# 2020-2025 STRATEGY


*"SIS-CC is a reference open source community for official statistics, focusing on product excellence and delivering concrete solutions to common problems through co-investment and co-innovation."*

SIS-CC
Statistical Information System Collaboration Community

SISCC.ORG

@SISCCommunity

# Foreword by Paul Schreyer

*Chair of the* **SIS-CC** *Strategic Level Group (SLG),*
*Acting Chief Statistician, Director of Statistics and Data, OECD*

Demand for evidence for policy is increasing – and so are expectations that statistics and data be accurate, timely, granular, accessible and compiled in interaction with a complex data ecosystem including the private sector, civil society and local governments. In order to cope with this demand organisations need the necessary statistical infrastructure, both in terms of human capacity and skills, and in terms of tools to operate efficiently.

**To a large degree statistical organisations share common needs and similar processes**. At the same time, official statistics are still a niche market driven by specific requirements, especially in terms of quality and compliance with standards, and a strong culture of international, open collaboration. This probably explains why, thus far, no sustainable offering has truly emerged on the 'official statistics market'. And this is why we strongly believe that open source, community and standard driven dynamics are the right way to fill this gap and here is where the SIS-CC has come in. **We need, as the community of official statistical organisations, to continue to join forces to co-innovate and co-invest in the next generation of practices and solutions to meet common challenges. Most of us will not be able to cope with these challenges alone**.

**Yet, maturity of practices among different groups of institutions varies greatly**. Some are strong enough in order to invest in their own infrastructure, and usually prefer to do so in order to move faster and keep full control. On the other end of the spectrum, lower capacity organisations struggle to maintain even basic infrastructure. We believe this diversity, and more generally, the diversity of organisations' profile and priorities can be a strength and an opportunity: for the stronger organisations to emulate each other and mutually leverage their investments; for the less advanced organisations to catch up, and bring in their qualitative contribution and creative ideas.

***How can the community grow more diverse in such a way that mutualisation and cross-fertilisation do not hamper agility and capacity for each organisation to move at their own pace?***

It has been 10 years now that SIS-CC exists as a community – I can recall when we first met in 2011, on the topic: "Laying the foundations for a strong collaboration community". So much has happened since then, with the Community tripling in size. Looking back, I can see particularly important moments of adjustment. Firstly, when in 2014, and thanks to the enthusiasm of founding members ABS, ISTAT, and Stats NZ, the Community drafted its 2014-2019 Strategy. The present document still builds upon this strategy. This was the moment when we forged a governance and 'business model' for the community, and set ourselves ambitious goals, which were achieved, if not exceeded during the cycle that just ended. Second, when, in 2019, the new *.Stat Suite* was launched as a full open source solution. An outcome, which was decided and implemented in a short period of time (24 months), was the full redevelopment of *.Stat* as an SDMX-native, open source platform, leveraging Eurostat's SDMXSource project, but also integrating most innovative technologies, such as DevOps, Cloud readiness and truly componentised architecture. In parallel, the institutional and geographical setting became more inclusive starting in 2017-18, when ILO initiated the LMIS project based on *.Stat*, or when INS and SPC joined the Community, and pilot work took place in collaboration with UNICEF, PARIS21 and UNSD, in Cambodia and Ghana.

This takes me back to the central question raised above. I believe that the 2020-25 strategy presented in this paper, resulting from intense collaboration among members in 2019, can bring useful responses. These are not of a theoretical nature, but of pragmatic character and build on broad-faceted experience over the past period, for instance the 'multi-tier governance' approach. I hope this will interest you in getting to know the SIS-CC Community and, why not, join it for a common journey in the future!

