



Please note that **this session is being recorded** and **will be made available** through **EMA Corporate Website and YouTube channel.**



Throughout the session, participants will be able to ask questions or give their input via the audience interaction tool **Slido**.

Interaction via Slido is voluntary, and you may opt to remain anonymous. If you chose to use Slido, **you consent to the processing of your personal data** as explained in the <u>EMA Data Privacy Statement</u> <u>for Slido</u>.

Welcome and housekeeping notes







Substance Management Service (SMS)

19 April 2023

SPOR Week - 17-20 April 2023



SPOR week is a **full week of webinars** during which EMA's Regulatory Data Management Service team talks about all aspects of regulatory data management and how it works today

📕 Webinar title	Date	🕙 Time
SPOR and XEVMPD Data Governance	17 April 2023	10:00-12:00 CET
Service Desk for SPOR and XEVMPD	17 April 2023	14:00-16:00 CET
Referentials Management Service (RMS)	18 April 2023	10:00-12:00 CET
Organisation Management Service (OMS)	18 April 2023	14:00-16:00 CET
Substance Management Service (SMS)	19 April 2023	10:00-12:00 CET
Substance Management Service (SMS) Product Management Service (XEVMPD)	19 April 2023 19 April 2023	10:00-12:00 CET 14:00-16:00 CET
	·	

³ For Questions: www.slido.com code: #7799764





Increase Awareness of SMS activities



Share Planned and future activities



Show how SMS is addressing customer feedback

Agenda







Introduction to SMS





EU-SRS is an open-source solution which implements **ISO IDMP logic** therefore enabling to register good quality substance data. SMS benefits from years of **integration of substance data into regulatory processes/systems**. Using both solutions is a cost-effective way to manage and share/re-use substance data.

🛅 Data

There is only one EU substance list: data between SMS and EU-SRS share the same ID and are being aligned via data fixes/batches of data. A future real-time sync is desired and has to be prioritised in the Network portfolio.

SMS contains all the substances used in pharmaceutical products available in EU-SRS, only it contains a subset of the fields from EU-SRS.

SMS Introduction – Data Fields





Identifiers

- **Primary:** SMS ID, previously known as EUTCT ID
- Secondary: EV Code (only for Human substances)

➡ Mandatory data fields

- Domain: Human or Veterinary
- **Status:** Current or Non-current different exports for each status
- Substance type
- **Substance Name:** Preferred term, aliases and translations available in export
- Language
- Name source
- Data classification: Public or Restricted – only "Public" names are available in export



Optional data fields

- Comments: replacement substance in case of nullification available in the export
- Substance codes:
 - Unique Ingredient Identifier (UNII, the FDA substance identifier) – available in the export
 - SVG cleansed flag available in the export



Before go live

Two different Human substance "lists" were maintained in XEVMPD:

- Approved (Authorised): registered by EMA and publicly visible
- Development: registered by Sponsors but only visible to the Sponsor that registered it
 - This led to 5514 substances with poor data quality (duplicates, undefined substances, etc.)

For SMS implementation

- Both Authorised and Development substances have been migrated to SMS and differentiated with the field Authorisation state. This "implies" a different level of Data Quality
- Only Authorised substances i.e. substances validated by EMA are registered/maintained and made available in the SMS API, new consuming systems and substance export
- Development substances are expected to be cleansed/nullified and over time as all substances are Authorised

Current way of managing confidentiality: Data Classification



In order to prevent disclosure of confidential substance information, SMS has "**Data Classification**" field for substance names:



Definition:

Name publicly visible in all consuming systems, SMS API and in substance export in the SPOR Portal

Note:

- The substance preferred term must always be registered as "Public"
- Official names (e.g. INN, USAN) are always registered as "Public"



Definition:

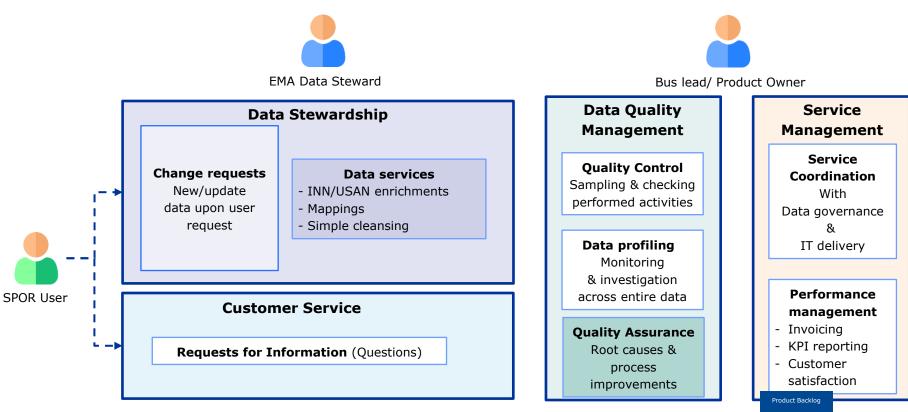
Name only visible to EMA Data Steward in SMS and to NCAs via SMS API



SMS Process

SPOR Data Management Processes







SMS Data Stewardship

Data Services at a glance



Mappings Enrichments consist in matching substance data consist in proactively completing SMS data with reference information existing in legacy systems to SMS, and the resulting creation/update of relevant data improve the data quality in and, by ٠ in SMS SMS Data preventing the submission of change requests, minimise the burden supports data migrations Services and implementation of SMS in Telematics on Industry/SMS users. systems Examples: INN and USAN names Examples: Vet NCA data for UPD, Orphan Designation substances for IRIS, XEVMPD development substances Cleansing/ corrections

- consists in proactively looking at the SMS data to identify and eliminate duplicates, as well as verify and standardise SMS data against established reference information.
- Data cleansing improves the data quality and, by preventing the submission of change requests, minimise the burden on Industry/SMS users.
 - The Substance Validation Group (SVG) is cleansing the legacy substance data, as prioritised by the Network
 - 36% of substances in SMS have been reviewed. This represents 100% of active substances in Veterinary authorised medicinal products and 80% of substances used in Human authorised medicinal products.

Substance cleansing – SVG cleansing and implementation in SMS Substance cleansing – SVG cleansing and implementation in SMS

Domain	Substance type	Count of substances	% in approved Human products	SVG Cleansing	SMS implementation	Comments	
Veterinary	Active substances: • Proteins • Vaccines • Plasma-derived • Cell therapy	~1.500	N.A.	100% completed	Completed	Cleansed and implemented	
Human	Chemical	~18.000	53%	Completed	Completed	Mostly cleansed and implemented: • Some PT changes pending	
Human	Insulins	~100	0.03%	Completed	Completed	 due to impact on ICSRs Not all duplicates/invalids nullified due to links to ICSRs/products 	
Human	Proteins linked to products	~1.000	0.2%	Completed	Completed	iesks/products	
Human	Polymers more used in products	~1.500	27%	Completed	Completed	Cleansed and implemented	
Human	Opadry/Opalux	~2.500	0.6%	Completed	Completed	Cleansed and implemented	
Human	Vaccines	~1.300	0.4%	Ongoing	ТВС		
Human	Homoeopathics	~16.000	0.3%	Ongoing	ТВС		
Human	Mixtures	~1.000	5%	Ongoing	ТВС		
Human	Herbals/Extracts	~7.000	2%	Not cleansed	ТВС		
Human	Flavours	~4.000	2%	Not cleansed	ТВС		
Human	Other Specified Substances	~4.000	10%	Not cleansed	ТВС		
Human	Remaining	~2.500	0.6%	Not cleansed	ТВС		



Veterinary active substances



VET substances:

- Originally, poor level of substance data quality
- Data cleansing has brought a significant data quality improvement 79% duplicates reduced.
- · all active substances now cleansed in SMS
- Vet NCA substance data has been mapped to SMS

 No action required
 Concept

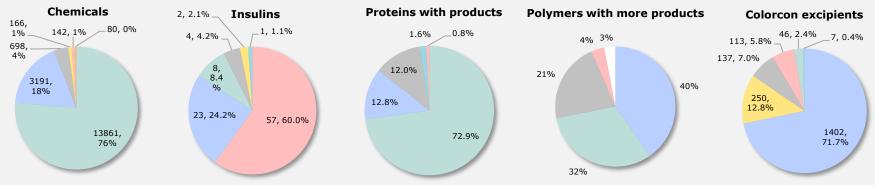
 Updated
 Mismatch

 Duplicate
 Under review

 New Substance
 created

HUMAN substances:

- Originally, mixed level of substance data quality across substance classes
- Data cleansing has brought assurance of the level of data quality
- With the cleansing of Chemicals, Insulins, Proteins, Polymers and Colorcon excipients **80% of substances used** in products are of good data quality



• As cleansing is implemented in SMS, consuming systems/processes benefit from improved Substance data quality



Impact to users:

- What has changed?
- What users should look out for?

