, as the sandbox develops and initial demand evens out, that it becomes in principle an ‘always open’ service that welcomes and assesses applicants on a case by case basis against defined criteria and subject to ICO resources being available

We will encourage early engagement and discussion to ensure that participants understand the parameters before applying and will work with potential applicants to ensure they understand the requirements. We will also ensure that every bespoke sandbox plan has a defined timescale within it to prevent open-ended commitments.

**Managing demand**

Many respondents recognised the need we are likely to have to actively manage demand and confirmed the suggestions we made in the question were feasible.

One common response was to suggest we specify priority areas – with suggestions as what these should be, closely linked to responses provided on what the scope of the sandbox should be. These included:

- prioritising applicants that focus on particular challenges with data protection;
- restricting entrance to particular sectors in which personal data is a major issue;
• trying to make the sandbox reflect the mix of companies and organisations in the UK – with defined numbers in defined areas.

The need for clear transparent criteria in any such prioritisation was stressed by a number of respondents, again linked to defining the possible scope of the sandbox. Whilst there were many suggestions for eligibility criteria these tended to fall into three main categories:

• Public/consumer benefit criteria – ensuring benefit to the end user of any product or service in the sandbox.

• Innovation criteria – ensuring that products and services were genuinely innovative and not just ‘business as usual’.

• Fitness to participate – ensuring that participants were fit to do so eg in terms of having accountability frameworks, being ready to test, and being fit and proper organisations more generally.

Some respondents also referenced analysis of risk as being a way of managing demand; and in particular prioritising those innovations that present particular risks to data protection.

A small number of applicants connected their suggestions on managing demand to the availability of resources to the organisations wishing to be involved. For example suggesting that organisations with limited access to their own development funds should be prioritised, or conversely suggesting that participants should prove they have the necessary funding in place to ensure that time spent in the sandbox was not wasted.

Views were mixed on whether cost recovery would be feasible; some arguing that participants may ultimately benefit, though not immediately or directly, commercially from being involved and that it would be reasonable to recover costs, whereas others indicated that this could in effect prevent small innovative organisations participating. Where respondents indicated that cost-recovery was feasible some form of flexible or tiered system was suggested to reflect the different organisations applying.
**ICO Comment**

We envisage demand primarily being managed by the use of entry criteria being shaped around the three main areas suggested by respondents: public benefit, innovation and fitness to participate.

In the live beta we expect there to be an early surge in demand for involvement and so will set a date by which initial applications to be in the beta phase will need to be submitted and that we will then assess by a set date. Number of participants will be set by availability of ICO resource and numbers of participants meeting the required criteria.

We will not charge for involvement in the sandbox during the live beta phase but will continue to consider it as an option for the future.

**Next steps**

We will use this feedback to contribute to our work developing an operational model how we expect the sandbox to function. We remain committed to opening the sandbox next financial year and we are planning to undertake some roundtable consultation events to explore some of the key issues early in the New Year. Further details regarding these events will be publicised on our website.

We also remain committed to building the sandbox transparently, in consultation and constructive engagement with stakeholders, and in such a way that fundamentally protects the rights of the data subject whilst supporting innovation in the use of personal data.

If you wish to discuss the sandbox with us please get in touch via sandbox@ico.org.uk
Annex A
ICO call for evidence - Regulatory Sandbox

The Information Commissioner (the Commissioner) is calling for evidence and initial views on creating a regulatory sandbox.

The ICO’s Technology Strategy for 2018-2021 sets out that we intend to establish a regulatory sandbox. The ICO sandbox will be a safe space where organisations are supported to develop innovative products and services using personal data in innovative ways. They won’t be exempt from complying with data protection law, but they will have the opportunity to engage with us; drawing upon our expertise and advice on mitigating risks and data protection by design, whilst ensuring that appropriate protections and safeguards are in place.

This call for evidence is the first stage of the consultation process. The Commissioner seeks early evidence and views on the feasibility, scope and demand for a sandbox. This will be used to inform our detailed proposal for consultation later in the year. The Financial Conduct Authority (FCA) sandbox has been a key point of reference in this early part of the process but we are aware there are other options and views and we wish to gain as wider viewpoint as possible at this early stage.

The Commissioner is particularly interested in evidence based submissions provided by organisations that are developing innovative products and services using personal data in innovative ways. She appreciates that different stakeholders will have different and particular areas of expertise. The Commissioner will use the evidence gathered to inform further work in developing the Sandbox.

