



Negotiating With AI

a presentation by

Graham Ross

for

Legal Protection International

12th March 2021



Negotiating With Augmented Intelligence

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Graham Ross
for
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When Artificial Intelligence Goes Wrong



ARTIFICIAL INTELLIGENCE

being the hand primarily in control



AUGMENTED INTELLIGENCE

being a helping hand to the human in control



Helping To Settle Faster

Smartsettle ONE is for resolving the single issue of the amount of money to be paid. It enables offers and counter-offers to be made without the other party knowing what they are and revealing only when there is agreement. The negotiator is always in control.

Smartsettle Infinity allows packages of proposals in multi-issue disputes to be made not just openly by the negotiators but generated by the machine (based on its knowledge of the preferences of each party as informed by a skilled negotiator) or anonymously by a negotiator with the other party never knowing whether the proposals are machine or negotiator generated.



Smartsettle



Smartsettle ONE

For single numerical issues



Smartsettle ONE- Key Takeaways

- ✓ A stand alone SaaS that can be used **together with** any system of negotiation/ADR
- ✓ No settlement is declared unless in a figure **within the specified bidding of both parties**
- ✓ Constantly **'nudges'** to encourage parties to move quickly to their bottom lines
- ✓ **Rewards** the party who makes **more effort to settle**



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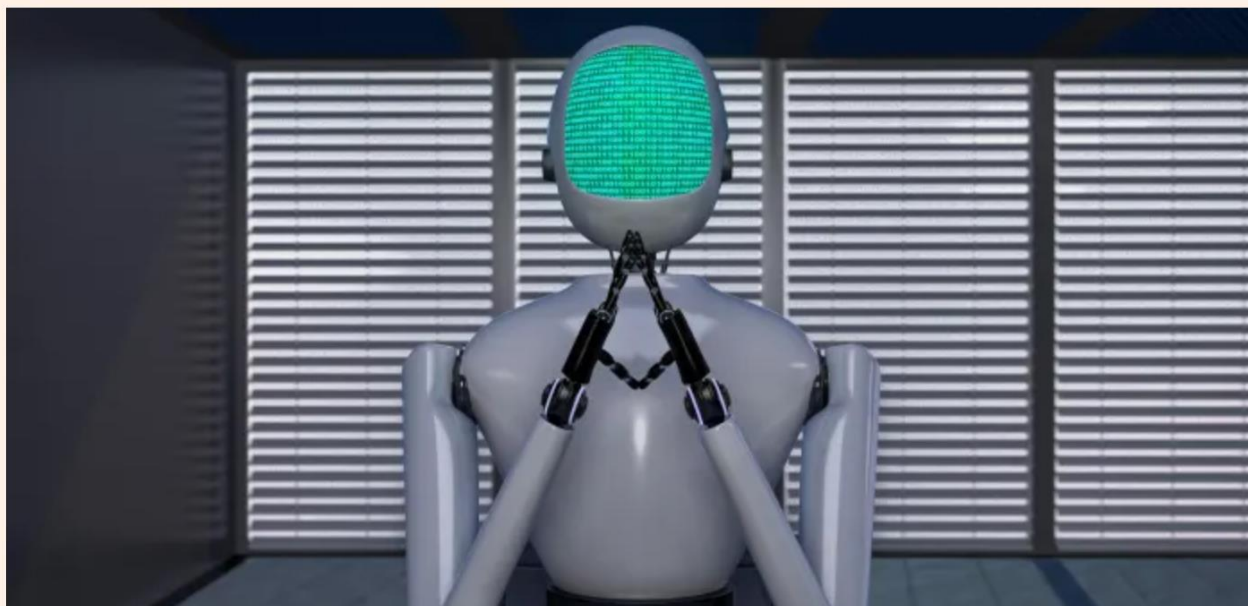
Legal services

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Robots and AI threaten to mediate disputes better than lawyers

Algorithms and big data are entering the often shrouded world of alternative dispute resolution

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Robot mediator settles first ever court case



19 February 2019

Posted by [Nick Hilborne](#)

A 'robot mediator' has been used to settle a dispute in the court system, for what is believed to be the first time.

The online tool, which uses artificial intelligence (AI) algorithms in place of a human mediator, settled the three-month dispute in less than an hour.

Graham Ross, mediator and online dispute resolution expert, said the breakthrough came when he introduced two litigants from the government's online civil money claims system to the Canadian dispute resolution tool Smartsettle ONE.

Mr Ross told *Legal Futures* that the dispute concerned around £2,000 in unpaid fees claimed by a trainer from a client following a personal counselling course.