Substance Names & codes

- Substance names changed (updated preferred term, new names added, names removed, alias converted to translation)
- UNII codes were added (when available)
- Some preferred terms to be changed only in the future (impact on ICSR recoding)

Substance status

Current



- Non-Current
 - invalid/duplicated substances not used in any medicinals product in XEVMPD or ICSRs have been made Non-current
 - Replacement substance available in Comments section
 - Users are advised to check if these substances are in use in any other system/context and use the correct substance instead

SVG Cleansed Flag

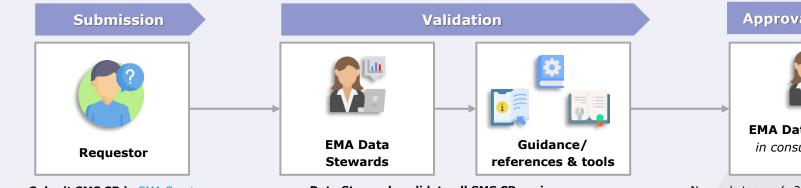
- Null Substance not yet reviewed by SVG
- 1 Substance reviewed by SVG Valid substance
- 0 Substance reviewed by SVG Invalid substance
- This is not a valid substance record and should not be used in regulatory applications
- The Substance is in use in one or multiple Authorised medicinal product or ICSR and will be nullified in due course
- Users should correct any medicinal product using these substances, so the substance can be nullified.
- Replacement substance is available in Comments section in the substance export
- 17 For Questions: www.slido.com code: #7799764



SMS Change Request process

SMS Change Request process at a glance





Submit SMS CR in EMA Service

- Desk portal:
- Add Substance
- Update Substance

Also include **Substance Request form** and **supporting documentation**



- SVG Data management Manuals
- Data Cleansing Manual
- EMA Substance Naming Rules
- Input from SVG discussions
- External Sources of Information





EMA Data Stewards in consultation with SVG

- New substances (<20): 5-10 working days
- Translations (<20): 10-15 working days
- Bulk requests (>20): No guaranteed SLA
 Priority to new substances

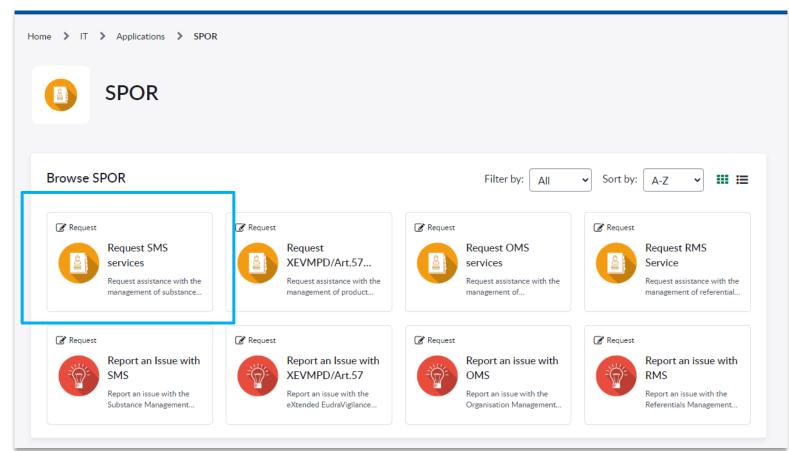
SMS CR approved = data updated in the SMS and published in consuming systems **SMS CR rejected** = reasons explained to requestor via EMA Service Desk

- New substances are created with higher data quality based on SVG defined business rules
- Newly created substances may eventually be reviewed by the SVG
 - End-to-end process discussions are ongoing



Substance Validation Group





SMS change requests – request in Service Desk



Request SMS services

Request assistance with the management of substance data



Use this service to request the registration of a new substance term or the update of an existing substance term through EMA Service Desk. Please ensure that you attach the completed Substance Request Form and supporting documentation describing the substance structure.

