Balancing Services Charges

8th Task Force

23 May 2019

nationalgridESO

Welcome and introductions

Mike Oxenham

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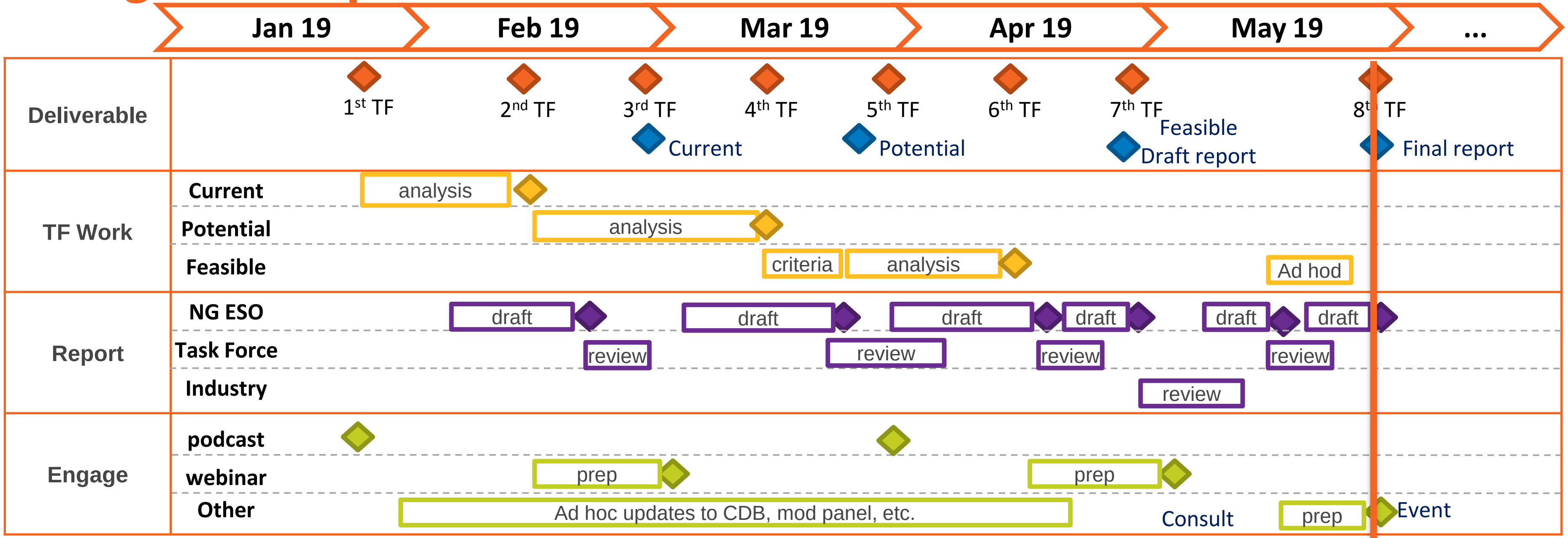
Purpose of today

- The **focus** of the task force meeting today is:
  - To review and debate consultation feedback, discuss the potential impact on the content of our draft final report and agree final actions to deliver the final report to Ofgem by 31st May 2019.

No	Subject	Lead	Time
1	Welcome and Introductions; Review Actions and Minutes	Mike Oxenham	10:00-10:30
2	Consultation response summary and discussion	Sophie van Caloen	10:30-12:30
3	*Lunch*	-	*12:30-13:00*
4	Consultation response summary and discussion (continuation)	Sophie van Caloen	13:00-15:30
5	Summary and Next steps	Mike Oxenham	15:30-16:00

Programme plan

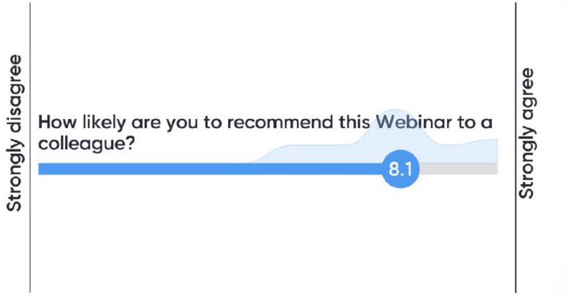


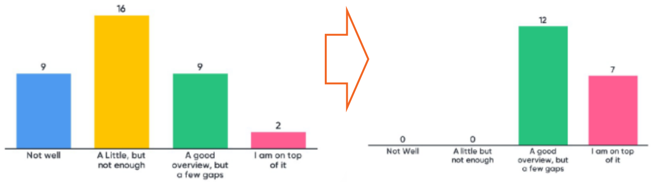
1- TF 29Jan	2- TF Feb	3- TF Feb	4- TF Mar	5- TF Mar	6- TF Apr	7- TF Apr	8- TF May
• TF plan • **Currently**: analysis actions	• **Currently**: agree conclusion • **Potential**: agree scope + analysis actions	• **Potential**: progress analysis - review options	• **Potential**: finalise options and decide progression towards **Feasible**	• **Feasible**: further analysis options	• **Feasible**: assessment options	• **Report**: finalisation before consultation	• Final **report**: consultation review and actions

Engagement - Feedback

Feedback from Webinar 7 May

- Positive overall feedback
- Detailed feedback in next slides





	Before	After	March
Respondents stating that they did not understand the progress of the TF well or only little	70%	0%	70% → 15%
Respondents stating that they had a good overview or were on top of it	30%	100%	30% → 85%

Feedback from previous engagements:

- EIUG – 14th May

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Consultation 24 non-confidential responses - overview