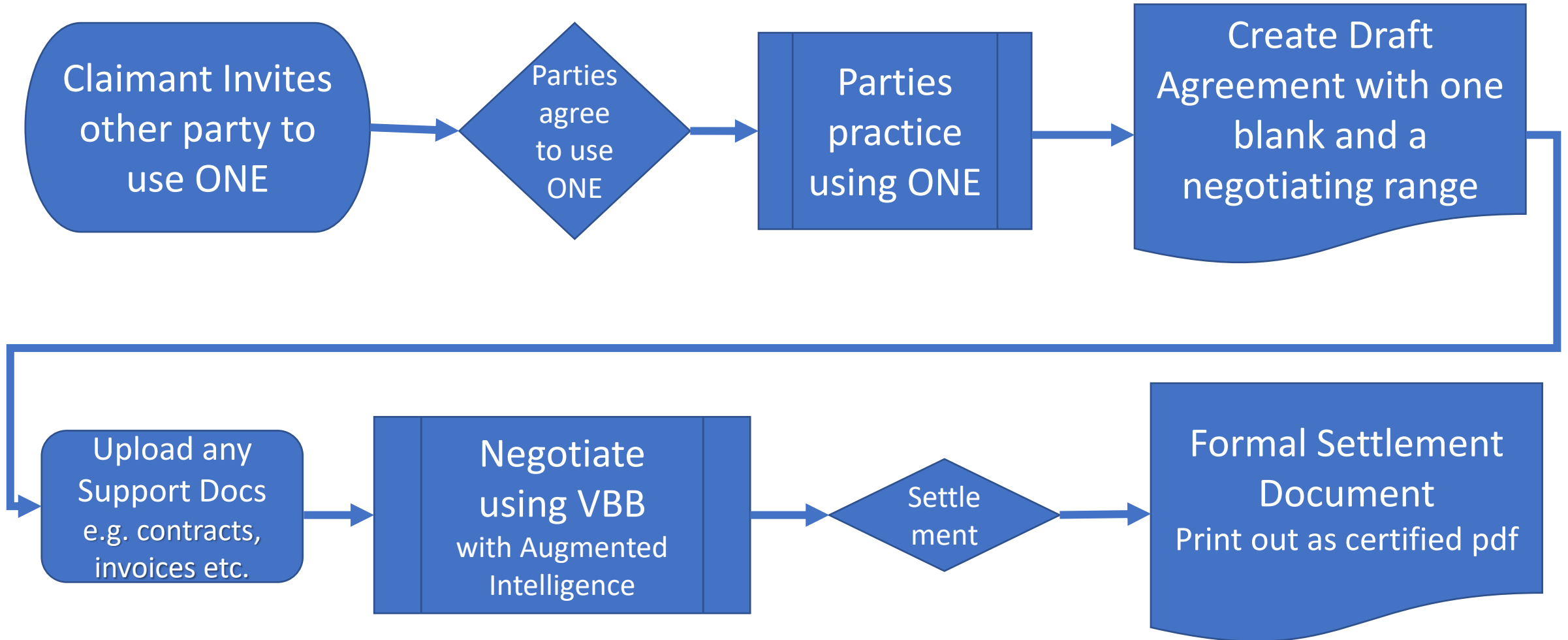
Ross: The system uses algorithms to help parties avoid the negotiation dance



Leo of Insurco is in negotiation with Tom of the PGS law firm over the payment to be made to PGS's client under a Business Interruption policy for the damage to his business caused by enforced Covid related closure.



The Process



Preparing the Single Negotiating Framework

The SNF is the settlement agreement in which the only item missing is the agreed settlement. This can be either binding or not according to what the parties decide.

The range for negotiation is between the current amount as claimed and the offer by the insurer. In this case it is from \$49,000, Insurco's opening offer, to the claim of \$65,000.



Heads of Agreement

(illustrative wording)

WHEREAS: The Claimant's business has suffered as a result of the Covid-19 pandemic. This is covered by a valid business interruption insurance policy underwritten by the Defendant.

THEREFORE: The Defendant agrees to pay the Claimant a settlement of **left blank**.

This agreement is subject to the following terms

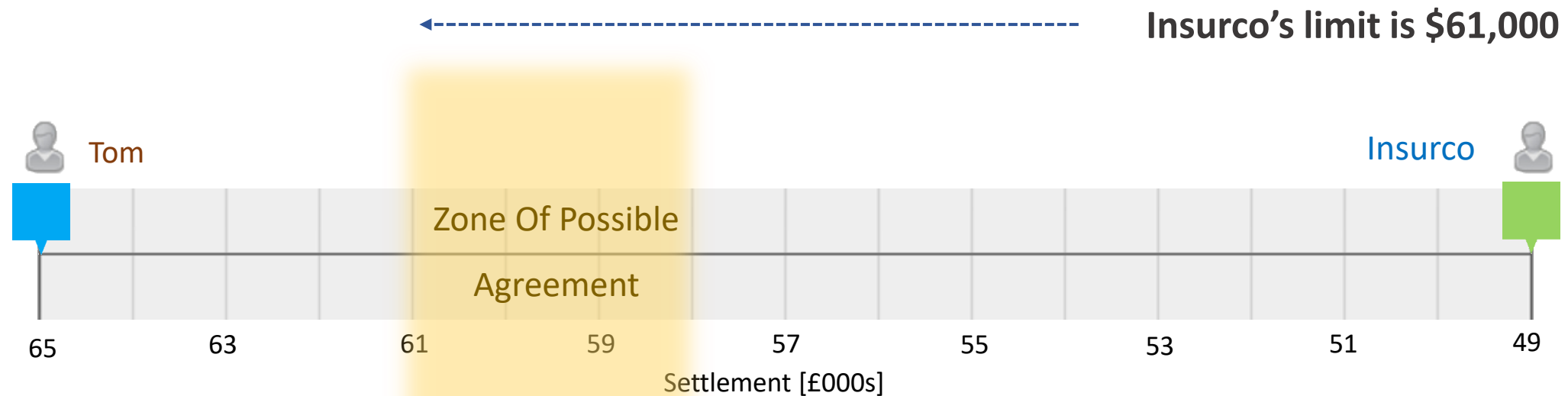
(Conditions for Settlement)

between \$49k - \$65k [amount
filled in automatically on reaching
settlement]



