

Sanitrace



Sanitrace Belgie - Sanitrace Belgique - Sanitrace Belgien

Sanitrace Luxembourg - Sanitrace Luxemburg - Sanitrace Letzeburg



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This solution conforms to the standards of the EDS internet and webservice strategy and is built with the EDS.SystemLib VS2005 - release 8.2

EAI USER MANUAL

Version 1.28 Jan 20, 2010

Document History

Version	Date	Change Log
1.0	Aug. 20, 2007	Minimal Version – Movements interface only as part of the Proof of Concept for connecting a Mobile Application to the Sanitel EAI Services
1.1	Oct. 9, 2007	Initial ‘full’ Setup – draft version for discussion and basic implementation based on Slaughtering Structure Interfaces definition table
1.2	Nov. 3, 2007	Initial Design + Discussions VRV / ALV / Internal
1.3	Nov. 16, 2007	Major part of documentation Added some initial examples – a lot of examples still missing either completely or sometimes just missing the namespace definitions
1.4	Nov. 17, 2007	Coding Examples
1.5	Dec. 15, 2007	Feedback + Error Handling
1.6	Jan. 8, 2008	Non-Official copy to some users
1.7	Jan. 24, 2008	Feedback + Extra examples + Added ExportMovementNotificationOverview documentation + Update for new EEC Trasy guidelines
1.8	Feb. 15, 2008	Change + Import
1.9	Mar. 15, 2008	FAQ extended Important Change – Animal Numbers in Export Interfaces from now on contain the check digit. To make them clearly visible the checkdigits are surrounded by spaces. E.g. BE 9 52395189 New fields in Export: <ul style="list-style-type: none"> - SanitaryUnitOverviewRequest: FCLT_CDE - SanitaryUnitOverview: TUST_CDE - Party Overview: LNGE_CDE - Party Overview Request: TPH, VAT_NBR, RLM_RGS_NBR - AnimalImport: PPPU_CDE New Interface: Import Treatment Notification (to register treatments such as bluetongue)

1.10	Apr. 30, 2008	Extra Documentation Web Service Stub Generation
1.11	May 15, 2008	Cosmetics
1.12	Jun. 4, 2008	Erronously named NOTP_ID field has been renamed to NOTF_ID impacting the movement XML structures: <ul style="list-style-type: none"> • AnimalMovementNotificationOverviewExportRequest • AnimalMovementNotificationOverviewExport • ChangeNotificationOverviewExportRequest • ChangeNotificationOverviewExport • MovementNotificationOverviewExportRequest • MovementNotificationOverviewExport
1.13	Jun. 10, 2008	Improved Example - Treatment Notification
1.14	Aug. 10, 2008	FAQ Question19 added Agreement Overview Export interface Added Notification Status Import Added Additional geographical fields in Facility / San. Unit
1.15	Sep. 1, 2008	PopulationNotificationImport added RetaggingNotificationImport added
1.16	Sep. 17, 2008	LiabilePartyOverviewExport added NotificationMovementImport extended with VRV data
1.17	Oct. 1, 2008	Party Type – PATP missing documentation documentation NOST Code: IVD -> IVLD ExportSanitaryUnit API-Break !!! Replaced the incorrect UPD_DTE_FRM/UPD_DTE_TO fields to the single UPD_DTE field AnimalDisposalType (Rendac) on AnimalImport and MovementNotificationImport Update Date Search on export movement /animal movement VRV fields in import animal Extra animal fields in notification overview export MarkingSeriesImport added Working On Behalf Of functionality
1.18	Oct. 22, 2008	<ul style="list-style-type: none"> • Added the slaughter vignet number (SLG_VGN_NBR) in the Animal Tag of the MovementNotificationImport-XML

		<ul style="list-style-type: none"> • Completed ANCO codes in the documentation + a rule has been added that in AnimalBirth registrations the SlaughteringCode DEAD cannot be used anymore... • Added SNUN_CDE as search criteria for AnimalMovementNotificationOverview • Added 2 Technical fields in interaction result defining the raw pattern string of the exceptions and the individual arguments. Technical application integration can than check on the pattern string and retrieve certain parameters directly
1.19	Nov. 5, 2008	<ul style="list-style-type: none"> • New Interface: ExportMarkingSeries • New Interface: ExportRetaggingNotification • Export AnimalOverview API- Break !!! Removal of the incorrect field VRV_IND_CRD_FLG. The correct field VRV_IDN_CRD_FLG remains • “Work On Behalf Of” Functionality added
1.20	Nov. 25, 2008	<ul style="list-style-type: none"> • Security Documentation added • UserLanguage documentation added
1.21	Dec. 15, 2008	<ul style="list-style-type: none"> • Birth / Import Examples • Refreshed incomplete drawings • Update FAQ (Animal number formats, Security Token)
1.22	Jan. 7, 2009	<ul style="list-style-type: none"> • ExportProductionUnit Interface
1.23	Feb. 15, 2009	<ul style="list-style-type: none"> • ExportWaterManureAllocation Interface
1.24	Mar. 06, 2009	<ul style="list-style-type: none"> • Fix in export XML example • Import Change Notification – Attribute codes re-aligned / extended with online application
1.25	May 18, 2009	<ul style="list-style-type: none"> • ExportWaterAndManure Interface – extended with Milk production quota
1.26	June 02, 2009	<ul style="list-style-type: none"> • Changed Sanitrace-references to the more actual Sanitel notation
1.27	June 26, 2009	<ul style="list-style-type: none"> • Final Documentation Version
1.28	Jan 20, 2009	<ul style="list-style-type: none"> • ProductionUnitNotificationImport redefined + examples

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Instructions to test the interfaces:

Introduction

XML and Web Services

The goal of web services is to allow external applications exchange data with the Sanitel.Net application in a standardized, efficient and transparent manner. The data is formatted as XML and the interaction is in two ways: Information can be imported in the Sanitel.Net-application (e.g. birth notifications, movements,...) and information can be exported / retrieved from the Sanitel.Net application.

Sanitel.Net provides three channels for exchanging XML: Formal SOAP 1.* web services, XML Streaming and manual XML uploads.