Name	Company	Del 1	Del 2	Del 3	Ccl
Joshua Logan	Drax Group Plc	Yes	Yes	Yes	Yes
Laurence Barrett	E.ON UK	Yes	Yes	Yes	Yes
Paul Mott	EDF Energy	Yes	Yes	Yes	Yes
Adam Morrison	EDPR	Yes	Yes	Yes	Yes
James Brown	Enercon GmbH – UK	Yes	Yes	Yes	Yes
Frank Aaskov	Energy Intensive Users Group (EIUG)	Yes	-	-	-
Joseph Underwood	Energy UK	Yes	Yes	Yes	Yes
Simon Lord	Engie	Yes	Yes	Yes	Yes
Kamila Nugumanova	ESB	Yes	Yes	Yes	Yes
Mark Draper	Flexible Generation Group	-	-	-	-
Dr. Tom Steward	Good Energy	-	-	-	-
Graz Macdonald	Green Frog Power	Yes	Yes	Yes	Yes
Jenny Garcia	Highview power	Yes	Partially	Yes	Partially
Kate Garth	innogy Renewables UK	Yes	Yes	Yes	Yes
Melissa McKerrow	InterGen	Yes	Yes & No	Yes	Yes
Sally Lewis	NGV	-	-	-	-
William Jago	npower	Yes	Yes	Yes	Yes
Andrew Ho	Ørsted	Yes	Yes	Yes	Yes
Mpumelelo Hlophe	ScottishPower Renewables	Yes	Yes	Yes	Yes
Alessandra De Zottis	Sembcorp UK	Yes	Yes	Yes	Yes
Colin Prestwich	SmartestEnergy	No	Yes	No	No
John Tindal	SSE	Yes	Yes	Yes	Yes
Scott Keen, Commercial Director	Triton Power Ltd	Yes	Yes	Yes	Yes
Alan Currie	Ventient Energy	Yes	Yes	Yes	Yes

Deliverable 1

Sophie van Caloen

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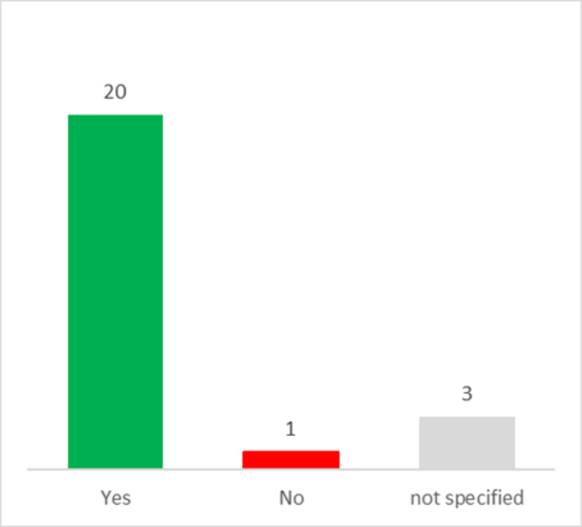
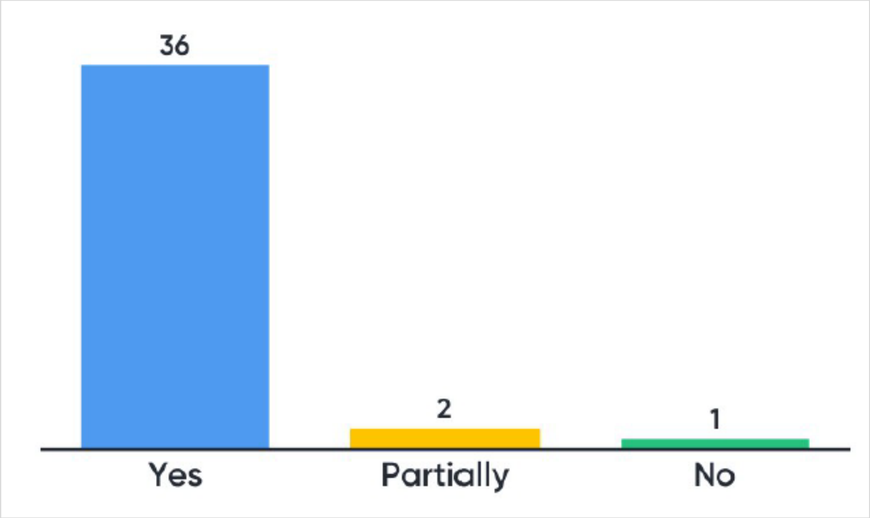
Feedback on Deliverable 1

Consultation feedback



Webinar feedback



A significant majority of the respondents to the Task Force consultation agreed with the conclusion of Deliverable 1. One respondent however argued the scope of the question regarding forward-looking signal is bringing confusion as the charge is based on a cost-recovery mechanism.

Further feedback from industry indicated a broad agreement with the five reasons highlighted in the report. Several respondents to the consultation also expressed the issue of risk premium and impact on increased consumers’ bills.

Consultation feedback on Deliverable 1 – Comments (I/IV)

With regards to the conclusion that existing elements of BSUoS do not currently provide any forward-looking signal which influences user behaviour to improve the economic and efficient operation of the market:

- A significant majority of the respondents agreed with the conclusion and that BSUoS does not provide a forward-looking signal. They agreed that the current BSUoS does not result in behaviour that would lower costs to consumers.
- One respondent did not agree with the conclusion, arguing that the confusion arises in the fact that BSUoS as a whole is a half hourly charge which looks and feels like it is a forward-looking charge while It is nothing more than a cost recovery mechanism.
- One respondent expressed that BSUoS prices currently lead transmission-connected generators to ramp up and down to generate at peak. Without the BSUoS price, there is increased incentive to run at baseload throughout the night (rather than facing start-up costs) and this would further increase BSUoS.
- One respondent also suggested that, while for RoCoF currently no signal is provided mainly because it is difficult to forecast and service despatch is opaque. a move by the ESO to calculating 'real-time' RoCoF limits combined with a 24/48-hour forecast (as with wind generation, solar and carbon intensity) could provide some kind of signal to the market at least in the short-term horizon.