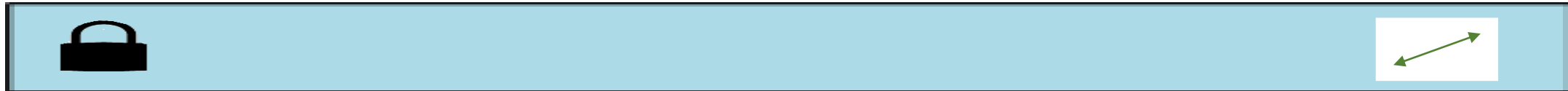
Zone of Possible Agreement

The parties never reveal their negotiation limit to anyone else, so the ZOPA is never known. We represent it here to better understand how the algorithms promote collaboration.



Tom will accept no less than \$58,000

(Note the chatbox for inter-party discussions
Documents can also be uploaded to the case file)

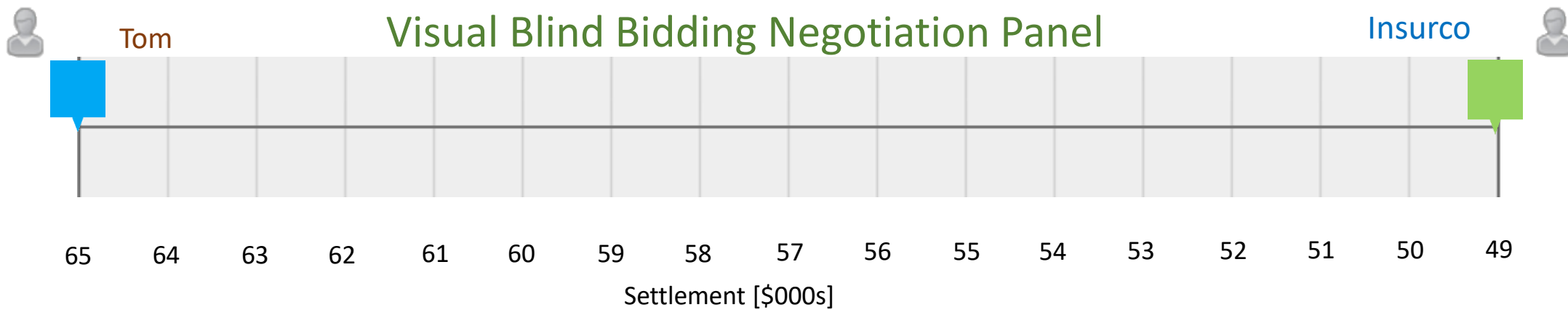


Insurco

Hi Tom all ready here. I feel sure we can quickly resolve this.