Paul Schreyer

# Our Mission

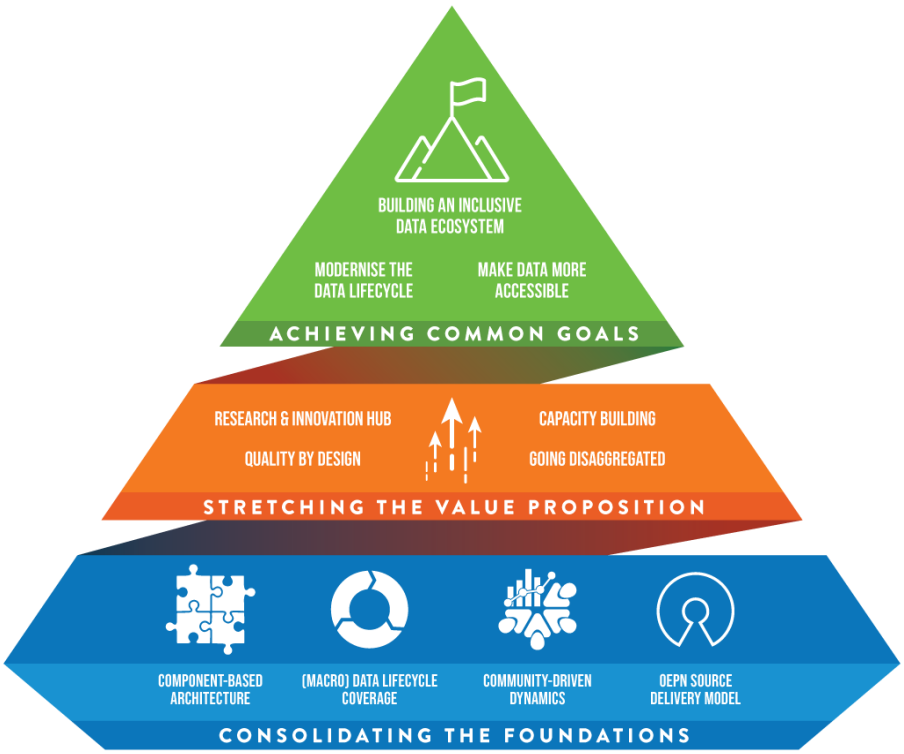
## SIS-CC is a reference open source community for official statistics, focusing on product excellence and delivering concrete solutions to common problems through co-investment and co-innovation.

Adhering to this purpose means we believe we can offer something that is bigger than just the sum of the achievements of each individual organisation's project objectives: meet the much-needed larger co-investment in digital platforms supporting official statistics process around the world, a pre-requisite to the broader statistical modernisation agenda. We believe this mission requires us to:

**Consolidate our foundations** built over 2014-19 around 4 pillars: **community-driven dynamics**, **open source delivery**, **(macro)data lifecycle coverage**, **component-based and scalable architecture** – by adapting them to a context which calls for more inclusiveness, the continued adoption of new technology to enable fast-moving organisations, the opportunity to connect open ecosystems in a 'plug & play' mode, and the necessity to invest in the larger coverage and better integration of the data lifecycle;

**Stretch our value proposition** by exploring new territories, such as: **going disaggregated**, that is consume micro-data and geolocalised data as SDMX (3.0) input to the data lifecycle; **data quality by design**, that is built-in features to streamline the data process (automation, pre-validation, workflow & reporting…) and improve the quality of data products; joint **research and innovation** projects to mutualise ideas, knowledge and resources in the most frontier areas of work, such as user/usability research to better understand what is on users' mind and drive evidence-based product development, experimentations of new ways for users to access the data (e.g. StatsBots NLP, semantic integration…), or identify new lines of products or new forms of partnership to connect data ecosystems.

**In order to achieve common goals**: **make data more accessible** and **modernise the data lifecycle** constitute the broad strategic agenda for most organisations, to which we add: **build an inclusive data ecosystem**, so that the open source assets developed by the Community can truly benefit a wide range of organisations with middle or lower capacity, through the appropriate support and business models.



# Our Goals

## Make data more accessible

Accessibility is a quest for increased impact, wider engagement on data, and capacity to bring relevant, reference facts to the online conversation – quickly. This requires a constant analysis of our audience, the type of data services they need, the stories we want to convey, and how we should engage with them. From a product perspective, this comes down to empowering data users to perform **data exploration** (retrieval, browsing) tasks more efficiently; also offering them to discover data analysis, or peers interested in the same facts. With the advent of AI techniques, a whole range of new data experiences can be envisaged – 'data fetchers', 'research assistant' – that will help, through natural language interactions to discover a relevant figure or trend, pull the needed table or chart featuring the comparisons, and easily share them. Performant machine-to-machine SDMX services, empowering also 3rd parties to consume data and develop value add on top of **data wholesale services**, a pre-requisite to make data more accessible.

### *.Stat Suite*, a platform...

**...to manage the (macro)data lifecycle** for official statistics (design, collect, process, disseminate).

**...to explore data** and develop various reporting and dissemination experiences.

**...'SDMX-native'**, building on best practices in statistical data modelling, and **open source**.

*"With its unique combination of cutting edge technology, data modelling capacity, and systematic user research, SIS-CC is the place where those new data experiences can be jointly explored and designed, and rolled out in scalable way."*

## Modernise the (macro)data lifecycle

The data lifecycle in many organisations is currently subject to multiple fragmentations – in the process, in the tools, and siloed skills. With the need to respond more quickly to the demand, statistical organisations can no longer sustain data factories that cannot be smoothly reconfigured, or data products that are poorly integrated. The pressure on budgets also necessitates creating more efficiencies, mutualising tasks and automating where possible. Yet trusted quality remains the core asset of statistical organisations, very much achieved through an expert craftsmanship production model. A new paradigm for **data lifecycle management** is needed, **(data) quality by design**, which aims to combine process streamlining (automation, pre-validation, workflow and reporting...) with improved quality of data products.

