Unidata CommunityLink (UCL) Design Model for Global Cooperation - Global Challenges Prize Entry

Summary - Global Challenges Foundation – Global Challenges Prize

The entries must consist of the following three parts:

1. Abstract (no more than 1000 words)
The abstract must summarize the design of the model, including the institutions, regulations, decision-making paths and control mechanisms it involves, as well as how key individuals and other decision-making bodies are to be appointed.
2. Description of the Model (no more than 5500 words)
The document must be divided into subsections with clear and descriptive headings. The Participant must clearly define the functions of the various components, their areas of responsibility and the extent of their decision-making mandate. Also, describe how the model is meant to manage both current and emerging challenges and risks.
3. Argumentation demonstrating how the model meets the assessment criteria (no more than 2750 words)
For each of the criteria listed below, the participant must provide convincing arguments as to how the proposed model meets the criterion.

Attachments Beta ULB site and UCL safe IOT network site

1. Abstract

The abstract must summarize the design of the model, including the institutions, regulations, decision-making paths and control mechanisms it involves, as well as how key individuals and other decision-making bodies are to be appointed.

Unidata CommunityLink (UCL) design model for international co-operation

The Missing Link

We currently are living in a technological age operating under pre-internet governance structures designed for an industrial system based on infinite use of a finite resource. By definition this is not sustainable.

Technology has brought real time global communications, artificial intelligence, genetic engineering, virtual & physically interoperability, 3D Printing/localized manufacturing and smart IOT automation with the promise of trillions in efficiency dividends but also the threat of mass job loss, "click to kill" security threats and human obsolescence.

Our existing industrial system ecology is characterized by a mechanistic and reductionist worldview, increasing inequity in the allocation of resources and a number of unprecedented global risks. Baum & Singh's "Evolutionary Dynamics of Organisations" describes our technological age and need for a spanning organisation "dominant design" to transition from our "era of ferment" to an era of incremental managed change.

Without a clear vision and dominant design "recognising all stakeholder nuances to bring them together in a way which achieves each of their needs/motives"… our human evolution and transition to a smart sustainable society is left to "happenstance". Any such vision/model must be holistic and represent the community as a whole including consumers, regions, SME's, industry, education, technology, charitable and government interests. (8 tribes of open intelligence).

Where to start?
Data is the blood that runs through the system and connects us all. Data is fundamental for intelligent local & global decision making and governance. However no structures, standards exist for the interconnection & administration of data at any level. This is the missing link in our post internet transition to a true interconnected global society proactively addressing interlinked risks and climate change, environmental damage, conflict poverty, and population growth problems.

Addressing "data" connectivity up front provides **a sustainable platform to evolve to a digital age UN style 2.0 decision making, governance and communication system to address global risks combined with a practical system for communities to address risks and issues locally**.

More simply data (and its control) is the mutual self-interest strategic & systemic point of leverage to create a spanning organisation, governance, operating system and social capital model to create a truly representative self-funding global collaboration with real time communications.

The design
Unidata CommunityLink (UCL) is a Breakthrough "spanning organizational" model for an **open ecology** system which is circular, lean and exponentially social. The UCL **smart society** system vision is a **global co-operation** amongst a decentralised autonomous network of smart communities (enabled by a **commercially neutral, open data infrastructure**) working together to support locally based sustainable value creation and its equitable distribution via a new social contract.

The CommunityLink model uses a Limited Partnership (LP) structure similar to Global Legal and Accounting firms operating decentralised autonomous networks managed by local partners. Established and deployed by a Unidroit style (global legal unification) "Unidata Governance Foundation", the system enables approved Citizens, Industry, Regional, Technology, R & D, Charitable & Government "Access" partners to establish their own smart data hub/exchange to act as the Investment manager of their own information, data and associated revenues within a global co-operative.

Access Partners manage their localised data ownership, security, risk and smart community transition. This enables inter community data sharing and closed loop automation within a decentralised autonomous network to support pre-defined "smart community, industry or citizen solutions". A new social contract (Mutual reciprocal PACT) ensures that significant $$ & efficiency benefits (e.g. trillions predicted by the IOT industry) are returned equitably & systemically (smart contract algorithm) to all community stakeholders.

The General Partners of Access LP's are Not for Profit entities such as Associations who recognise that an Access Limited Partnership enables member access to an open ecology as a natural extension of their current mandate to represent member interests.

The design incorporates a Social Capital Investment Bank of funds from systemic community margins to internally fund the cooperation. It starts by harnessing and leveraging the global smart city and industry revolution underway creating the potential for a strategic leap for the "whole" not the few.

In short it enables existing players to partner and build the new Unidata cooperation design at the centre of the old without disturbing existing operating vehicles.

The Institutions/decision paths/control mechanisms
Operating within existing national boundaries "Access" LP's for the 8 tribes establish a National Data Administrator (NDA) entity as General Partner with themselves as LP's of a National Partnership. Specific "Access" Board Advisory Councils secure ongoing Access user operational requirements.

Similarly the Unidata Foundation is the General Partner of a global co-operative partnership and general assembly of national based Access partners. Representative Global "Access" board advisory Councils support the Governing Council and Secretariat ensuring system design, governance and operational implementation meets member needs. For example

- Consumer Access digital voting capability for a "global citizens assembly"
- Regional Access leverage of existing global Council of Mayors and smart city programs
- Industry Access open data supply chains protecting against privatisation of industry supply chains and strengthening industry governance

Using a proven commercial structure to meet the need for a "commercial and legal framework to support the digital representation of the real world" enables us to create a true global partnership of trusted communities and evolve the legal documentation to a dynamic global constitution or "CommunityLink Trust".

How key individuals and other decision-making bodies are to be appointed.
Implementation commences with the Unidata "genesis peer". The initial individual peer genetic makeup incorporates the Founding organisational and engineering team, key values aligned global individuals with the greatest IP, Investment and operational contribution and operational Access individuals representing each of the 8 tribes.