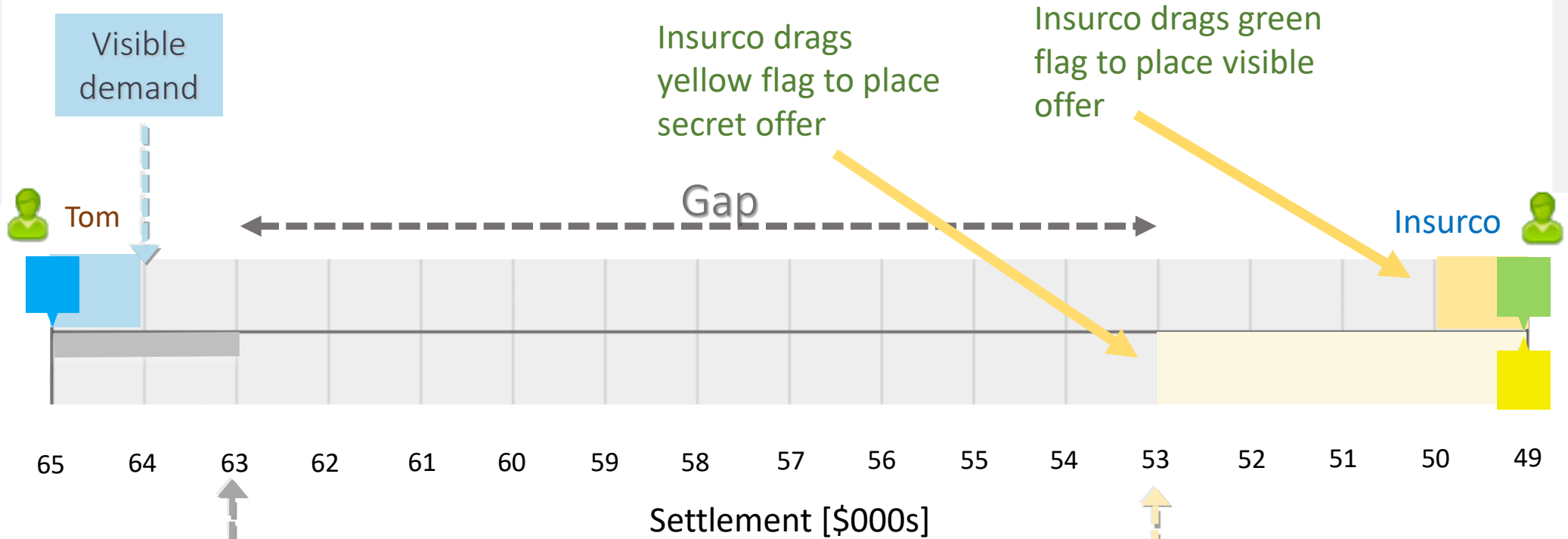
Your message

SEND MESSAGE



Session 1

Start Bidding – Insurco's View



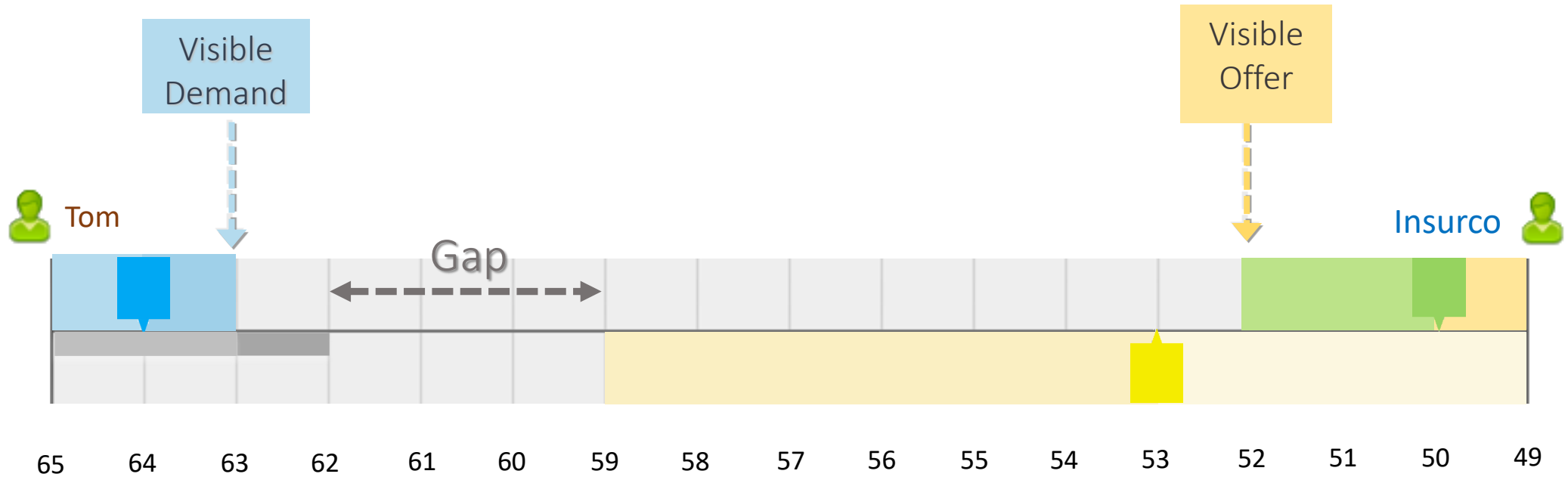
Tom's Secret demand
Not visible to Insurco

