

## **Data**

### **Precis / POST**

Data is vital to our success. We will kick off a number of data related initiatives. These will focus on:

- High-level issues such a governance, security, quality control and compliance
- More granular activity such as data inputs, touchpoint reliability and impact of context-of-use on accuracy
- Sharing and openness
- Politics (how does this impact policy and our partnership with devolved admins and foreign trade negotiators)

The “Data” initiative will be led and managed by a specialist team – not service designers – but it is captured here as it forms an integral part of the design of our new service

## **Data Science**

- data scientist to lead planning and execution. Details to follow.

(post-it capture ignore and jump to precis)

- The importance of AI and statistics
- Machine Learning?
- “Magic”
- Explore use of statistics to mitigate need for inputs

### **Precis / POST**

The impact of data science on services continues to grow. We will assess its ability to reduce our cost or balance effort between different part of our organisation. For illustration, data science allows Google to perform real-time, multi-lingual translation in near real-time without the use of look-up tables. Words and phrases are translated not on the basis of dictionary and grammar but on the basis of massive statistical samples and analysis. Similar thinking may allow our service to deliver much higher accuracy of animal location and likely disease without the need for total individual tracing. We need to explore this opportunity and this initiative will be led by relevant experts

## **Enterprise Tech/Integration**

- Paul Brotherton will lead planning and execution. Details to follow.

### **Optimisation and quick wins**

(post-it capture ignore and jump to precis)

- Movement license forms improvement
- Test idea if having a separate hosted medicine book (to-be prototype)
- Food Chain info improvement on form (prototype)
- GOOD Description on XL
- Fix ARAMS - log in, password refresh, forms, security
- Improve CTS usability
- Enable PDF licenses
- Improve Gov.uk licenses

- Vendor management (SLA issues)
- Inputs - as part of data improvement, look at all the ways data is input and validated at the front-end to the system - Reminder that this is all front-end, data collection and inputting
- INPUTS (data validation; analysis of inputs environment - how do we pull maximum know-how from user research and plan prototyping of new inputs?)
- Better communications / feedback in existing systems around error reporting and notifying
- To include current Defra SLAs - e.g. eartag provider

## **Precis / POST**

A cross-disciplinary initiative focused on looking for lower-complexity, lower-cost or higher reward rapid tactical interventions. These might be to do with updating communications or existing input forms for example or where possible making light touch changes to how we enforce a given policy (Clare?)

## **Livestock processes and how we work with them**

(post-it capture ignore and jump to precis)

- Pre-approved routes (pyramidisation) test benefits outweigh cost
- Test/model pre-movement notifications & effect on disease risk
- Harmonization (check meaning with Policy) - harmonize with EU policy?
- Storyboarding is Important - need to have story telling
- Individual ID vs Group

## **Precis / POST**

An initiative to uncover potential savings and benefits in new ways of operating in the livestock industry. The team will conceive and prototype speculative tools, environments and situations and will test these in real industry contexts (in fields, abattoirs, markets etc.)

## **Art of the possible**

(post-it capture ignore and jump to precis)

- Explore sample innovations
- Prototype (role play) to test
- Tap into Lancashire and Somerset Police work on tracing stolen animals
- Sheep wifio in Wales - take up and feeling within industry
- Existing people in Defra on Yammer have context for above
- Tag and facial recognition
- Explore use of SMS (advance notification) - prototype to-be
- Outreach explore and prototype IoT ecosystem (contact @edent and @thingmonk)
- Explore machine learning in disease control and traceability
- Explore cutting edge of use of statistics / fuzzy logic in defining “good enough” traceability (see data science initiative)
- Climate change impacts the diseases we get in the uk
- Drones
- GPS
- Fieldforce mobility innovation
- Tagging innovation RFID
- Genetics: opportunities to precision farm DNA currently collected at point of kill in some cases
- mapping eartag developments
- electric vehicles self-driving trucks

- robot milkers
- defra drive toward common platforms and cloud based architecture
- opportunity to do easy EID
- block chain - example transparent way to track stuff
- next 10 year digital revolution will allow different types of farmers

## **Precis / POST**

This is a “creative technology” survey which may involve external innovation consultants such as PFSK. The initiative will uncover potential benefits from just-around-the-corner technology bearing in mind that while some of the components of the service may launch relatively quickly, the cultural and social change will map to 5 or even 10 years in the future so it will benefit the programme to understand this technology and its potential. Where possible or appropriate the team will prototype and test new technologies in the field.