***"With its unique SDMX edge, and combination of various profiles of data providers and aggregators, SIS-CC is the place where this new paradigm could be jointly developed and applied in the realm of macro-data that is production of aggregates, and sharing and combination thereof to produce integrated and linked data."***

## Build an inclusive data ecosystem

Experimentations and strategic thinking during the previous cycle led to concepts such as ***federation of capacity building communities*** or ***national data backbones*****.** Whether **the data ecosystem is global, regional, sectorial, or national** – there is a need for data to flow according to a decentralised, yet orchestrated model, and according to agreed data and metadata models, which SDMX can provide for. The multiplicity of data formats and platforms, and the inability to engineer holistically the data flows, lead to unsustainability, or incapacity to maintain the relevant and consistent statistical infrastructure and provide with the capacity building needed at various (international, national and local) levels.

***"SIS-CC cannot support directly hundreds of entities participating in those ecosystems; rather, we are providing open source solutions to enable members who have a mandate to support middle or lower capacity organisations, in their sector, region or at a local level. This positioning reconciles the objective of limiting the volume of participants in the core Community so as to preserve its velocity and capacity to innovate, whilst enabling virtually all statistical organisations in the world to benefit from its outputs."***

# Consolidating the foundations, stretching the value proposition

## Component-based, scalable architecture

At the heart of *.Stat Suite*, the **modular architecture combining flexibility, cloud-readiness, scalability and high performance** that offers multiple deployment scenarios (*.Stat Suite* as a Service, as a Container, as Source Code) adapted to individual context and capacity, with an emphasis on simplicity of installation in a variety of topologies and infrastructures. At an individual organisation level, this enables state-of-the-art user experience through best-in-class front-end modules, which are reusable, can be assembled, and repurposed into custom data experiences. To support various topologies and processes, the *.Stat Suite* is articulated around multiple data spaces corresponding to different phases or versions, and can be assembled based on the appropriate data domains, transfer and mapping services. With its component-based and open source model, *.Stat Suite* is positioned well to **support hub & spoke and distributed networks constituting a statistical system**: typically, national institutes or central banks aggregating data flows from various sources, departments and agencies to build a central repository of official statistics; and international organisations or data aggregators, integrating data on regional or sectorial basis from various countries and organisations.

### Going Disaggregated

In the context of SDMX 3.0 evolution, the platform should support **storage and exchange of micro-data and/or geolocalised data**, and as input to generate aggregated tables.

The Community see benefits for a possible **convergence of XBRL towards SDMX**, responding to a specific use case to open up to further members from financial institutions.

By enabling the **consumption of data and metadata for geospatial purposes**, it becomes possible to automate the generation of maps through consumption of shape files.

Consumption of unit record data to **automate the dissemination of aggregated table**, and possibly, in the longer term, implement data input privacy measures, which are being designed in the statistical community.

### Enabling Statsbots

Ensuring that the right data reach the right people is a challenge, in an era where the demand for data is user-driven, predominantly through online channels and where users have the ability to search and consume information of any kind. In addition, more and more, users are expecting instant responses to their questions, and with the arrival of GAFAs digital assistants, the way in which user's access information is rapidly changing. In order to stay relevant, statistical organisations need to innovate with how their statistics is being accessed and used, and how they **bring the relevant facts to the online conversation**.

As part of the Community's ability to innovate we see an opportunity for **joint experimentation with Statsbots**; the **Statsbots initiative** is driven by Statistics Canada and CBS Netherlands, with the participation of several SIS-CC members; it is hosted by the Community and sponsored by UNECE HLG-MOS, with a focus on practical implementations in partnership with market players, start-ups and academia.

The Statsbots initiative is an example, among others, of how the **Community can be a vehicle for experimenting innovative ideas together,** through targeted workshops with peers, co-financing of PoCs or prototypes, etc. – innovations that leverage the standard structure and semantics of SDMX.

## (Macro)Data lifecycle coverage

The project has been **historically focusing on data reporting and dissemination** – *.Stat Suite* will continue to support expanding and evolving Open Data and data engagement strategies, including through API/Wholesale data services, as well as best-in-class user experience on the *.Stat Data Explorer*. However, it is foreseen that the platform should progressively support all the *General Statistical Business Process Model* (GSBPM) phases, from design of data model and process, through collect, process to dissemination/reporting for aggregated data. **The fundamental use case supported will become that of data integration** – including, with the implementation of SDMX 3.0, of micro- and geolocalised data input – a use case which corresponds to largely common functional requirements across statistical organisations, whether national or international. The objective is to progressively substantiate the **data quality by design vision**: the data producers should be provided an intuitive user experience and on-the-job guidance to support their tasks, such as in the area of data and metadata modelling or process design – and the efficient maintenance of those models (SDMX 3.0 semantic versioning features, for example); visual quality assurance as well as rich reporting features should be provided, and with possibly, in the longer term, the assistance of quality assurance Machine Learning algorithms as well as peer-review features; validation, pre-validation, tasks automation and orchestration should be enabled with the progressive implementation of the *Validation & Transformation Language* (VTL), mappings between data (as a way of creating transparent, standard compatible way to establish workflows), important features contained in SDMX 3.0. Achieving this vision is a long-term objective that should capitalise on the experiences of the difference members, including by progressive integration of tools developed by members as part of the *.Stat Suite*.