Consultation feedback on Deliverable 1 – Comments (II/IV)

With regards to the five reasons identified in the draft report:

- Most respondents are in agreement with the reasons given by the Task Force.
- Many respondents highlighted the fact that BSUoS is currently difficult to forecast, increasingly volatile and overly complex. This is due to the varied nature of drivers and determinants of underlying elements that make up the BSUoS charge.
- Some respondents highlighted that without understanding the reasoning beyond costs, forecasting is impossible. One party mentioned there is a lack of transparency in how the ESO takes balancing actions. Similarly, another said that only NGESO has visibility of the complex set of inputs which make up BSUoS price. Another party noted the duration and extent of balancing actions to be procured is difficult to predict and service despatch is usually opaque with instructions given very close to delivery. The cost of services procured is not fixed and will depend on a number of market and commercial factors.
- Respondents also mentioned that, even if parties were able to forecast BSUoS perfectly (and had visibility), the majority of chargeable volume would be unable to alter their behaviour because the costs are relatively small and therefore unlikely to trigger any response. It was also noted that the costs of actions may be spread across a number of half-hours, hence will not result in a noticeable peak in any given period.
- One respondent however highlighted that, while BSUoS costs are smaller than market prices, best economic outcomes occur when charges are cost-reflective, to allow economically rational actors to respond to each of these signals. They explain that, as more zero-marginal cost plant comes onto the system, and wholesale prices fall, BSUoS may become the marginal price signal in decision-making in future.
- Respondents also reacted on the fact that BSUoS is currently levied on both load and generation also limits its ability to provide any meaningful signal as different types of parties may respond in opposite ways to a price signal.
- One respondent mentioned some additional market distortion that appear as generators connected to the transmission network pay BSUoS, while by contrast interconnected generators and generators connected to the distribution network, or behind customer meters do not pay BSUoS. Also, transmission connected storage currently pays BSUoS on both its imported and exported energy.
- In addition, one respondent highlighted the constantly changing make-up of the charge and information asymmetry of the actions making up the charge on a half-hourly basis.
- Another respondent emphasised that there are no fixed patterns or correlations in most of the balancing actions that make up the BSUoS charge fixed. Technical and market drivers of various balancing actions can often be unforeseeable and difficult to envisage.

Consultation feedback on Deliverable 1 – Comments (III/IV)

With regards to the impact of the risk premium:

- Respondents agreed with the views of the Task Force and mentioned that uncertainty and volatility in the BSUoS charge creates risk for market parties which inevitably has to be mitigated through risk premiums. They also expressed that longer term BSUoS price forecasts have proven to be highly inaccurate and do not capture its volatility. They explained that this increases the cost of power to the detriment of the efficient operation of the GB system and inflating bills for consumers.
- One respondent noted that the risk premium issue has been mitigated in certain cases (for example in the case of the "balancing system charge" strike price adjustment mechanism in the current contract for difference).

With regards to the overnight signal distortion:

- Several respondents also indicated BSUoS does tend to be highest overnight and agreed that those signals are not adequate to create an efficient response.
- One respondent emphasised this currently dampens the Demand Side Response (DSR) signal at these times and does not encourage demand-side behaviour, which would be beneficial to the system.
- One respondent highlighted that power is traded over timescales ranging from the year ahead up to real time, with no meaningful foresight of likely wind output at the point of delivery for the majority of the trading window.
- Another respondent raised concern that constrained generators may be increasing their offer prices to increase constraint cashflow, also suggesting that there could possibly be issues with other generators also increasing their bid prices to provide the constrained energy. Generators are not supposed to take advantage of system location to increase revenue and we suggest that this be investigated further by the Authority.

Consultation feedback on Deliverable 1 – Comments (IV/IV)

Other comments:

- Some respondents also discussed how to solve some of the issues raised and charge BSUoS differently. One respondent mentioned that if the BSUoS charge is to be converted to a cost recovery charge, it could be converted to a flat charge across the year.
- Another respondent, that disagreed with the draft conclusion of the Task Force, argued that BSUoS should remain a half-hourly charge as it would be absurd to suggest that some elements of BSUoS (especially energy imbalance) should not be settled half hourly. They also mentioned that just because it is difficult to forecast does not mean that it should change. Also, they believe any other approach would add even more risk premia as there would be a cost associated with smearing over a longer timeframe.

Webinar feedback on Deliverable 1 – Comments

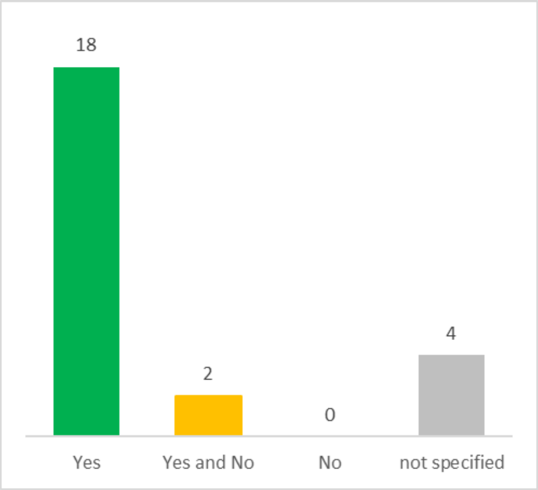
yes	This work as described so far sounds thorough, and the conclusion well-founded.
	The system and industry model has changed so much and will have to change to accommodate new technologies - therefore BSUoS charging has to change
	Information kept private like bilateral contracts do not help with forecast.
	Very much agree on the analysis, HH granularity of charging seems like something that needs changing as since it's so difficult to forecast, it seems as though many parties only make 'averaged' assumptions of BSUoS on a daily or even monthly basis.
	In all of the modelling that I have done for a wide range of clients, we only ever make an assumption on 'average' BSUoS charges - suggesting that the actual half-hourly charges do not really have any impact on investment decisions!
	The only signal is constant cost and this is covered via TNUoS. Currently high BSUoS overnight it provides a strong opposite signal that is inappropriate and leads to additional BSUoS cost.
	Right conclusions for current arrangements. Potentially more work required to understand future requirements or potential to change.
	Are users with large infeed losses getting a cost reflective signal?
No	Just because the current system does not influence behaviour does not mean we should move away from half hourly settlement of BSUoS. A large part of it is energy imbalance which is then adjusted through cash out.