## **How it gives us better data**

(post-it capture ignore and jump to precis)

- eID adoption
- if this data existed how would you use LIDA/CCIR

## **Precis / POST**

There are areas of the traceability landscape that while not necessarily “quick wins”, a large group of stakeholders or experts senses the potential to start improving our data as soon as possible. Perhaps this initiative is “quick start” instead of “quick wins”. The team will evaluate possible solutions around for example eID adoption and will quickly design speculative tools, situations and environments and will prototype them in order to learn how they can best form part of the new service.

## **Carrot & Stick (being seen to be fair and leveraging value)**

(post-it capture ignore and jump to precis)

- Build the negotiation toolkit (prototype to-be)
- How do you inspect WATO if paperless? (stick)
- Data Feedback (how valuable is it) CCIR
- Force(??) Ranking Put them in order
- “you need to put this in” [mock up data and test this “how would you use this data?”]
- (1,2,5 years data) how would keeper use ?
- Enforcement - on/off table
- Bov eID start?
- Who pays?

## **Precis / POST**

Key to our success is moving from a penalty-driven relationship between government and industry to a more collaborative relationship. Understanding the way value is exchanged between all parties is vital to building that partnership (who wants what for what and when and why, what are the motivations behind the stated needs etc). The outcomes of this initiative will includes tools and techniques for optimising the adoption of our new service. It will provide the materials with wich productive negotiations can be completed.

## Risk in the system

(post-it capture ignore and jump to precis)

- Explore the least risky way of moving animals
- Prototype disease response
- what we have etc
- with scientists?
- vets?
- policy people?
- Prototype
- Standstill / prenotification (??)

## Precis / POST

This initiative will focus on understanding what changes to the service or elements of the new service can reduce risk. This applies to both animal health risk or disease control risk or risk of loss of earning or other harm caused to industry. This will not replace the high-fidelity health data modelling being done by specialist teams in Defra, instead it will seek to focus on the consequences of changing or improving the service as a whole, a service designer's approach to risk in the system.

## Leaving no-one behind

(post-it capture ignore and jump to precis)

- Explore grouping in co-op (test this)
- Build tests of alternative business models
- Prototype ways to include everyone
- Would we share health data?
- Good way to include - short phone interviews - with stimulus?
- Jam
- Dystopia / Utopia scenario planning. Workshops to understand the outcomes of help industry versus protect small farmer
- Co-op prototype
- Exit schemes (Reduced peripheral complexity)
- Education, government outreach:

*If this covers 'digital upskilling' START EARLY don't leave til service goes live and don't rely on Farm Advisory Service (defra) to educate via Powerpoint – This initiative would seek to prepare a plan and assets in support of Edu and outreach“ ”- Farmer cooperative to prevent disadvantaging small farms etc. Relates to the removal of subsidies*

- Worst case vs. best case
- Managing changes in the way the industry works as a result of the project
- Effective communication of the change. Preparing all potential users to easily move to new ways of working
- whole spectrum of keepers
- This has got to work for everyone
- Step 1) Service Jam 2) communicate 3) plan?

Through a combination of research and organising events, this initiative will find practical ways to ensure the project stays true to the design principle of inclusion.

## **Enabling multi-tier industry (proposition analysis impact on consumers) [Demand Side] Assumptions**

- how does this work? is it just about scale? would it work in UK?
- prototype multi-tier
- learn multi-tier

## **(devolved admins) Test ways to be ready for talks with China (foriegn office?)**

- ~British Council?~ - an organisation that sells Britain Abroad
- API thing?
- Keepers doing things over borders
- Workshop to extract knowledge - stakeholders - Chris and Simon have met devolved admins
- Liaison w/ devolved
- Invest in Britain
- DTI
- Numbers on eartags (scotland)
- Trade agreements expiring and changing
- Include SMEs from Foreign Office? Trade negotiators? Others?

## **Org Design (change)**

- Emily Miles and team (Carolyn Moody?)