## User & Usability Research

Our organisations, for the most part, share common goals and engage with similarly segmented audiences when it comes to data dissemination – or similar populations of data producers when it comes to data production or aggregation. This justifies, in the first place, creation of common tools and practices, to address common challenges. However, we have identified a further opportunity to work more deeply in **sharing analytics and undertaking joint user research** that could lead to rich evidence on how to design products and drive user experience.

**UX Analytics (data-driven User Experience analysis)** has demonstrated value in that it can continually feed evidence – on what users want, their preferences and priorities, the way they perform tasks more efficiently, etc. – into the product development cycle. With millions of external users consuming from *.Stat Data Explorer*, and thousands of data producers working in *.Stat Data Lifecycle Manager*, the community can mobilise a uniquely wide and diverse user base to develop the statistical practices of the future.

Perhaps more importantly, this could lead to identify a **network of power users** from around the world who can contribute with their feedback to improve the platform, or who could be connected through the platform to facilitate peer learning in statistical practices.

## Build Capacity in Data Modelling

This is an area where all members have expressed a need and some face a shortage in capacity. The Community is to build on its existing experience and shared knowledge to work towards **building capacity in the area of SDMX** – curriculum around cleaning data, structuring, integrating data with SDMX, and how to use *.Stat Suite* in this context. This point is critical to the success of many of the members' projects in the future – and hence, to the Community's success: **we need competent data modellers**, we need efficient ways to train them and we need tools to make data design, through an iterative and collaborative process, as easy as possible ('hide SDMX complexity' or 'SDMX-under-the-hood' paradigm).

Several members already undertake in-country capacity building efforts. New members who have joined, or are about to join, continue to express a real need to support in-house capacity building efforts on SDMX and data modelling in *.Stat Suite*. A consolidation of these efforts, and a consolidation of the materials and tools used, would lead to e-learning modules and onsite coaching programs, peer-learning capacity, that are able to meet the ever increasing demand as well as **a wider adoption of standardised approaches and tools for data modelling**.

## Open source delivery model

The *.Stat Suite* is now **accessible to a wider set of organisations, at no licensing cost** (free, MIT license). In order to accelerate the pace and quality of the delivery, it should further **leverage existing open innovations** and communities (such as R, Python, Gitlab, SolR, React, Kubernetes, Docker, etc.) through software reuse and interoperability. To maximise user value, integration with market standards whether they are open source (CKAN, Drupal, WordPress), or not (Excel, Stata, Esri, Tableau, etc.), is also necessary, for organisations to develop a seamless user experience to access, edit, and mash up the data and data artefacts. More specifically, the open source model requires **a highly effective delivery model**: fully documented and transparent, agile and iterative, and with specific security measures to protect from vulnerabilities. This only becomes possible through state-of-the-art delivery mechanisms (DevOps), combining effective agility, multiplicity of contributors regulated with extensive peer reviews and security controls (code vulnerability checks), and simplicity of deployment on the cloud, software quality and structured documentation. **Deliver product excellence, through software quality by design**. The Community will also continue to work towards *.Stat Suite* becoming database agnostic, in the longer term, opening up the possibility to connect to multiple open source database engines (MySQL, Postgres, MariaDB, MongoDB…) beyond Microsoft MSSQL.

## Developers' Forum and Advocacy

The *.Stat Suite* project is now open source and publicly available, **any developer from around the world has the potential to interact and contribute** in various ways: participate in testing, share ideas and experience, provide feedback to improve documentation, support and seek support from peers, and contribute code. There is a lot of value in encouraging such contributions and therefore increase our global capacity to deliver product excellence.

Most successful open source projects provide a **forum from which developers can interact with each other and with the core team**, both virtually and physically. Gitlab with the addition of Gitter can provide the virtual space for such exchanges to take place. Topical webinars and specific developer (face-to-face) sprints to complement the online forum. **Capacity building for developers** will primarily rely on continuous improvement of the documentation and organisation of repositories and process, for example by including copy/paste commands to deploy services without a need to know the technology behind.

In order to steer the forum animation and bring feedback from the developers' community to the core team, on needed improvement of documentation, and more generally support for developers, the **role of developers' advocate** has been established and will be even more important in the future. One of the Community members takes this role on a rolling basis. Contribution from all Community members, especially *Architecture Task Force* (ATF) members, to bring feedback and contribute to forum and webinars, is key to make this work stream viable.