This enables UCL Access representatives of the 8 tribes to then customize their Access peer enabling the Phase 1 AU smart community peer to peer network business case with localized Access partners and Unidata governance.

The Unidata CommunityLink design model provides the path of least resistance, business and investment case for our evolution to a new international cooperation and governance system.

2. Description of the Model

The document must be divided into subsections with clear and descriptive headings. The Participant must clearly define the functions of the various components, their areas of responsibility and the extent of their decision-making mandate. Also, describe how the model is meant to manage both current and emerging challenges and risks.

Unidata CommunityLink (UCL) design model for international co-operation

Introduction

We currently are living in a technological age operating under pre internet governance structures designed for an industrial system based on infinite use of a finite resource. By definition this is not sustainable.

Our existing industrial system ecology is characterised by a mechanistic and reductionist worldview, increasing inequity in the allocation of resources and a number of unprecedented global risks. Technology has brought real time global communications, artificial intelligence, genetic engineering, virtual & physically inter-operability, 3D Printing/localised manufacturing and smart IOT automation with the promise of trillions in efficiency dividends but also the threat of mass job loss, "click to kill" security threats and human obsolescence.

What is the systemic model to bring together the benefits of technologies and the industrial ability to efficiently make things to meet the need for an effective collective decision and governance model to address making global problems and support our transition to a smart sustainable society?

Baum & Singh's "Evolutionary Dynamics of Organisations" describe our technological age and need for a spanning organisation "dominant design" to transition from our "era of ferment" to an era of incremental managed change.

Without a clear vision and dominant design that "recognises all stakeholder nuances" and provides a way to bring them together in a way which achieves each of their needs/motives… our human evolution and transition to a smart sustainable society is left to "happenstance". Any such vision and model must be holistic and represent the community as a whole including citizen, regions, SME's, industry, education, technology, charitable and government interests (8 tribes of open intelligence).

Where to start?

The Economist has identified that it is not technology that defines our current era. It is data and that ceding control of all our data to a few vendors is a bad idea. Furthermore the current regulatory model is not fit-for-purpose as it has failed to keep up with the pace of technological change. Data is the blood that runs through the system and connects us all. Data is fundamental for intelligent local & global decision making and governance. However no structures, standards exist for the interconnection & administration of data at any level.

This lack of a knowledge & data model framework design for international cooperation is the missing link in our post internet transition to a true interconnected global society, as a network of smart decentralised autonomous sustainable communities *proactively addressing global risks*.

In essence we must and in fact have no choice but to address "data connectivity" as the core issue/problem to be solved, if we hope to evolve to a digital age UN style 2.0 decision making, governance and communication system to progress the global risk debate combined with a practical system for communities to address risks and issues locally.

More simply data (and its control) is the strategic & systemic point of "mutual self-interest" leverage to create a spanning organisation, governance, operating system and social capital model to create a truly representative self-funding global community body with inbuilt continuous learning.

What is missing?
Unidata CommunityLink (UCL) is the missing link which provides a "spanning organisation" or dominant design model for international cooperation which systemically organises, integrates and provides the pathway for Regional , Industry, R & D , Charitable, Citizen, Technology & Government stakeholders to come together to support our transition to a smart and locally based sustainable society funded through system efficiencies it creates.

The UCL design provides a single unifying global vision, strategy, cooperation model, organisational methodology, legal & commercial structure, commercialisation strategy and ICT implementation plan. It can align, leverage delivery of a range of existing knowledge, data and ICT infrastructure initiatives creating ongoing systemic revenue streams and addressing systemic risks.

The design model for international cooperation
Unidata Community (Access Inter)Link or CommunityLink is a Breakthrough "open ecology" spanning organizational model which is circular, lean and exponentially social. The CL smart society system vision is a global co-operation amongst a decentralised autonomous network of smart communities (enabled by a commercially neutral, open data infrastructure) working together to support locally based sustainable value creation and its equitable distribution via a new social contract.

The CommunityLink model uses a Limited Partnership (LP) structure similar to Global Legal and Accounting firms operating decentralised autonomous networks managed by local partners. Established and deployed by a Unidroit style (global legal unification) "Unidata Governance Foundation" the system enables approved Citizen, Industry, Regional, R & D, Charitable, Technology & Government "Access" partners to establish their own smart data hub/exchange to act as the Investment manager of their own information, data and associated revenues within a global co-operation.

Access Partners manage their localised data ownership, security, risk and smart community transition. This enables inter community data sharing and closed loop automation within a decentralised autonomous network to support pre-defined "smart community, industry or consumer solutions". *A new*

social contract (Mutual reciprocal PACT) ensures that significant $$ & efficiency benefits (e.g. trillions predicted by the IOT industry) are returned equitably & systemically (smart contract algorithm) to all community stakeholders.

The General Partners of Access LP's are Not for Profit entities such as Associations who recognise that an Access Limited Partnership which enables member access an open ecology as simply a natural extension of their current mandate to represent member interests.

The design incorporates a Social Capital Investment Bank of funds from systemic community margins to internally fund the co-operation. It starts by harnessing and leveraging the global smart city and industry revolution underway creating the potential for a strategic leap for the "whole" not the few.

The Institutions/decision paths/control mechanisms
Operating within existing national boundaries "Access" LP's for the 8 tribes establish a National Data Administrator (NDA) entity as General Partner with themselves as LP's of a national Partnership. Specific "Access" Board Advisory Councils secure ongoing Access user operational requirement.

Similarly the Unidata Foundation is the General Partner of a global co-operative partnership and general assembly of national based Access partners LP's. Access Board advisory councils support the Governing Council and Secretariat ensuring system design, governance and operational implementation meets member needs, for example
- Consumer Access digital voting capability for a "global Citizens assembly"
- Regional Access leverage of existing global Parliament of Mayors and smart city programs
- Industry Access open data hubs protecting against privatisation of industry supply chains and strengthening Industry governance
- R & D & Charitable Access distribution of systemic margins to address knowledge gaps and global problems of greatest need both locally and globally
- Government Access enables national governments to engage as one tribe within a global open ecology cooperation to maximise efficiencies and service delivery within its process mandate.