Insurco's Secret Offer
not visible to Tom

End of Session 1
No Agreement

Session 2

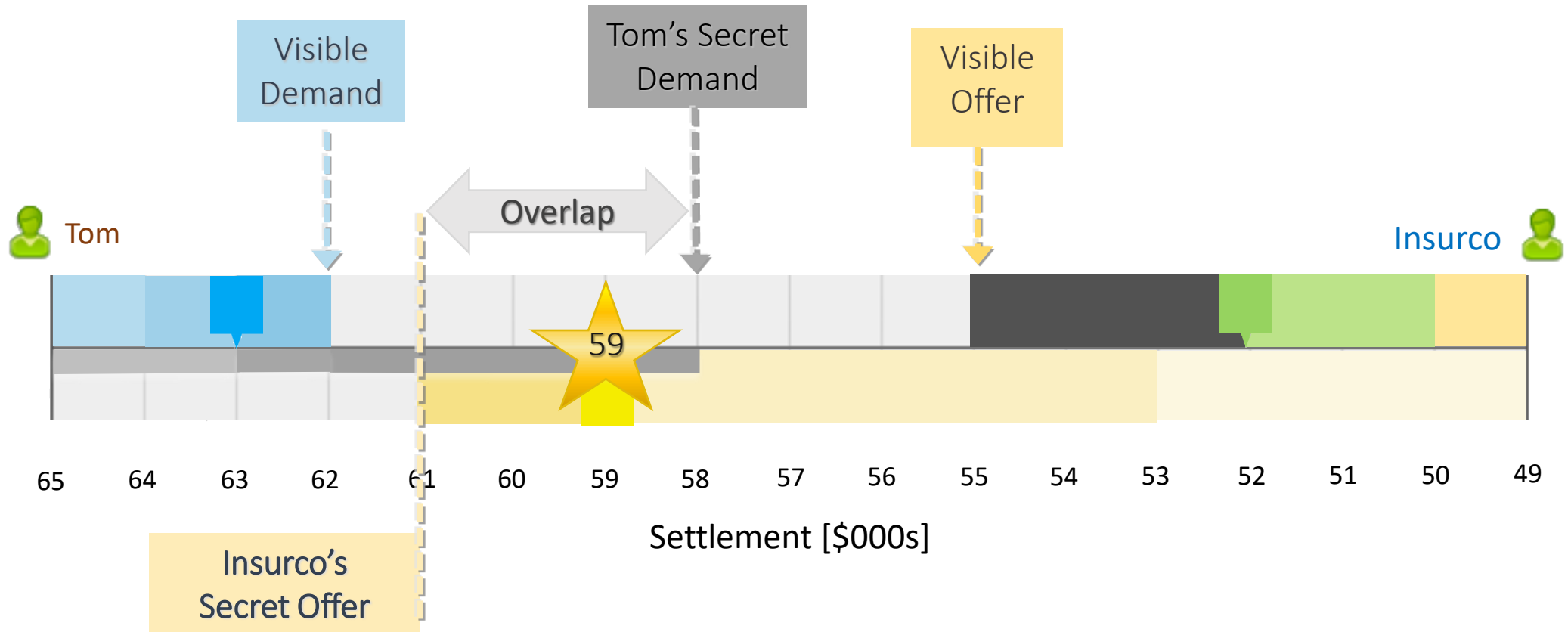
Insurco's View



End of Session 2
No Agreement

Session 3

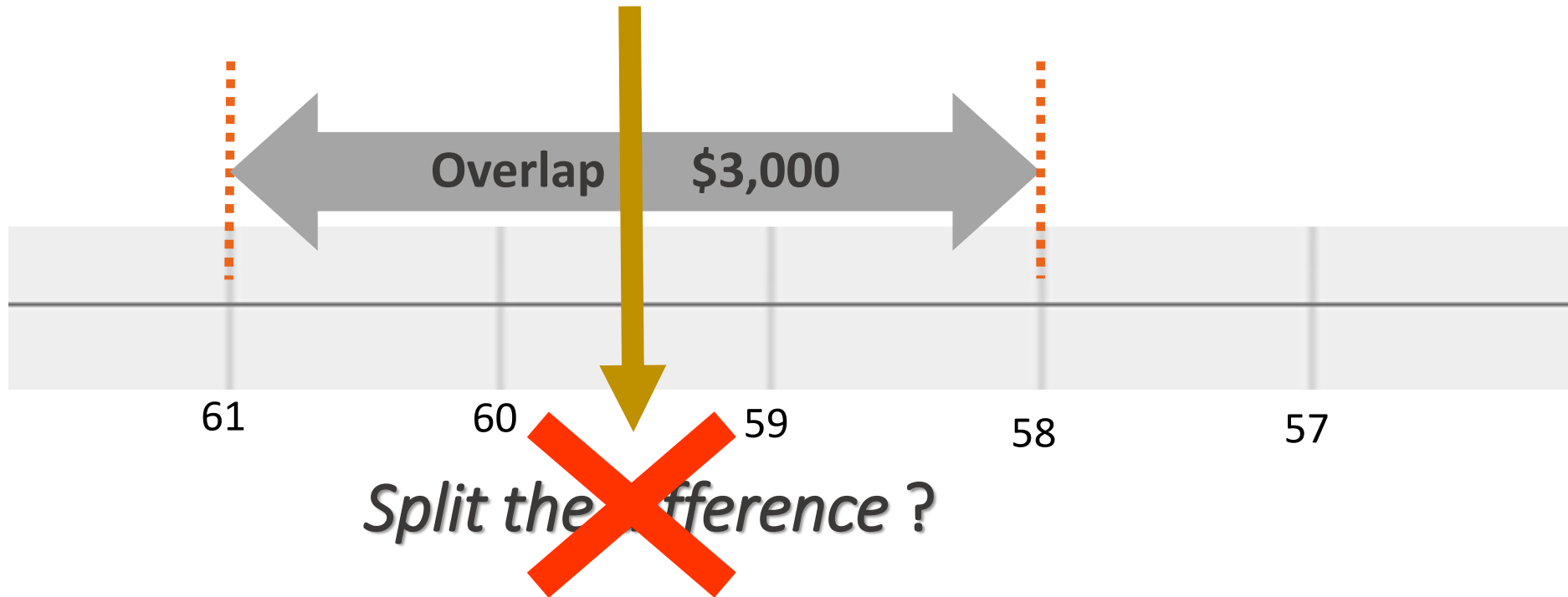
Insurco Declares Final Session



Insurco Declare Final Session

An Agreement at \$59,000

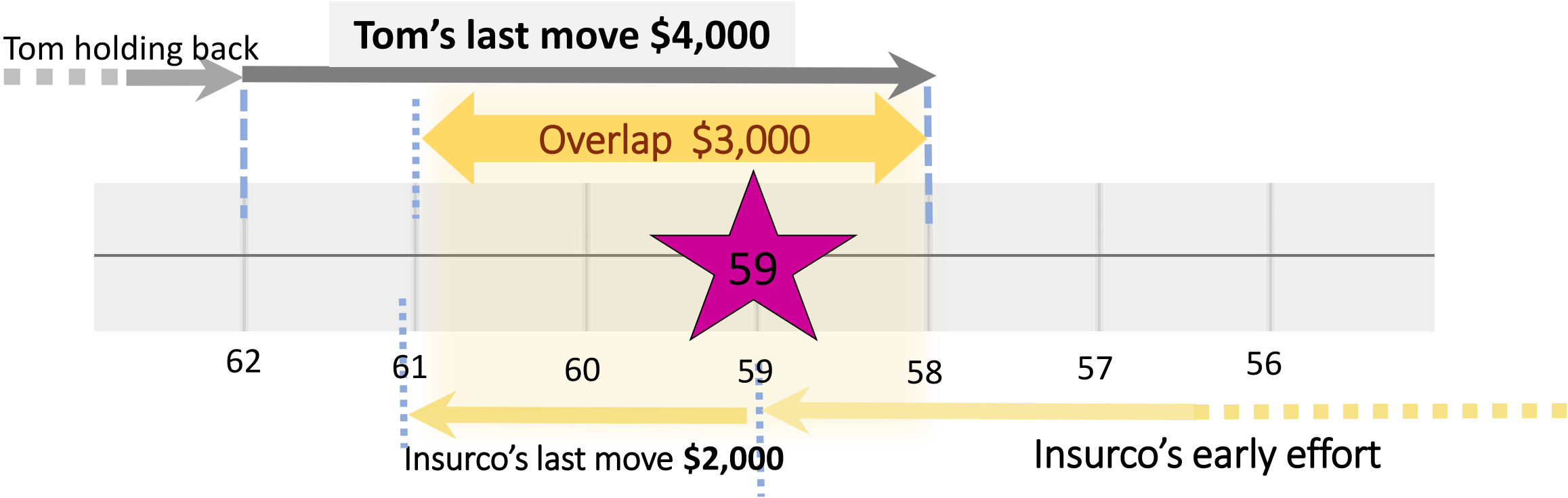
Resolving the Overlap



‘Split the difference’ rewards the party that holds back

Insurco was first to declare final session and then moved to their limit.
Tom also wanted to settle and so moved to his concession limit.

Reward Early Effort



Rewarding Early Effort

Insurco entered the Zone of Possible Agreement before Tom (a greater early effort).

Insurco is rewarded for the early move by dividing the overlap in the ratio 1:2 (the ratio of the final moves) and receives the greater proportion of the overlap.