Deliverable 2

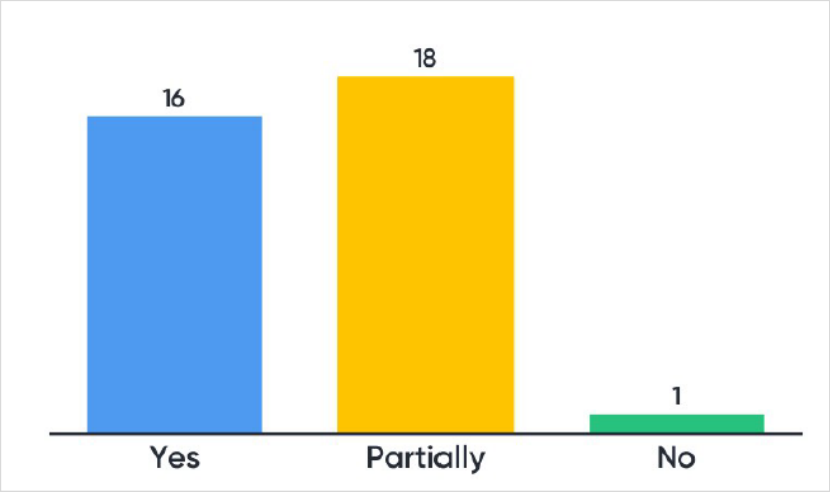
Sophie van Caloen

Feedback on Deliverable 2

Consultation feedback



Webinar feedback



The industry respondents broadly agreed with the Task Force conclusion for Deliverable 2. The Task Force received feedback that it is well presented and that the Task Force has delivered options that require further work.

Most respondents agreed several elements of BSUoS have no scope to provide forward-looking signals as they are clearly cost-recovery elements. However, some respondents suggested more time could have been spent looking more closely at elements such as energy imbalance, inertia, embedded generation behind constraints, fault and planned outages of transmission circuit. However, they also expressed that they do not believe this would have made any significant difference to the conclusions of the Task Force.

Consultation feedback on Deliverable 2 – Comments (I/II)

With regards to the four potential options identified by the Task Force:

- Most respondents agreed the four potential options have merit and describe elements of BSUoS that could potentially be reformed into a forward-looking charge. Respondents expressed the Task Force chose the correct area to focus on, has done a good job and been receptive to feedback received through engagement.
- However, most respondents raised concerns regarding limitations that could arise, and not be overcome, with each potential option. Respondents raised strong reservation regarding feasibility of those potential options.
- One respondent noted that the explanation accompanying each option was very short. There would have been merit in providing additional detail and practical examples.

With regards with elements of BSUoS not considered as a potential option:

- Most respondents agreed several elements of BSUoS have no scope to provide forward-looking signals as they are clearly cost-recovery elements.
- Some respondents mentioned more examples would be welcome. For instance, more time could have been spent looking more closely at elements such as Black Start, SO Internal Costs, Energy Imbalance, other elements of Reserve/Response or looking at different types of Reserve/Response. However, they also expressed that they do not believe this would have made any significant difference to the conclusions of the Task Force.
- One respondent said it might be helpful to confirm the materiality of costs within the report.

Consultation feedback on Deliverable 2 – Comments (II/II)

With regards to other potential options:

- One respondent suggested three other potential options:
  1. Low inertia plant (typically wind and solar) leads to additional BM and other costs as actions are taken to maintain system operability. The reduction in inertia drives additional cost of frequency response as the system is now faster moving in the event of plant loss and is a major theme in the FES reports.
  2. Embedded generation located behind transmission constraints. Where embedded generation is located behind transmission constraints (e.g. Scottish wind) this leads to an increase in the constraint cost and hence BSUoS. In addition, there has been a reduction in the size of the BSUoS demand denominator driven by an increase in embedded generation. This reduction in transmission connected generation has increased the £/MWh BSUoS rate.
  3. Fault and planned outages of transmission circuit. The loss of the western link in autumn 2018 led to a significant increase in BSUOS cost. The cost of this was met collectively through BSUoS by industry with only a small cost being born by the TO.
- One respondent believes the Task Force had insufficient time to develop views. They explained as an example that black start costs could be a potential option to consider. The probability of needing to call on black start is increased more by large generation plant, than small. Therefore, it would be logical to suggest that black start could be collected on a cost-reflective basis i.e. sending a signal to support investment in plant which is less likely to risk the need for calling on black start.

Other comments:

- One respondent believes none of the potential options are appropriate to be taken forward as changes to the charging methodology because current BSUoS charging is, and should remain, a cost recovery mechanism and be treated consistent with recent TNUoS charging changes relating to cost recovery elements i.e. allocated to demand users only.

Webinar feedback on Deliverable 2 – Comments

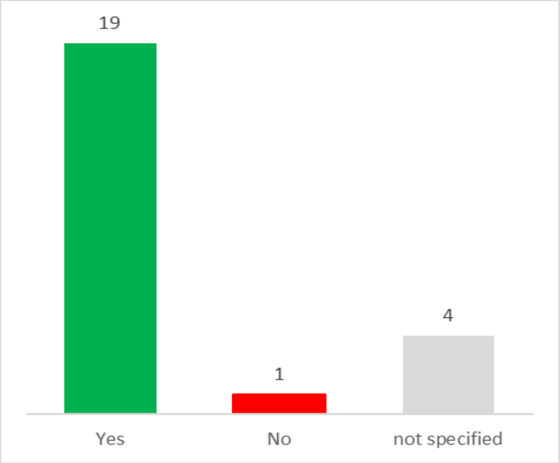
yes	Seems well presented
	As no real feasibility analysis has been carried out and no conclusions drawn on this front i agree that the group has delivered options that require further work.
	Another possibility is to move to locational marginal pricing
Partially	Without knowing the operational feasibility, it's hard to determine whether these options will work in practice. The proposed does more align to charging those who have caused the issues which have resulted in balancing being required
	There is a limit to which granularity should be chased. The NETS is a national asset and charges should not discriminate against users where they have acted to support the system in good faith. Also Connect and Manage has driven a lot of constraints.
	Seems sensible that there are regional costs associated with constraints or reactive power, albeit that there are already local reactive power charges so need to make sure there is not double counting
	TO line outages driven by faults and planned maintenance cause significant constraint cost (BSUoS) but the cost is not passed back to these parties or raised in the report
	This work should also consider future system needs. Short Circuit Level and Inertia will also be locational and should be included in the options.
	Did you consider the charging of New Connections by TNOs regarding TNO planned constraint costs?
No	The TF looks to be trying to find issues to justify its existence - the point is being overthought

