



SADC MED DATABASE (SMD) APPLICATION LAUNCH

The official launch of the SADC Med Database (SMD) Application is a groundbreaking initiative aimed at revolutionizing pharmaceutical procurement and accessibility within the Southern African Development Community (SADC) region.

Background

Increased transparency and regional market integration require harmonisation of medicines regulation, control, and procurement collaboration across countries. Evidence from many regional initiatives, suggests that there are substantial gains to be made through regional co-operation on these important issues. Many member states remain as epicentres for the lack of essential medicines, devices and treatment, as was demonstrated during the COVID-19 pandemic. Although there have been significant interventions, technical support and guidance to strengthen the status quo, sustainable health outcomes are challenging, and disparities in transparency, pricing and regulated quality remains.



Rationale and Feasibility of Procurement Cooperation Models

Market intelligence is critical for informed decision making, increased efficiency, good governance and transparency,, all of which ultimately facilitate equitable access to affordable, safe and effective essential medicines. In such a context the rationale for the procurement cooperation of essential medicines and health commodities is there. This can be implemented in a phased approach, Four Models of Procurement Cooperation (adapted from MSH) with information and work sharing, and progressively moving towards group contracting, as pharmaceutical procurement and supply management systems (PSM) across Member States reach the required minimum standards of good practice and where applicable, legislative guidance.

Understandings and models of procurement cooperation

Procurement cooperation is the overarching term used where part or all the procurement processes depends on technical capacity, financial resources, good information systems, efficient management and availability of suppliers. Effective policies, legislation, regulations and guidelines underpin the processes. Strong political will and economic commitment are needed to support procurement cooperation.

Informed Buying	•Member States share information about prices and suppliers but undertake individual procurement.
Coordinated Informed Buying	•Member States undertake joint market research, share supplier performance information and monitor prices. Countries undertake individual procurement.
Group Contracting	•Member States jointly negotiate prices and select suppliers. Countries agree to purchase, individually, from selected suppliers.
Central Contracting/ Purchasing	•Member States jointly conduct tenders and awards contracts through an organisation acting on their behalf. A central buying unit manages the purchase on behalf of countries.



The recommended option for procurement cooperation of essential medicines is the group-contracting model, delivered incrementally through a staged approach that starts with coordinated information exchange and work sharing.

This strategy allows for all Member States to reach minimum standards of acceptable PSM systems, while allowing those Member States that have attained higher PSM standards to move towards more rapidly adopting group contracting. The staged approach in accordance with the principles is deemed feasible, and moving in a rational steady approach, without skipping important steps to realise the ultimate procurement cooperation and collaboration benefits.

SADC recognizes that there are opportunities to increase market efficiencies through regional pooled procurement of medical products. In this regard, SADC has prioritized pooled procurement as highlighted in Article 29 of the 1999 SADC Protocol on Health (SADC, 1999) and the associated Implementation Plan for the Protocol, and the SADC Pharmaceutical Business Plan :2015-2019 SADC, 2015). Consequently, the SADC Health Ministers approved the ‘SADC Strategy for Pooled Procurement of Essential Medicines and Health Commodities (2013 – 2017)’ in November 2011. Through the strategy, SADC aimed to fulfil one of its primary objectives - to improve sustainable availability and access to affordable, quality, safe, efficacious essential medical products. The strategy provided a mechanism that allow regional cooperation as a means to level out differences in procurement practices and supply chain management amongst member states. Concurrently, capabilities and capacities will be harnessed, resulting in best practices, pooled resources, and information sharing; the goal being prudent utilisation of resources and national budget savings. Furthermore, a synergy between pooled procurement and the promotion of local and regional manufacturing can be realised.