The Agreement is better than both their bottom lines

Heads of Agreement

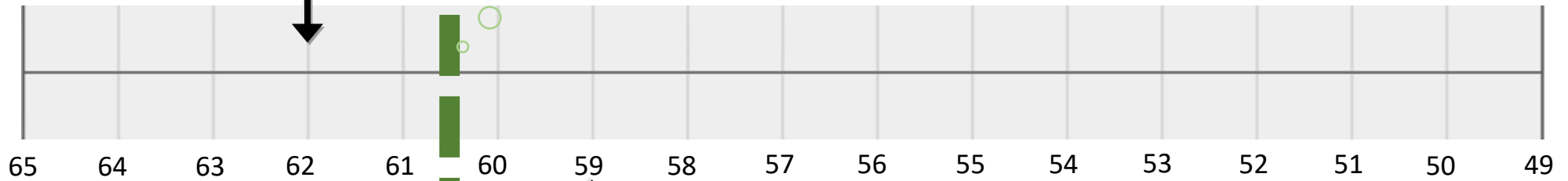
WHEREAS: The Claimant's business has suffered as a result of the Covid-19 pandemic. This is covered by a valid business interruption insurance policy underwritten by the Defendant.

THEREFORE: The Defendant agrees to pay the Claimant a settlement of \$59,000 subject to the following conditions:-

On agreement, the final document is generated and a pdf copy is available to both parties.
This final agreement may be digitally certified

Scenario 2: What if the Bids Do Not Overlap?

Final Secret Demand



Final Secret Offer



Automatic Deal-Closer

(resolving small gap impasse)

If a small gap remains, do you agree to divide it by "Rewarding Early Effort"?