## **Service Planning**

- ALL OF THIS IS SERVICE PLANNING :)

## **Left edge of board**

- End of disco diamond
  - “How might we?” question(s)
  - Priority - Boost whole industry ecosystem
  - Animal health
  - Impact of paperless
  - Design Principles
  - Secondary HMW - Be socially responsible
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# **DRAFT! FOR REVIEW BY LEADERSHIP**

**In what way should we get to where we're going? How do we know if we're doing things the right way?**

Guiding design principles + Strategic pillars and themes

1) We leverage the Power of Three

Improved animal disease management, better foreign trade and a stronger and happier livestock industry are all completely interlocked in our future. As we design our new LIP service, we will never focus on one without considering the other two. These three pillars must be considered, enabled or improved by every initiative we take.

## 2) The Crown leaves no one behind

As we forge ahead with the exciting improvements and creative solutions to the challenges we have identified, we will never forget to factor in the smaller, the disadvantaged, those who lead a more precarious experience in our country. LIP is for all.

## 3) We will build the right knowledge, the right way for the right reasons

Our aspiration is to enable lifetime traceability of livestock. Where possible or appropriate this will also mean tracing individual animals. As we plan ways to achieve this we will always evaluate the true value of knowledge in the wider service context to ensure we only invest in data that will provide genuine returns.

## 4) We will embrace the opportunity of digital and data

Digital is not an end in itself. Creating better services that help our customers reach their objectives is the target. As we design our new service, we will always make the most of digital and data to maximise the usefulness, simplicity, scalability, and accountability of our new service.

## 5) We will enable the flow of information

Everything about our new service will build towards a solution to our primary problem, the current lack of good flow of traceability information between industry and government.

## 6) Accurate and seen to be accurate

As agents of the crown, we are responsible for the quality of our data and the impact that data has on our society. Every service design element we introduce must support the creation of a very accurate and transparent data-driven service.

## 7) We will build partnership

The only way we will reach our future objective is to build a strong partnership between industry and government. This partnership will require cultural change but will enable the growth of best practice for all participants. We will always keep this partnership front-of-mind as we design the new service.

## 8) We will promote flexible and lightweight legislation

As part of our new design, we will encourage the flexibility of regulatory controls. We will always work with policy-makers as one unit to ensure we reduce the weight of control on industry as much as possible within the quality and accountability envelope of the wider service.

# Empowering principles

These are things we recognise

Dug – here are some notes from Simon and Clare that highlight the expectations re. policy priorities and TDUG engagement with prototyping. Some of this we will want to challenge, some of it we need to accommodate/work with.

(from Simon)

## **Policy want to major on re-designing the policy for movement recording, and removal of paper passports for cattle.**

We want to make as much progress as we can through the following topics:

Individual vs batch reporting for all species, but particularly sheep.

Separate on and off moves. Who will be responsible for what (CPRCs, Hauliers, Keepers. How are movement reports handled and movements recorded on the database?)

Pre-notification – should this be extended beyond pigs, and implications for FCI.

Elimination of paper movement documents, implications for FCI and WATO.

Real time data – how this would work with current legislative requirements to record within 72 hours.

Issues with regard to moves being reported off a premises after they have arrived on.

### **For each aspect, we will need to consider:**

- My suggestion – what we know from research about how this works/could work – pain points and opportunities
- Strengths and weaknesses of current ways of doing things
- Possible options for doing things differently
- Possible constraints on our ability to change the way that we currently do things.
- Whether technology could offer novel or new ways of doing things.

### **For TDUG we need to ask:**

- What inputs we need?
- Who's putting them together and when they will be ready to issue?
- Communicating what we will talk about to members so that they can decide whether to come (Clare, you've previously said that it's probably not relevant to all)?
- Who's inviting the additional attendees (transporters and shows)?
- Who's going to facilitate the conversation and how will that work?

### **For service design:**

- What else do we need to understand about how industry actually works (e.g. when do farmers split/merge/change batches)?
- What prototyping do we need to do on the ground, before we even think about system and business process?
- Can we find a way to track individuals through batches (e.g. associate individual to batch)?
- What prototyping do we need to do re: system and business process?
- Where does all this fit in the service design plan?

## **Simon**

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