#### BETTER ENVIRONMENTAL REGULATION -

# SUMMARY REPORT OF CHARGING SCHEME SESSION AT STAKEHOLDER EVENT OF 11 JUNE 2013

#### 1 Introduction

A stakeholder workshop was held, on 11<sup>th</sup> June 2013, jointly with the Scottish Government, Crown Office and SEPA in order to discuss the new enforcement measures proposed in the Regulatory Reform (Scotland) Bill and to progress work on the development of an integrated and risk-based charging scheme for regulated activities.

Delegates from a range of business sectors, government and public bodies were invited to attend (see appendix 5.7). This report will focus on the charging scheme aspects of the workshop,

This report summarises the results of the afternoon charging scheme workshop. The enforcement workshop is reported separately. An appendix provides the detailed analysis.

#### 2 Background

In October 2012, Scottish Government and SEPA consulted on "Proposals for Future Funding Arrangements for the Scottish Environment Protection Agency". The key charging scheme proposals of this consultation included:

- developing a charging scheme that is based on risk and operator performance; and
- building on the polluter-pays-principle by bringing in a charge that relates to the impact on the environment from the use of environmental resources and provides a fairer basis for the charges

An analysis of the consultation responses was published in May 2013.

- 75% supported a risk based approach to charging based upon the proposed principles.
- 85% supported direct cost recovery from poor performers.
- 55% agreed with the use of the environmental resources principle being factored into charges to regulated business.

The objective of the charging workshop was to explore the options for defining the risk-based approach to charging.

The workshop was structured to discuss the strengths and weaknesses of four illustrative approaches to incorporating risk assessment into the charging scheme. They are listed below.

 Model 1 (sector based charging). Uniform charges across an activity type, for example dry cleaners, filling stations, hydropower schemes. Charges are based on an assessment of the average impact of the activity type and the effort involved in regulation, and do not vary according to the scale of each individual activity within the sector.

- **Model 2 (site based charging)**. Charges are site-specific, taking account of the inherent hazard posed by the activity, proximity to sensitive receptors (e.g. protected areas), and the effort involved in regulation. Charges therefore vary according to the scale of the activity.
- *Model 3 (emissions based charging)*. Charges are based on the level of emissions to (or abstractions from) the environment as associated with each individual activity.
- **Model 4 (environmental impact based charging)**. Charges are based on measures of impact to the environment caused by an activity, for example pollution of watercourses or impairment of air quality. Charges also take account of proximity to sensitive receptors, and can be varied in response to measures by the operator to mitigate the impacts caused by the activity.

## 3 Analysis and Discussion

Extensive analysis of the workshop outputs has been made and is included in appendix 5.2 to **Error! Reference source not found.**. The following summarises this.

## 3.1 Review of Models and there Applicability

Participants felt that overall each model had areas of strength and weakness. The workshop (particularly via the written comments) highlighted where participants saw that the model may fit within a charging scheme. It was not unexpected that no model would fulfil all the requirements and that some combination would be required to cater across the wide spectrum of activities and scale of industry.

In summary the workshop findings were that:

- Model 1 (sector based) would be most useful for activities where technology used was consistent and the environmental impact was low.
- Model 2 (site based) struck a good balance between simplicity and being based on risk, but did not take sufficient account of measures to mitigate impacts on the environment.
- Model 3 (emissions based) scored well but with comments that this model might work well for some sectors but would be hard to apply to others where quantification of small-scale emissions was difficult (e.g. farming and forestry). There were also concerns about double charging, for example where an activity was covered by the Emissions Trading Scheme.
- Model 4 (environment based) was considered to best reflect the potential environmental impacts. However concerns were raised on its potential complexity and lack of stability / transparency such that it would not be suited for small-scale activities with low impacts.

## 3.2 Charging Components

Six charging scheme components were identified in advance for discussion at the workshop: complexity of operation, size of site / activity, level of compliance, sensitivity of environment in which the site / activity was located, the scale of emission and the environmental harm that the site / activity caused.

All six of the defined charging components were deemed by participants to be of relevance, with scale of emissions, compliance, and environmental harm emerging as the most important, closely followed by environmental sensitivity. The complexity and size of a site / activity were considered to be of less importance by participants.