The Web Services are meant to complement other usage of the Sanitel.Net application like online access, reports, etc...

The web services are in principle not meant to synchronize databases, although some possibilities obviously do exist. Please refer to the appendix for more information on synchronization alternatives...

Interface Overview

For the Sanitel Renewal a number of formal interfaces have been defined for exchange of information (Imports of Movements, Export of Notifications, etc...).

The list underneath gives an overview of a first set of interfaces

Direction	#	Code	Name	Allows an external application to...
Export	S.01	EXAN	ExportAnimal	Retrieve a detailed insight of an animal (All characteristics, risk status, history,...)
Export	S.02	EXAMN	ExportAnimalMovementNotificationOverview	Retrieve an overview of movements (of a certain animal – from /to a certain facility ...)
Export	S.03	EXANO	ExportAnimalOverview	Retrieve an overview of animals and their key characteristics
Export	S.04	EXCNO	ExportChangeNotificationOverview	Retrieve an overview of changes to a Facility, a Sanitary Unit or Animal characteristics
Export	S.05	EXFAO	ExportFacilityOverview	Retrieve a general overview of facilities (name/address infor, reference numbers, liable party details,...)
Export	S.06	EXMVN	ExportMovementNotification	Retrieve a detailed insight in a movement (involved parties, involved facilities, involved animals,...)
Export	S.07	EXMV	ExportMovementNotificationOverview	Retrieve an overview of movements (of a certain animal – from /to a certain facility ...)
Export	S.08	EXPAO	ExportPartyOverview	Retrieve a general overview of Parties (Name/Address, Reference Numbers, Contact Data,...)
Export	S.09	EXPUO	ExportProductionUnitOverview	Retrieve a general overview of which exploitation units are used at which facilities / sanitary units
Export	S.10	EXSU	ExportSanitaryUnit	Retrieve detailed info about a sanitary unit (Location, Address, Sanitary Characteristics, Involved Parties, Production Unit Info, Marking Inventory, Capacity, Population Inventory, Risk Information, History Information...)
Export	S.11	EXSUO	ExportSanitaryUnitOverview	Retrieve a general overview of sanitary units and their key characteristics
Export	S.12	EXSLO	ExportSlaughteringOverview	Retrieve summary statistics of slaughtered animals
Import	S.13	IMANN	ImportAnimalNotification	Submit births or import records
Import	S.14	IMCHN	ImportChangeNotification	Submit changes on an Animal, a Facility, a Sanitary Unit or even a Party
Import	S.15	IMINN	ImportInventoryNotification	Submit marking inventory results
Import	S.16	IMMWN	ImportManureWaterNotification	Submit water/manure consumption statistics / corrections
Import	S.17	IMMVN	ImportMovementNotification	Submit a movement (e.g. Mobile App)
Import	S.18	IMPPN	ImportPopulationNotification	Submit population inventory results
Import	S.19	IMPUN	ImportProductionUnitNotification	Submit assignments of production units (exploitation units) to Sanitary Units
Import	S.20	IMRSN	ImportRiskNotification	Submit risk notifications, laboratory results,...

Import	S.20	IMRSN	ImportTreatmentNotification	Submit a treatment
Import	S.21	IMPST	ImportStatusUpdateNotification	Submit a status update notification – currently limited to treatments but extendable to other notifications
Export	S.22	EXAGR	ExportAgreementOverview	To test if certain parties have certain (active) agreements with certain other parties ;-)
Import	S.23	IMRTN	ImportRetaggingNotification	To import a retagging notification
Export	S.24	EXLPO	ExportLiablePartyOverview	To export information about veterinaries and other liable parties. This interface has limited access only because of privacy concerns
Import	S.25	IMPMS	ImportMarkingSeries	Submit a marking series allocation
Export	S.26	EXMSO	ExportMarkingSeriesOverview	To retrieve an overview of Marking Series / Marking Series Allocations
Export	S.27	EXRNO	ExportRetaggingNotificationOverview	To retrieve an overview of Retagging Notifications
Export	S.28	EXPU	ExportProductionUnit	To retrieve all Animal allocations to any old or current production unit of a certain facility including the from and the to of these allocations
Export	S.29	EXWMA	ExportWaterManureAllocation	To retrieve all WaterManureAnimalAllocations to do a correct calculation of Water / Manure consumption

Schema Overview

The following table gives, for each interface an overview of the document types used as input and the document type obtained as a result.

