

Steven J. McGee Distributed Systems Architect / Patent Applicant / Consultant

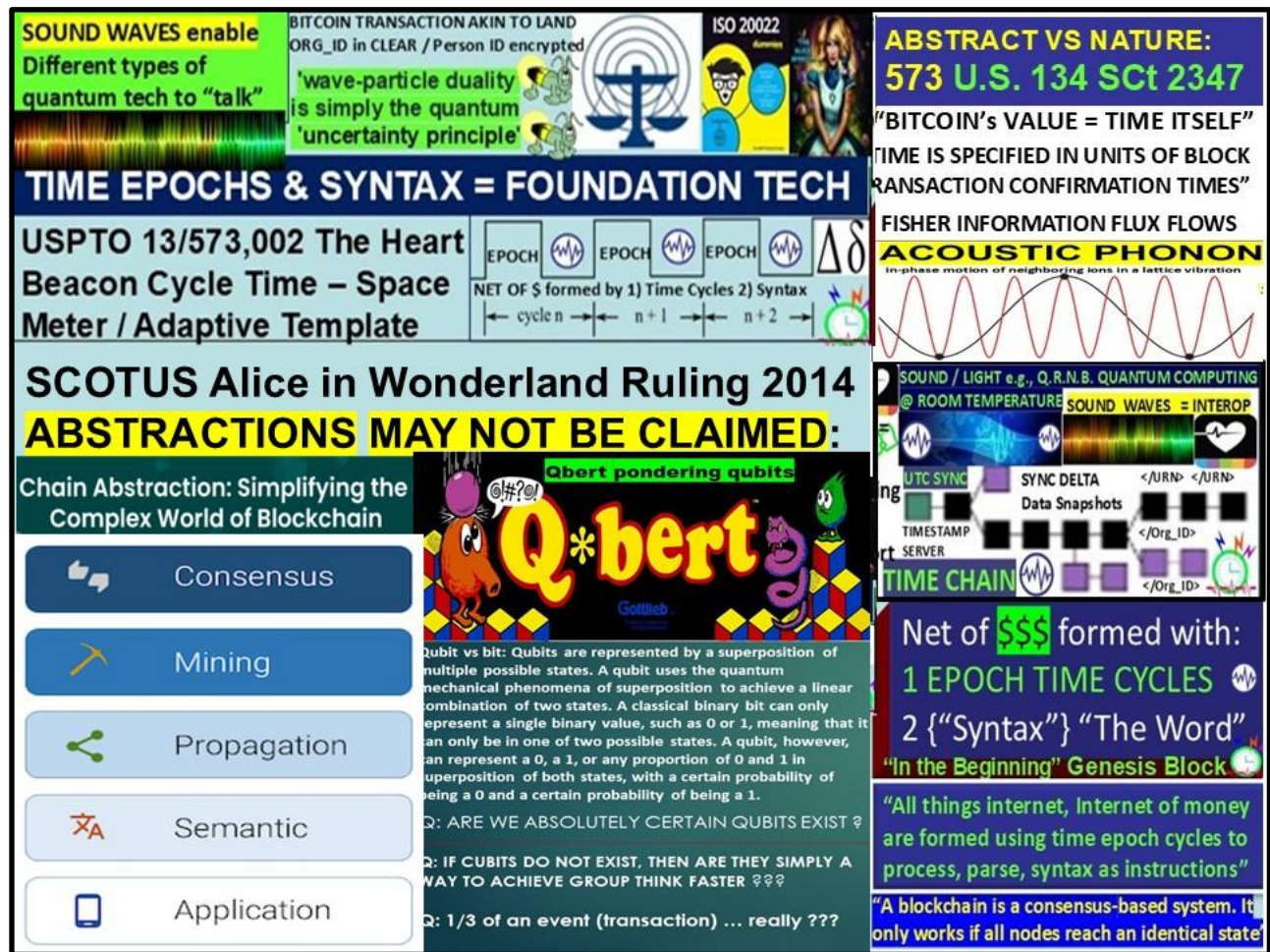


Figure 1: USPTO 13/573,002 Telemetry for The World Game Great's Great redesign
USPTO 13/573,002 Adaptive Procedural Template Coding programmable \$\$, Economy
Current: Distributed Systems Architect, Patent Applicant – self-employed.