## .Stat Academy

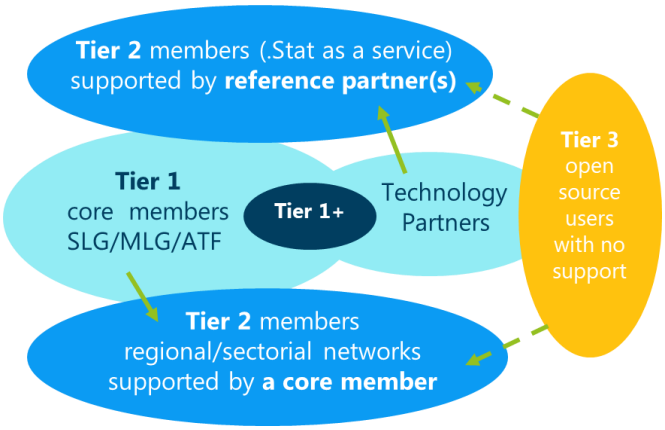
To include various workshops, and the creation of online learning modules and webinars to **set-up, configure, manage and use the *.Stat Suite***. Covering capacity building on how to optimise third party components in the context of the .Stat Suite – for example an important area identified is the **configuration of the search engine (SolR) for data exploration**, to support an organisation's search performance strategy, through features such as weighting, ranking, faceting, synonymising – and measurement of actual search performance (see box on User & Usability research – did the user find the data he/she was looking for?).

A series of webinars could bring a great deal of value to the improved usability of the *.Stat Suite* through fine-tuned configuration. The .Stat Academy requires the set-up of the platform to produce and share content with time investments from experts across all member organisations to share their knowledge in that context.

## Community driven dynamics

The development of the *.Stat Suite* will continue to be driven by the community of contributors, that is to continue to grow steadily over the next years; the Community is set to evolve towards a multi-tier governance structure, to combine growth in usage (extension to Tier 2 and 3 organisations) with continued focus and commitment to agility and product excellence (Tier 1 and Tier 1+ organisations):

- **The platform co-produced by core members (Tier 1)** through resources pooling and knowledge sharing, retaining the existing governance mechanisms (*Strategic Level*, *Management Level*, *Architecture Task Force* – see annex 1). Tier 1 members are organisations whose strategic objectives require to get actively involved in the project, and contribute to it financially and in-kind. Amongst Tier 1 members, those who contribute more (Tier 1+) are given precedence in setting the project priorities;
- **The continued adoption and growth beyond core members, is to benefit Tier 2 organisations** that are not core members, supported either by a Tier 1 member, or by a technology partner. Tier 2 are organisations who for different reasons do not wish to actively contribute to the project, but are willing to benefit from it. Tier 1 or technology partners to recover the cost of support services from the Tier 2 organisations;
- The governance augmented with a **technology partners programme** to develop services (hosting, integration, support) around *.Stat Suite*, and make it accessible to a larger audience of Tier 2 organisations that are not core members and prefer a commercial arrangement for the support of their *.Stat Suite* platform.




## Technology partners programme

The programme includes two areas of work:

1) **Enabling the emergence of *.Stat as a service* commercial offering**. This could enable a wider use of *.Stat Suite*, especially by organisations who do not have the willingness or capacity to become active contributors to the project. As seen in several cases with existing members, the availability of such offering can also be critical in order to kick-start projects or complement technical skills in the user organisations. The technology partner programme would aim at making such approaches more systematic, advertising them publicly and supporting commercial organisations interested in developing projects based on *.Stat Suite*.

2) **Facilitating the technical integration of *.Stat Suite* with widely used data tools** on the market, and leverage their ecosystems: commercial tools (ESRI, Microsoft, Tableau, Stata) or open source projects (CKAN, Drupal, WordPress, SolR), and R & Python projects.

## DevOps delivery

With this **DevOps approach to continually deliver the platform**, a new frontier of collaboration and agility is being reached within the Community. Several delivery options become available (*.Stat Suite* as a Service, as a Container, as Source Code), that make it possible to potentially have new features developed and rolled out in the same day to every instance of *.Stat Suite* in the world.

This possibility of a **network of *.Stat Suite* platforms that can quickly be enriched with new features** agilely developed in response to user needs is a new paradigm, which we have to harness and learn to create value with.

# ANNEX 1: COMMUNITY GOVERNANCE AND FUNDING MODEL

## This is how the Community governance structure operates

The ***Strategic Level Group (SLG)*** comprises senior executives (Director Generals, Chief Statisticians, and Government Statisticians etc.) from each SIS-CC member organisation steering the Community, confirming the high-level priorities and committing resources to the project. The SIS-CC 5-year strategy prepared by MLG and proposed to SLG for validation, is the reference document that guides the Community activities.