Deliverable 3

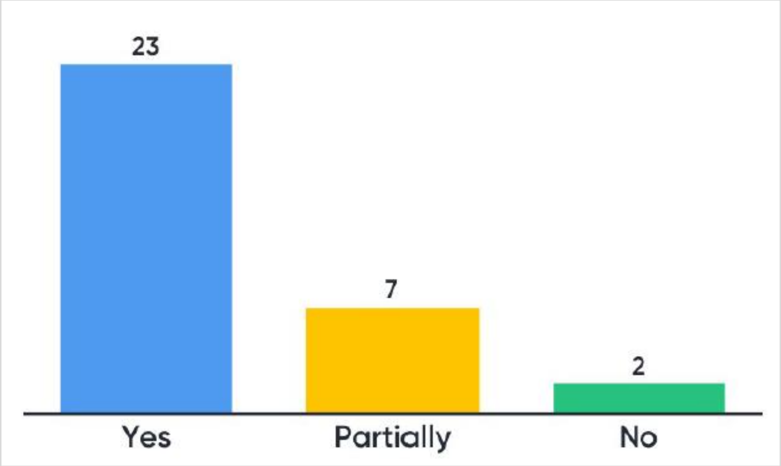
Sophie van Caloen

Feedback on Deliverable 3

Consultation feedback



Webinar feedback



A significant majority of the respondents strongly supported the conclusion of the Task Force on Deliverable 3, highlighting there are several fundamental limitations that cannot be overcome. They do not believe any of the options would be able to induce effective and efficient behaviour to reduce the overall system costs and benefits consumers. One respondent however argues there is still value in making parts of the BSUoS charge more cost reflective.

Further feedback indicated respondents agree with the overarching economic theory around forward-looking signals being based upon marginal costs as well as with the importance to ensure there is no double-counting issues. Also, most of the respondents agreed that many of the limitations that exist with the current BSUoS charge would continue to apply, expressing concerns about increasing volatility, uncertainty and complexity which would likely result in additional risk premium cost being introduced.

Consultation feedback on Deliverable 3 – Comments (I/V)

With regards to the feasibility analysis

- A significant majority of respondents strongly supported the draft conclusion of the Task Force and does not believe any of the options would be able to induce effective and efficient behaviour to reduce the overall system costs. Respondents agreed with the assessment and limitations expressed in the draft report.
- One respondent, that did not agree with the draft conclusion, argued cost reflective charging is good in and of itself and that, whilst it may be difficult to demonstrate that changed behaviour would be to the benefit of consumers, this should not have to be proved first before potential change can be investigated further.

With regards to forward-looking signals being based upon marginal costs.

- Most respondents agreed with the overarching economic theory that is described within the report around forward-looking signals being based upon marginal costs. Respondents highlighted it is fundamental to remember that constraint costs are not based on marginal costs but on the total costs incurred by the ESO.
- One respondent, that did not agree with the draft conclusion, said they would agree with this in a perfect world but that it does not mean there is no value in making parts of the charge more cost reflective.

With regards to double-counting issues:

- Most respondents agreed on the importance to ensure there is no double-counting issues. In particular, respondents highlighted the incompatibility with current TNUoS signals.
- One respondent, that did not agree with the draft conclusion, believes that with BSUoS (and cash-out) staying as is, it would be perfectly feasible to develop a further cost-reflective incentive (netting to zero) based on locational constraints. BSUoS itself would not need to change.

Consultation feedback on Deliverable 3 – Comments (II/V)

With regards to the limitations of the current BSUoS charge:

- Respondents agreed that many of the limitations that exist with the current BSUoS charge would continue to apply.
- Several respondents expressed concerns about increasing volatility and uncertainty in different zones, which would likely result in additional risk premium cost being introduced. Market participants in a particular zones may be exposed to significant changes in their cost due to actions of other market participants that would be extremely difficult to forecast.
- Several respondents also highlighted the complexity to separate BSUoS into different charges. Some of the services procured by the ESO can solve more than one system problem, making it more efficient. How those complex actions can be apportioned and charged will be unclear and may be inefficient. In addition, it could be a combination of factors that triggers the need to procure a service. Therefore, they believe the overall practicality and proportionality of creating new charges may ultimately not create value to consumers.
- One respondent also said any adjustment to reflect locational constraint payments within BSUoS would also require a complete transparency around where these constraints existing across the network. They highlighted ESO has not as yet provided this level of transparency and considerations would need to be given to how this would be done and updated.
- One respondent expressed they believe that hypothetical signals that could be provided by any individual component of the BSUoS charge are unlikely to be strong enough to provide an adequate incentive for market players to react and change behaviour.