Direction	#	Code	Name	Allows an external application to...	Input XML - Schema Name	Result XML - Schema Name
Export	S.01	EXAN	ExportAnimal	Retrieve a detailed insight of an animal (All characteristics, risk status, history,...)	AnimalExportRequest	AnimalExport
Export	S.02	EXAMN	ExportAnimalMovementNotificationOverview	Retrieve an overview of movements (of a certain animal - from / to a certain facility ...)	AnimalMovementNotificationOverviewExportRequest	AnimalMovementNotificationOverviewExport
Export	S.03	EXANO	ExportAnimalOverview	Retrieve an overview of animals and their key characteristics	AnimalOverviewExportRequest	AnimalOverviewExport
Export	S.04	EXCNO	ExportChangeNotificationOverview	Retrieve an overview of changes to a Facility, a Sanitary Unit or Animal characteristics	ChangeNotificationOverviewExportRequest	ChangeNotificationOverviewExport
Export	S.05	EXFAO	ExportFacilityOverview	Retrieve a general overview of facilities (name/address info, reference numbers, liable party details,...)	FacilityOverviewExportRequest	FacilityOverviewExport
Export	S.06	EXMVN	ExportMovementNotification	Retrieve a detailed insight in a movement (involved parties, involved facilities, involved animals,...)	MovementNotificationExportRequest	MovementNotificationExport
Export	S.07	EXMV	ExportMovementNotificationOverview	Retrieve an overview of movements (of a certain animal - from / to a certain facility ...)	MovementNotificationOverviewExportRequest	MovementNotificationOverviewExport
Export	S.08	EXPAO	ExportPartyOverview	Retrieve a general overview of Parties (Name/Address, Reference Numbers, Contact Data,...)	PartyOverviewExportRequest	PartyOverviewExport
Export	S.09	EXPUO	ExportProductionUnitOverview	Retrieve a general overview of which exploitation units are used at which facilities / sanitary units	ProductionUnitOverviewExportRequest	ProductionUnitOverviewExport
Export	S.10	EXSU	ExportSanitaryUnit	Retrieve detailed info about a sanitary unit (Location, Address, Sanitary Characteristics, Involved Parties, Production Unit Info, Marking Inventory, Capacity, Population Inventory, Risk Information, History Information,...)	SanitaryUnitExportRequest	SanitaryUnitExport
Export	S.11	EXSUO	ExportSanitaryUnitOverview	Retrieve a general overview of sanitary units and their key characteristics	SanitaryUnitOverviewExportRequest	SanitaryUnitOverviewExport
Export	S.12	EXSLO	ExportSlaughteringOverview	Retrieve summary statistics of slaughtered animals	SlaughteringOverviewExportRequest	SlaughteringOverviewExport
Import	S.13	IMANN	ImportAnimalNotification	Submit births or import records	AnimalNotificationImport	Interaction Result
Import	S.14	IMCHN	ImportChangeNotification	Submit changes on an Animal, a Facility, a Sanitary Unit or even a Party	ChangeNotificationImport	Interaction Result
Import	S.15	IMINN	ImportInventoryNotification	Submit marking inventory results	InventoryNotificationImport	Interaction Result
Import	S.16	IMMWN	ImportManureWaterNotification	Submit water/manure consumption statistics / corrections	ManureWaterNotificationImport	Interaction Result
Import	S.17	IMMVN	ImportMovementNotification	Submit a movement (e.g. Mobile App)	MovementNotificationImport	Interaction Result
Import	S.18	IMPPN	ImportPopulationNotification	Submit population inventory results	PopulationNotificationImport	Interaction Result
Import	S.19	IMPUN	ImportProductionUnitNotification	Submit assignments of production units (exploitation units) to Sanitary Units	ProductionUnitNotificationImport	Interaction Result
Import	S.20	IMRSN	ImportRiskNotification	Submit risk notifications, laboratory results,...	RiskNotificationImport	Interaction Result
Import	S.20	IMRSN	ImportTreatmentNotification	Submit a treatment	RiskNotificationImport	Interaction Result

Export Interfaces always have a ‘request’ document type as input. Import interfaces always return an interaction result as result.

All document types are described in the interface description.

Schema design conventions

As there is no Industry XML-standard for this type of information, we have defined a number of dedicated schema's. We tried to make this structure as consistent as possible and have made the following conventions

The following interface design conventions were followed:

- Full Schema definition in English
- Schema names + Structure names + Steering Attributes: Camel Case, No abbreviations
- Field Names:
 - o Abbreviation Based
 - o Upper Case
 - o 4 character abbreviations refer to a Coding Schema's or to a main Entity
 - E.g. ANTP_CDE denotes a code from the coding schema ANTP – Animal Type
 - E.g. FCLT_CDE refers to the code/id/main reference number of a Facility.
 - o Rest 3 (2) character abbreviations
 - o No indication of the type string / number except for dates (_DTE) or Booleans (_FLG)
 - o Fields as short as possible without jeopardizing readability
- Coding Schema's optimized for 'maximal stability'
 - o Coding schema's are NOT included in the schema (new codes could be added without change in the interface)
 - o Minimal validation rules in the schema (no input length definitions, no mandatory fields,...) -> All business logic on the Server
 - o Only standard data types: string, decimal (decimal point) , datetime
 - DateTime = YYYY-MM-DDTHH:MM:SS.FFF UCT –
 - Examples: 2007-03-01, 2007-03-01T10:04:12,
 - A Null date time can be represented as
0001-01-01T00:00:00
- Best practices
 - o Cardinality and structure complexity
 - 0 to limited rather than minimal 1 and maximal 3
 - Minimal Depth and Redundancy
 - Similar information requirements – Similar field names
 - o Import Interfaces
 - Multiple input records possible
 - Standardized interaction result
 - o Export Interfaces
 - Request = Single Line Search Criteria => but all criteria freely combinable
 - Result = list-result
 - o Standardized Header Info*

- All Headers
 - Username – name of the user on whose behalf the import is made – this user needs to have the adequate permissions as if he would register this action in the online
 - Security Token – Reserved if a stricter security is necessary in case of XML abuse
- Extra Header Info Export Results
 - Return Code – can be negative in case the search failed e.g. missing / incorrect search criteria ... 0 means all OK. A Return code 999 will mean that the result is truncated to the first 1000 results
 - Return Message – specification why the search failed
- Extra Header Info Export Request Steering Parameter
 - Result Index – ReservedPaging parameter in case of multiples of X000 of records (1 = first X000, 2 = second X000,...)

*) Remark that we use the Header of the MessageType for storing these special information elements. This is a preferred practice over e.g. the use of a special context element for the following reasons:

- Security and routing can be done on just the information in the header of the message without the need to “parse” the full message structure
- The header info can be extended e.g. with message version information again accessible without the need to “parse” the full message structure
- Conceptually the header info is NOT part of the message so it should not be part of a special context element

Schema Definitions

The attached zip file contains a collection of all schema's.



Schemas.zip

XSD Schema's

When discussing channel 1 we also explain how one can retrieve the XSD Schema's online...

