



# PES and AES: Can they be integrated and deliver better value for money?

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# Aims and Methods

*“Explore the potential for different models of agri-environment delivery, including reverse auctions and match funding mechanisms, in the context of developing the new Rural Development Programme for England.”*

Scope, trial, and assess implications  
of selected “Reverse Auction”  
mechanisms for Countryside  
Stewardship



Literature Review  
Experimental (Lab) Study  
Simulation Environment  
Farmer Workshops

*“Review the barriers and opportunities to incorporating private funding alongside Rural Development Programme funding.”*

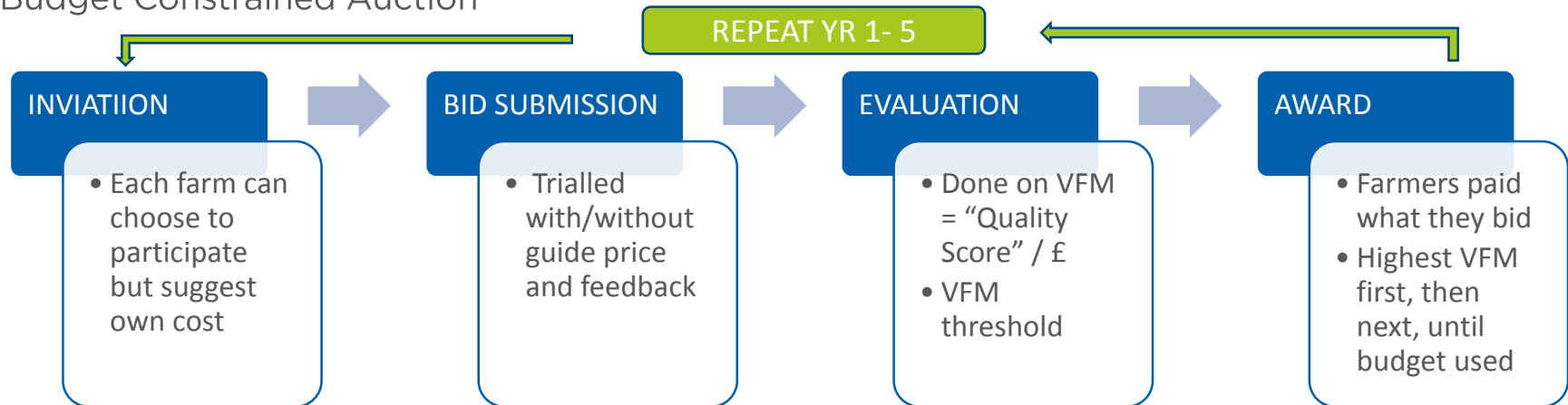
Explore potential for and barriers  
associated with incorporating  
private funding with RDP



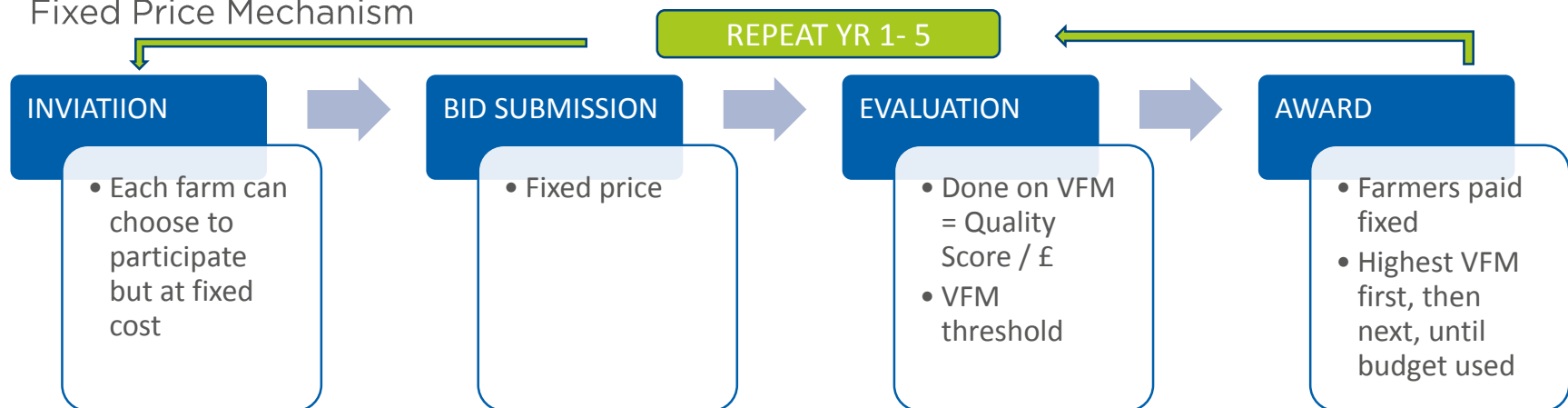
Literature Review  
Stakeholder Consultation