A virtual SLG meeting held on a yearly basis to discuss possible amendments to the strategic directions and validate the priorities and resources for the coming year, based on the yearly report on Community activities.

The ***Management Level Group (MLG)*** comprises senior managers appointed by member organisations. Prioritising *.Stat Suite* product development through an ongoing, transparent and fair process is the key MLG task. Other tasks include monitoring *.Stat Suite* delivery and ensuring alignment with the strategic directions, sign off on business or technical architecture decisions, deal with any operational issues, prepare and contribute to the yearly SIS-CC workshop, and prepare SLG meetings.

A virtual MLG meeting is held on a monthly basis, and face-to-face during the annual Community workshop, to perform the above tasks and for all members to inform others of their respective project plan and advancement.

The ***Architecture Task Force (ATF)*** comprises experts appointed by member organisations (business analysts representing the 'data producers' and 'data consumers', and technical architects or 'data toolers') to drive the business and technical architecture of the *.Stat Suite*, and present it to MLG for sign off.

A virtual ATF meeting held on a regular basis, with a frequency that can vary from weekly to bi-monthly, depending on the intensity of needed coordination or knowledge sharing at a given point in time. The ATF chair presents regular updates on ATF activities to the MLG, and presents the global annual report on their activities and recommendations during the annual Community workshop. Usually, an ATF face-to-face workshop ('ATF sprint') is organised on a yearly basis, by one of the member organisations (ISTAT and INS in the 2014-19 period), on their premise. Any significant architecture decision, especially with business impact, is signed off at MLG level after analysis and recommendation by the ATF.

The ***Developers' advocate***, appointed by one of the member organisations on a voluntary basis, has an important role to play in bringing the perspective of external developers to the ATF and core team. As such, the Developers' advocate has privileged access to the core team of developers through regular review of issues and ideas.

The ***Community Governance Secretariat***, taken care of by OECD as lead organisation and main contributor to the project, includes meeting preparation, drafting of documents and reports, update of all the relevant dashboards to support prioritisation exercise with sufficient information. The chairing of the different groups is by default usually exercised by the OECD as a way of convenience, but is open for other members on a voluntary, rolling basis.

The ***Community manager***, under the supervision of the reference OECD manager, takes care of the *Community Governance Secretariat* on a daily basis, as part of the broader Community management role, including all coordination, promotion and support tasks. The *Community manager* animates the ***bilateral engagement*** with each member organisation, starting with the initial MoU and renewal of it, scoping support provided at project inception, responding to support requests on a daily basis. Systematic bilateral project reviews are organised on a bi-monthly basis and ad-hoc missions to the member organisation when needed and agree mutually in the context of critical phases in the member organisation's project.

## This is how the Community funding model works

The funding model in place ensures the Community sustains and operates efficiently:

a) **Funding of "Run" outputs (promotion, coordination and support)**: These have been, and will continue to be funded by the member organisations' recurring financial contributions, as defined in the bilateral MoUs between the OECD and each member. This recurring, equal, financial contribution is set in the context of the SIS-CC 5-year strategy, in order to ensure sustainability, and maybe revised on a 5-yearly basis (see the box below).
b) **Funding of "Build" outputs (product development)**: The OECD has thus far funded a large proportion (50 to 80%, depending on the year) of product development activities. In addition, members have made significant financial and in-kind contributions to speed up the Community work plan. These special project contributions are aligned with specific priorities of the funding member, as well as with the overall product vision; they do not serve to support integration work specific to an organisation.
c) **Funding of "Emerging activities" (such as user research, StatBots, capacity building etc.)**: These have so far been funded on an ad-hoc basis through in-kind contributions and specific project-based funding, sometimes involving organisations that are not regular SIS-CC members.

The **three funding options (in-kind, in-kind with OECD partner, financial)** enables those members who wish to contribute to the project over and above the regular financial contributions meant for the Community's coordination and support. All funding options have been put to use. All members have been contributing in-kind, be it only through participation to group activities, and spending time and effort in bringing feedback or testing the product. This mutualisation of efforts and resources, guided by a shared vision and roadmap, is what made the delivery of the previous strategy possible and will ensure the success of the new cycle.

**All member organisations are welcome to participate in fund-raising for the Community**. This can take the shape of a project presentation during an international meeting, or advising peer organisations potentially interested in joining the Community, or identifying potential donors who would be interested in contributing to the Community.

### A Tier 2 member...

**Contributes financially at a much lower level**, in order to cover the cost of support, hosting and other services provided by the reference Tier 1 organisation or technology partner. Precise business model is dependent on the supporting entity. As part of the technology partner programme, typical reference offering will be available on the market.

**Is not supported by the Community core team** and has limited influence on the product priorities.

**Tier 3 members** are organisations using the *.Stat Suite* as open source, on their own, and with no support from any member organisation or technology partner.

### A Tier 1 member...

**Participates actively** in the ATF, MLG, and SLG driving the product priorities and vision, including the critical milestones of the member's project.