You can email your response to Sandbox@ICO.org.uk

Or print and post to:

Sandbox Call for Evidence
Assurance Department
Information Commissioner’s Office
Wycliffe House
Water Lane
Wilmslow
Cheshire SK9 5AF
If you would like further information on the call for evidence, please email the Sandbox@ICO.org.uk team.

Please send us your views by 12 October 2018.

Privacy statement

For this call for evidence we will publish responses received from organisations but will remove any personal data before publication. We will not publish responses from individuals. For more information about what we do with personal data please see our privacy notice.
Questions

Barriers and Challenges

Q1  What, if any, barriers or challenges to developing innovative products and services in particular do you perceive as a result of the General Data Protection Regulation (GDPR)/Data Protection Act 2018 (DPA18). Please provide specific examples where possible.

Q2:  Are there any perceived barriers or challenges to developing innovative products and services created by the ICO’s regulatory approach as a Supervisory Authority? Please provide specific examples where possible.

Possible scope of an ICO Sandbox
Q3 Data protection cuts across all sectors. Whilst we expect a key area of focus to be digital innovation, we would like views on the key areas of innovation, new technologies, or specific sectors that may be most helpful for the Sandbox to focus on. Please provide specific examples where possible.

Understanding the benefits of involvement

Q4 Sandbox participation needs to be beneficial to participants to be meaningful. Please indicate what specific benefits from being involved in the sandbox would be of most importance to you. These could include:

- Reputational/publicity benefits gained through involvement
- Access to ICO expertise to aid in product/service development
- Enhanced trust in data protection approaches from potential customers, investors and/or internal decision makers regarding product/service viability
- Increased reassurance for individuals who may be affected by the proposed developments
Sandbox Mechanisms

Q5 What mechanisms would be most useful within the sandbox? Please provide specific examples where possible. Examples of possible mechanisms include:

- **Advice** or ‘informal steers’ early in the development process on how to address data protection and information rights issues in developing innovative products and services

- **Adaptations** to regulatory guidance, assurance and enforcement approaches - ONLY where legally permitted and with appropriate safeguards in place. Examples of such adaptations include:
  - Provision of ‘letters of comfort’ stating that any inadvertent contravention of data protection principles during the sandbox period will not lead immediately to action
  - Provision of a negative confirmation to the effect that, at the point at which the product or service being tested transitioned out of the sandbox, on the basis of the information provided, there was nothing to indicate that its operation would breach data protection legislation.

- **Anticipatory guidance** on addressing data protection challenges in specific areas of emerging technology and innovation e.g. including development of relevant codes of conduct
Sandbox Timings

Q6 We understand that timing is crucial in the decision to move into testing, to invest in development, or to resource new projects. Awareness of the existence of the sandbox, knowledge of its parameters, and when it is open to participation, is therefore likely to be a key variable in those decisions.

Please provide any views you have on how we can best manage the timings of our sandbox to support innovation. For example,

- How much notice of the operational parameters of the sandbox is likely to be needed to inform decisions to participate?
- Should entry to the sandbox be restricted to specific ‘windows’ of time with participation through the sandbox happening as a group e.g. as a ‘cohort’ of participants? Or on an individual basis?
- Or should entry be flexible to fit with specific product/service development cycles?
- Would a pilot or test phase be attractive to participate in?

Managing Demand

Q7 Experience from the FCA sandbox suggests that there may be considerable demand from organisations to participate in a regulatory sandbox. Whilst we are keen to meet these demands we will need to balance this appropriately against delivering our core regulatory activities. It may be therefore that we will need to manage demand. If this were to happen, approaches to address this could include:
• Specifying priority sectors/areas in which we would want to see participation
• Specifying priority types of organisations from whom we would want participation (e.g. by size/type)
• Setting a maximum number of participants via
  o a defined cohort model as described above,
  o a cap which when reached closes the sandbox
• Developing a cost-recovery model to fund the sandbox

Please provide any views you have on how we might best manage demand.

Further views
Q8 Please provide any further view you wish on the development of a regulatory sandbox
About you:

Q9 Are you answering these questions as?
☐ A representative of a business or commercial enterprise
☐ A representative of a public authority
☐ A representative of a third / voluntary sector organisation
☐ A representative of a trade association or representative body
☐ A data subject
☐ Other

Q10 If other please specify:

Q11 Please provide more information, including the name and the type of organisation you work for, ie a digital start-up, a large tech firm, a public body

Q12 We would like to hear of expressions of interest in our work developing a sandbox and in potential involvement in the sandbox when it opens.

Please note involvement in the sandbox would be conditional on meeting any specified conditions of entry.

If you wish your interest to be noted with a view to further contact please provide an appropriate contact and their contact details:

Thank you for taking the time to share your views and suggestions