# Reverse Auction vs Fixed (Computer Simulation)

- Budget Constrained Auction\*



- Fixed Price Mechanism



\* Target-constrained auction also evaluated (objective to achieve certain level of uptake; single round of bidding only)

# Reverse Auction - Main Result

- 15% cost efficiency gain in Auction (0.240 vs 0.205 points / £)

Transaction Costs of £20 and VFM Feedback									
Year of Scheme	Auction			Median Fixed Price (full transaction costs)			Median Fixed Price (half transaction costs)		
	Part <sup>1</sup>	Cost Eff. <sup>2</sup>	Social Eff. <sup>3</sup>	Part <sup>1</sup>	Cost Eff. <sup>2</sup>	Social Eff. <sup>3</sup>	Part <sup>1</sup>	Cost Eff. <sup>2</sup>	Social Eff. <sup>3</sup>
One	40.1%	0.235	0.278	53.1%	0.204	0.267	58.0%	0.205	0.282
Two	44.5%	0.243	0.297	54.6%	0.205	0.270	58.5%	0.205	0.281
Three	40.5%	0.242	0.297	56.1%	0.205	0.271	59.2%	0.205	0.283
Four	42.0%	0.240	0.299	56.9%	0.205	0.272	60.2%	0.206	0.286
Five	41.0%	0.240	0.300	57.7%	0.205	0.272	60.4%	0.206	0.286

Notes: <sup>1</sup> Participation rate in percent; <sup>2</sup> Cost efficiency calculated as quality points per £ of govt. expenditure on contracts; <sup>3</sup> Social efficiency calculated as quality points per £ of farmer costs through taking on a contract



# Reverse Auction - Main Result

- 30% more farmers funded in Auction



- Caveats:
  - Assumption made on distribution of farmers' costs
  - Not including public costs of setting up auction
  - Collusion not evaluated
  - Requires widespread participation

# Reverse Auction - Other Findings

- Feedback
  - Providing feedback on VFM of winning bids encourages participation from farmers capable of offering good VFM bids
  - Higher **cost efficiency** and **social efficiency**
- Guide Price
  - Publication has modest impact in Year 1 only.
- Multiple Actions
  - “**Pick and Mix**” format leads to better VFM than “**All or Nothing**”

# Reverse Auction - Farmer Workshop

- 2 Workshops (upland livestock, lowland arable) held in Summer 2014
- Positives
  - Arable farmers understood to auction exercise
  - Valued the feedback, guide price information
  - Could encourage higher take up of “difficult” options
- Concerns
  - Scoring mechanism in CS already a step change
  - Auction would add further complexity and costs (IT, advice)
  - Payment rates will be lower
  - Would favour larger, more efficient operators
  - Perverse incentive to bid low (win agreement but under-deliver)
  - Loss of long term security of environmental outcomes
  - Collusion at local scale
- Recommendations
  - Ensure scoring approach is well understood before adding competitive element
  - Platform needs to be easy to understand and use
  - Provide feedback and guide prices
  - Offer farmers opportunity to bundle actions coherently
  - Offer opportunity to commit to longer term arrangements (>5yr)
  - Correct farmer selection important (avoid perverse incentives)



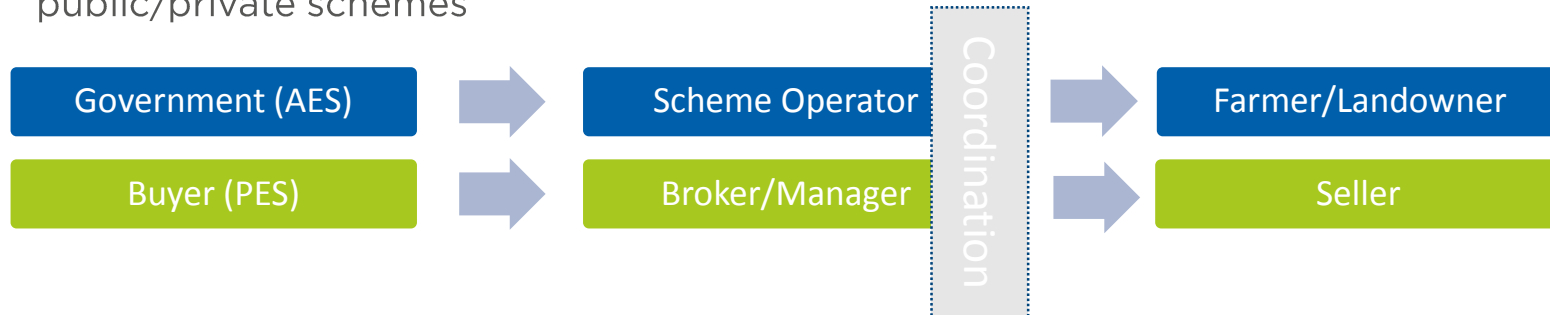
# PES Integration – The options

- Combined Administration?
  - Save costs
  - Benefits of single interface
  - Greater cost efficiency?
- Combined Purchasing?
  - As above and.....
  - More choice for public and private funders
  - Private could fund public options; Public could fund private