Using a proven commercial structure to meet the need for a **"commercial and legal framework to support the digital representation of the real world"** *enables us to create a true global partnership of trusted communities and evolve legal documentation to a dynamic global constitution or "CommunityLink Trust".* Agreements can be secured and automated via new smart contract technology as part of the UCL operating system.

Benefits of this approach to stakeholders are that it:
i. creates the commercial framework & legal environment necessary for the International cooperation to commence building a "bridging system for transition" to a fully integrated, inter-operable smart sustainable society
ii. enables partners to maintain their current activities and engage in the general partner role initially as one additional activity, so risk in engaging immediately is minimised

iii. provides Not for Profit General Partners with a commercial & legal structure to receipt investment and grant dollars to get paid to establish the commercially neutral infrastructure without conflict of interest

iv. provides the UCL "open ecology" Access LP data interlinks an ongoing systemic % revenue stream from the UCL network to drive ongoing design and development for the benefit of their Access members.

The UCL cooperation design model, functional organisational methodology, legal & commercial structure provides the mechanism for user governance of a global decentralised "open ecology" information and data marketplace and data unification path.

It provides the methodology to bridge from the existing industrial ecology to a new community based market ecology based on sustainable value creation and its equitable distribution. A starting point benchmark is the existing "Unidroit" approach to global legal unification.

In essence the Unidata model enables existing players to partner and build the "bridging system" to a new International co-operation structure and open community ecology without disturbing their existing operating vehicles.

The IOT "data" strategic & systemic leverage starting point
The global focus, investment and push to IOT/app connectivity for inter-regional and inter-industry data exchange and automation is huge and unstoppable with the promise of trillions is cost savings and efficiencies!

In essence we must and in fact have no choice but to engage with this revolution if we are to progress the vision for a Unidata design model for international cooperation based on open data and a decentralised autonomous internet. One where the "efficiency dividend" benefits are shared equitably by the community as a whole via a new social contract. One which focuses on addressing the existing systemic poverty and conflict issues whilst also addressing future AI and automation issues which threaten to create mass job losses/disruption.

The IOT revolution need is for an operating system which addresses the security, identity, data ownership, closed loop autonomous network and liability issues. Additionally no "design model for international cooperation" or "commercial and legal framework" exists to manage the digital representation of the real world (physical & virtual interoperability) we are in the process of creating or provide ongoing ongoing governance for these fundamental design and operational issues.

Clearly the IOT revolution need is the strategic and system of leverage start point to initiate the UCL design model for international cooperation and the open ecology data system to provide the basis to systematically address their and other core issues. But where to start?

Our research indicates that Australia has reached an evolutionary convergence point to implement the Unidata model and operating framework starting at the IOT "data" strategic & systemic leverage starting point. This requires only a slight refinement/alignment of existing national smart city stakeholders activities in partnership with core underlying open ICT platforms partners already seeking to engage with an open ecology design model.

In the UCL model representative National, Regional , Industry, R & D , Charitable, Consumer & Government stakeholders (Not for profit/representative associations) establish a "Access" Limited Partnership with themselves as the General Partner and members as Limited partners. From here the "Access" Limited partnerships establish a National UCL Partnership and National Data Administrator (NDA) entity as General Partner with themselves as the Limited partners.

Similar to the Unidata global approach Limited partners form their specific "Access" Advisory Councils to ensure NDA Board and management alignment to their ongoing Access user operational requirement. National Access Partnerships are part of the global co-operative partnership with nominated members participating in aligned global Access advisory councils to support the Unidata Governing Council and Secretariat ensuring system design, governance and operational implementation meets member needs within a global cooperation cultural context.

We have connected with key Australian stakeholder/drivers who are already progressing to the stated need for an open ecology to enable the IOT revolution. The missing link being the single UCL unifying vision, cooperation model, commercialisation strategy, organisational methodology, legal & commercial structure and implementation plan that can fund, align, integrate, leverage delivery of and create ongoing systemic revenue streams for existing stakeholder initiatives.

Development Case study design – CommunityLink Phase 1 Smart Society – A national strategy & business case
On the back of the Australian convergence opportunity and stated need/specifications we have defined a Phase 1 smart city IOT start point as part of an AU national IOT strategy which can be recreated globally.
There are over 500 Councils in Australia who collectively spend over $50bl per annum in delivering core physical infrastructure including lighting, waste management, water, power, parking, health, education, signage and more where smart technology promises significant cost savings and improved service delivery to end users.

The Smart City Phase 1 – systems re-engineering business case has been built around the Smart city framework " template & projections" developed by Councils in Australia. This template illustrates 14 underlying Smart city IOT solutions, a 5 Phased implementation plan and 6 execution steps each individual Council is encouraged to address to secure projected $100ml p.a. savings after 10 years.

The Council smart city framework involves creating a "Smart Region Management platform (local industry platform)" to simplify management of municipal services, consolidate services into one place, facilitate integration of multi-vendor solutions and enable inter-regional data sharing and analytics that can enable data-driven decision making and planning. A key recognition is the need for an external governance operating model.

The initial objective of the Phase 1 Smart city project is to implement the Unidata CommunityLink peer to peer system to deliver to this Regional/Council need and capture working templates. From here we can to deploy this solution across 500 LGA's to progressively re-engineer the current Australian Council physical infrastructure.

Cost savings are projected grow to $5bl p.a. over 10 years and we can create a national smart data network of communities and infrastructure that delivers projected $2.5bl p.a. ongoing revenues to the UCL system in Australia alone on one activity and facilitate inter regional & industry data sharing and fund next generation social and economic functionality to support sustainable community ecologies.