Coding Schema's Overview

The following coding schema's have been used in the XML definition

AAST	AnimalAllocationStatus
AATP	AnimalAllocationType
ABFY	Beefiness
ABSP	AnimalBirthSpecifics
ADPR	AnimalDepartureReason
ADSP	AnimalDeliverySpecifics
AGEC	AgeCategory
AMQL	AnimalMeatQualityLabel
ANCO	AnimalCondition
ANCP	AnimalConception
ANDT	AnimalDisposalType
ANPR	AnimalPremiumCodes
ANRC	AnimalRace
ANRT	AnimalRaceType
ANSB	AnimalSubtype
ANTP	AnimalType
ANVN	Animal VRV name
ANVS	Animal VRV specification
ASRV	AnimalSurvival
BLST	BlockingStatus
CITY	CleaningFacilityType
CTRY	Country
DNAQ	DNA Quality Code
FATP	FacilityType
FLTP	FacilityLocationType
GNDR	Gender
H RTP	Hairtype
LNGE	Language
MSAL	Marking Series Allocation
NFTP	NotificationFacilityType
NOKD	NotificationKind
NORS	NotificationReason (Reserved for later usage)
NOST	NotificationStatus
NOTP	NotificationType
NPTP	NotificationPartyType
NR CR	NotificationRiskChangeReason
OILB	Order Item Label
OISN	Order Item Serie Numbering
OITP	Order Item Type
PATP	Party Type
PBR S	SanitaryUnitPassportBlockingReason
PBST	SanitaryUnitPassportBlockingStatus
PPPR	PassportPrintReason
PPPU	Passport Print Urgency
PRQU	Production Quality
PRWA	Production Ware
PUTP	ProductionUnitType

RIIT	RiskItemType
RIOG	RiskOrigin
RIQR	RiskQualificationReason
RIQU	RiskQualification
RIST	RiskStatus
RITP	RiskType
RSST	RiskCondition
SPTP	SanitaryUnitPartyType
SUHS	Sanitary Unit Housing
SUKD	SanitaryUnitKind
SUTP	SanitaryUnitType
TMLV	Treatment Notification Group level
TMTP	Type of treatment (e.g. Oral, Inoculation,...)
TITP	Type of treatment item (e.g. 1 st , 2 nd , ...)
TUBR	BlockingReason
TUST	TrackingUnitStatus
UNIT	Unit
VATP	VLMAnimalType
VEOR	Veterinary Organization

Main Entity Overview

The following 4 letter codes refer to a main entity. You have to know their key before you can access them

ANML	Animal
ANPP	AnimalPassport
ATRB	AnimalSanitaryUnitHistory
FALO	FacilityLocation
FCLT	Facility
MACT	MarkingCountryCode
MEDC	Medicine
NORI	NotificationRiskDetail
PATY	Party
PRUN	ProductionUnit
RIIM	RiskItem
SNUN	SanitaryUnit
TRGR	TrackingGroup
VIST	Visit
ORIM	Order Items (e.g. Retagging Earmarks)

Abbreviations

The following abbreviations have been used

ID	Identification	MCP	Municipality	RCV	Receive
TO	AgreementComment	MHR	Mother	RDC	Rendac
AL1	Adress Line 1	MLK	Milk	REF	Reference
AL2	Adress Line 2	MRK	Marking	RLM	Realm
ALT	Alternate	NAM	Name	RGS	Register
ANA	Analyst	NBR	Number	RQS	Request
ANM	Animal	NEW	New	RSK	Risk
ASG	Assigned	NRS	Nourish	RSP	Responsible
BAG	Bag	NUR	Nursing	SGP	Subgroup
BLO	Block	OCR	Occur	SMP	Sample
BNK	Bank	OLD	Old	SRC	Search
BOX	Box	ORD	Order	STA	Status
BRO	Brood	ORI	Originator	STB	Stable
BTH	Birth	PCR	Producer	STR	Street
CAG	Cage	PLT	Plate	SUC	Surface
CDE	Code	PNT	Print	TOT	Total
CDG	Check Digit	MLK	Milk	TPH	Telephone
CMN	Comment	MLP	Milkproduction	TRS	Transporter
CNT	Count	MRK	Marking	TWO	Two
CRD	Card	M01 ...	Month Jan...	UPD	Update
CRF	Certificate	M12	Month Dec	VAL	Value
CTY	City	NAM	Name	VAT	BTW-TVA
DES	Description	NBR	Number	VGN	Vignette
DLV	Delivery	NER	NR/DR	VLM	VLM
DNA	D.N.A.	NEW	New	VRS	Version
DOC	Document	NRS	Nourish	VRV	V.R.V.
DST	Destination	NUR	Nursing	VTY	Veterinary
DTE	Date	OCR	Occur	WGH	Weight
DTH	Death	OLD	Old	YER	Year
EMA	Email	ORD	Order	ZIP	Postal Code
END	End	ORI	Originator		
EPO	Export	PCR	Producer		
EXT	Extension	PLT	Plate		
FAX	Fax	PNT	Print		
FEM	Female	POP	Population		
FLG	Flag	PPT	Passport		
FRM	From	PUR	Purchase		
FRT	First	QAL	Qualifications		

GRP	Group	RCV	Receive
GSM	GSM	RDC	Rendac
GTC	Genetic	REF	Reference
IDN	Identification	RLM	Realm
IMO	Import	RGS	Register
LBO	Lable	RQS	Request
LIA	Liabilities	RSK	Risk
LIC	License	POP	Population
LMS	Live	PPT	Passport
LST	Last	PUR	Purchase
MAL	Male	QAL	Qualifications

Coding Schema's Content

The following is a list of accepted/returned user codes. Codes can be recognized as <USERGOU>_CDE.

e.g. ADSP_CDE, AGE_CDE, ...

AATP	Animal Allocation Type
SYS	System created animal allocation
OVR	System created overruling animal allocation
ABFY	Beefiness
MLK	0 Milkcalf
LBFY	1 Low Beefiness
MBFY	2 Normal Beefiness
HBFY	3 Robust Beefiness
FAT	4 Double-muscled
ADPR	Animal Departure Reason
03	Ouderdom Age
04	Overtollig Surnuméraire
05	Afgemest/Slachtrijp Fini/prest à abattre
10	Been/Klauwaandoening Affection d'un membre ou de l'onglon
11	Voedingsstoornissen Trouble alimentaire
12	Problemen rond het afkalven Problème de vêlage
13	Hoog celgetal/Mastitis D G Z
14	Vruchtbaarheid Fertilité
19	Overige gezondheid Autre problème sanitaire
20	Lage productie Faible production
21	Melkbaarheid En lactation
22	Slecht exterieur Mauvais extérieur
23	Gedrag Comportement
ADSP	AnimalDeliverySpecifics
EASY	Easily
NRML	Normal
DIFF	Difficult
CSRN	Caesarean
SWD	Sawed Off
OTH	Other Aid
AGEC	AgeCategory
LT18	Younger than 18 months (SHP,GOAT,DEER)