The SADC Med Database (SMD) Application represents a significant milestone in our collective efforts towards regional integration and development, in line with the SADC Industrialisation Strategy and Roadmap (SISR) 2015-63. The SADC medicines database application is an important component in the operationalisation of the SADC Pooled Procurement Services (SPPS). The SMD is truly aligned to the SADC commitment to attain regional integration and development, encapsulated in the SISR and the related Action Plan which has included pharmaceuticals as one of the value chains for fast tracking policy implementation. The SADC Secretariat’s Support to Industrialisation and the Productive Sectors (SIPS) Programme has facilitated the development and deployment of SADC Med Database (SMD) Application which is now ‘live’ and ready to be officially launched. The SPPS is a model example of an enabling environment with coherent policies between health-trade-industry-finance-agriculture, which supports a shift in industrial structure, manufacturing, production and exports of the pharmaceutical manufacturing industry. The rationale for pooled procurement cooperation is to have quality essential pharmaceutical products available in the market at lower costs. With pooled procurement, considerable savings can be expected at the stage of information and work sharing by procurement departments/ agencies in Member States.



Purpose

To increase equitable access to essential quality medicines and health commodities by sharing information of pharmaceutical procurement data in participating countries.





Value:

The SMD Application boasts a comprehensive array of features designed to empower member states and stakeholders with actionable insights and real-time data, including:

- A searchable database of verified supply information to support procurement processes.
- Data-driven insights on medicines, technologies, and supply chains to facilitate strategic decision-making.
- Identification of manufacturer net selling prices to drive cost-effectiveness.
- Enhanced efficiency in forecasting and price negotiation processes.
- Provision of price analysis and insights to optimize resource allocation.

The screenshot displays the 'Home Page' of the SMD application. It features a navigation menu at the top with options like 'Home Page', 'Medicines / Health Supplies', 'Country Reports', 'Regulatory Links', 'Register', 'Change password', 'Procurement Documents', 'Financials', and 'News And Events'. The main content area is divided into four columns:

- Home Page Overview:** Contains subsections for searching medicines and health supplies, and product selection.
- Medicine Procurement Details:** Provides drill-down capabilities for full details, benchmarking, registration/patent status, and a cost savings calculator. It includes a table for 'AstraZeneca/Oxford COVID-19 Vaccine' with columns for Country, Net Selling Price, and Net Price.
- Cost & Analysis Tools:** Offers an opportunity to measure against system-generated data and includes a 'Health Supplies Procurement Details' section for tracking procurement and cost.
- Standardisation:** Discusses a normative standards framework for interoperability, listing variables like FORM OPTIONS, INCOTERMS, CURRENCY CONVERTER, UNIT OF MEASURES, CONTAINERS, SOURCE DATA, and DOSAGE FORMS. It also includes sections for adding procurement records and customising reports.

SMD Specifications Highlights

- Supports manual & bulk data import
- Multiple international benchmark prices can be added for comparison
- Interactive dashboard for extracting data
- Link to products regulatory status
- Link to products patent expiry date
- Added forecasted procurement option
- Supports devices and medicines

Specifications

The database is securely hosted within the SADC ICT infrastructure, and all collected data would fall under the ambit of the host, to maintain confidentiality.

IT System Architecture:

1) System Requirements:

Minimum server system requirements:

Linux OS (e.g., Ubuntu 18.04)

4 vCPUs, 4GB RAM, 128GB NVMe storage

2) Server Access:

SSH access to the server on port 22 for deployment and maintenance.

Necessary SADC ICT firewall rules allow incoming connections on required ports.

3) API Access:

The server allows secure access to the necessary APIs, defined API endpoints, methods, and any authentication mechanisms, and firewall rules to allow incoming connections on required ports.

4) Domain URL Configuration:

Preferred URL used: <http://sadcmed.sadc.int/>

Configured DNS settings for the domain to point to the server's IP address.

Appropriate ports for the frontend and backend URLs (e.g., 80 for HTTP, 443 for HTTPS).