Consultation feedback on Deliverable 3 – Comments (III/V)

Additional elements with regards to the assessment of 'locational transmission constraints':

- One respondent expressed assets are located where they are due to a number of historical factors, including (but not limited to) land costs, proximity of network services (electricity transmission, gas transmission) and TNUoS signals.
- One respondent did some analysis and expressed that, whist there is strong correlation between bids behind constraints and BSUoS, they do not believe it would be possible to create a meaningful signal to those parties behind the constraints as they typically have low or negative variable cost (wind).
- One respondent also said the SQSS determines the level of transmission investment and assumes an optimal level of constraint compared to investment from the customers' perspective. Constraint can be driven by several factors: fault or planned outages on the network, areas where the network is not SQSS compliant (typically derogations are in place) driven principally by the connect and manage process and constraint on an intact system as designed by the SQSS.
- One respondent highlighted that it would still be difficult to allocate costs to a specific area. Firstly, system balancing is currently done at a national level. Secondly, it is likely to be a combination of factors, possibly across the whole system, causing the constraint or congestion. Some triggers may also be addressed by other balancing actions or system operations. Splitting the system into explicit or implicit locational zones would create further complexities and may result in a less cost-efficient solution or over-investment in grid capacity.

Consultation feedback on Deliverable 3 – Comments (IV/V)

Additional elements with regards to the assessment of 'locational reactive and voltage constraints'

- One respondent believe that these cannot be manipulated to provide a better forward looking signal or a more efficient use of the network, and in turn may make forecasting even more complex and hard to predict due the nature of the driving forces behind reactive power costs.
- One respondent highlighted the reduction in the number and output from transmission connected large generation stations combined with the growth in embedded generation has driven the need for increased quantities of reactive producing plant and apparatus. The transmission system was designed at a time when large volumes of plant was available to provide this type of service. Additional investment by the various TOs or industry can provide MVArs from static compensation equipment is seen as a solution to this issue.

Additional elements with regards to the assessment of 'response and reserve bands':

- One respondent expressed that, in the vast majority of cases, the largest loss is driven by either an interconnector (at 1000 MW) or a transmission line where a maximum plant loss of 1320 MW is set in the SQSS. The maximum loss is rarely (if ever) driven by an individual generator on a line as the SQSS effectively precludes this eventuality. Given this they do not believe that it is practical to charge on this basis and the effect would not drive a change in operation as the largest loss is in the vast majority of cases is not related physical capacity (MW) of individual generators on the system but rather the transmission capacity that connects a group of demand or generation users.

Additional elements with regards to the assessment of 'response and reserve utilisation':

- One respondent agreed that imbalance cash out currently penalises generation for shortfalls in plant output against forecast so to charge plant for response and reserve utilisation would be to double charge for plant failure.

Consultation feedback on Deliverable 3 – Comments (V/V)

Other comments:

- One respondents argued that, importantly, moving to more granular charging may not be future proof to the ever-changing energy market, hence a more holistic approach would be required to reflect how changes driven by policies in decarbonisation of power, heat and transport will shape the future of those balancing actions. It already becomes clear from ESO analysis that characteristics of services requirements are changing significantly with the changing energy landscape.
- With regards to the 3 other potential options raised by a respondent in Deliverable 2, the following assessment was provided:
    1. embedded generation & low inertia plant: The Ofgem minded-to position will go some way to supporting this driver by including embedded generation in the BSUoS charging base. If further evidence comes forward that plant with no or low inertia is driving additional BSUoS costs then an option to charge at a higher rate for this type of plant could be considered. We do not believe it is appropriate to charge differential BSUoS on the basis of plant characteristics unless a link between plant type and BSUoS cost is firmly identified.
    2. Fault and planned outages of transmission circuit: This should be picked up under RIIO-2 but it seems that some BSUoS costs should be faced by the TO or interconnector owner for fault outages on circuits where it drives a significant increase in BSUoS cost for all users.
- One respondent reinforced the statement that market splitting should be assessed carefully by noting that efforts required to implement market splitting are likely to significantly outweigh the benefits and would require a holistic and thorough review of all of the market arrangements, including TNUoS, BSUoS and DUoS charging regimes, trading and commercial arrangements, connection and network reinforcement criteria and requirements.
- With regards to a possibility of constraint costs being recovered through TNUoS, one respondent, in addition to the extra effort required to implement this potential solution, disagrees that this is an appropriate measure and would note that the fundamental objective of the TNUoS charge is different to that of recovering constraint costs.

Webinar feedback on Deliverable 3 – Comments

yes	I have followed the logic given and the reasoning is all sound
	Agree that double charging needs continued to be reviewed for any further locational charging which is built into a number of other charges including TNUoS.
	Makes sense to keep BSUoS as a small cost recovery element for the ESO. TNUoS is the big problem to be converted to forward looking.
	Transparency on actions taken against users not acting in the interest of the system, gaming etc, they are not getting away with it, might reassure everyone that the socialisation of BSUoS is still beneficial.
	Agree that BSUoS is better treated as a cost recovery charge. Making the TNUoS forward looking signal stronger would be far more effective
	Agree overall but we were all aware of the difficulties, discussing a solution is the more pressing issue
	Key issue is that actions are taken to resolve multiple issue and there is limited ability to give marginal signals.
	There has to be some marginal cost attributable to more parties than others - That its too difficult to forecast is part of why these parties should pay more
Partially	The options presented don't address the five limitations - I don't see that we're moving forward with a solution
	Signals in TNUoS do not reflect real time constraints.
	The rationale on why TNUoS already provide a signal do not address the fundamental cause identified by the task force regarding constraint cost, low demand and high generation
	To me there is still an issue with users choosing to develop plant with large infeed losses which cause costs related to inertia and rocof - the costs they impose are higher that users with small infeed losses.
	Would be difficult for an incremental cost signal by HH
No	Will need to look in detail, but the idea was to find a solution not to say why it is difficult to do.

