# The need for a Maximum Average Transaction Size (MaTS)

**A Maximum Average Transaction Size (MaTS) keeps markets focused on what people at the bottom of the economy have to sell. It's complex, but behind-the-scenes for users.**



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**NERD ALERT**

Public infrastructure is fiendishly complex under-the-hood. We take for granted water comes out of the faucet, drinkable and with sufficient pressure to run a shower. But chemists, physicists, geologists, engineers, attorneys, geographers and meteorologists working for water companies are guided by a stack of detailed regulations that make this one seemingly simple outcome a reality.

It's the same with POEMs (Public Official E-Markets). Low-income users should just experience interfaces, data and tools constantly making it as easy as possible to increase their earnings and get as many hours work as they need. Like water regulations, the MaTS formula must be published. But it would be a sign of its success if no-one bothers scrutinizing it.

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Bulldozers v. bicycles

Any system of markets with access to government facilities will have advantages over alternative trading forums. Assuming revenue comes from a **fixed percentage mark-up** on each transaction, for-profit operators will want to apply their unique benefits to high-cost transactions such as commercial property sales, superyacht hire or rental of high-end vehicles. But policymakers are extending those facilities to create opportunity for the less well off. Somehow, an operating consortium need to be incentivized, cajoled or forced to focus on low value trades.

To make the issue tangible, consider a market within POEMs (Public Official E-Markets) that allows anyone to rent out their bike when it's not needed. Even if that only nets $2 an hour, it helps each seller

build economic resilience. But a **truly comprehensive market** for bike rental has the same software needs as a market allowing any construction company to rent out their bulldozer when not required. They can command $5,000 an hour.

In each case: The resource may be traded for hours, days, occasionally weeks. A possibility of damage during the hire requires functionality for follow-up resolution. Someone, possibly a third party within the contractual chain, has to check the item out and confirm its condition on return. Delivery to the renter's location may need to be part of the transaction; a teen cycling the bike round, or a flat-bed truck with escort vehicle for an excavator. Insurance may need assembling to underpin the deal.

The Financial Director for a consortium running POEMs will very quickly start looking for these commonalities across diverse market sectors. She will also observe; people who hire bikes are typically less predictable, legally compliant, and homogenous than the regulated entities who have bulldozers to offer. And bike hires can be short *("15 minutes to get to work")*. This all adds enormously to complexity the software must manage, and the expense of creating then maintaining that code. An unrestrained POEMs consortium would build what's needed to trade bulldozers, possibly scaling it down for bike rental as an afterthought.

Bikes and bulldozers are one example. At the back-end, POEMs needs a suite of mechanisms for transactions. Each handles purchases with specific characteristics, most will have **high value and low value applications**. Software that manages letting of short-term domestic storage *("I want to rent the cupboard under my stairs")* is immediately ready to trade rental of expensive advertising hoardings. Enabling trading in bespoke tailoring needs management of a cycle of; seller assesses project, submits plan, gets commissioned or re-submits, executes plan and obtains buyer sign-off. Specialist architects have the same needs, often for 20 times the charges.

Options for the legislation

How could the concession that creates POEMs ensure asset-light individuals and small businesses and their complex markets are the unrelenting focus of a winning consortium? As an example, assume the biggest desirable trade within POEMs is set at $50 per hour of a person or item, and that the operator's mark-up on each purchase is 2%. Possibilities to drive a focus on small transactions include:

- **A hard cap**: Legislation could baldly state; POEMs is not permitted to trade any asset with a unit cost above $50. But this creates an abrupt ceiling that will distort activity. Imagine a user who starts out offering book-keeping services; a year later his diligent track record has earned training as a junior accountant, then he progresses to forensic accountancy for which free-market rates could peak at $60 an hour at tax time but settle around $40 the rest of the year. POEMs should not be stopping that ascent in earnings when demand is high.

- **Defined sectors**: Legislation could list what POEMs is allowed to trade. That seems unwieldy. Clearly a family renting out their child's sailing dinghy when not needed is in the zone for financial empowerment. But their cabin cruiser? Is that too close to a superyacht? POEMs of course will have a market for lawyers. It would probably be the first stop for users wanting to challenge system classifications of aquatic transport or in thousands of other sectors. But that disruptive activity is one sub-sector operators and legislators won't want to artificially promote.

- **Tapered mark-ups**: Could operator's commission reduce for higher value trades; 2% for up to $50 value, sliding down to 0.001% for a $5,000 an hour rental? That would have low-income bike owners subsidizing asset-rich construction giants. Not good for a system reliant on public support.

- **Cap operator earnings at the ceiling:** Our example settings - $50 an hour maximum value allowed, 2% commission on each trade for operators - ensures the most a consortium can earn from any one-hour rental is $1. That could be set as a cap for what operators can earn, regardless of what buyer is paying seller. It recognizes that creating an enormously efficient, officially backed, trading machine, then <u>not</u> allowing bulldozer owners the option of using it seems pointlessly restrictive. Construction creates housing, public amenities, jobs and peripheral work opportunities. If it deploys the available bulldozers more efficiently, that's good for a range of stakeholders. The same seems true across other sectors reliant on high value resources.