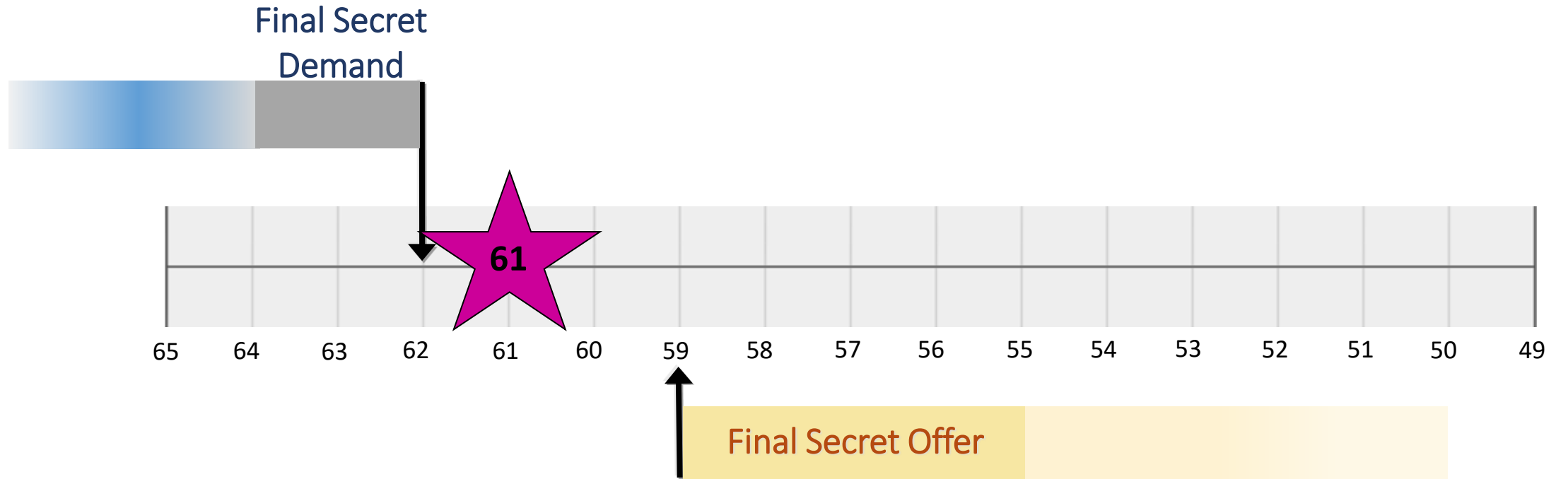
No

Yes. My secret bid may be increased by up to thousand dollars

A new session will start if there is no overlap.

Whenever a bid is made, the system gives the option to indicate in secret a small increase in the bid to be applied if it results in a settlement. Smartsettle will simply divide it using 'Reward Early Effort'.

Small Gap Impasse Automatic Deal-Closer



On this screen the system allows the parties to set all their bids for each of the sessions at the outset, thus automating their bidding. This may be useful to enable a team leader to guide less experienced case handlers as well as speed up negotiations.

Session	Visible	Secret	ADC	Message	
1	50	53	ADC	Message	 DELETE
2	52	59	ADC	Message	 DELETE
Final	55	61	ADC	Message	

ADD ROW



SAVE

Any Case Can Be Configured for Mediation With Three-way Chat

Chat boxes are easy to use and expandable

chat boxes
expandable



Three way chat

 Private chat by mediator with Insurco 

Insurco
Hi all ready here

Your message



SEND MESSAGE

 Mediator Chat with Both Sides 

Facilitator Carissa
Hi everyone, thanks for being on time

Your message

SEND MESSAGE

 Private chat by mediator with Tom 

Tom
Hi Carissa, ready to tackle the framework

Your message

SEND MESSAGE

Reversing The Bid

With Smartsettle ONE any party can reduce a secret offer.

This will empower the insurer to make a high compensation offer early when costs are low in the hope that acceptance will be less costly overall to the insurer than settling later at a lower figure when costs are high.

Unlike in open bidding the fact they made a high offer initially, but reversed it, is not known by the Claimant so no damage is done to the insurer's negotiating stance.



No Settle - No Fee

Case fees are 2% of the negotiating range (the gap between the initial offers from each side) and only charged on an agreement being reached on the system.

Optional API link and branding/tailoring the configuration – price on application.



Smartsettle ONE- Key Takeaways

- ✓ A stand alone SaaS that can be used **together with** any system of negotiation/ ADR/ODR including telephone and in person mediation
- ✓ No settlement is declared unless in a figure **within the specified bidding of both parties**
- ✓ Constantly **'nudges'** to encourage parties to move quickly to their bottom lines
- ✓ **Rewards** the party who makes **more effort to settle**





Smartsettle Infinity

For multi - issue/multi-party negotiations.



Smartsettle INFINITY- Key Takeaways

- ✓ **This is not negotiation by robot.** No settlement takes place save on terms specifically agreed by both parties.
- ✓ The parties can put forward **secret proposals** not attributable to them, removing the delays inherent in the usual negotiating 'dance'.
- ✓ The parties can ask the system to put forward its own suggestions for settlement that, from machine learning, it considers more likely to be mutually acceptable.