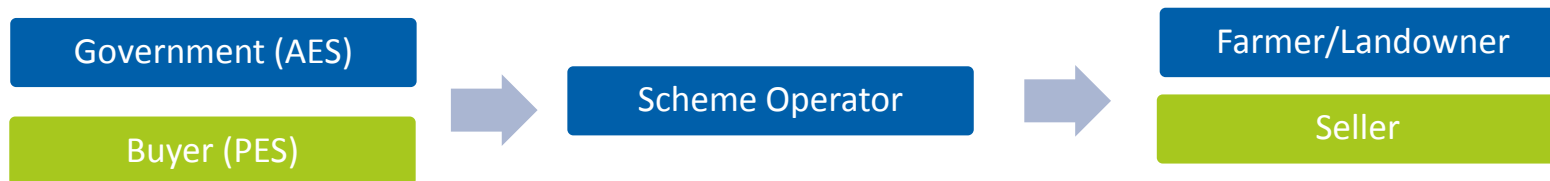


# PES Integration – Three Possible Approaches

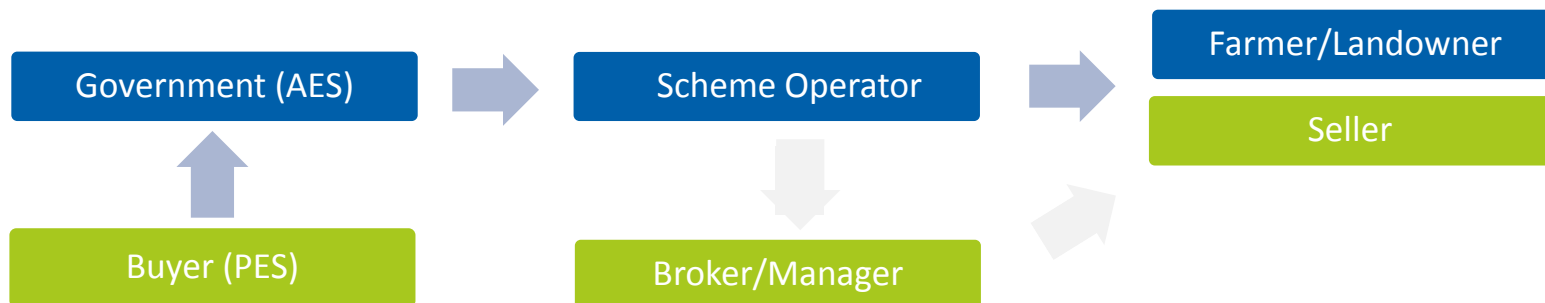
- Co-ordinated but separate public/private schemes



- Joint administration



- Joint public/private purchasing



# PES Integration - Barriers

		Coordinated purchasing	Joint admin only	Joint purchasing
Requirements of private agents	Option choice	Private agent can design and administer own options.	Private agent can design own options but these would need to be captured by the public administration.	Limited to public scheme options only within EU rules. Using additional options would require a parallel procurement process.
	Farmer contact	Shared roles to maintain contact for both parties?	Potential loss of contact by private agent	Could be lost but option for joint badging?
	Administration	Potentially more efficient / effective coordinated delivery.	Admin. Likely to be more complex but total costs should be reduced.	Income foregone rules may limit ability to apply at sufficient scale to show cost effectiveness.
EU rules	Verifiable and controllable	No impact on private options	No impact on private options	Common for both public and private schemes but may be issues of definition.
	Income foregone	No impact on private options	No impact on private options	Lack of flexibility for private agent to pay above typical costs of participation.

Key:

	Model can fully address the requirements
	Model can only partially address the requirements
	Model cannot address the requirements



# Conclusions and Recommendations

- Reverse Auctions 15% better cost efficiency (in experimental environment)
- Farmers open to concept, but a number of concerns
- Pilots should be trialled for budget and landscape scale auctions
- Multiple barriers to integrating public and private schemes
- Joint coordination model most feasible approach
- Design of this should be scoped with involvement of private sector

- Full study available at:

<http://randd.defra.gov.uk/Default.aspx?Menu=Menu&Module=More&Location=None&ProjectID=19134&FromSearch=Y&Publisher=1&SearchText=LM0105&SortString=ProjectCode&SortOrder=Asc&Paging=10>

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