## 3.3 Workshop Conclusions

Based on the feedback comments the following conclusions have been reached.

- A mix of the models is required.
- Activities with consistent technology and relatively low level of impact / emissions lend themselves to a more sector weighted model.
- A site based model will be the main component for calculating the charge for the medium to large scale activities.
- Larger activities which have good quality emissions data should have an emissions based component for charges.
- An environmental harms based model is suitable for when harm can be assessed as long as it does not become overly complex.

## 4 Next Steps

The output from this meeting will inform the development of proposals for the construction of the new charging scheme. These will be presented to stakeholders at a workshop planned for the autumn.

## 5 Appendix

## 5.1 Background to Workshop

#### 5.1.1 Models Presented and Questions Asked

The participants in the charging scheme workshop were asked to consider the relative merits of four models, summarised as follows.

**Model 1 (sector based charging)**. Uniform charges across an activity type, for example dry cleaners, filling stations, hydropower schemes. Charges are based on an assessment of the average impact of the activity type and the effort involved in regulation, and do not vary according to the scale of each individual activity within the sector.

*Model 2 (site based charging)*. Charges are site-specific, taking account of the inherent hazard posed by the activity, proximity to sensitive receptors (e.g. protected areas), and the effort involved in regulation. Charges therefore vary according to the scale of the activity.

*Model 3 (emissions based charging)*. Charges are based on the level of emissions to (or abstractions from) the environment as associated with each individual activity.

**Model 4 (environmental impact based charging)**. Charges are based on measures of impact to the environment caused by an activity, for example pollution of watercourses or impairment of air quality. Charges also take account of proximity to sensitive receptors, and can be varied in response to measures by the operator to mitigate the impacts caused by the activity.

Workshop participants were split into four groups and given presentations from the project team on each model in turn. At the end of each presentation they were asked to score the model according to how well it measured up to a set of pre-defined charging scheme principles. Once they had seen all four presentations they were asked to rank the models in order of preference. The participants were asked to consider a list of potential components for inclusion in a future charging scheme, and to rate these components according to their relative importance. Throughout the workshop, participants also had the opportunity to ask open questions about the pros and cons of each model.

#### 5.2 Number and type of responses

A total of 24 individual responses were received. Of these, 11 responses could be categorised as being from representatives of organisations that currently pay charges, and 7 from representatives of non-charge payers. The remaining 6 responses did not fall into either category, 5 of these responses being anonymous.

#### 5.3 Scoring in relation to charging scheme principles

During previous consultation exercises it has been proposed that any future charging scheme should, as far as possible, comply with the following five principles:

• Risk based and environment focused

- Flexible and targeted
- Accountable, transparent and fair
- Stable and resilient
- Simple and proportionate

Workshop participants were asked to score each of the models against the charging scheme principles, on a scale of 0-5 where 0 = no compliance and 5 = fully compliant. Detailed plots of the scores for each model are shown in Appendix 1, but the overall results can be summarised thus:

- Model 1 (sector based) scored relatively poorly against risk, flexibility, and accountability, did a little better in terms of stability and simplicity, but was not regarded by any respondent as being fully compliant with any of the five principles.
- Model 2 (site based) scored relatively well against all the principles, being given scores between 3 and 5 by most respondents.
- Model 3 (emission based) scored consistently in the middle of the range (2-3) against most of the principles, doing slightly better against risk and slightly worse against simplicity.
- Model 4 (environment based) scored very well against risk and flexibility, attracting the highest score of 5 from a significant number of respondents. However, it scored poorly against stability and simplicity.

Further insight into the relative strength of each model can be gained by adding together all the scores against all the principles (Fig 1). In this case, the maximum score that could be achieved by any particular model would be 600, assuming all 24 respondents gave a maximum score of 5 against each of the five principles.



Fig.1. Total score against all principles as achieved by each model

- Model 2 (site based) achieved the highest total score of 333. This model also showed the least variability in scoring and demonstrated the most consistent levels of compliance against all five charging principles.
- Model 4 (environment based) achieved a slightly lower total score of 330, but showed the highest variability in scoring against the five principles, indicating that it works very well in terms of risk and flexibility but poorly in terms of

simplicity and stability. Written comments suggested that this model is best reserved for the largest and most complex sites that have the most potential to cause environmental harm, and that this model is good at taking account of measures to mitigate environmental risk and impact.