GE18	18 Months or Older (SHP,GOAT,DEER)
LT6	Younger than 6 months (BOV)
B612	Between 6 and 12 Months (BOV)
B1224	Between 12 and 24 Months (BOV)
GE24	24 Months or Older (BOV)
AGSA	Agreement Status
ACT	Active
STP	Stopped
SUSP	Suspended
DRF	Draft
CAN	Cancelled
IVD	Invalid
REJ	Rejected
AAWP	Active And Awaiting Printing
APRE	Approval Requested
APTP	Agreement Party Type
CVET	Surveillance Veterinary
CVETB	Backup Surveillance Veterinary
ACVT	Guidance Veterinary
ACVTB	Backup Guidance Veterinary
REGP	Registered By Party
AGPA	Authorising Party
ADPA	Authorised Party
RSPS	Responsible Sanitary Unit
RSPF	Responsible Facility
AIPA	Authorised Party Integration
ASPA	Authorised Party SGS
AVPA	Authorised Party VRV
AGTP	Agreement Type
VETA	Veterinary Agreement
MASA	Market Supervision Agreement
RAFI	Read Authorisation
ADMA	Administration Authorisation
AMQL	AnimalMeatQualityLabel
MER	Meritus
PCRVC	Procervic
ANCO	AnimalCondition
ALIVE	Alive
DDMKD	Dead born, marked
DDNOT	Dead born, not marked
DEAD	Dead

DDHUN	Dead by Hunting
TCUT	Throat cut
TCOR	Throat cut and organs removed
ANCP	AnimalConception
NRM	Normal
INV	Transplant
ANDT	Animal Disposal Type (Animal Type Rendac)
PIGL	Piglet
SOWPL	Sowgarbage/Piglet
PIG	Pig
SOWB	Sow/Boar
ACALF	Aborted Calf
CALF	Calf
BOV	Bovine
LAMB	Lamb
SHPG	Sheep/Goat
	Above codes are augmented with the ones underneath used in the Interface by Rendac only. C31-C32 are registered as CALF; C35-C38 as BOV
C31	KALF (25 KG)
C32	KALF (50 KG)
C35	RUND (150 KG)
C36	RUND (300 KG)
C37	RUND (550 KG)
C38	RUND (800 KG)
ANPR	AnimalPremiumCodes
P1	P1
P2	P2
ANRC	AnimalRace
AB	Abondance
AL	Tyrol Grey
AN	Angus
AU	Aubrac
AY	Ayrshire
BB	Belgian Blue
BD	Blonde d'Aquitaine
BM	Beefmaster
BO	Braford
BR	Brahman
BN	Brangus
BS	Brown Swiss

BF	Buffalo (Bubalis bubalis)
BIS	Bison
CA	Chianina
CH	Charolais
DR	Dexter
RE	European Red Dairy Breed
EWR	East-Flanders White Red
FLR	West-Flanders Red
GA	Galloway
GU	Guernsey
GV	Gelbvieh
HH	Hereford, horned
HP	Hereford, polled
HI	Highland Cattle
HO	Holstein
RW	Holstein, Red and White
RDB	Holstein, Red Dairy Breed
JE	Jersey
LM	Limousin
MA	Maine-Anjou
MG	Murray-Grey
MO	Montbéliard
MR	Marchigiana
NO	Normandy
NR	Norwegian Red ****
PI	Piedmont
PZ	Pinzgau
RN	Romagnola
SL	Salers
SG	Santa Gertrudis
SD	South Devon
SH	Shorthorn
SM	Simmental
SCT	Speck cattle
SW	Sahiwal
SR	Swedish Red&White
TA	Tarentaise
WB	Welsh Black
ANRT	AnimalRaceType
MILK	Milk
MEAT	Meat

MXD	Mixed
PET	Pet
NAT	Nature
ANSB	AnimalSubtype
VCALF	Vealcalf
BOV	Bovine
BIS	Bison
BUF	Buffalo
DBOV	Dwarf Bovine
SHP	Sheep
DSHP	Dwarfsheep
GOAT	Goat
DGOAT	Dwarfgoat
HRSE	Horse
DNKY	Donkey
PIGB	Pigs for breeding
PIGF	Pigs for fattening
PIGL	Piglet
PIGP	Pet pig
DEER	Deer
WPIG	Wild Pig
LMAM	Other breded land mammal
OSTR	Ostrich
EMU	Emu
NANDU	Nandu
CSWR	Cassowary
CHCK	Chicken
PHST	Pheasant
GFWL	Guinea Fowl
PRTG	Partridge
FCHCK	Frychicken
SCHCK	Soupchicken
CHICK	Chick
RSTR	Rooster
TRK	Turkey
SWN	Swane
QL	Quail
GSE	Goose
PGN	Pigeon
DUCK	Duck
RBT	Rabbit

HARE	Hare
RDT	Rodent
FURB	Furbearer
MSL	Mussel
OYS	Oyster
BOAR	Wild Boar
ROE	Roe
WDEER	Even-toed Wild Ungulate
STAG	Stag
MFLN	Mufflon
OTHG	Other game animal
FURG	Fur game animal
BIRG	Game Bird
FISH	Fish
BEE	Bees
FROG	Frogs
SNAIL	Snails
ANTP	AnimalType
BOV	Bovine
SHP	Sheep
GOAT	Goat
OUNG	Odd-toed ungulate
PIG	Pigs
DEER	Deer
WPIG	Wild Pig
LMAM	Other breded land mammal
BIRD	Bird
PLTR	Poultry
LGMPH	Lagomorph (and rodent)
BEE	Bees
FROG	Frogs
SNAIL	Snails
FISH	Fish
MLSC	Mollusc
CRSTC	Crustaceae
BIGG	Big Game
SMLG	Small Game
ANVN	Animal VRV name
A	Automatic
G	No Name
N	Fill-in name