Smartsettle

Smartsettle -- Unfair Dimissal (UNFAIRDISMISSAL on Server 41)

File Case Version Party Issue Group Package Preferences Generate Help

Shared Information Graphic Employee

Version #01 Organize Private Groups New Package Click for Help Close

3000	3250	4900	5000
Basic Award - 5.0			
50	5200	11500	12000
Compensatory Award - 20			
None		Positive	
Reference - 7.0			
5			0
Bar Out Years - 10			

Published

Published Packages will appear here. Each party must first Propose a Package to establish a combined negotiating range before any other Suggestions can be published. To get started, create some Private Packages to work with.

Private

- 40 Optimistic
- 1 Unacceptable

Markers

- 42>> (marker) Rightmost Values
- <<0 (marker) Leftmost Values

Any number of issues can be created in the framework by agreement between the parties to reflect all the potential items/conditions over which to negotiate. These can be created for each dispute or a template can be designed to apply to similar cases.

Here the employee in an unfair dismissal case has set out his range of acceptance by posting opening proposals that show the most favorable (Optimistic) and least favourable (Unacceptable).

3000	3250	4600	4900	5000
Basic Award - 5.0				
50	5200	10000	11500	12000
Compensatory Award - 20				
None	Neutral	Positive		
Reference - 7.0				
5		1		0
Bar Out Years - 10				

Published
Published Packages will appear here.
Each party must first Propose a Package to establish a combined negotiating range before any other Suggestions can be published. To get started, create some Private Packages to work with.

Private

- 40 Optimistic
- 30 Fair
- 1 Unacceptable

Markers

- 42>> (marker) Rightmost Values
- <<0 (marker) Leftmost Values

The employee, or lawyer, now puts forward a 'fair' and more realistic offer.

Smartsettle -- Unfair Dimissal (UNFAIRDISMISSAL on Server 41)

File Case Version Party Issue Group Package Preferences Generate Help

Shared Information Graphic - XYZ Ltd

Version #01 Organize Private Groups New Package Click for Help Close

5000	4000	3000	
Basic Award - 5.0			
12000	8000	6000	5000
Compensatory Award - 15			
Positive	Neutral	None	
Reference - 2.0			
0	2	5	
Bar Out Years - 10			

Published

Published Packages will appear here.
Each party must first Propose a Package to establish a combined negotiating range before any other Suggestions can be published. To get started, create some Private Packages to work with.

Private

- 20 Optimistic
- 18 Fair
- 10 Unacceptable

Markers

- 22>> (marker) Rightmost Values
- <<10 (marker) Leftmost Values

Looking at it from the Employers perspective, they also post a 'Fair' proposal. But both are not as yet shared with the other party.

3000	4000	5000
Basic Award - 5.0		
5000	9579	10425
Compensatory Award - 20		
None	Neutral	Positive
Reference - 7.0		
5		0
Bar Out Years - 10		

Published

- 40? Package 2 - (infeasible) Employee
- 33 Package 7 - Improvement (verified)
- 32 Package 6 - All (*** Baseline Agreement
- 23 Package 3 - Suggestion
- 21 Package 4 - Suggestion
- 12 Package 5 - Suggestion
- 3? Package 1 - (infeasible) XYZ Ltr

A check for an Improved Agreement will be made upon every new acceptance.

Private

- 40? Optimistiic - (infeasible)
- 30? Fair - (infeasible)
- 23 Secret Proposal
- 1? Unacceptable - (infeasible)

Here we are much further advanced with a number of suggestions (eigher computer generated or by a party anonymously claiming it to be by the computer.

Issues can be frozen where they are separately agreed . For example the Basic Award, which is likely not to be in dispute, could be agreed before the overall settlement terms are agreed. Nobody could then move that from that figure, in this case 4,000

400	323	250
Senior staff hourly rate (GBP/hr) - 10 *		
200	172	150
Junior staff hourly rate (GBP/hr) - 5.0 *		
225	158	100
Senior hours - 10 *		
225	168	100
Junior hours - 5.0 *		
2.0	4.2	5.0
Expenses (GBP 000s) - 1.0 *		
200.0	84.1	40.0
Gross Fees (GBP 000s) - 160		

Published

- 166 • Package 1 - Insurer
- 138 • Package 3 - All (*** Baseline Agreeemer
- 108 Package 2 - Solicitors

An Improvement may reveal hidden value.

Private

- 166 optimistic
- 138 concession
- 111 fair
- 99 • unacceptable

Markers

- 191 >> (marker) Rightmost Values
- <<0 (marker) Leftmost Values

This is the roleplay case you will see run live after the Q&A. Its a negotiation of lawyers fees by the LP insurer. One aspect in this model is that the 'Gross Fees' flag position is a calculation of the other 5 issues. This enables the insurer to play with variations on hourly rate and hours agreed for different levels of staff and expenses and quickly see the impact on the gross fee to be paid.

Smartsettle INFINITY- Key Takeaways

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- ✓ The parties can ask the system to put forward its own suggestions for settlement that, from machine learning, it considers more likely to be mutually acceptable.



Smartsettle

To experience Smartsettle ONE by negotiating in roleplay cases against the machine or against a colleague go to

go.smartsettle.com





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