The cap on operators' earnings would ensure; for a $5.000 hour of 'dozer rental, POEMs deducts its standard 2%; $100. But only $1 is sent to the operator's account. They are still earning more from trading an excavator than a bike. But there are probably thousands of bikes for every bulldozer in the economy, so serving bicyclists is a more exciting market.

The remaining $99 would go to a Surplus fund. This should push operators to create a gentle taper in a user's experience of the system. The ambitious accountant will feel the system doing everything it can to get him up to $50 an hour. But as he climbs higher, POEMs gets less interested in giving him tools he now needs. He might want specialist tracking for his hours as a highly paid auditor to reach $80 an hour for instance. POEMs won't provide that functionality; operator resources will be focused on getting a next wave of users to $50-an-hour. But specialist service providers can interface into POEMs, building their own charges to him on top of the 2% POEMs will continue to take for all its functionality that is still finding him bookings.

Assigning the MaTS surplus

Assuming the last of our options above, many millions of dollars could accumulate in the "MaTS Surplus" account within POEMs. How could it be spent?

**Investment in POETs functionality**: Not advised. This would incentivize operators to focus on high-end transactions because they will fund a better system.

**General taxation**: The surplus could be directed into government coffers. But then politicians will want to see expensive items favored in POEMs. The system needs to be robustly independent, shaped by wider economic policy, not skewed towards its potential as a cash cow.

**Market hygiene**: Processes like arbitration in cases of irresolvable disputes between a buyer and seller will keep the platform's markets clean and trustworthy. Serial complainers can be identified in an accountable process, and sanctioned. Case could be funded as low-bore court cases are now, with winner awarded costs. But some victims may still be unable to launch an action. The Surplus Fund could act as legal aid.

**Bonuses for operators**: The surplus could boost operators' bottom line if they meet key targets for output. An obvious possibility; job creation. So, 50% of the current surplus might be paid out for every 20% of POEMs users that transition out of the market into full time employment for at least 6 months as tracked by payroll data. This has the benefit of rewarding behavior that is good for users but illogical for operators; fostering off-platform relationships. But it could result in POEMs trying to drive users out of the system, favoring job creation tools at the expense of ongoing variable arrangements that enhance possibilities for both sides.

**"First rung" investment**: This is our suggested option. A panel of independent assessors, like the ones who allocate lottery cash, use POEMs' data to channel investment to people who are struggling either to get into the system or are not increasing their earnings, probably due to skills mismatches or rough times personally. They do that either by boosting operator's income from entry-level sectors, so bike hire for example earns more than just 2% of each hire. And they can fund initatives that reach out of the system.

So, for instance, pools of provenly reliable workers with care experience in POEMs could be offered training as "Peer Navigators" who then get booked to support individuals who are homeless, uncomfortable with technology or otherwise in risk of being economically marginalized. Someone just out of prison might be offered 20 one-hour sessions with a Navigator who lives locally and was themselves formerly in the justice system. Meeting in a café or library, the client is supported through POEMs registration, vetting by a specialist intermediary and on first bookings which may draw on "Guaranteed Work" for specific groups.

The Navigator completes pro-forma reporting at the end of each session, possibly earning a bonus when their mentee completes 10 hours of paid work. They are of course trained to spot when referral to professional services is required.

First Rung Investment positions POEMs as a tool for economic inclusion that extends beyond the immediately techno-literate. It incentivizes operators to grow functionality that brings uncertain new

users into trading, with the system facilitating all sorts of support. (Because operators get 2% of each hour of a Peer Navigator and each hour a new user works.) Users generally will benefit from the network effects of a growing userbase, and potentially lower public assistance costs

Sizing the MaTS

The concrete figure that replaces our example $50 maximum value setting above will vary between regions. There are two factors to be determined:

**What is the unit?** A MaTS (Maximum Transaction Size) will need to apply across different units of sale. The main ones are:

**Hours**: This should cover the bulk of POEMs trading. People and resources are offered for a per-hour charge paid by the buyer.

**Overnights**: Vacation accommodation, mortuary slots, industrial storage, conference centers, hospital beds and other resources trade typically in 24-hour blocks.

**Miles**: Any offer of a journey will have mileage as at least one part of the pricing formula.

**Sales**: When a user wants rid of their wardrobe there is a one-off sale price.

It's imperfect, but we advocate aligning these units by making overnights count as a single hour for MaTS calculation. That would drive operators to focus on individuals renting a room rather than luxury hotels. Mileage charges can be aligned based on average distance covered in an hour. So if a journey is likely to average 50mph, a 50 mile journey counts as one hour when the MaTS is applied to the transaction. Sales can use the MaTS figure directly; so operators become disinterested in serving sales of any item over $50.

The danger in determining MaTS units is fostering artificial atomization of assets. In an exaggerated example, operators might structure a market for car sales so it directs sellers to split their $50,000 car into 1,000 lots. Buyers are then encouraged to purchase all of them for ownership resulting in 1,000 X 2% accruing to operators. Mandated transparency can guard against this kind of structuring but there needs to be a test describing acceptable levels of granularity in the framework.

**What is the MaTS setting**? Three-times-minimum-wage is our suggested starting point for a developed economy. It creates headroom within which operators will strive to develop functions that grow each user's income to that ceiling. System support will plateau at a point where the user is clearly able to sustain an upward trajectory.