R	Random Name
ANVS	Animal VRV specification
NONE	0 None
PREM	1 Premature birth
POST	2 Postmature birth
MULT	3 Multiple Birth
HERHA	4 Hereditary handicap
SPECS	9 Several specifications
ASRV	Animal Survival
LIV	Alive
STBRN	Stillborn
DCS1	Deceased first day
DCS2N	Deceased after first day
BLST	Blocking Status
N	Normal
B	Blocked
S	Suspect
CTRY	Country
BE	BELGIUM
DE	GERMANY
FR	FRANCE
GB	UNITED KINGDOM
LU	LUXEMBOURG
NL	NETHERLANDS
...	2 letter iso code
DNAQ	DNA Quality Code
OK	Ok
NOK	Not Ok
FATP	Facility Type
ASMY	Assembly place
CLEAN	Cleaning company
DEALR	Cattle dealer facility
FARM	Cattle farm
MRKT	Cattle market
SLGHS	Slaughterhouse
ASMYA	Acknowledged Assembly place
ASMYP	Allowed Assembly place
PCKUP	Pick-up point
MED	Medical Research centre
HSPTL	Animal Hospital
PRCTC	Animal practice

QRTNE	Quarantaine Stable
FDTN	Federation
DEST	Destruction Company
CITY	Municipality
FLTP	FacilityLocationType
FOUND	Foundation
MEAD	Meadow
SHED	Cowshed
STBLC	Stable complex
BMEAD	Border meadow
DMEAD	Distant meadow
QSTBL	Quarantaine Stable
GNDR	Gender
FEM	Female
MAL	Male
UNK	Unknown
OX	Ox
H RTP	Hairtype
BLUW	Blue White
DBR	Dark Brown
G	Gray
LBR	Light Brown
MBR	Mouse Brown
R	Red
RW	Red White
W	White
WBL	White Blue
WR	White Red
WZ	White Black
BL	Black
BLW	Black White
LNGE	Language
NL	Dutch
FR	French
GE	German
MSAL	Marking Series Allocation
AMANU	Allocation-manually
RDSTR	Recuperation for destruction
RSTCK	Recuperation for stock
UNUSD	Free
STOCK	Stock

ALROR	Reserved Origin Register	
RECUP	Recuperation for Reserved Origin Register	
ORGRA	Manual allocation from Origin Register	
NFTP	NotificationFacilityType	
SRC	Source	
DST	Destination	
PRT	Participating	
ORI	Origin	
NOKD	NotificationKind	
ARV	Arrival	MMT
DPR	Departure	MMT
TRP	Transportation	MMT
R4	Change Hormone Status	PRNT
R6	Loss	PRNT
R10	Change Responsible Party	PRNT
R12	Damaged	PRNT
R22	Not commercialised Bovine	PRNT
R45	Change Exploitation	PRNT
R49	Change Main Location Sanitary unit	PRNT
R51	Responsible Party Address Change	PRNT
R52	Change Address Main Location	PRNT
R53	Address Change	PRNT
R17	Other Constations	PRNT
R29	Internal change SU	PRNT
R40	Export	PRNT
BREG	Bovine Register	RGPOP,BOV
PGCNT	Pig Count	RGPOP,PIG
C1512	SGD 15 12 Count	RGPOP,SHP,GOAT,DEER
CTR15	SGD Inventory control	RGPOP,SHP,GOAT,DEER
VAC	Vaccination Aujeszky	TMT,PIG
BLUTG	Blue Tongue	TMT,BOV, SHP, GOAT, DEER
IBR	IBR	TMT,BOV
NCD	NCD	TMT,PLTRY, BIRD
AI	AI	TMT,PLTRY, BIRD
SALPL	Salmonella - ploultry	TMT,PLTRY
SALPG	Salmonella - pigs	TMT,PIG
BVD	BVD	TMT,BOV
SCINJ	SC injection	TMT,BOV,SHP,GOAT,DEER,PLTRY,BIRD,PIG
IDINJ	ID injection	TMT,BOV,SHP,GOAT,DEER,PLTRY,BIRD,PIG
IMINJ	IM injection	TMT,BOV,SHP,GOAT,DEER,PLTRY,BIRD,PIG
ININJ	IN injection	TMT,BOV,SHP,GOAT,DEER,PLTRY,BIRD,PIG
IVINJ	IV injection	TMT,BOV,SHP,GOAT,DEER,PLTRY,BIRD,PIG
IMMIJ	IMM injection	TMT,BOV,SHP,GOAT,DEER,PLTRY,BIRD,PIG
IPINJ	IP injection	TMT,BOV,SHP,GOAT,DEER,PLTRY,BIRD,PIG
ORALW	Oral use - water	TMT,BOV,SHP,GOAT,DEER,PLTRY,BIRD,PIG

ORALF	Oral use -feed	TMT,BOV,SHP,GOAT,DEER,PLTRY,BIRD,PIG
POUR	Pour-on methode	TMT,BOV,SHP,GOAT,DEER,PLTRY,BIRD,PIG
BOLUS	Bolus	TMT,BOV,SHP,GOAT,DEER,PLTRY,BIRD,PIG
WASH	Wash /spray dip	TMT,BOV,SHP,GOAT,DEER,PLTRY,BIRD,PIG
INFUS	Infuus vochttherapie	TMT,BOV,SHP,GOAT,DEER,PLTRY,BIRD,PIG
ANMC	Animal Characteristics	CHNGE
ANMB	Animal Birth	CHNGE
ANRT	Animal Identification	CHNGE
ANLF	Animal Location	CHNGE
ANCI	Animal Attributes	CHNGE
ANMN	Animal Movements	CHNGE
ADNA	Animal DNA	CHNGE
AVRV	VRV	CHNGE
ADR	Address	CHNGE
NEW	New	CHNGE
ANID	Animal Identification	CHNGE
ANLO	Animal Location	CHNGE
GNOTC	General Notice	CHNGE

NOST NotificationStatus	
DRF	Draft
CAN	Cancelled
ENT	Entered
APT	Accepted
REJ	Rejected
IVLD	Invalid
NEW	New
SUBM	Submitted
ENTF	Entered Federation
IVDF	Invalid Federation
APTF	Accepted Federation
REJF	Rejected Federation
SPLTN	Split
SUBMF	Submitted Fed
NOTP NotificationType	
ARBTH	Birth
ARIMO	Import
MMEPO	Export
MMDPR	MovementDeparture
MMARV	MovementArrival
MMLOD	MovementLoad
MMUNL	MovementUnload
MMIMO	MovementImport
MMDPS	MovementDepartureSlaughterhouse
MMDPD	MovementDepartureDisposal

