



Department
for Environment
Food & Rural Affairs

EFA Implementation in England

DEFRA CAP Delivery Programme

DEFRA CAP Delivery Programme

- ✓ England has established a programme to deliver new systems to support the implementation of the reformed CAP.
- ✓ The scope of the programme covers both Pillar 1 and Pillar 2 schemes.
- ✓ The programme vision is digital at the point of entry. Beneficiaries will either enter applications and transactions on-line supported by geo-spatial tools or be assisted to do so where they are unable to do so directly.
- ✓ The intention is that customers will be able to mark and identify features including those EFA declarations.
- ✓ It is a componentised solution but has the Abaco Siti-Agri product at its core.



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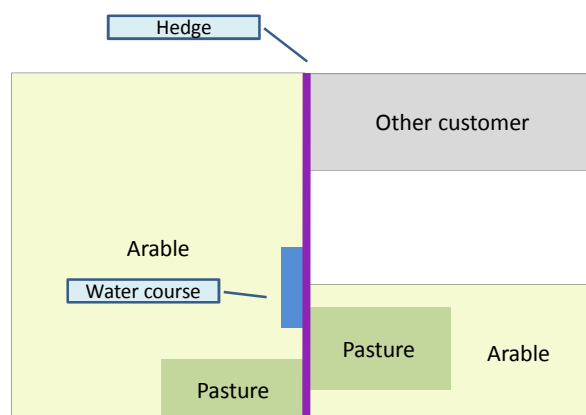
EFA in England

- England has offered the following EFA options in 2015
 - *Buffer strips*
 - *Nitrogen - fixing crops*
 - *Hedges*
 - *Catch crops / cover crops*
 - *Fallow land*
- There are a number of challenges in developing a complete EFA control layer by 2018 and in the precision around how certain features such as hedges need to be defined and controlled.
- We envisage that in 2015 beneficiaries will declare their EFA features and we will progressively capture and validate via increased inspection rates and digitisation where applicable.
- We are working with the UK mapping authorities and Abaco to examine opportunities of using automated tools to support this and particularly the requirements for the 2018 EFA layer.

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EFA – Business rules

In this example there are 3 parcels, two are linked to the same farmer (left and bottom right) the third to another customer (grey)
The hedge is indicated with the vertical purple line.



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Working with the Ordnance Survey

- In England, the Ordnance Survey produces an OS Mastermap product (OSMM) that digitally captures boundaries and features. The Rural Payments Agency, the paying agency of England, uses the product to update and refresh its current LPIS, and this will continue with the new applications.
- The product identifies that features exist on boundaries but does not specifically classify different boundary features such as hedges. This impedes the automatic identification and capture of hedges for control purposes.
- RPA has been working with the OS to look at:
 - Whether opportunities exist to use its tools and emerging technologies to confidently identify hedges automatically;
 - What limitations around the level of precision that is possible, particularly around gaps and height;
 - Running a pilot exercise on a small area to run these automation tools. Compare with data digitally captured manually and with data collected on the spot.

Working with Abaco

- Abaco has been examining opportunities to assist the identification of EFA features to aid the beneficiary application and the establishment of the control layer.
- It has worked with existing data sets available from the current RPA Rural Land Register and other sources but has also recognised the issue that some data sources are missing and the challenges it presents. For instance we do not always know what is on the other side of a boundary.
- They are still working with assumptions as the detailed rules and guidance in some areas are still to be clarified

Abaco Tools available to support EFA?

- ✓ Platform (system)
 - *SITI AGRI has a spatial rules engine that can assist in the identification of potential EFAs*
- ✓ Agents/Farmers
 - *EFAs confirmation or changes can be received through a graphical application user interface (Customer Portal or SITI FARMER) and be registered in the land use layer*

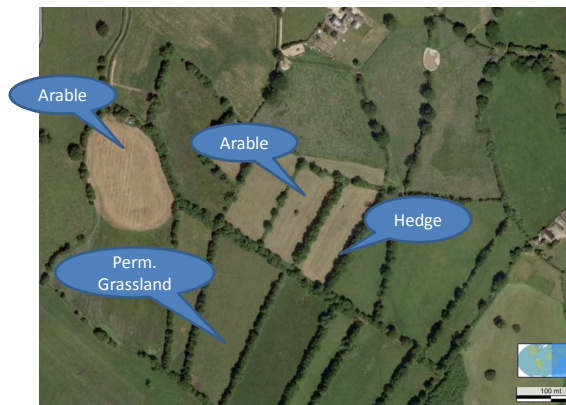
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Tools to Assist Beneficiaries

- ✓ Beneficiaries will need to:
 - work out their EFA requirement
 - measure their features and areas (checking they're on or next to their arable land)
 - work out what their features and areas are worth under the EFA rules (potential 'applicability')
 - see if they have the equivalent of 5% ('eligibility' to Greening)