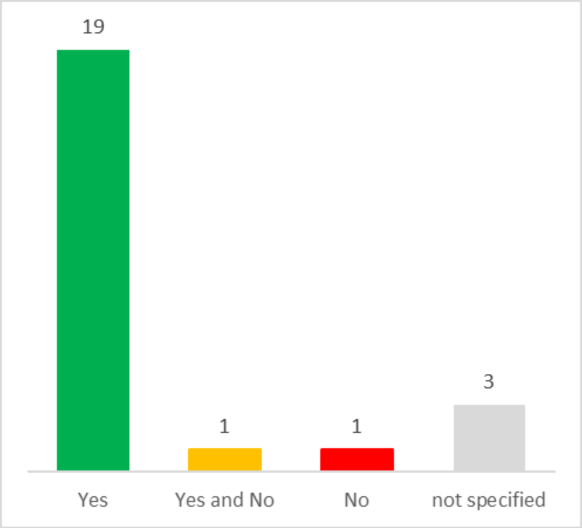
Overall conclusion

Sophie van Caloen

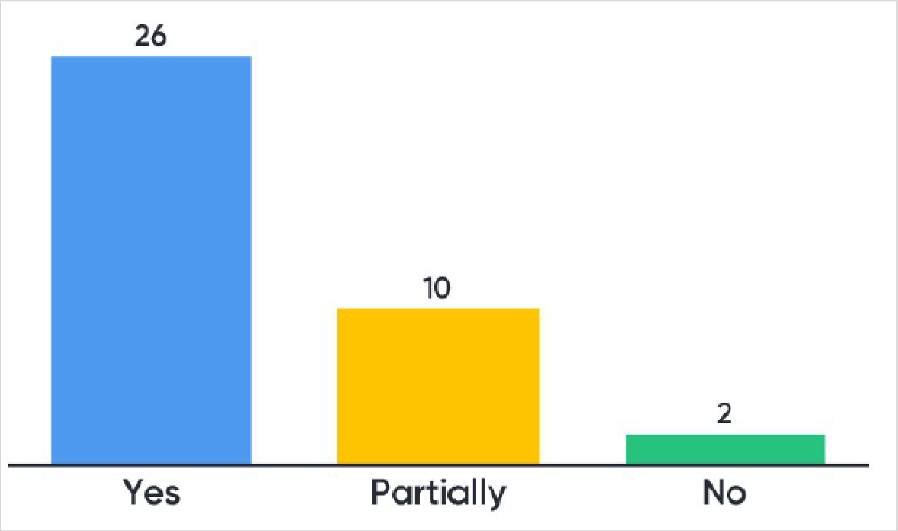
nationalgridESO

Feedback on overall conclusion

Consultation feedback



Webinar feedback



Feedback from the industry broadly supported the overall conclusion, stating that the assessment of the Task Force was robust, comprehensive and well-documented

Consultation feedback on conclusion – Comments

With regards to the overall draft conclusion:

- A significant majority of the respondents agreed with the overall draft conclusion of the Task Force and that the costs within BSUoS should all be treated on a cost-recovery basis.
- Respondents supported the conclusion and next steps, stating that the assessment was robust, comprehensive, well-documented and that the logic was clear.
- One respondent, that did not agree with the overall draft conclusion, expressed that cost reflective charging is desirable in and of itself. They expressed it would be perfectly feasible to develop a further cost-reflective incentive based on locational constraints.
- One respondent agreed partially as they felt the feasibility was not assessed in Deliverable 2 so it is difficult to conclude.

Other comments:

- One respondent also welcomed the simplicity in terms of approaching these charges in a cost recovery way and charging the consumer directly (via the supplier).
- One respondent highlighted removing BSUoS from generators would also improve market efficiency by bringing the UK into line with Continental markets, and removing an unfair benefit that interconnectors currently enjoy over UK generators. This should increase efficiency of cross-border flows.

Webinar feedback on Overall Conclusion – Comments

yes	The reasoning can't really be faulted, the thing heard most often is "why wasn't CMP250 passed, want stability, such volatility as there is in BSUoS within-day, is too much", we do need better forward-looking signals via TNUoS; feel confident that is
	Agree with the conclusions of the report, very well-presented rational and analysis
	A good report well done
	Am I right to assume that the BSUOS recovery may stay the same as it is following the recommendations?
	Think the task group met the terms of reference and stopped short of going further from the current framework
	The important thing now is to remove the volatility of charges (e.g. wind nights issue). If there are tweeks to BSUOS for some aspects to be refined later (e.g. for more cost reflectivity) - these minor changes can follow through industry processes.
	Ofgem's position on residual is to charge suppliers - that is what the group said - it is a residual. SO if you move to suppliers, is this a £/MWh, £/meter or what? And how long to get there
Partially	A small amount of residual cost recovery for the ESO is acceptable, but as it stands it's too much. Looks like the focus will have to be on TNUoS.
	The 4 potential options need to be set out in more detail, possibly with examples. It's difficult to assess if they are "feasible" without this.
	Will need to read the detail in the draft report to be fully convinced of D3 rational.
	Seems v unambitious to conclude no costs can be made cost related. By saying it's all residual, Ofgem will dump it on customers.
	There are elements in D2 missing and the conclusion for D3 should be that further work is needed.
	Wind should bear more of the cost of the complications it imposes on system balancing
	Cost reflective does keep overall costs down
	It would be good to explore further what the relationship between flexibility markets and ESO activities need to be for a cost recovery bsuos to be efficient
No	Has project TERRE and the introduction of European balancing services being taken into account in terms of how this new balancing mechanism may impact BSUoS?
	D1 and D2 yes but D3 is a lazy conclusion. All the presenters did a great job!

Other comments

Sophie van Caloen

nationalgridESO

Consultation feedback – Other comments (I/III)

While out of scope of the Task Force, some feedback was received regarding recommended next steps as to the best way of achieving further change in BSUoS.