June 2004 – March 2018 Simple Always Wins Concepts LLC SAW Concepts LLC (dissolved)

Defense Contractor for Validity Systems, SAIC x 2, MITRE, BAE Systems 1996 – 2002

Master of Science Information Systems Western International University 3.85 GPA 93 - 96

B.A. Psychology, Business Concentration Indiana University of Pennsylvania 1978 - 1992

United States Army Signal Corps Officer 11 years 82 – 93 / ROTC Full Scholarship Recipient

Presenter: International Conference Complex Systems ICCS New England chapter 2006

June 2003 – Present: Patent applicant USPTO 13/573,002: The Heart Beacon Cycle Time – Space Meter Adaptive Procedural Template (checklist of tools, processes, algorithms, protocols... useful to form Distributed Autonomous Groups DAGS synchronized in time – space Checklist: ideas, algorithms, processes, procedures, metrics, meters, signal & telemetry structured data for consistent Eco sustainable economic time cycle epochs for programmable \$ / economy / Net, Net of money foundation technology for DeFi, programmable internet, internet of money.

US Patent Office USPTO: Document Control Number: USPTO 13/573,002 Art Unit: 2468

TITLE: The Heart Beacon Cycle Time - Space Meter

SUBTITLE: The World Game's (s) Great redesign's Adaptive Procedural Template framework, control grid / matrix telemetry, metrics, meters..

Patent Application Type: Adaptive procedural template

SUMMARY: System of systems telemetry framework formed with an Adaptive Procedural Template foundation technology framework for The World Game (s)

USE CASE: structured data exchange synchronization, stochastic harmonization, OPSCODE brevity codes - Artificial Intelligence symbol sets, sound - light based quantum computing speedbumps, reuse of DARPA, NATO systems OOTW for control grid / matrix telemetry, metrics, meters..

USE CASE: Real World Assets commodity index backed currency - Economy: commodity tokens / RWA Real World Assets index backed currency / stable coin - DeFi / TradeFi algorithmically regulated programmable ethical, equitable automated economy, control grid, access, permission's protocol (s)

QUOTE: "There is only one revolution tolerable to all men, all societies, all political systems: Revolution by design and invention". Richard Buckminster Fuller author of The World (Peace) (simulation) Game book, futurist, environmentalist: <http://bfi.org>



FIGURE 2: Adaptive Procedural Template = tools, processes, procedures, algorithms...

Method of claim 1 is to comply with Supreme Court SCOTUS US SC 573 US 134 2347 Alice Corp Vs CLS Bank ruling with use of a physical, non-abstract little league baseball tournament meme to describe, list steps, procedures, processes intrinsic to internet, internet of foundation technology framework adaptive procedural template to support for example: DeFi programmable money digital tokenized assets by providing system time epoch cycles, geospatial location survey points, workflow roles, rules, scoring system, rewards, penalties, rulings, schedules, event, alerts, sync deltas control grid, access, permission, price discovery, equilibrium algorithms (s) for DeFi, TradeFi based trade federations to establish for example, a one world government, economic, financial system of system's universal unit of value, statistical mean value for many cryptocurrencies, commodities, currencies, stocks derived from price discovery algorithms which are then heartbeat message beacon broadcasted across time - space

Method of claim 2 relies on through use of an adaptive procedural template framework tools, procedures, processes to describe internet, internet of money, programmable money foundation technology, metrics, meters, SLA Service Level Agreements to form a syntax lexicon namespace derived from NATO / DoD brevity OPSCODE FFIRN, FFUDNS tokens structured data exchange mapped to symbols describing A.I. man - machine interface symbols, big data elements, sets, fields, to form a consistent, universal syntax structured data exchange library - lexicon using UTZ / UTC time stamped data with organization <Org_ID>. data class type, </URN Uniform Resource Name type to form a syntax, code, data element Rosetta Stone referred to in military discussions as The "Grail": i.e., synchronized, common, shared situational awareness data dashboard view (s) of time stamped, brevity code / tokens, digital assets that are filtered, prioritized from heartbeat message bus filtered, parsed, processed from a federated system of systems via use of heartbeat message event bus sync delta epoch data updates Universal Time Zone UTZ synchronized, stochastically harmonized updates using an improvement described by the University of Bologna / Hungary's ,Chinese University's firefly inspired heartbeat synchronization algorithm that matches, synchronizes stochastic harmonizes via firefly inspired heartbeat synchronization pulses intrinsic analogous to Network Centric Warfare's Battlefield Digitization's closest OPTEMPO Operational Tempos epoch time intervals, cycles i.e., 05, 10, 15, 30 micro, milli seconds, minutes, hours days, years posted to digital dashboards.