5) UX Interface

High res SADC logo, and any other logo required

Preferred colour scheme for application



SWOT Analysis



Weaknesses

- Varying quality and infrastructure of existing national procurement data systems needs analysis and support
- Continuous improvement will require maintenance and support after this project implementation

Strengths

- Realtime, verified & relevant data on an interactive platform
- Secure and controlled access
- Cost saving potential
- Supply chain transparency for informed decision making
- Product and supplier quality ratings
- Singular portal for ease of use
- Open for automatic integration to multiple data sources
- Data driven insights



Threats

- Data growth and value is dependant on voluntary participation of member states
- The development roadmap should be inclusive of other existing data-sets, to avoid duplication and overlap

Opportunities

- Move away from static, multiple sources of data (often outdated, not maintained)
- Centralised sharing of procurement data provides transparency across the supply chain
- Close the gaps in realising the **impact, benefit and transaction cost** of procurement cooperation on drug prices, including mechanisms at international, regional and national levels, particularly in developing countries
- Public-Private-Partnership model will enhance supply-demand efficiencies & cooperation
- Subscription-based model could be used for ongoing sustainability



Procurement transaction information

Data field	Description	Comments
Procurement country	Name country that provided the data	
Generic name & strength	List as per WHO standards	
Dosage form	List as per WHO standards	
Product name	Manufacturer brand name or generic name – name manufacturer where applicable.	In cases where there is no specific name the generic name is used followed by –name manufacturer. The brand name or generic name – name manufacturer ties the product to a specific manufacturer
Procurement period	Time frame indicated by month-year for which the procurement is valid with a minimum default period of 12 months 2020 or specified with starting and ending date (month-year), e.g. June 2021 –May 2022.	Information about actual number of months
Terms	The international trade term applicable to the contracted price.	Prelisted: CFR, CIF, CIP, CPT, DAF, DAP, DAT, DDP, DDU, DE DES, EXW, FAS, FCA, FOB
FOB/EXW Price per pack size (USD)	The price used for comparisons; this either provided as such or has been calculated by subtracting a certain percentage from the price with Incoterms that include transport and/or insurance and/or other costs	FOB or EXW
Procurement quantity	The number of packs contracted at the specified unit price.	



Definition of Terms

Group contracting	A type of procurement whereby Member States jointly conduct and negotiate tender processes. They establish specifications, quantification, sourcing of suppliers, competitive bidding, technical and financial evaluations and adjudication, and contract awards. Member States agree to purchase from selected suppliers, but they place purchase orders separately (in other words the commitment is between the individual Member State and supplier).
Harmonisation	The name given to the efforts of Member States to replace the variety of national pharmaceutical policies, practices and standards currently adopted in favour of uniform regional policies, "good practices" and standards, which are at an internationally acceptable level.
Information sharing	Member States share information about products and suppliers (such as price, quality, source and suppliers' performances).
Coordinated informed buying	A type of procurement where Member States undertake joint market research share suppliers' performance information and monitor prices. Member States conduct procurement separately.
Good practices	The agreed description of the pharmaceutical organisation, procedures and standards that enable the required quality of service to be delivered, including criteria for organisational structures, personnel, facilities, equipment, material all kinds of operations, and quality control.
Pooled procurement/ Cooperation	Pooled procurement (also known as joint procurement or procurement cooperation) is the overarching term for procurement where part or all of the procurement processes of different procurement entities (agencies or departments of bigger entities) are jointly executed by either one of those procurement entities or by a third-party procurement entity.
Prequalification	An initial evaluation of the capabilities of suppliers (technical and financial) of the quality of their products to allow them to participate in the procurement process.
Public procurement prices	Free-on-Board (FOB) prices contracted by National Medicines. Procurement Agencies in Member States. It is recommended that the public procurement agency knows the FOB prices of the products that are being procured. Only FOB prices allow for analysis of logistics costs (freight, insurance, clearing, etc.), as well as for international benchmarking and comparison within the region. Actual supply contracts may still specify any other INCOTERM that includes freight and other costs, as long as FOB prices are also documented