- Model 3 (emission based) achieved a total score of 273, somewhat lower than models 2 and 4. It did, however, show the second lowest variability in scoring against the principles.
- Model 1 (sector based) achieved the lowest total score of 209, and showed the second highest variability in responses. Written responses, however, did indicate that there is stronger approval for this model where sectors consist mainly of small scale activities that have a low potential impact on the environment.

The total scores for each model, broken down into the total scores against each of the five principles, are presented in Fig. 2. In this case, the maximum score achievable per principle is 120.



Fig.2. Total scores per model and principle

In order to determine whether there were any significant differences in responses from individuals representing charge paying organisations and those that weren't, the average total score against all the principles from each category of respondent was calculated (see Fig. 3). Note that averages had to be used in this instance as there were different numbers of respondents in each category. The highest achievable score in this case would have been 25.



Fig.3. Average total scores against all principles for different categories of respondent

In general, the scores from different categories of respondents were not significantly different. Representatives of charge paying organisations (marked as 'Yes') gave somewhat lower scores to Model 1 than non-charge payers, perhaps indicating their concerns that widely differing scales of activity within the same sector would attract the same charges. In contrast, charge payers gave somewhat higher scores to Model 4 than non-charge payers. This may indicate that charge payers felt that the advantages of a model that most accurately reflected environmental impact outweighed the disadvantages of increased complexity and lack of stability.

Caution should be exercised when interpreting these results, due to the relatively low numbers of respondents in each category, and the widely differing numbers (11 representing charge payers, 7 non-charge payers and 6 not known). Furthermore, those participants representing charge payers tended to be representatives of larger scale operations (e.g. power companies, distillers and the construction industry). A list of invited delegates is presented in Appendix 2 for reference.

## 5.4 Preferred model

As well as being asked to score each of the four models against the five charging principles, workshop participants were also asked to rank the models in order of overall preference (Fig. 4).





Model 2 (site based) attracted the highest number of first preferences, followed by Model 4 (environment based). Model 3 (emission based) attracted the third highest number of first preferences, but the highest number of second preferences. Model 1 (sector based) attracted the lowest number of first preferences and the highest number of fourth preferences.

When first and second preferences are combined, Model 2 (site based) attracts the highest number, followed by Model 3 (emissions based) which benefits from a high number of second preferences. Model 4 (environment based) drops to third place, perhaps reflecting concerns that the complexity and lack of stability associated with this model may limit its application. Model 1 (sector based) again attracts the lowest number of preferences – see Fig. 5.



Fig.5. Preference for models, combining top two and bottom two preferences

## 5.5 Importance of components

The main components for potential inclusion in a charging scheme were defined as follows:

- Complexity of site
- Size of site
- Compliance record
- Environmental sensitivity of location
- Scale of emissions
- Environmental harm

Workshop participants were asked to rank each of these potential components according to their view of whether they were important, quite important, of minor importance or not important (Fig. 6).



Fig.6. Importance of components

Compliance and environmental harm were considered to be important components by the highest number of respondents. None of the components were considered to be of no importance by more than one or two respondents, but site complexity and size attracted the highest number of minor importance ratings.

When the rankings of important and quite important are combined, and the same is done for minor importance and not important, it can be seen that the combined

scores for the former significantly outweigh those for the latter in the case of all the components (Fig. 7). Scale of emissions, compliance and environmental harm are considered to be the most important, closely followed by environmental sensitivity. The complexity and size of a site are considered to be of lesser importance.