Method of claim 3 relies on the use of an adaptive procedural template tools, processes, procedures to provide an alternative to formal mergers and acquisitions for example, tether, untether to autonomous DAO Distributed Autonomous Organization i.e., trade federations using agile, adhoc NetOps supporting federations for example; Ripple's consensus protocol based on federation / federated on demand liquidity drawn from a distributed (global) (trade) federation i.e., 1907 Knickerbocker Banker's Crisis JP Morgan protocol on demand AI directed response - financial system revaluation where Battlefield Digitization Network effects: splits, joins, adds, drops are used as needed as a temporary alternative to formal merger and organization, corporate acquisitions

Method of claim 4 relies on the use of an adaptive procedural template processes, procedures to broadcast, unicast, anycast data synchronization deltas “sync deltas” via micro to macro-cycle system of systems data updates at agreed upon times observing set durations of events, time, temporal epoch leases, price discover algorithm data harvests for example stocks, commodity real world digital assets, currency arbitrage trade exchange adjustments using heartbeat epoch time beacon’s intrinsic temporally consistent, synchronized, time bounded i.e heartbeat start, stop, TTL Time to Live epochs providing discrete time interval start, stop, TTL Time To Live epoch windows embedded in </108> system heartbeats, messages in a control matrix among for example HFT stock market systems participating to establish algorithmic regulation via use of algorithmic price discovery, Nash Equilibrium algorithms to derive a uniform, universal statistical mean value index, discrete, time bounded trade windows, stock trade circuit breaker via heartbeat beacon message, event bus broadcasted , uni, multicast among many stock, commodity, ETF Exchange Traded Fund systems

Method of claim 5 relies on the use of the adaptive procedural template’s firefly inspired heartbeat synchronization message event bus algorithm – protocol, software application neutral monitors geo-spatial, temporally distributed events reported across a DAO Distributed Autonomous Organization among federated groups synchronized across time-space to achieve common, synchronized goals in conjunction with use of adaptive procedural template list items that are intrinsic to algorithms / protocols such as Princeton’s John Nash Equilibrium algorithms and count minimum sketch or streaming K algorithms algorithmically regulating through use of epoch time intervals for HFT stock, commodity, digital token, tokenized RWA Real World Assets, cryptocurrency trade, arbitrage micro transaction epoch temporal time windows in federated systems supporting economic, fiscal control grid matrix among a federated system of systems

Method of claim 6 relies on the use of an adaptive procedural template framework to establish, support, maintain economist Milton Friedman’s K% rule where a Central Bank Digital Currency CBDC. stablecoin or conventional FIAT, commodity index backed currency is derived from sampling lead GDP Gross Domestic Product economic indicators among a global event message bus sync delta data, event changes updating for example, a RWA Real World Asset based commodity index backed collective, consistent value unit based currency via use of filtered, stochastically harmonized, temporally synchronized telemetry polled from a universal event bus applying firefly-heartbeat algorithm events, state changes leveraging heartbeat message - event functions to update a statistical mean value index as a standard, consistent unit of value using algorithmic price discovery heartbeat beacon broadcasted among many systems