MMTRS	MovementTransportation
CHANM	ChangeAnimal
CHSNU	ChangeSanitaryUnit
CHFCY	ChangeFacility
CHPTY	ChangeParty
RISK	Risk
PTMMT	ParentMovement
PTCHG	ParentChange
PTARG	ParentAnimalRegistration
PTUNS	ParentUnspecific
MMDST	MovementArrivalDisposal
MMSLG	MovementArrivalSlaughterhouse
MMAGY	MovementArrivalAgency
RETAG	Retagging
PRNT	Reprint
TMT	Treatment
RGPOP	RegisterPopulation
RGWAT	RegisterWater
RGMAN	RegisterManure
RGORD	RegisterOrder
NFTP	NotificationFacilityType
SRC	Source
DST	Destination
PRT	Participating
ORI	Origin
NPTP	NotificationPartyType
RSP	Responsible
TRA	Transporter
TRU	Truck Driver
VET	Controlling Veterinary
DLR	Dealer
HND	Handling Party
DELV	Delivery
FACT	Facturation
NRCR	NotificationRiskChangeReason
NEW	New
EXT	Extension
RNWL	Renewal
OILB	Order Item Label
ULTR	Ultra(Aliflex Europe SAS)
FL1A	M-Flex 1A(Metagam BVBA)

M3XPT	Exportoormerken-type M3
FL1AC	M-Flex 1A composite(Metagam BVBA)
SLVIG	Slachthuisvignetten
M6FED	Verbondsoormerken Type M6
HRD14	Beslagoormerken(blauw):Couple14 (AllflexEuropeSAS)
SRSR	Senior Senior(Allflex Europe SAS)
M6SU	Beslagoormerken – type M6
M7	M7 metalen punt(Merko NV)
CPL14	Couple 14 (Allflex Europe SAS)
SVD35	Bouton SVD 35 (Allflex Europe SAS)
...	Full List available on demand
OISN	Order item Serie Numbering
BOVM	Bovines prime earmarks
BOVSL	Bovines slaughtering labels
PIGM	Pigs facility earmarks
PIGFM	Pigs federation earmarks
PIGXM	Pigs export earmarks
PIGPE	Pigs facility earmarks Preengraisseur
SGDM	Sheep/Goat/Deer prime earmarks
SGDDW	Sheep/Goat/Deer prime earmarks for dwarf animals
SGDFM	Sheep/Goat/Deer facility earmarks
SGDOS	Sheep/Goat/Deer Old
OITP	Order Item Type
ID1ST	Earmarks for first identification
MRKP	Earmarks
PDCC	Personalised Document
PRMOB	Prime Earmarks for newborn Calfs
PDCB	Personalised Document
...	Full List available on demand
PATP	Party Type
ASMY	Assembly place
CLEAN	Cleaning company
DEALR	Cattle dealer
DLRFC	Cattle dealer with facility
FARM	Cattle farmer
SLGHS	Slaughterhouse
TRNS	Transporter
VET	Veterinary
PERS	Natural Person
DEST	Destruction Company

FDTN	Federation
SERV	Services
CITY	Municipality
MEAT	Meat Dealer
AGCY	Agency
SPVSR	Supervisor
CTRL	Control point
QUAL	Qualified person
PBRs	SanitaryUnitPassportBlockingReason
UPLC	Unpaid License
BADCO	Bad Cooperation
PBST	SanitaryUnitPassportBlockingStatus
NRM	Normal
BLCK	Blocked
PPPR	PassportPrintReason
PCHSE	Change of Sanitary Unit
IMP	Import
STAT	Change Hormone Status
LOSS	Loss
TKOVR	Change Responsible Party
DMGD	Damaged
IDREG	Bovine identification regularization
CPLID	Loss both earmarks Regularization
OTHCS	Other Constations
ALIV	Bovine reset Alive
NCOM	Not commercialised Bovine
RES	Change Residue Status
PCHVC	Purchase Vealcalf
BOVVC	Switch Bovine towards Vealcalf
VCBOV	Switch Vealcalf towards Bovine
VCDD	Delivery Vealcalf died meanwhile
RCE	Change Racetype
IDMOT	Change Mother Bovine Number
EXPL	Change Exploitation
GDR	Change Gender
BDTE	Change Birthdate
HTPE	Change Hairtype
CHLOC	Change Main Location Sanitary unit
BOVDD	Bovine Delivery died meanwhile
RSPAD	Responsible Party Address Change
LOCAD	Change Address Main Location

ADDCH	Address Change
DD4RG	Bovine died after delivery before registration
1ID	First Identification
PPPU	Passport Print Urgency
NRM	Printing - not urgent
URG	Printing - urgent
NO	No printing
PRQU	Production Quality
STD	Standard
BIO	Biological Facility
LBL	Label
PDGRE	Pedigree / Selection
PVL1	PVL001 Belki
PVL2	PVL002 Hendrix
PVL3	PVL003 Quartes
PVL4	PVL004
PVL5	PVL005
PVL6	PVL006
PVL7	PVL007
PVL8	PVL008
PVL9	PVL009
PVL10	PVL010 Mechelse Koekoek
PVL11	PVL011 Coprobel
PVL12	PVL012 Val Dieu
PVL13	PVL013 P. Hesbaye
PVL14	PVL014 Coprosain
PVL15	PVL015 Coq Ard
PVL16	PVL016
PVL17	PVL017
PVL18	PVL018
PVL19	PVL019
PRWA	Production Ware
MEAT	Meat production
AIMS	Artificial insemination
MILK	Milkproduction
NOCS	No consumption objective
MIX	Mixed production
PGLET	Piglet-breed establishment
MGOAT	Goat Meat production
CELAY	Consumption eggs - lay establishment
HERL	Hatching egg - reproduction - lay