* Indicate required information

*Raise this request on behalf of

Pedro Batista

*Subject

*Description

*SMS Request type

-- Please Select --

Add attachments

• Description:

- For creates: Brief description of the substance
- For updates: provide the SMS ID or EV Code of the substance to be updated and the new name to be added
- SMS Request type: select the regulatory procedure
- Attachments:

× v

Substance request form

 Supporting documentation describing the substance nomenclature/structure (e.g. SmPC, Investigator's Brochure, company specifications, section A.3 Medical Plausibility of Orphan Designation, draft package for Scientific Advice, etc.)



EUROPEAN MEDICINES AGENCY	х			
REQUEST FOR REGISTRAT	TION OF A NEW SUBSTANCE			
Please provide at least one preferre	ed term in English and as many aliases as known. Copy the table below if multiple substances are being	requested.		
Please adjust the privacy settings o	f each name if your substance is still in development. Public names will be published in EUTCT.			
Note: proposed INN and company o	ode are not acceptable for Orphan Designation, Opinions on Paediatric Investigation Plans/waivers, a	nd Marketing Authoris	ations	
				_
Name type	Name	Privacy settings 🕶	Comments	-
Recommended INN		Public		
Proposed INN		Public		
Chemical name		Public		
Scientific name		Public		
Common name		Public		
Company code		Public		
Other (specify)		Public		
Molecular formula		Public		
CAS number		Public		

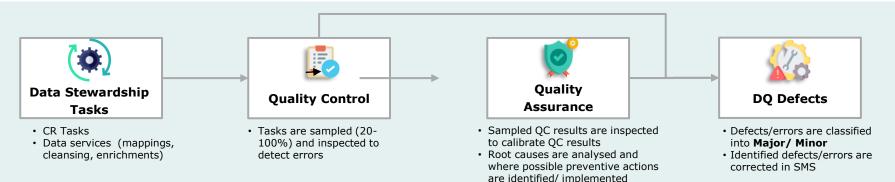
- At least one name must be made public
- Official names (INN, USAN, etc.) are always public
- For Orphan Designation, Paediatric Investigation Plan and Marketing Authorisation Application, company codes **cannot** be used as the substance preferred term
- 22 For Questions: www.slido.com code: #7799764



SMS Data Quality Management

SMS Data Quality Management

Activity based Monitoring - Started



Process improvements

- Substance data quality is being improved gradually with the SVG data cleansing
- **New substances** will be created with **higher data quality** (i.e. No duplicates, IDMP business rules, SVG input on naming conventions)
- Data Quality Mgmt methodologies (Quality Control/Quality assurance) guarantee we can maintain a very high-level of DQ for the new/updated data being managed in SMS.

SMS Acceptable DQ	Errors percentage in 2022
<1 % major errors (confidentiality, duplicates, wrong PT, incorrect mappings)	0.04% major errors
<10 % minor errors (inconsistent subst details – incorrect translation/source)	0.09% minor errors

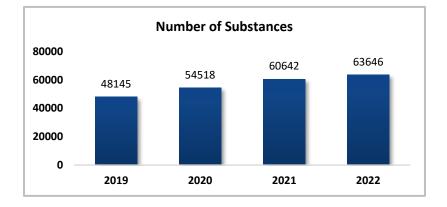


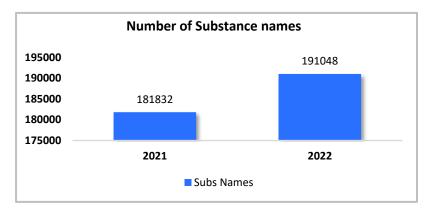
Error Type	Error category	Justification	
	Incorrect preferred term selected		
Major	Incorrect alias added		
	Incorrect data classification selected	 Major impact on regulatory applications 	
	Duplicated substance created	Confidentiality disclosures	
	Restricted substance registered as public		
	Public substance registered as Restricted for Orphan Designation		
	Incorrect translation added		
Minor	Use of abbreviations instead of spelled-out word	Minor or no impact on	
	Parent substance not created	regulatory applications	
	Incorrect casing		