Method of claim 7 relies on the use of an adaptive procedural template’s tools, processes, procedures, algorithms to derive from price discovery algorithm from Real World Assets a commodity index backed algorithmic stablecoin comprised of: commodity tokens / RWA Real World Assets index where algorithmic price discovery is derived from many stablecoin time (block) chains, that employ equilibrium algorithms (s) where a stablecoin may include attributes, processes, procedures: i.e., use of geo-spatial

temporal event, activity intensity fencing to establish payment boundaries, geo-spatial areas of effect, geo-spatial temporal areas of support where a coin may have a set time limit based on time - stamp servers heartbeat, geo-spatial area of authorized use, select (federated) group of crowd funders, harvest, move crop commodities, goods backing the value of the coin from / to a given area's commons market, federation for example, a trade federation supported by Economist Bernard Lietaer's TRC Trade Reference Currency: TERRA RWA Real World Assets, commodities, commodity basket, index based featuring demurrage fees, charges to support supplier to consumer logistics transfer, travel of for example GDP Gross Domestic Product pricing items as a global complementary currency designed to provide an inflation-resistant international standard of value; to stabilize the business cycle on a global level; and to realign stockholder's interests with long-term sustainability, management of trade tariffs

Method of claim 8 relies on referencing an adaptive procedural template to establish, maintain trade tariffs SLA Service Level Agreements i.e., ecologically sustainable economic econometric epoch time cycles supporting universal standard measures, meters, metrics sync delta cyclic update temporal change, linear sequential, geo-spatial temporal intensity radius hop count metrics and meters where closer is shorter, closer is cheaper, given less CO2 carbon dioxide credits are used given less trade demurrage fees levied as a method of climate control agreed upon by a trade federation (s)

Method of claim 9 relies on the use of an adaptive procedural template's tools, processes, procedures to establish, maintain a global system of systems telemetry data synchronization, stochastic harmonization, based on sound - light waveform based quantum computing to establish for example, temporal speed limits, discrete time intervals to derive, provide systemic metrics, meters, synchronization, stochastic harmonization among many system of systems Distributed Autonomous Systems DAS

Method of claim 10 relies on the use of adaptive procedural template tools, processes, procedures, algorithms and specifically sound waves (see water drop in pond meme, graphic) to measure trough, crest wave cycles that when statistically sampled represent a digital approximation of physical waves as the basis for establishing common, shared, universal method and means to measure, meter, communicate telemetry across a plurality of quantum computing system of systems using a system (s) for example: comprised of curved electrodes to concentrate sound waves similar to a magnifying lens to focus a point of light at room temperature rather than use of liquid hydrogen to cool a space for quantum particles event sampling with electron microscopes

Method of claim 11 relies on the use of an adaptive procedural template framework's tools, processes, procedures, algorithms to apply the electric dipole effect electric meters, metrics where closer is cheaper given less infrastructure needed given energy attenuates over distances • data over energy link where energy pulses as a method and means to transmit data / electricity via wired, and wireless air – ground pathways as demonstrated by inventor, scientist Nicola Tesla circa 1900 near Colorado Springs CO

Metaphorical blockchain's = timechain actual foundation tech, net of \$ building blocks