The UCL AU Phase 1 IOT smart city Commercialisation strategy, investment and business case includes a development roadmap to a Phase 1 SAFE CL IOT messaging testnet to deliver a smart city solution to an existing Council specification. *The initial AU phase 1 step is activated through the Project workstreams necessary to establish the "Unidriot" style data global co-operation. It becomes the initial systemic Unidata Foundation revenue source and captures the "Access" LP open ecology templates for recreation globally.*

Who gets what? – A new social (internet) contract – Exponentially more Social, Lean, Circular
A Smart City Phase 1 systems reengineering feasibility has been developed to illustrate the co-operation model as a whole to stakeholders. This is based on the assumptions created by the demonstration Council smart city framework plan.

In order to automate their smart city solution and secure the localised and national smart city benefits available Councils will have to outsource core functionality from their legacy system to the **dedicated smart city peer to peer system within a national smart network** via their locally owned, controlled and operated Community Development Centre (CDC).

Based on the 6 phase process described in the smart city framework brochure we have defined a default "*progressive cost reduction and outsourcing" model* to illustrate the benefits to *Council from phased smart service take up over 10 year via accessing the national UCL network.*

Using these assumptions the project feasibility can illustrate over 10 years an overall 1 page smart community network P & L to demonstrate the system as a whole. This includes CDC/Council take up and margin split assumptions, example CDC & Council P & Ls, Regional, Industry, Consumer, Technology, R & D, Charitable and NDA Access P & L's with capital & revenue assumptions. It also provides key system suppliers, IP licensing & operational revenue projections, Unidata Foundation systemic margin and ROI's for investors.

How are the benefits from the smart revolution shared equitably? In essence the more the system makes the more it returns to the community stakeholders via the unique social contract which includes with a systemic charitable margin at its heart & R & D component for continuous "living university" system improvement.

Establishing the international cooperation decision-making structure or framework

Bringing all these disparate interests together into one co-ordinated global co-operation to deliver to the Development case would appear to be impossible. How can we achieve this? Where do we start?There is in fact a way. *This starts with identifying the various components, their functions, areas of responsibility and the extent of their decision-making mandate.*

We have identified 12 critical functional components which have been allocated a Project Workstream which frames their area of responsibility and the extent of their decision-making mandate. This is part of a Development roadmap and project plan to achieve the UniData Foundation establishment and self-funding milestone**.**

The UCL model and Development roadmap involves establishment of an open ecology (commercially neutral global open data infrastructure and governance system) funded through the system efficiencies it creates. Community Project workstream contributors, many who are currently making unpaid contributions to aligned "Association/Not for profit" stakeholder projects, can now be paid without creating a conflict of interest.

The UCL Development roadmap and **Project Plan has 3 project sections,** Section 1 - Unidata Foundation (Build the Foundations) as workstream 1, Section 2 - Commercial (secure supply) workstreams 2-4 & Section 3 – Community (secure demand) workstreams 5-12.

Each workstream is also part of the initial Phase 1 Smart City Commercialisation strategy/business case which comes with a project funding allocation, revenue margin and leads to a defined commercialisation milestone start point being the Council smart city solution delivery.

Engagement involves Requests for Co-development proposals from component stakeholders to secure their Access LP capital & systemic revenues allocation and system access as part of an Mutual Agreement which serves/leverages their agenda. This Phase 1 AU IOT Development case study is critical to taking the design model to a practical implementation path to galvanize effective international action. Next stage risks are addressed as projects/milestones of an Integrated Workflow through the "open ecology" framework.

The Integrated UCL Project plan and critical path will create the Unidata Foundation, enable the commercial project team to deliver the system to the Unidata "client" and a Driving Execution implementation plan to the AU national Access stakeholders to achieve the commercial & operational start point milestone for both as follows;

i. The Foundation project section 1 –"Creating the Foundation building block"
- establish a Unidata Founding Council & genesis ICT peer to enable Foundation to own system IP, deploy   the phase 1 au smart pilot and oversee global "data unification" deployment & governance

ii. **The Commercial project section 2 – "Design & build the system"**
- fund the Product development team to secure the open source & commercial IP and deliver the system and strategic investments to key underlying system components
- establish a smart city IOT data messaging "SAFE testnet" between the respective Regional Access, Industry Access & National Data Administrator & pilot Community Development Centre masternodes with three open source technology providers seeking an open ecology model
- create dedicated smart city peer to peer system to test within a Council smart application pilot environment (Accelerator program framework established looking for the system)

iii. **The Community project section 3 – "Deploy the system"**
- establish representative Consumer, R & D, Charitable, Regional and Industry Access General Partners and national administration to deliver to the CDC/Council smart city IOT requirement
- provide each of the Access Limited partnerships with a capital allocation and systemic revenue model from a commercially neutral open ecology
- enable current contributors working to development the commercially neutral "interlinking system through Not for profit entities to be paid for current and future work without conflict of interest
- capture generic Access templates for Unidata "library" and deployment as part of its international cooperation mandate.

Descriptive of the Project Section 1 - Building the Foundations - Workstream 1 – UniData Foundation
Purpose
To establish a UniData global cooperation amongst a decentralised autonomous network of smart communities to create systemic change at scale. Create a global community whose mission is to support a global rebalancing based on a system which enables locally based sustainable value creation and its equitable distribution.

Terms of reference
i. Bring together values aligned global leaders who share the UniData vision to establish an initial Unidata peer utilizing the identified decentralised internet system
ii. Define members and funding, IP and operational support for a. the Unidata Foundation establishment and b. Project collective investment vehicle
iii. Establish the Unidata Foundation to own the system IP to protect UCL as an open system
iv. Use the UCL AU Phase 1 smart city program AU pilot to a. capture generic access templates for global "Access stewards" council b. Create financial sustainability for the Foundation to support global cooperative system deployment
v. Establish a global data governance structure for the UniData "open ecology", a commercially neutral open data system for global co-operation.