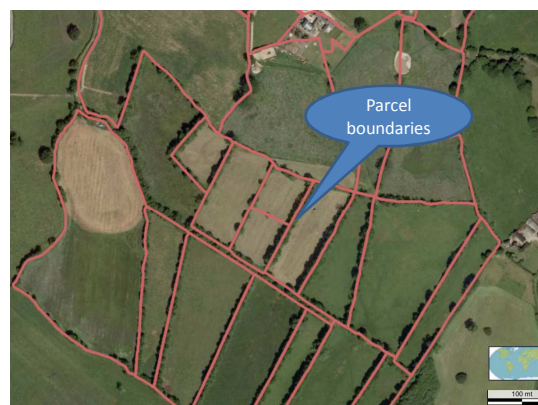
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Current Situation (landscape)



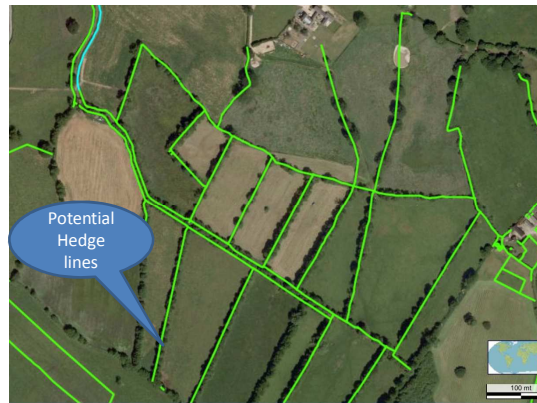
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Current Situation (Parcels)



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Features likely to be EFAs



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Applicable EFAs (automated)



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Non-Applicable EFAs (automated)



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Assisted Confirm/Change EFAs

- ✓ Screen of changes to EFAs (Farmer Declaration)

▼ [Parcel: NZ 1234 567, Lower meadow farm](#)

Hedges in this parcel	Area	<input type="checkbox"/> Select all
Hedge 1	1 ha	<input checked="" type="checkbox"/>
Hedge 2	0.2 ha	<input checked="" type="checkbox"/>
Hedge 3	0.3 ha	<input checked="" type="checkbox"/>
Hedge 4	0.2 ha	<input checked="" type="checkbox"/>
Hedge 5	0.3 ha	<input type="checkbox"/>



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Greening Calculator (eligibility)

✓ Screen of Greening Calculator

Greening Requirements 2015

From 2015, there'll be a new greening payment. This will be worth about 30% of your total payment. To get this payment, you'll need to meet the greening rules.

[View 3 Greening rules](#)

Eligibility criteria for the greening requirements	
Crop Diversification	Obligation met ✓
Ecological Focus Areas	Obligation not met ✗
Total area: [100 ha] Minimum EFAs required: [5 ha] Total EFAs identified: [4 ha] Less than 5%	
Check EFA Calculator	
Permanent Grass	Obligation met ✓

Ecological Focus Areas	
Total area:	[100 ha]
Minimum EFAs required:	[5 ha]
Total EFAs identified:	[4 ha] Less than 5% of the total area
You have not currently met your EFA requirements	

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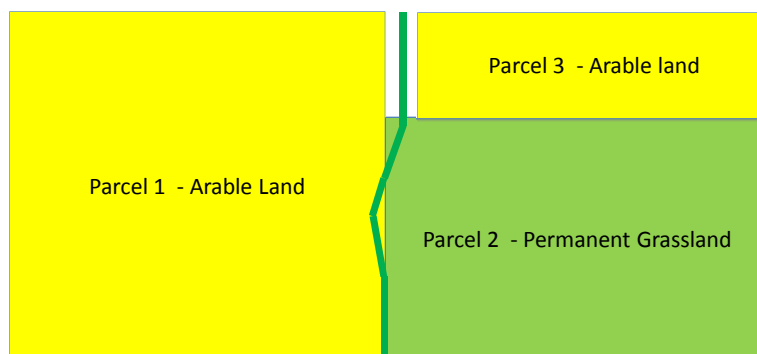
How can this work

- ✓ Applicable EFAs are inferred using the following layers:
 - ✓ Reference Parcels
 - ✓ Boundary lines
 - ✓ Water bodies
- ✓ And Business Rules
 - ✓ Linear potential EFA are segmented according to land cover changes
 - ✓ For each segment is calculated if the segment is an EFA or not (adjacent to arable land and at disposal)
 - ✓ For the EFA is also calculated if is applicable on one side or both sides

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Technical issues

- ✓ How to be sure if a line is adjacent to a polygon?
- ✓ landscape features or buffer strips are considered to be "adjacent to arable land" when they are physically touching an agricultural parcel of arable land on the longest edge of the concerned EFAs.



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Conclusions

- ✓ The development of an EFA layer is complex and potentially costly;
- ✓ In 2015 it is likely that we will be reliant upon customer declarations, increased levels of inspection and manual digitisation to control the validation of EFA;
- ✓ There are still challenges around accessing and interpreting data from sources where features are not specifically defined and we still await stable interpretation and guidance in some important areas but.....
- ✓ We are proactively looking at the opportunities to use automated techniques to capture EFA features to both meet the obligation of a complete EFA control layer by 2018 and to simplify the future application process for beneficiaries.

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DEFRA CAP DP

Thank you for the attention!