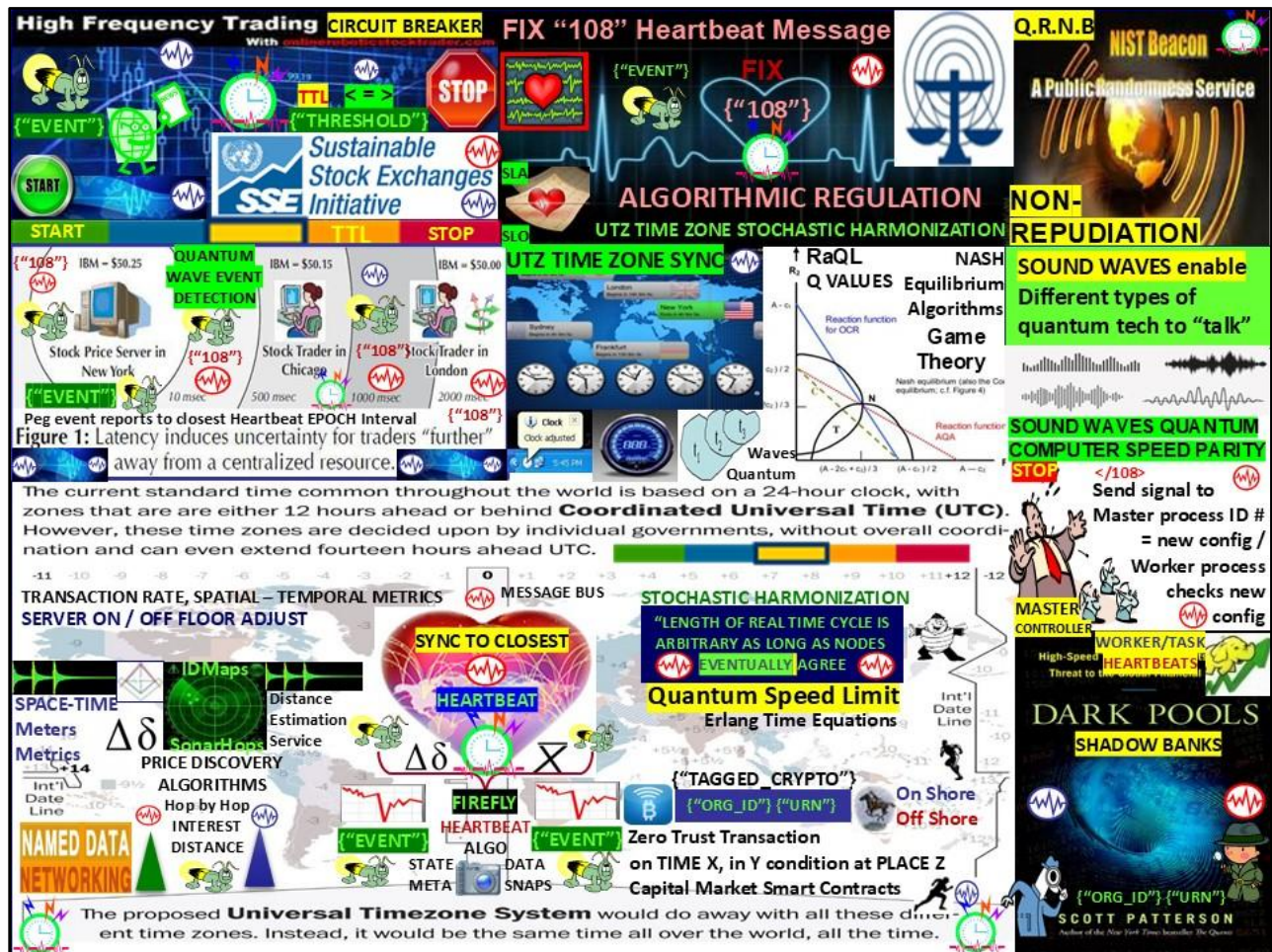


Figure 3: USPTO 13/573,002 / SSEI Sustainable Stock Exchange Initiative

The United Nations Sustainable Stock Exchanges (UN SSE) initiative has officially joined the Global Capacity Building Coalition (GCBC) template framework for Stock Exchanges

USE CASE: Micro to macro-cycle system of systems data updates at agreed upon times observing agreed durations i.e., stock, commodity, currency trade epochs. Discrete time interval start, stop, TTL Time To Live trade windows commands embedded in `</108>` heartbeats, heartbeat messages.

Algorithmic regulation / Algorithmic stable coin support: firefly inspired heartbeat synchronization algorithm in stocks, currency exchanges is a segue to algorithmic regulation. Improving temporal trade parity between Bitcoin, crypto & conventional stock exchanges by using the firefly-heartbeat algorithm to take trade speed samples among trade populations across time zones to establish consensus among disparate trade protocols, optimal trade speed / frequency price discovery as a statistical mean.

USE CASES



FIGURE 4 Thesis / Summary

THESIS: All things internet, net of money blockchains are formed by unicast, multicast, anycast protocols. Programmable money's improvements are in cryptography. Blockchains are formed by unicast, multicast, anycast and workflow filters.