Each Access workstream has a similar project descriptive of their functions, areas of responsibility, extent of their decision-making mandate and phase 1 capital & systemic revenue allocation. To support establishment of the Model design and bring an international team of experts around the Unidata Foundation and other Access "Project workstream Challenges" we are seeking a high profile Project Patron/Chairman.

How is the Unidata model and enabling CommunityLink system funded, established and maintained??
The design model funding issues put simply:

i. How do we fund establishment of the Unidata Foundation and an "open ecology" which cannot be owned by investors or be beholden to vested interest donors with the potential to delay funding or compromise the vision?
ii. How do we separate the commercial build, risk and ongoing development and supply requirement from the "Unidata governance" role of what must be a commercially neutral infrastructure?
iii. How do we bring together the multiple players, IP and operational processes together with the ability to plug in and out as they become obsolete (so it cannot be held captive to existing "capital ROI's) without disruption to the system and to ensure a smart "continuously learning" organisation?
iv. How do we secure funding for the open ecosystem Limited Partner hubs and not for profit General partners to implement their "Access Workstream" mandate?
v. How do we fund initial Project UCL Phase 1 IOT network business case to establish the cooperation model design and create path to self-funding and system sustainability?

To solve these issues we have designed and are advocating **the Institutional Social Capital Investment Trust (SCIT) collective investment methodology** to separate the commercial build, risk and ongoing system development requirements from the Unidata governance role to ensure the "UCL open ecology"and enabling commercially neutral infrastructure operates for all humans in perpetuity.

The role of the SCIT is to secure the IP, fund the partner workstreams, build the core UCL system asset on behalf of Unidata Foundation in return for an annuity revenue stream with UCL retaining ownership of the IP to ensure community control in perpetuity. The collective investment approach eliminates the need for duplicated capital raising activities enabling us to present a much stronger collaborative investment case without conflict of interest.

The SCIT design is an elegantly simple but sophisticated Portfolio Asset Management approach incorporating three funds as part of an Integrated Portfolio strategy to deliver to the multiple stakeholders and UCL system needs as follows;

i. Portfolio Integration Asset Fund (PIA)
- Secures core IP to the Project UCL system specification and pays system licensing fees
- Creates the plug in plug out capability necessary to adapt continuously without commercial risk to the system as a whole

ii. Knowledge Infrastructure Fund (KIF)
- Secures investment funds from values aligned investors e.g. Investment Foundations to further leverage their good works
- Integrates IP licensed from the Portfolio Integration Asset Fund to build the UCL system
- Places system IP created by KIF in the Unidata Foundation to protect the open system and secures an ROI annuity revenue stream

iii. Strategic Investment Fund (SIF)
- Provides Founding capital to the Community project section Access partner i.e. create the (KIF) client
- Fund development of core IP key fundamental to continuous system adaption
- Fund development of key strategic (defensive or tactical) system assets

Why the Multi fund approach? *T*he simple answer is risk management. Placing the IP, build and strategic partner funding risks areas into separate funds provides the legal basis to engage with the holistic requirements of the system build and ongoing operation, in a way which reduces the risk for all collaborators and protects the interests and integrity of the system as a whole. We call this Holistic Capital Management. Continuous learning, improvement & adaption is fundamental to a smart system. It cannot be held captive to existing "capital ROI's". The initial SCIT KIF Phase 1 "smart city" Integrated Portfolio design provides a practical application.

In essence using a collective capital raising vehicle such as the SCIT Institutional Trust structure with its unique portfolio design and integrated or Holistic Capital Management approach enables us to bring the necessary players around the project. It enables us to secure the multiple IP sources, build the system, fund the international cooperation model and not for profit UCL Access workstream Challenge partners fundamental to the ecology without conflicts of interest.

The core benefits of the Social Capital Investment Trust methodology
i. Provides a single collective investment & engagement point for securing IP & investment to facilitate ongoing system & product development
ii. The **system & IP** created by the SCIT on behalf of the community is to be **owned by the "Unidata" Foundation to ensure open ecosystem perpetuity.**
iii. **Creates an internal "social capital bank of investment funds**" to fund the new system deployment and fund transition from the old disconnected system to the new inter-operable system (*Data Transvestment*)
iv. **Maximises profits from system efficiencies** and enables tactical data transition from the current system to maximise the emergent system's competitiveness"
v. **Creates a virtuous cycle** by utilizing margins from efficiencies created in the old system to fund the new system deployment to create further old system efficiencies until the new becomes dominant and the old obsolete
vi. Has a globally applicable Smart City Phase 1 system re-engineering investment & business case commercial start point which creates a self funding model and path

Who manages it? As with any major Infrastructure Trusts the SCIT will have an Asset Manager (50% owned by the Unidata Foundation) with a unique global mandate & social capital purpose to fund the ongoing development of the underlying infrastructure asset. We are seeking to engage with values aligned global Foundations & investment experts e.g. Global Challenges Foundation to partner in the ongoing development of the SCIT and its "sustainable value creation and its equitable distribution" investment mandate.

The creation and funding of a new generation Social Capital Investment Trust/Bank funded through annuity style revenues stream from a community monopoly infrastructure is a key strategy to support our transition to a new economy based on the Regenerative capitalism advocated by John Fullerton's Capital Institute and Richard Branson's Plan B Principles for Industry that "put people and planet alongside profits". Additionally by "maximising profits from system efficiencies" and ensuring equitable distribution of the benefits via a new social (internet) contract it will support the Global Challenges Foundation Design model for international cooperation mission by creating sources of systemic funding to address global problems

Summary of UCL Model highlights
UCL is a new model design for International cooperation structured as a commercial partnership between citizen, region, industry, technology, R & D, Charitable and govt access representatives to establish a global open ecology and Unidata global governance Foundation that has the potential to evolve to digital age UN 2.0 and multi Access stakeholder digital constitution through

- Deployment of smart city and smart industry data hubs (campuses) for an "open ecology"
- Commercially neutral infrastructure & open data marketplace with user established Unidata Foundation governance
- "Open data ownership, access" framework to create data standard for inter-city and inter-regional data sharing and enable closed loop automation
- Citizen ownership of their private data,permission based ownership of aggregated data
- Multi-Level Knowledge model to maximise linkages for predefined smart city, industry and consumer product outcomes
- Community ownership of public resource
- Physical & virtual governance forum to address critical global risks
- Social capital contract with "virtuous cycle" revolving funds & community loyalty methodology to ensure benefits shared equitably at a local and global level
- Government, business , community and citizen agendas aligned
- Collective investment methodology via Social Capital Investment Trust to provide single point to secure IP & investment to a. facilitate ongoing system & product development b. separate commercial requirements from "neutral infrastructure" role c. establish "internal social capital funding bank"
 - UCL AU Smart society Lighthouse Phase 1 – local industry platform Proof of concept opportunity start point that captures generic access templates and creates a sustainable network for global roll out.