SMS Statistics

EUROPEAN MEDICINES AGENCY

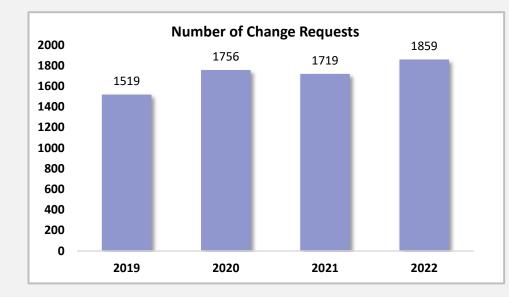


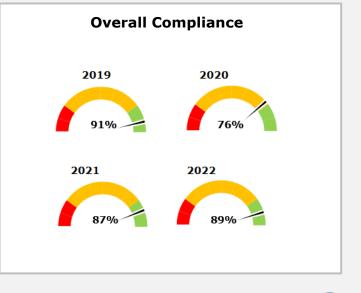




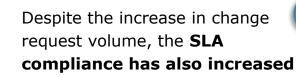
- The **increase in substances** (~+6000) and **substance names** (~+6000) in 2021 due to change requests, data enrichments (INN/USAN) and data mappings (NCA veterinary substances for UPD).
- More modest increase in substances in 2022 (~+3000)







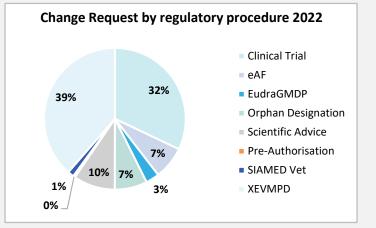
Change requests increased 8% in 2022



SMS Statistics – Change Requests

Change Requests per Type 1500 1253 1232 1115 1108 1000 370 334 500 301 314 48 35 31 11 0 2019 2020 2021 2022 Upd Sub (syn and/or transl) Mixed (New + Upd) New Sub

• As usual, most of the requests (77%) were for new substances.



EUROPEAN MEDICINES AGENCY

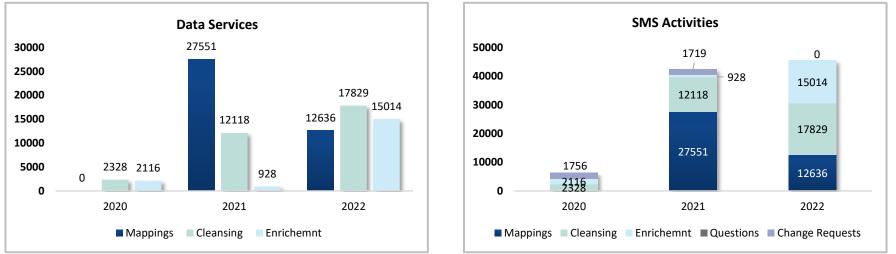
The **majority of the requests** were **for XEVMPD** (Art.57 and Pharmacovigilance) and **Clinical Trial Applications** (EudraCT and CTIS)

CRs by status 2022 Rejected Approved 77%

Overall, the **majority of requests** were **approved** (77%)

SMS Statistics -Cleansing/mapping/enrichments vs CRs vs Questions

EUROPEAN MEDICINES AGENCY

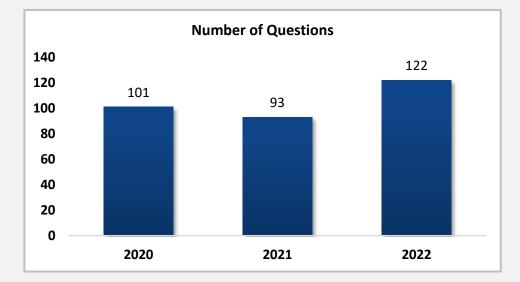


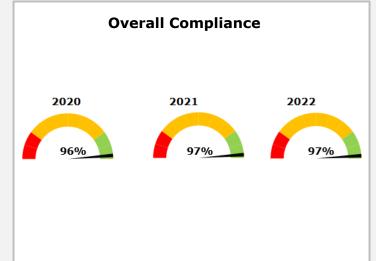


- Data cleansing was the **most significant task** in 2022: implementation of **SVG** cleansing of chemicals, proteins and polymers
- **High volumes** also on data enrichments (review and registration of all legacy INN) and mappings (development substances)
- Despite the volume of data mappings and change requests, the **number of customer services (questions) was negligible**