Programmable money's improvements are in cryptography. Internet 3.0 and the new web will be based on the original structure described by Stanford University. There are no packets, frames, layers, blocks, shards, graphs, hash graphs "bots", "motes", "qubits" ... or Satoshi's traversing the net, stored in a blockchain cube. Transactions are unicast, multicast, or anycast (workflow). The afore mentioned terms are non-existent fabrication. We need an Eco sustainable Economic Heartbeat with incentives systemically coded into the programmable economy applying consistent time - space metrics, meters and a syntax lexicon library. The German military made a suggestion circa 2003 namely OOTW Operations Other Than War of use of Battlefield Digitization for humanitarian relief, digital dashboards displaying updates to an EIN Earth Intelligence Network drawn from a system of Distributed Autonomous Systems DAO. (RAND term circa 2001)

Battlefield Digitization for OOTW Operations Other Than War: i.e., Eco Economic Epoch Heartbeat / USPTO 13/573,002 The Heart Beacon Cycle Time - Space Meter Adaptive Procedural Template paper, use cases, claims, graphics, metrics, meters, syntax lexicon #A.I. Battlefield Digitization consists of structured data where OPSCODE brevity codes are mapped to symbology, symbol sets organized into 300 + Use Case messages . Brevity code mapping to symbols is essential to A.I. Artificial Intelligence man – machine interface

Improvements as the basis of invention to U.S. Army CECOM Communication Electronics Command's "greatest invention" distributed systems dashboard structured data exchange framework as swords to plowshare use cases for economic reset, climate change sustainable development incentives, stable coin Fed-World Coin.

Teams are forming to win the DeFi Distributed Finance / programmable \$\$\$ money IP Intellectual Property wars. The winning team will prove that their IP intellectual property filings established. Foundation tech described through the lens of SCOTUS 2014 "Alice in Wonderland" ruling? "Claims may not direct towards abstract ideas"



Figure 5: Nobel Prize Winning Economist's K% rule / USPTO 13/573,002

The K-Percent Rule was a proposal by economist Milton Friedman that the central bank should increase the money supply by a constant percentage every year. The K-Percent Rule was a proposal by economist Milton Friedman that the central bank should increase the money supply by a constant percentage every year. The K-Percent Rule proposes to set the money supply growth at a rate equal to the growth of gross domestic product (GDP) each year. In the United States, this would typically be in the range of 2-4%, based on historical averages. The K-percent rule, proposed by economist and Nobel Prize winner Milton Friedman Milton Friedman Milton Friedman was an American economist who advocated for free market capitalism. Friedman's freemarket theories influenced economic, is a monetary policy rule that requires central banks to increase the money supply irrespective of the condition of the economy. Supporting economist Milton Friedman's K% rule where a "FEDCOIN / WORLDCOIN" currency could be derived from sampling lead economic indicators across a global, universal event bus applying the firefly-heartbeat algorithm tracking changes, updating a GDP commodity statistical mean value index of GDP Real World Assets RWA.



FIG 6 SCOTUS Alice Corp Vs CLS Bank "claims may not direct towards abstract ideas"

Firefly inspired Heartbeat Synchronization: in a paper entitled Firefly-inspired Heartbeat Synchronization in Overlay Networks by the University of Bologna Trento Italy along with the University of Szeged, Hungary: “Heartbeat synchronization strives to have nodes in a distributed system generate periodic, local “heartbeat” events approximately at the same time. The heartbeat synchronization protocol for overlay networks is inspired by mathematical models of flash synchronization in certain species of fire flies. Nodes send flash messages to their neighbors when a local heartbeat triggers. Fireflies adjust the phase of their next heartbeat based on incoming flash messages using an algorithm inspired by mathematical models of fire-fly synchronization. Heartbeat synchronization strives to have nodes in a distributed system generate periodic, local “heartbeat” events approximately at the same time. It differs from classical clock synchronization in that nodes are not interested in counting cycles and agreeing on a ID of a current cycle. There is no requirement regarding the length of a cycle with respect to real time as long as a length is bounded, and all nodes agree on it eventually.

Use Case: Economic Reset solution: form economic trade federations incentivizing environment friendly business practices leveraging Bitcoin's micro-payment capabilities supporting the TERRA Trade Reference Currency TRC demurrage handling charge. Closer is cheaper, less fuel, < CO2 carbon emission in smart contract Service Level Agreements.