How key individuals and other decision-making bodies are to be appointed.
Model implementation commences with the Unidata "genesis peer" established through what is called a Close group consensus. *The initial individual peer genetic makeup incorporates the Founding organisational and engineering team, key values aligned global individuals/organisational with the greatest IP, Investment and operational contribution and operational Access individuals representing each of the 8 tribes. The generic Access templates created will enable the* AU Access stakeholders to customise to meet their Phase 1 UCL peer to peer network requirement

The Project UCL team has a beta web site which is essentially the GCF entry abstract (Vision), Design of model (Business model, business case & Investment case) and Argumentation (Benefits/value prop) and is designed to commence promoting the international co-operation design model as a natural extension of the GCF entry process.

The Project UCL beta website
i. introduces Unidata CL design model as The Missing Link for an International Cooperation through a single unifying vision, strategy, design model, organisational methodology, legal & commercial structure, commercialisation strategy and implementation plan starting at the IOT revolution strategic & systemic point of leverage.
ii. illustrates how the design model aligns, integrates and leverages a broad range of existing global & national knowledge, data, ICT infrastructure and smart IOT initiatives to minimise cost, duplication and resistance creating a path to self-funding and holistic capital optimisation

Core to the site is an invitation to key individuals to enter into a Unidata Foundation Consensus dialogue **(Greek dia—logus the capacity of the team to suspend assumption and enter into genuine thinking together)** for agreement to participate in establishing the UCL Foundation team.

The site includes a "Request for a Co-development proposals" from key Product development and "Access" workstream stakeholders seeking to secure the $, margin, IP allocated to their product or project area of collaboration. An investment contribution to the SCIT Knowledge Infrastructure fund from Investment Foundation partners prior would enable us to tie a $ funding amount to the Request for proposal which would strengthen our case considerably.

Who are the funders? What is the funder value proposition?
The Unidata Foundation team is a pre-defined mix of values aligned global leaders/individuals whose associated organisations have the most to gain and who can make the greatest contribution to establishing the "Unidata" Foundation entity and supporting the Social Capital investment Trust (collective investment entity) in terms of IP, operational contribution, funding and advocacy. Project UCL starts with Investment Foundations associated with Close group individuals investing in the SCIT Knowledge Infrastructure Fund.

The Social Capital Investment Trust KIF investment value proposition is

"the opportunity to leverage off the integration of three existing open source software platforms with over $25ml already invested by the UK government and private investors to deliver to an existing AU Council smart city specification and re-engineer $50bl of existing AU council expenditure with projected system efficiencies of $5bl p.a. after 10 years."

This creates natural community monopoly/systemic annuity revenue stream for a self-funding Unidata Foundation international cooperation and the internal Social Capital Investment Trust bank of funds to fund UCL deployment globally whilst ensuring open ecosystem system independence from vested interests.

How the model is meant to manage both **current** and **emerging challenges and ri**sks.
With Unidata Foundation model design start point we have the path of least resistance, cooperation model, business and investment case for our evolution to a new international co-operation and governance system. The Access user established Unidata open ecology system of global governance offers

"a multilevel biofeedback framework to empower local and regional communities and private investors and govt's to more effectively deal with local and global issues by increasing economic and social equity through redistributing wealth creation to the issues, people, communities and infrastructure that need it to redirect and sustain transformative new systems of collaboration for human sustainability".

In short Project UCL enables existing players to partner and build the new Unidata collaboration system at the centre of the old without disturbing their existing operating vehicle thus minimising risk, institutional resistance and maximising potential win win win upside.

Following the lodgement of the GCF entry the natural UCL next step is to connect with targeted stakeholders with a invitation to enter into dialogue and request for co development proposals for IP, operational, funding and advocacy support. We extend this invitation to The Global Challenges Foundation to participate in the UCL dialogue.

3. Argumentation demonstrating how the model meets the assessment criteria

For each of the criteria listed in "Criteria", the participant must provide convincing arguments as to how the proposed model meets the criterion.

1. Core Values

UCL provides a clear vision and "dominant" design model for international collaboration based on the respect for the equal value of all human beings as individuals, combined with a practical methodology which "recognises all stakeholder nuances" to bring them together for the good of all humankind in a way which achieves each of their needs/motives. The vision/model is holistic and represents the community as a whole including consumers, regions, SME's, industry, education, technology, charitable and government interests (8 tribes of open intelligence).

UCL is a Breakthrough open ecology & "spanning organizational" model which is circular, lean and exponentially social. The core values for the (UCL) design model are based on regenerative capitalism principles for a holistic, living systems or ecological world view to support our transition from the mechanistic and reductionist worldview of the industrial age to locally based sustainable value creation and its equitable distribution.

The Unidata vision is a global co-operation amongst a decentralised autonomous network of connected communities enabled by an open ecology (commercially neutral, open data) infrastructure. Individuals and their communities work together to support locally based sustainable value creation and its equitable distribution via a new remutalisation social contract, mutualism from a biological sense being natures approach to capital optimisation. Individuals engage initially through establishment of their Universal Information Account (UIA) contributing unused computing power as the first step in building a low cost infrastructure and starting the mutual reward system design.