SMS Statistics – Service Desk

EUROPEAN MEDICINES AGENCY





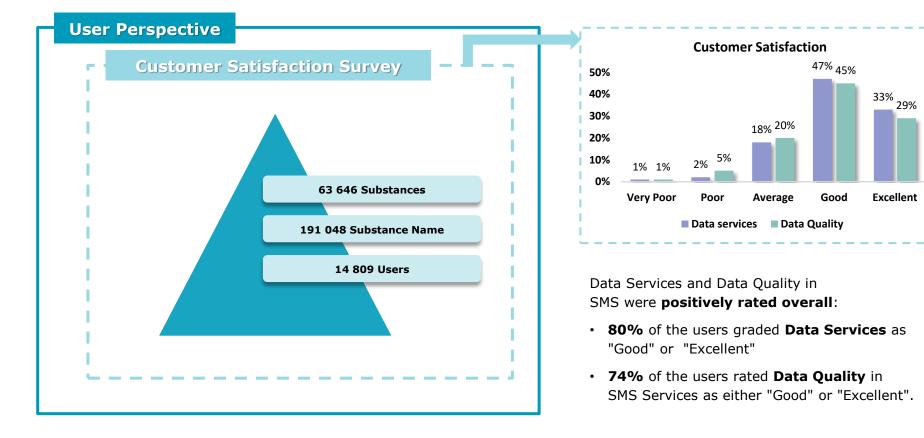
31% increase in questions, mainly about substance request process and queries related to CTIS



SLAs met

SMS Statistics – Customer Satisfaction

EUROPEAN MEDICINES AGENCY





Useful information on SMS

SMS Documents & Help

EMA Account

EMA systems



SPOR portal

Main documentation required to successfully use SMS services:

Substance data exports •



SMS Webinars

- @emainfo channel contains Videos of SPOR & specific SMS webinars
- Industry Webinar Introduction to SMS services and activities on 6 September 2022

EMA Service Desk

- For any help needed and not found in docs e.g., Service requests, issues, requests for technical support can be submitted through the ServiceNow Portal
- ServiceNow Request SMS Services
- Substance request form