**Receives support** directly from the Community core team and other Tier 1 members; the member shares its project plans with the Community and receives extra support during critical phases of its project.

**Contributes initially 80k€**, for the support of its project initialisation and contribution to product development.

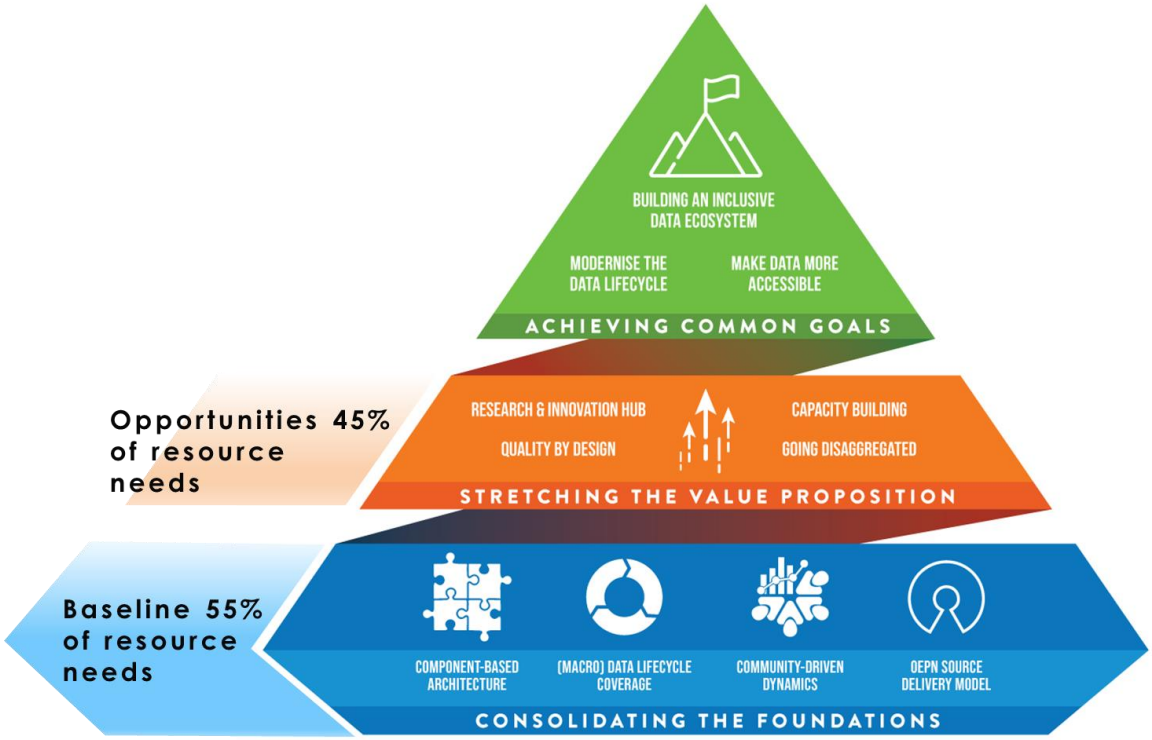
**Contributes yearly 30k€**, from year 2 onwards, to cover Community coordination, promotion, support costs. This cost covers the availability on the cloud of a *.Stat Suite* environment, for test purpose, but no production environment.

**May contribute additionally** through special grants to the project or in-kind, in which case requirements can be given a higher priority in proportion of this additional effort (Tier 1+).

**May use the product without any limitation** to the benefit of Tier 2 members that it supports.

## The funding scenario for the 2020-25 cycle

**The vision for the SIS-CC 2020-25 strategy requires approximately double the size of the resources devoted to achieve the 2014-19 strategy**. From this, and according to priorities agreed by the members:




The flight plan for the execution of the SIS-CC 2020-25 Strategy is the following:

- The **Baseline funding** for completion of actions contributing to **Consolidating the foundations** component of the plan constitute **55% of resource needs** (that is, more or less the resources available for the 2014-19 plan) and is funded thanks to continued investment by OECD, continued steady growth of the Community (+2 members every year, leading to 25 members by 2025 – a volume deemed maximal and requiring some adjustments to how the Community governance is operated), 3 members becoming Tier 1+ from 2020 onwards, and a slight increase in the recurring financial contribution by existing members to finance new 'Run' activities such as the **.Stat Academy** and increased communication efforts;
- The **Opportunities funding** for achieving the vision in the areas of **Data Quality by design**, **Going disaggregated, Research & Innovation Hub** (developing new activities in the context of the Community such as such as **User & Usability research,** and pushing the edge in the area of **Semantic integration**), as well as **Capacity building** activities that enables **stretching the value proposition** of the Community, constitute **45% of resource needs** and should be funded on an *ad hoc* basis (e.g. financial or in-kind contribution by a member or non-member third party); two options identified as possible sources of funding are: Donors, in the context of data for development and SDGs agenda; technology partner who would develop business based on the *.Stat Suite* and would contribute to the plan as a member of the Community with a different contribution model (typically, no fixed entry contribution, but a contribution proportional to the number of Tier 2 members supported);
- In this model, the continuation of the **Eurostat SDMXSource project** is fundamental, as a highly significant and strategic contribution to the *.Stat Suite* project (and the Community, in return contributes to the *SDMXSource* project). The Community also takes advantage, whenever possible and it make sense to, of open source tools readily available in the market place.