If we are to move towards a reduced growth or non-growth systemic design that also promotes greater equity, we will need to make some major coordinated decisions on investment, infrastructure, research, monetary policy, and more. Decision making is leveraged buy a multi-level integrated or "Holistic Capital Management" knowledge model for simultaneous bottom up and top down change management.

The UCL Knowledge model is designed to support a digital age continuous learning approach for all individuals and communities. UCL provides the opportunity to optimize inter-dependencies and mutual benefits as part of a global community led movement to build the bridging system to a new sustainable "Mutual Life society" where every human is a valued "policy" holder within the new communitylinked constitution! We are all part of our "Living University" and Universal LifeBank (ULB) and the need is to ensure our human evolution (i.e. the spiritual evolution of intelligence) and transition to a smart sustainable society is not left to "happenstance".

2. Decision-Making Capacity

The UCL is a digital era design model for international cooperation based on decentralised autonomous individual & community decision making. This is diametrically opposed to the nature of the current system which reinforces centralisation of decision making.

 UCL decision making is decentralised and autonomous via;

- Consumer Access digital voting capability for a "global Citizens assembly"

- Regional Access leverage of existing global Parliament of Mayors and smart city programs

- **Industry Access** open data hubs protecting against privatisation of industry supply chains and   strengthening Industry governance

- **R & D & Charitable Access** distribution of systemic margins to address knowledge gaps and global problems of greatest need both locally and globally

- **Government Access** enabling national governments to engage as one tribe within a global open ecology cooperation to maximise efficiencies and service delivery within its process mandate.

The UCL design model enables the rebuilding of new interlinked communities of trust within the centre of the existing system. The initial "commercial and legal partnership framework provides the holistic framework for the digital representation of the real world" which does not currently exist. This enables us to create a true global partnership of trusted communities and evolve the legal documentation to a dynamic (multi level) global constitution or "CommunityLink Trust" reflecting the "Community Will" or succession plan we collectively are creating for future generations. Agreements can be secured and automated via new smart contract technology as part of the UCL operating system.

By virtue of the digital open ecology design crippling delays and power of vetoes are lessened by real time transparency of governance representative actions/decisions, peer to peer connectivity, decentralised and local community led decisions combined with permission based aggregation of data. Roadblocks can be bypassed by new paths of connectivity.

3. Effectiveness

To be effective the model needs to provide the ability for people and communities to act. Rightly the Economist has identified that it is not technology that defines our current era. It is data and that ceding control of all our data to a few vendors is a bad idea. Furthermore the current regulatory model is not fit-for-purpose as it has failed to keep up with the pace of technological change. The answer is simple. We must switch control back to the user and give the individual the rights, education and skills to make informed decisions about how and when they engage with technology, and those providing products or services via the internet.

The UCL governance model provides the design for system capability to handle the global challenges and risks in a way not currently possible within our current mental & physical system construct. **Self-organising community (e.g. regions, industry and consumers) "access" the global network and act as the Smart Investment manager of their own information, data and associated revenues and localised maintenance". They manage their localised data ownership, permission based data sharing, security, risk and "smart community" transition within an open ecology and engage via the Unidata (Unidriot style) general assembly/governing council to work with the Secretariat to protect their interests and support our global and systemic evolution.**

 The Access user established Unidata open ecology system of global governance offers

> "a multilevel biofeedback framework to empower local and regional communities and private investors and govt's to more effectively deal with local and global issues by increasing economic and social equity through redistributing wealth creation to the issues, people, communities and infrastructure that need it to redirect and sustain transformative new systems of collaboration for human sustainability".

With Unidata Foundation model design start point we have the path of least resistance, cooperation model, business and investment case for our evolution to a new international co-operation and governance system.

4. Resources and Financing

In order to ensure that the governance model has sufficient human and material resources at its disposal, and these resources can be financed in an equitable manner, it was critical to identify the various components, their functions, areas of responsibility and the extent of their decision-making mandate to ensure adequate resources and financing within a clearly defined strategy and implementation plan.

As a result of this need 12 critical functional components were identified and have been allocated a Project Workstream which frames their area of responsibility and the extent of their decision-making mandate. This is part of a Development roadmap and project plan to achieve the UniData Foundation establishment and self-funding milestone**.** To galvanize effective international action we have designed a Workstream Challenges process to help identify the values aligned global leaders/individuals, their workstream tasks and material resources critical to taking the concept design to a practical implementation path.

These resources **are to be financed via a collective "Institutional Trust" capital raising vehicle** to separate commercial requirements from the "neutral infrastructure" operations**. Called the Social Capital Investment Trust (SCIT) its unique integrated portfolio design or Holistic Capital management approach enables us to to bring the necessary players around the project.** It enables us to secure the multiple IP sources, fund the open ecology system build and establishment of the not for profit Access interlink partners which enable the international cooperation model to

> i. create an internal "social capital bank of investment funds" to fund the new system deployment and fund transition from the old disconnected system to the new inter-operable system (*Data Transvestment)*
>
> ii. **Maximises profits from system efficiencies** and enables tactical data transition from the current system to maximise the emergent system's competitiveness"
>
> iii. **Creates a virtuous cycle** by utilizing margins from efficiencies created in the old system to fund the new system deployment to create further old system efficiencies until the new becomes dominant and the old obsolete
> iv. commence the Smart City Phase 1 system re-engineering investment & business case commercial start point

Our ability to secure and then maintain the identified human and material resources is significantly leveraged by our ability to illustrate a Phase 1 opportunity that can facilitate the "trillions in efficiencies identified via the IOT revolution" starting with the AU phase 1 smart city IOT network national strategy opportunity.

This enables us to establish the Unidata governance structures and all the moving parts e.g. generic Access templates created within the AU pilot for other national deployments from a platform of commercial sustainability. All workstreams (Access hubs) receive and initial capital allocation and a systemic revenue % allocation from the projected "UCL network" $2.5bl T/O to ensure the commercial sustainability for global recreation.