Substance Validation Group

- **UNICOM SVG documents**
- HMA SVG page •

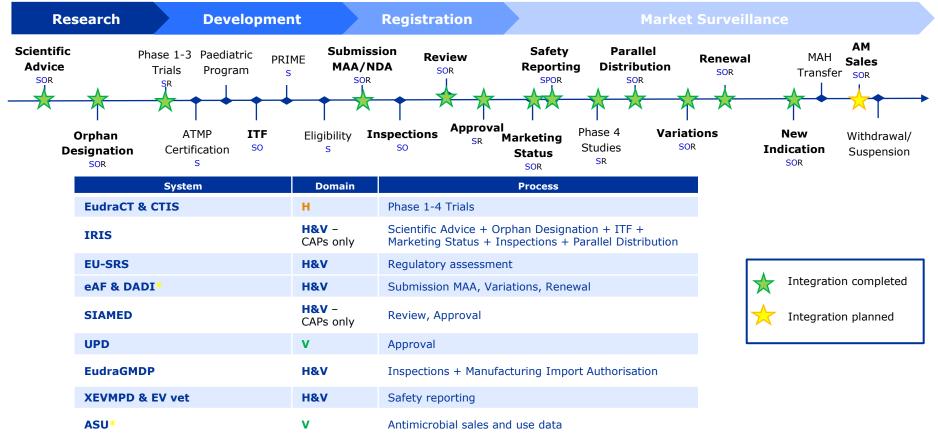
documents



SMS in Projects/Systems

SMS in Projects/ Systems

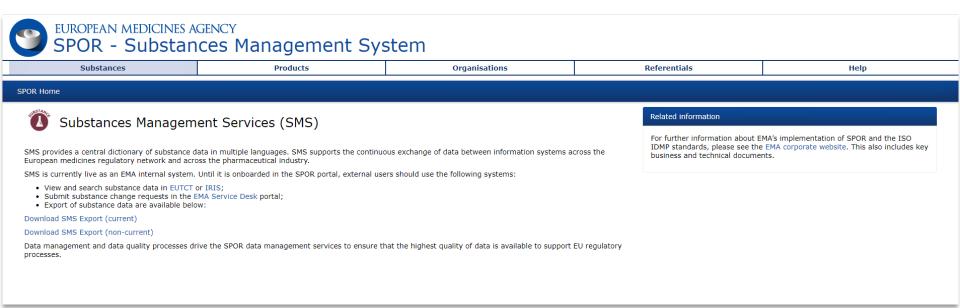






What's new in SMS







Both the current and non-current export files contain the following **data fields**:

SMS ID

- Substance_Name preferred term, aliases and translations
- Is_Preferred_Name- "Yes" refers to preferred term, "No" refers to alias or translation
- Language Preferred term and aliases in English, Translations are in different EU languages
- Name_Source- Source of the substance name
- Substance_Domain- Human or Veterinary
- Status Current or Non-current (each export only contains one status)

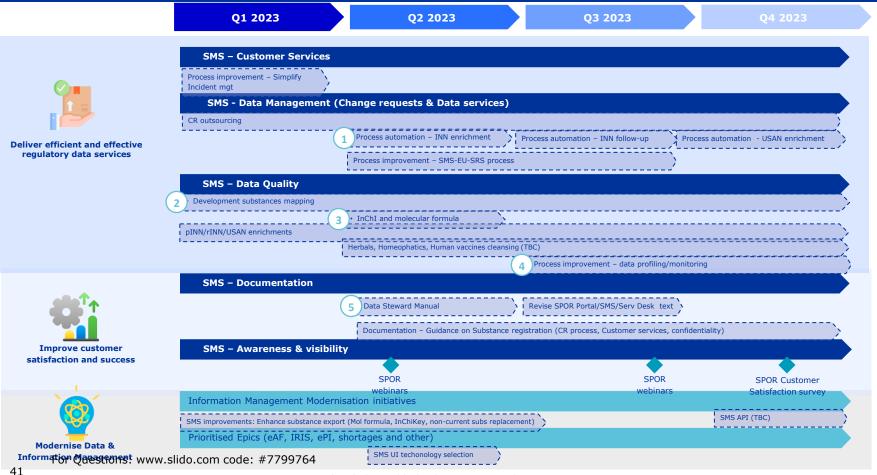
- Substance_Type Substance type per RMS list
- Comment Contains the SMS ID/EV Code of its replacement substance
- Created_Date
- Last_Updated_Date
- External_Code_XEVMPD Substance EV code (only for Human substances)
- External_Code_SVG- 1 valid substance, 0 invalid substance, null not yet reviewed
- External_Code_UNII- UNII from FDA