FIGURE 8 TERRA Trade Reference Currency / Crypto micro payment Demurrage fees

Nobel Prize winning Economist Milton Friedman's K% rule is what I call an "economic heartbeat" K-Percent Rule. DEFINITION of 'K-Percent Rule'. The K-Percent Rule was a proposal by economist Milton Friedman that the central bank should increase the money supply by a constant percentage every year. The K-Percent Rule proposes to set the money supply growth at a rate equal to the growth of real GDP each year. K-Percent Rule— Investopedia <http://www.investopedia.com/terms/k/k-percent-rule.asp>

Currency / Economic RESET is a mathematical certainty. Do we RESET the global system of systems as is or re-engineer our world using NATO / DOD system of systems engineering framework standing on the shoulders of giants swords to plowshares ?

IF climate change causes a drop in crop commodity by 20–25 % while population grows, THEN this condition will become a matter of national security. THEN this will require revisiting Belgian Economist Bernard Lietaer's TRC Trade Reference Currency ELSE face chaos by not leveraging proven system of systems, procedures, processes, tactics, etc..



Figure 9: Nobel Prize Winning Economist Milton Friedman's K % GDP based rule

Economist Milton Friedman predicted the rise of a computer capable of automatically adjusting the inflation rate of money. This is precisely what we see in the case of bitcoin, as a regulatory algorithm intelligently adjusts the mining difficulty to make the issuance of blocks more or less easy depending on the demand for network hashing power. No money system we have seen to date can claim it is chronologically regulated. The universal construct of time is the backbone of the cryptocurrency digital economy. Investopedia K % Rule [Source: https://investopedia.com/terms/k/k-percent-rule.asp](https://investopedia.com/terms/k/k-percent-rule.asp)

Satoshi Nakamoto's Bitcoin key building block is a time stamp server. "Bitcoin is intended to be paired with the market place" "the blockchain stores references to market indexes"

Demurrage: term used in currency trading to denote cost of currency ownership and/or storage. cost of carrying money... considered superior to interest payments, as it stimulates currency circulation and economic growth. "In a physical sense, demurrage represents a delay that occurs during the transportation of goods via truck. When this happens, the trucking firm delivering the product can opt to pay a flat fee to the receiver to cover any loss incurred as a result of the delay. This fee can be assessed on an hourly basis. Or in the case of gold, demurrage is simply the costs associated with storage of bouillon. [LINK](https://investopedia.com/terms/d/demurrage.asp)

Structured Data Exchange

SYNTAX LEXICON ROSETTA STONE

Coder's Guide lexicon

STRUCTURED <CONTENT> EXCHANGE TEMPLATES

MIL STD 2525ABC ASSET TOKENS

"SYMBOLS RULE THE WORLD"

STRATML

XBRL

DDL DATA DEFINITION LANGUAGE

Signal operating instructions (SOI): technical control coordination of signaling, telemetry Current situational awareness, data dictionary, network identification, channels, network directory, brevity code-words, signals. Units maintain 2 SOI copies: PEACE TIME version "Go-To-War" version = BIZ COA (s) <Org_ID1><Org_ID2><Org_ID3>

NATO MESSAGE TEMPLATES USE DATA SETS FOR STRUCTURED DATA EXCHANGE // POSITION FIELD IN MESSAGE PROCESSED BY TABLE, FIELD # IN A CONSISTENT, PREDICTABLE ORDER = AI FRIENDLY M2M AI

GOAL: vide a common lexicon / syntax / term library used among FEDERATIONS identified by Federated ID

GOAL: Provide a common, consistent, reliable schedule to share signaling and telemetry within federations.

MTL Machine Trust Language

MESSAGE TEXT FORMAT:

SEG RPT OCC CLASSNAME SETID SEQ FIELD OCCURRENCE SET FORMAT NAME

O 11NUPRES EXER 1 /M /O // (NU) EXERCISE IDENTIFICATION

C 11NUPRES OPER 2 /M /O /O // (NU) OPERATION CODEWORD

M MIOPV1 1 MSGID 3 /M /M /O /O /O // (NU) MESSAGE IDENTIFIER

M MIP OUT ORDPLAN 4 /M /O /O /O // (NU) PLAN ORDER REFERENCE

SIOP OUT MSGREF 5 /M /M /M // (NU) REFERENCED MESSAGE

JUPRES DTG 6 /M // (NU) DATE-TIME GROUP

O ORGID 7 /M /M /M /M /M /M /M /M /C // (NU) ORGANIZATION DESIGNATOR

M 11NUPRES GENTEXT 8 /M /M // (NU) 1.A ENEMY FORCES / COMPETITORS

M 11NUPRES GENTEXT 9 /M /M // (NU) 1.B FRIENDLY FORCES / TRADE FEDERATION

M 11NUPRES GENTEXT 10 /M /M // (NU) 1.C ATTACHMENT / DETACHMENT INTEREST

O 11NUPRES GENTEXT 11 /M /M // (NU) 1.D COMMANDERS EVALUATION

O 11NUPRES GENTEXT 12 /M /M // (NU) 1.E ENVIRONMENTAL INFORMATION

M 11NUPRES GENTEXT 13 /M /M // (NU) 2. MISSION </108>K00.99 / FIX / SWIFT / E-911 Heartbeat Message

M 11NUPRES GENTEXT 14 /M /M // (NU) 3.A CONCEPT OF OPERATION

O 11NUPRES GENTEXT 17 /M /M // (NU) (3) RECONNAISSANCE SURVEILLANCE

O 11NUPRES GENTEXT 21 /M /M // (NU) (5) INFORMATION OPERATIONS

O 11NUPRES GENTEXT 28 /M /M // (NU) (5) COMMS INFORMATION SYSTEMS

O 11NUPRES GENTEXT 35 /M /M // (NU) 3.D COORDINATING INSTRUCTIONS

M 11NUPRES GENTEXT 36 /M /M // (NU) 4.A SUPPORT CONCEPT (Logistics)

M 11NUPRES GENTEXT 37 /M /M // (NU) 4.B MATERIAL AND SERVICES

SYMBOLS Friend Neutral Hostile Partner Competitor

TOKENIZED ECONOMY BREVITY CODE OPSCOSE MAPPET TO SYMBOLS

INFOCON

INFORMATION CONDITION

PURCHASE CODES

FEDERATED PEGS

ISO 10383 - MIC

Market Identifier Codes

STOCK NDN NAMED DATA

EXCHANGE NETWORKING

MIC CODES PRECEDENCE

FILTERS PROCESSING

BLOCKTIME

ARBITRAGE

ERLANG TIME

EQUATIONS

Fig 10: Syntax Lexicon Library Rosetta Stone from DoD / NATO system of systems framework

Common syntax library of various Message Text Formats MTF to enable universal signaling / telemetry among a system of systems is ESSENTIAL. Decades of research at the taxpayer's expense into structured messaging / structured data exchange where the location, type of data identified by table number will help accelerate the process of organizing syntax into categories from disparate systems into data set reference repositories. Many semantic, syntax tags will be reusable. The rules, roles and logic developed by years of research involving thousands of subject matter experts solving real world issues is the value to be extracted from 300+ message sets. NATO stays synchronized across many languages and cultures so why reinvent the wheel?

MESSAGE CATALOG: The USMTF message library has over 300 messages to choose from to facilitate information exchange requirements. MTFs presenting data in a logical, well specified and unambiguous layout. MTFs are transmission medium neutral. The content of the Message Catalogue has been developed by military operators over the last 20 years. Messages are regularly maintained to keep pace with the latest tactics and doctrine. **Military brevity codes and stock exchange codes are similar. security Identifier used in financial markets are: SYMBOL, CUSIP, ISIN, SEDOL, RIC Code, Syntax Lexicon Library**

CONTACT / SOCIAL MEDIA

Linked IN: <https://www.linkedin.com/in/ecoeconepochs/>

FACEBOOK: <https://www.facebook.com/beaconheart>

Github: <http://github.com/Beacon-Heart>

IPFS Interplanetary File System Web3 web page. <https://ecoeconomicepochs.dao/>

SCRIBD Documents: <https://www.scribd.com/user/11781571/Steven-James-McGee>

Slideshare Files: <https://www.slideshare.net/EcoEconomicHeartbeat>

X / Twitter: https://twitter.com/Heart_Beacon



Figure 11: Steven "FutureMan" McGee's Business Card / Contact Information