Other comments regarding BSUoS next steps

- Several respondents expressed that it appears that there is a clear action to change the current structure of BSUoS charge.
- Several respondents expressed that the way of achieving the change in BSUoS is key, that a thorough assessment needs to be made which include analysis and clear opportunity for industry to engage. Also, a timetable should be developed by Ofgem highlighting their next steps and in particular when a decision on BSUoS is expected. One respondent raised the fact that there are multiple ways in how to achieve change in BSUoS and the implementation cost must be considered by Ofgem to ensure the most economic and efficient methodology is established.
- Respondents also highlighted they would hope Ofgem will give its views on both the Task Force's work and their proposed way forward as quickly as possible, to ease uncertainty throughout the industry.
- Several respondents expressed concerns about risks associated with the piecemeal approach to change being taken in the network charging space - the BSUoS taskforce, the TCR, the access and forward-looking work stream, and a number of code modifications will all affect the transition to a low-carbon energy system. They noted that Ofgem should ensure that any decisions on BSUoS should be considered against the Access Significant Code Review and the TCR as well as providing clear, well-defined guidance and expectations on what is anticipated from the code modifications which industry raise.

Consultation feedback – Other comments (II/III)

Other comments regarding the recovering of BSUoS costs:

- While out of scope of the Task Force, respondents believe the way in which any BSUoS costs should be recovered is a key for the continued improvement of the industry.
- Most respondents highlighted that, in the minded-to decision document on TCR, Ofgem reminds us that when it originally launched the review, it indicated that it would consider the applicability of applying any wider TCR reform options to balancing changes.
- Most respondents highlighted BSUoS cost should be recovered from customer in a similar manner to residual charges (also classified by Ofgem as cost recovery). They argue this would remove market distortions and counterproductive signals which are detrimental to the efficient operation of the system and negatively impact consumer benefit as well as being consistent with Ofgem charging principles.
- Several respondents believe it is inappropriate to have a residual charge which is volatile and varies by half hour but that the costs should be fixed and known in advance.
- One respondent believes that, even if industry decides not to pursue cost-reflective charging, it does not mean that half hourly settlement of BSUoS needs to be reviewed. A half hourly approach is appropriate because RCRC and cash out are also settled on a half hourly basis, and a large chunk of BSUoS actually relates to energy imbalance.
- Some respondents said a logical transition for BSUoS as a residual charge would be to have it in line with the TCR recommendations for residual charging, and to define it as some form of fixed charge. One respondent highlighted that TCR is currently suggesting that residual charges for other network charges (DUoS and TNUoS) is recovered as a £/mpan or capacity type charge. They believe that this is a valid approach to charge for BSUoS.
- One respondent said volumetric charges (£/MWh) are the simplest way to ensure proportional cost recovery, whilst encouraging reduction of energy usage. It encourages energy efficiency on behalf of demand users and does not require any significant new information, so can be implemented at minimal cost.
- One respondent expressed there might be a case for considering charging some of the constraints costs to the transmission companies in order to allow them to better assess the costs of any constraints against the costs of investments. However, this would have to be assessed as part of their price control.

Consultation feedback – Other comments (III/III)

Other comments regarding current charging modifications:

- Regarding CMP 308 (“Removal of BSUoS charges from generation”), several respondents expressed their support to the proposals as it would allow the charges to be moved to demand and avoids generators placing a risk premium onto BSUoS, which will represent a benefit to consumers. This also allows generators to compete better with continental generation, which currently does not pay balancing costs.
- Regarding CMP 281 (“Removal of BSUoS from storage facilities”), several respondents expressed their support as it would address the issues around the treatment of storage.
- Regarding both CMP 250 (“Stabilising BSUoS with at least a 12 month notice period”), respondents believe it would allow for the removal of the risk premia attached to forward sales in the wholesale market, or BM pricing strategies. Leading to reduced price for consumers.

Other comments on the report and process:

- Respondents said the Task Force met its Terms of Reference. Respondents also noted that the Draft Report is well written, well thought out and not overly complex for what is a short consultation period.
- Some respondents believes the process has been conducted over a short timeframe given the importance of the issue. In addition to this, the ten working days given for responses to the consultation is short for industry stakeholders to consider and respond to the report. They accept that this was necessary for the Task Force to meet its Terms of Reference.
- One respondent believes it is potentially problematic that the Task Force seems to have departed from the objectives of the CUSC, as changes will almost certainly have to be enacted through CUSC modifications.
- One respondent highlighted the analysis of the correlation between wind generation and constraint costs (and demand and constraint costs) was very interesting and would have welcomed more i.e. impact of Western Link.

Webinar - Questions

Does Ofgem agree it is a residual and therefore should go on suppliers?
If it does go on suppliers, would it be £/MWh or £/meter?
should some charges go on itnerconnectors - they are obviously creating costs.
Was there any consideration to including possible approaches to turning BSUoS into pure cost recovery in the report, or was this ignored as being out of the TF scope?
How much variation is there is BSUoS between settlement runs and which ones were used in your studies?
Would National Grid support fixing BSUoS with a true up mechanism at the end of the charging year?
How do the task force see the draft conclusions feeding into the ongoing TCR?
My knowledge of BSUoS is weak, but it wasn't clear in this presentation or a skim of the draft how this impacts domestic customers. Were the solutions proposed all aimed at large consumers/generators?
Could constraint costs (which make up the majority of BSUoS) be captured in TNUoS? Either locationally or through the different methods for charging different technology types?
What proportion of annual BSUoS costs is constituted by constraints costs?
Does anyone know when CMP308 is schedule to reach The Authority for decision …. (it's a mod that makes a lot of sense to me).
Was the option of combining elements of BSUoS with other charging methodologies such as TNUoS considered in the full report?
Do you think it would be tidier to have a single forward looking charging methodology and a single residual charging methodology for all socialised costs rather than multiple UoS charges?
I would like to see that "starting form scratch" charging proposal!
from year to year, there seems a lot of volatility in the ESO internal costs element to BSUos, and shortish notice of the large increase for coming year. Better notice and transparency please ?
Why is the BSUoS cost of TO fault outages not covered is this an oversight

Summary and Next Steps

Mike Oxenham

Final Report – Proposed next steps

- ESO to update draft report by Friday 24th EOD
- Task Force review by Wednesday 29th EOD
- Publication before Friday 31st May

Thank you

If you have further views please contact **ChargingFutures@nationalgrid.com**.