Future SMS Activities

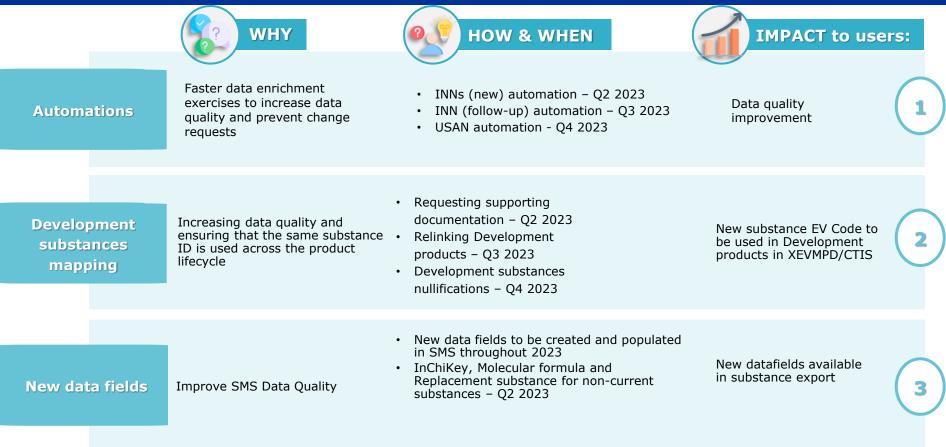
Planned SMS Activities

EUROPEAN MEDICINES AGENCY



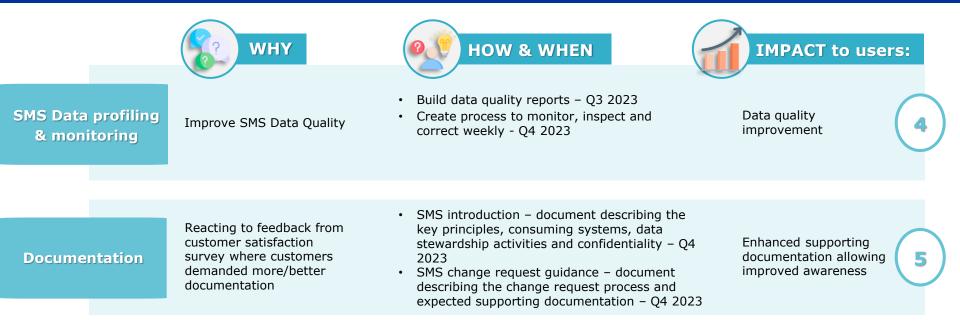
Planned Service Process Improvements 2023 (I)

EUROPEAN MEDICINES AGENCY



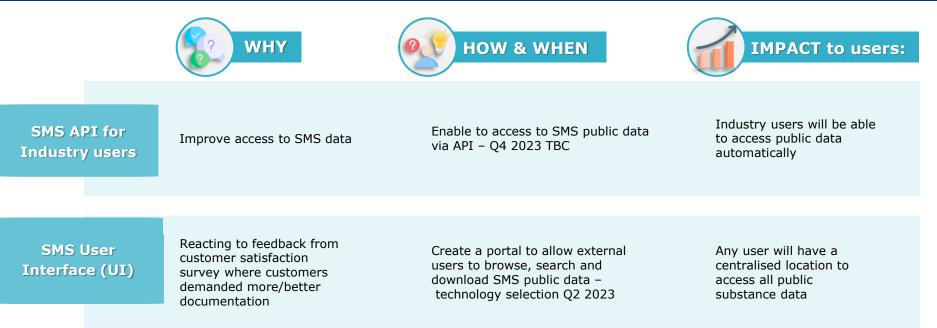
Planned Service Process Improvements 2023 (II)

EUROPEAN MEDICINES AGENCY



Planned Information Management Modernisation initiatives 2023







Key takeaways and conclusions





Awareness of SMS activities

- · Data stewardship (Change requests) and customer services in place and with excellent performance
- Sponsors impacted by the development substance mapping exercise will be made aware of future changes in advance



Share Planned and future activities

- Enhancement of substance export
- · Improved data mgmt efficiency through automations, improved Data quality through profiling and monitoring
- SMS UI and API for all users under analysis



Show how SMS is addressing customer feedback

Plan for guidance documentation in place



Any questions on the webinar?



SPOR week is a **full week of webinars** during which EMA's Regulatory Data Management Service team talks about all aspects of regulatory data management and how it works today

	Webinar title	Date	🕙 Time
	SPOR and XEVMPD Data Governance	17 April 2023	10:00-12:00 CET
	Service Desk for SPOR and XEVMPD	17 April 2023	14:00-16:00 CET
	Referentials Management Service (RMS)	18 April 2023	10:00-12:00 CET
	Organisation Management Service (OMS)	18 April 2023	14:00-16:00 CET
	Substance Management Service (SMS)	19 April 2023	10:00-12:00 CET
	Product Management Service (XEVMPD)	19 April 2023	14:00-16:00 CET
	Substance, product, organisation and referential (SPOR) application programming interface (API) - SPOR API	20 April 2023	10:00-12:00 CET
	EMA Account Management	20 April 2023	14:00-16:00 CET

Further information

Contact us through ServiceNow @ https://support.ema.europa.eu/

Official address Domenico Scarlattilaan 6 • 1083 HS Amsterdam • The Netherlands Address for visits and deliveries Refer to www.ema.europa.eu/how-to-find-us Send us a question Go to www.ema.europa.eu/contact Telephone +31 (0)88 781 6000