Matters to Note

Unidata CL (Project UCL) AU Phase 1 Smart IOT model provides a single unifying national data/IOT vision, strategy, business model, organisational methodology, legal & commercial structure, commercialisation strategy and implementation plan that

      i. can deliver a projected $5bl p.a. efficiency dividend for LGA communities across AU after 10 years

      ii. create a smart community network with a projected collective $2.5bl T/O with all system profits being returned to the community via the UCL internet social contract that "maximises profits via system efficiencies and share them equitably"
      iii. creates the platform for significant additional income streams from future social and economic functionality deployments
      iv. ensures the open system and governance infrastructure remain under community control and ownership in perpetuity

UCL could **generate recurrent revenue streams** for Australian communities, industry, R & D, Charitable, community organisations and consumers after 10 years of as much as;

      - $350 ml p.a. available to regional communities via Regional Access system revenue share to improve CDC engagement
      - $1.4bl in CDC profits across 500 LGA's to create a LGA Local Development fund to support community sustainability via sustainable food, energy, housing, water and social programs
      - $350 ml p.a. available to industry bodies via Industry Access to develop and engage industry by industry engagement e.g. Technology Access, Health Access, Wealth Access within the national smart community digital peer to peer data marketplace and prevent private data monopolies
      - $280 ml p.a. through Consumer access system margin allocation to develop ongoing consumer solutions and directly as a consumer bonus to reward Universal Information Account users who contribute their unused computing power which provides the low cost computing infrastructure to all communities
      - $280 ml p.a. returned National Learning Institutions via R & D Access to ensure equality in education access$280 ml p.a. returned to charitable institutions
      - Annuity revenue stream to the Social capital Investment Trust for Investor ROI, IP licensing, ongoing system R & D and creation of an "internal social capital investment bank" of funds for smart city deployment globally
      - An annual $100ml+ au margin to support the Unidata Global Data Unification & Governance Foundation and facility for systemic annuity fund allocations to address global or cross border issues

The potential annuity revenue streams to the SCIT from a natural community monopoly enables us to present an initial UCL investment case *"to raise $25ml to integrate 3 existing software programs to create a $5bl p.a. efficiency dividend and open ecology system with a $2.5bl T/O after 10 years in AU by delivering to an existing Council specification"* .

5. Trust and Insight

The UCL design model enables the rebuilding of new interlinked communities of trust within the centre of the existing system. By virtue of the digital open ecology design the ability and power of vetos is lessened by transparency of governance representative actions/decisions enabled by real time communication, decentralised and local community led decisions.

6. Flexibility

To ensure flexibility for revisions and improvements continuous learning and adaption are the fundamental underlying design principles of the UCL open ecology model and will define our ability to compete with the industrial system.

Core to this approach from an enabling commercial system perspective is the need to bring together the multiple commercial suppliers, IP and operational processes together with the ability to plug in and out as they become obsolete (so it cannot be held captive to existing "capital ROI's) without disruption to the system. This is core to ensuring a smart "continuously learning" organisation to progress to our dynamic equilibrium or steady state objective.

From the user perspective self-organising communities engage with the Unidata (Unidriot style) governing council to work with the Secretariat through their representative Access Advisory "Council". The role of each Access Council is to proactively ensure continual revisions and improvements to protect their stakeholder interests and support our global and systemic evolution through their members ability to manage their localised data ownership, permission based data sharing, security, risk and "smart community" transition within an open ecology.

To ensure flexibility and remove conflicts of interest the model separates the commercial build, risk and ongoing open system development requirement from the "Unidata governance role and commercially neutral infrastructure. It provides a methodology for them to work together to build the core UCL system asset on behalf of Unidata "Governace Foundation which retains ownership of the system to ensure community control of revisions and improvement in perpetuity whilst creating an internal system social capital bank of funds for self-reliance.

7. Protection against the Abuse of Power.

The UCL model enhances the internal affairs of national states without favouring any special interests by providing a practical methodology which "recognises all stakeholder nuances" to bring them together in a way which achieves each of their needs/motives. Representative Regional, Industry, R & D, Technology, Charitable, Consumer and government establish a "Access" Limited Partnership with themselves as the General Partner and members as Limited partners. From here the "Access" Limited partnerships establish a national UCL Partnership and National Data Administrator (NDA) entity as General Partner with themselves as the Limited partners.

 Similar to the Unidata global approach Limited partners form their specific "Access" Board Advisory council to ensure NDA Board and management alignment to their ongoing Access user operational requirement. National Access Partnerships are part of the global co-operative partnership with nominated members participating in aligned global Access Board advisory council to support the Unidata Governing Council and Secretariat ensuring system design, governance and operational implementation meets member needs within a global cooperation cultural context.

The benefits of the UCL design methodology are that it

i. creates the smart city commercial framework & legal environment and system constraints necessary to provide p**rotection against the abuse of power**
ii. enables national governance ensuring that the model does not unduly interfere with nation states
iii. represents all stakeholder interests equally ensuring no favouring of special interests
iv. provides representative Not for Profit stakeholders with a commercial & legal structure to receipt investment and grant dollars to get paid without conflict of interest
 v. provides the system operating vehicle to receipt ongoing % revenue streams from the UCL network without interfering with current stakeholder operations

8. Accountability

With the Unidata Foundation model design start point we have the path of least resistance, open ecology model, business and investment case for our evolution to a new international co-operation and governance system. A User established "Access" system of UCL global governance offers

 "a multilevel biofeedback framework to empower local and regional communities and private investors and governments to more effectively deal with local and global issues by increasing economic and social equity through redistributing wealth creation to the issues, people, communities and infrastructure that need it to redirect and sustain transformative new systems of collaboration for human sustainability"

In essence decentralised accountability is via an open ecology that provides global transparency within the interconnected whole. This is via a holistic capital management based value system that reflects our community will.