Fig.7. Aggregate of important and quite important, and minor and not important

## 5.6 Summary

- Model 1 (sector based) showed the lowest level of compliance with the charging scheme principles and was the least preferred overall. Written comments from participants did, however, indicate stronger support for this model where sectors consist mainly of small scale activities that have a low potential impact.
- Model 2 (site based) performed very well in terms of compliance with the five charging scheme principles, ranking of preferences, and overall consistency in responses. Written comments indicated that this model struck a good balance between simplicity and being based on risk, but did not take sufficient account of measures to mitigate impacts on the environment.
- Model 3 (emissions based) attracted a slightly lower level of support then Models 2 and 4 in terms of compliance with the charging scheme principles and ranking of first preferences, but a high degree of consistency in responses, which for example enabled it to move ahead of Model 4 when first and second preferences were combined. Written comments indicated that whilst this model might work well for some sectors, it would be hard to apply to sectors where quantification of small-scale emissions was difficult (e.g. farming and forestry). There were also concerns about double charging, for example where an activity was covered by the Emissions Trading Scheme, and concerns that scale of emissions does not always relate directly to environmental risk or impact.

- Model 4 (environment based) scored very highly against some of the charging scheme principles (risk and flexibility), but very poorly against others (simplicity and stability). It also achieved the second highest number of first preferences when ranked against the other models, but achieved the lowest number of second preferences. Overall the model attracted a good level of support, but there was a high degree of variability in the responses. Written comments indicated that due to its potential complexity and lack of stability and transparency, the use of this model would not be suited to small-scale activities with low potential impacts. It was, however, the model that took best account of environmental impact and measures to mitigate risk and impact.
- Overall, Model 2 attracted the most consistently positive responses, but other models did attract good levels of support, at least in part. In order to maximise levels of compliance with the five charging scheme principles, it is therefore likely that some elements of all the models will need to be reflected in the new charging scheme framework.

All six of the defined charging components were deemed to be of relevance, with scale of emissions, compliance, and environmental harm emerging as the most important, closely followed by environmental sensitivity. The complexity and size of a site were considered to be of less importance.

Individual	Organisation
Ronald Daalmans	Chivas Brothers on behalf of Scotch Whisky Association
Lloyd Austin	Scotlink (morning only)
Craig McAdam	Scotlink (afternoon only)
Barry Love	EL Chambers
David Wishart	Veolia Water
Gordon McCreath	Pinsent Masons on behalf of UKELA
Robert Home	REHIS
Stephen Freeland	Scottish Environmental Services Assoc.
Mick Borwell	Oil and Gas UK
Dave Crookal	Scottish and Southern Energy
Rhona Mclaren	Scottish and Southern Energy
Jane McMillan	Scottish Power Generation
Robert Reilly	Scottish Sea Farms
Gordon McGregor	Scottish Power
Andrew Simpson	SITA UK
Stuart Davidson	SITA UK
Jackie McCreery	Yester Consulting on behalf of Scottish Land and Estates
Sarah Hutcheon	Scottish Natural Heritage
Ian Nicolson	
Mandy O'Neill	Scottish Court Service HQ (morning only)
Bill Gilchrist	East Ayrshire Council
Isobel Fernie	South Lanarkshire Council
David Balmer	WH Malcolm Construction Services
John J Sheridan	Mineral Products Association (Scotland) Ltd
Mark Williams	Scottish Water
Ton Harvie-Clark	Scottish Water
John Ferry	Sinclair Knight Merz
Angus Torrance	Vehicle Certification Agency
James Clark	Vehicle Certification Agency
Nigel Johnston	BAM Nuttall
John A Murray	Balfour Beatty Construction Services
Will Munro	Food Standards Agency Scotland
Julie Whitelaw	West Lothian Council
Linda Coe	Mackay Murray and Spens on behalf of Network Rail
Ron Bailey	Clydeport
Neil Watt	Scottish Government
Bridget Marshall	Scottish Government
George Burgess	Scottish Government
Thomas Dysart	COPFS
Craig Harris	COPFS
Jeremy Warner	SEPA
John Burns	SEPA
John Kenny	SEPA
Dave Gorman	SEPA
Calum MacDonald	SEPA
Jo Green	SEPA
Iain Wright	SEPA
Martin Marsden	SEPA (workshop facilitator)
John Shaw	SEPA (workshop facilitator)
Simon Bingham	SEPA (workshop facilitator)
Paul Griffiths	SEPA (workshop facilitator)
Andrew Sullivan	SEPA (workshop facilitator)

## 5.7 Appendix 2 – List of workshop participants