# ANNEX 2: COMMUNITY DELIVERY MODEL

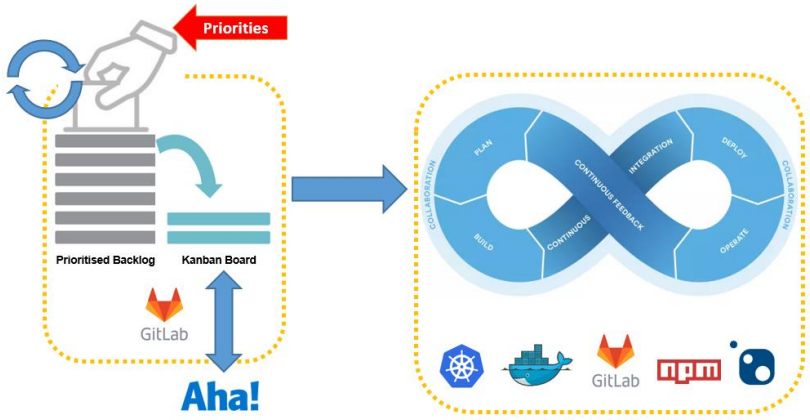
## This is how we deliver open source software and practice DevOps

**We work in an agile mode**: As project maintainers, we work in Kanban, a lean method to manage and improve work across human systems. This approach helps to manage work by balancing the demands with available capacity, and improving the handling of bottlenecks. Product releases happen in short cycle (typically, weekly), with **semantic versioning** to provide a shared indication for library authors and users to communicate with each other, using a three-part number, MAJOR.MINOR.PATCH, incremented as follows:

- MAJOR, when a change is API-incompatible with previous releases
- MINOR, when new functionality is added in a backwards-compatible manner
- PATCH, when bug fixes are made in a backward-compatible manner

**We are transparent** with the project accessible and open to anyone that serves as basis for the prioritised product development with members, technology partners, and potentially any interest party being able to interact and use the Kanban board as a way of driving consultations within both the Community and their own organisation. Any user of the solution or developer-contributor role can have direct, real time information of the topics the core team is working on, and bring feedback.

**We constantly review our priorities and adapt to new needs**, through a monthly cycle of review and prioritisation of the *product backlog* by members, delivering **on a continuous cycle**, with new versions of components, new features, patches, or bug fixes tested and shipped for deployment. An updated changelog with each release ensures the recipient knows what they are getting and what they are installing. To ensure efficiency of the development process, there is a weekly monitoring and measuring with adjustments based on a set of KPIs.




**We focus on product quality** by following a streamlined development process from plan through to deploy, including multiple systematic testing and quality assurance procedures, that enables a continuous integrated flow and continuous feedback to continually enhance and improve. All functional and design specifications and merge requests undergo **peer review** to ensure a consistent and high quality stories (specifications) and code contributions, combined with **automated testing** and **automated security checks** of the source code to ensure fit for purpose and maximise code quality in each release.

**We are user driven**, with a **user centred design** approach using a variety of research and design techniques involving users throughout the whole process so to create **highly focused and accessible products** ensuring a desirable look, feel, and usability – '**Product Excellence**'.

**There are three distinct .Stat Suite delivery mechanisms:**

**.Stat Suite as a service** requires no technical skills, limited configuration possible, and subscription costs for cloud service provisioning and maintenance required (services offered by technology partners, under commercial agreement).

**.Stat Suite as containers** requires knowledge of docker (container technology) and orchestration techniques (docker-compose or Kubernetes, which enable highly efficient deployment of new releases. Deployment, maintenance, continuity, scalability, and recoverability of service is the receiving organisation's responsibility. Containers usually deployed on the cloud, provisioned by the receiving organisation under their own procurement rules.

**.Stat Suite as codebase** requires a stronger technical knowledge of the underlying ecosystems (.Net, JavaScript, SQL etc.), with Continuous Integration being the receiving organisation's responsibility. This approach allows for specific integration approach with the receiving organisation technical environment, especially when the services are deployed on premise and when containerisation is not an option.

# 2020-2025 STRATEGY


*“ SIS-CC is a reference open source community for official statistics, focusing on product excellence and delivering concrete solutions to common problems through co-investment and co-innovation. ”*

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