HERM	Hatching egg - reproduction - meat
HESL	Hatching egg - selection - lay
HESM	Hatching egg - selection - meat
BL	Breed - lay
BRL	Breed - reproduction - lay
BRM	Breed - reproduction - meat
BSL	Breed - selection - lay
BSM	Breed - selection- meat
GAME	Game set-out
FISH	Fish (meat)
CVR	Caviar
HNY	Honey
FUR	Fur
PUTP	ProductionUnitType
DFLT	Default
RIIT	RiskItemType
DISS	Disease
HRMN	Hormone
PCTM	Pig Contaminates
BDIS	Bovine Diseases
PDIS	Pig Diseases
PBDIS	Poultry Diseases
BHRM	Bovine Hormones
PHRM	Pig Hormones
BRSD	Bovine Residue
PRSD	Pig Residue
DDIS	Deer Diseases
GDIS	Goat Diseases
SDIS	Sheep Diseases
OHRM	Hormones Other Animals
BCTM	Bovine Contaminates
CNTM	Contaminate
RES	Residue
BRES	Bovine Residue
PRES	Pig Residue
ORES	Residue - Other Animals
OCTM	Contaminates Other
RIOG	RiskOrigin
VST	Visit
BLD	Blood Analysis
XMN	Physical Examination

RIQR	RiskQualificationReason
NOPAY	Lagging Payments
OTH	Other
RIQU	RiskQualification
C01	1
C02	2
C03	3
C04	4
C05	5
C06	6
C07	7
C08	8
C09	9
RIST	RiskStatus
1	Normal
2	Suspicion
3	Suspension
4	Under Supervision
CANC	Cancelled
RITP	RiskType
RES	Residue
DISS	Disease
CNTM	Contaminate
OTH	Other Risk
HORM	Hormone
RSST	RiskCondition
0	Center
1	Antecedents unknown
2	Antecedents known
3	Disease free
4	Officially disease free
SPTP	SanitaryUnitPartyType
	Reserved
SUHS	Sanitary Unit Housing
NAT	Nature and landscape management
CAGE	Enriched cage
BTRY	Battery system
FREE	Free range
OUT	Outdoor run
BIO	Bio
HLTHA	Healthqualification A

HLTHB	Healthqualification B
HLTHC	Healthqualification C
SUKD	SanitaryUnitKind
IND	Individuele Huisvesting
GRP	Huisvesting In Groep
SUTP	SanitaryUnitType
BOV	Bovine
SGH	Sheep, Goats and Horses
PIG	Pigs
RST	Roast Game
FOWL	Fowl
RDNT	Rodent
BFS	Bees, Frogs and Snails
AQUA	Fish, Aquaculture
TITP	Treatment Item Type
VAC1	1st Vaccination
VAC2	2nd Vaccination
VACLT	Last Vaccination
VACRP	Repeated Vaccination
VACPR	Prime Vaccination
TRMT	Treatment
AFTCR	Aftercare
TMLV	Treatment Level
GRP	Group
INV	Individual
TMTP	Treatment Type
SCINJ	SC injection
IDINJ	ID injection
IMINJ	IM injection
ININJ	IN injection
IVINJ	IV injection
IMMIJ	IMM injection
IPINJ	IP injection
ORALW	Oral use - water
ORALF	Oral use -feed
POUR	Pour-on methode
BOLUS	Bolus
WASH	Wash /spray dip
INFUS	Infuus vochttherapie
TUBR	BlockingReason
SANR	Sanitary Reason

ADMIN	Administrative Reason
UNTRC	Untraceable
TUST	TrackingUnitStatus – Sanitary Units
ACT	Active
STP	Stopped
TUST	TrackingUnitStatus – Animals
INV	Bovine is in Sanitary Unit Inventory
MOV	Bovine moved from Sanitary Unit: Pp read
C03	Bovine arrived in Sanitary Unit other federation
AWAI	Bov arrived in SanitaryUnit awaiting purchase exam
C05	Bovine has arrived in new Sanitary Unit
RJCT	Purchase has been rejected in new Sanitary Unit
DDSLH	Bovine is dead: Slaughterhouse
XPRT	Bovine has been exported
DDKV	Bovine is dead: Meat Production
DDRDC	Bovine is dead : Rendac (destruction facility)
BLCK	Bovine blocked due to sale fr Facility H status
UNIT	Unit Codes
KG	KG
MG	MG
L	L
DL	DL
CL	CL
ML	ML
DOSIS	Dosis
G	G
TUBE	Tube
SET	4 Tubes
VATP	VLMAnimalType
MANC	Mestkalveren
MIYT1	Melkvee - vervangingsvee jonger dan 1 jaar
MAYT1	Mestvee - vervangingsvee jonger dan 1 jaar
MIB12	Melkvee - vervangingsvee tussen 1 en 2 jaar
MAB12	Mestvee - vervangingsvee tussen 1 en 2 jaar
MLKCW	Melkkoe
SCLCW	Zoogkoe
OTBOV	Andere runderen
VEOR	Veterinary Order
NL	Dutch Speaking Veterinary Order
FR	French Speaking Veterinary Order

Interface Definition

The archive underneath contains a more detailed description for the interfaces. For each interface we list it's direction, it's short description, it's input and output schemas, etc...

Interface EXAN – ExportAnimal

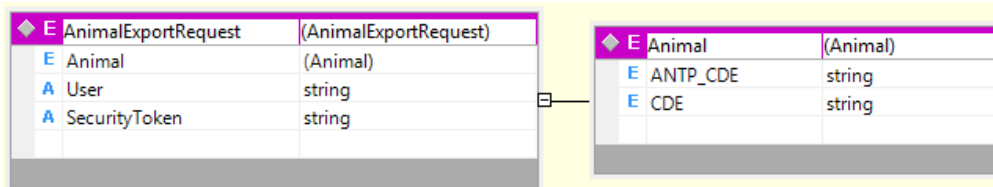
Direction: Export

Purpose: Retrieve a detailed insight of an animal (All characteristics, risk status, history,...)

Layout-Documentation:

http://gas.sanitrace.be/int/QAS_Sanitel_ExtInterfacingSvcs/SanitelServices.aspx?op=ExportAnimal

Input Schema: AnimalExportReq



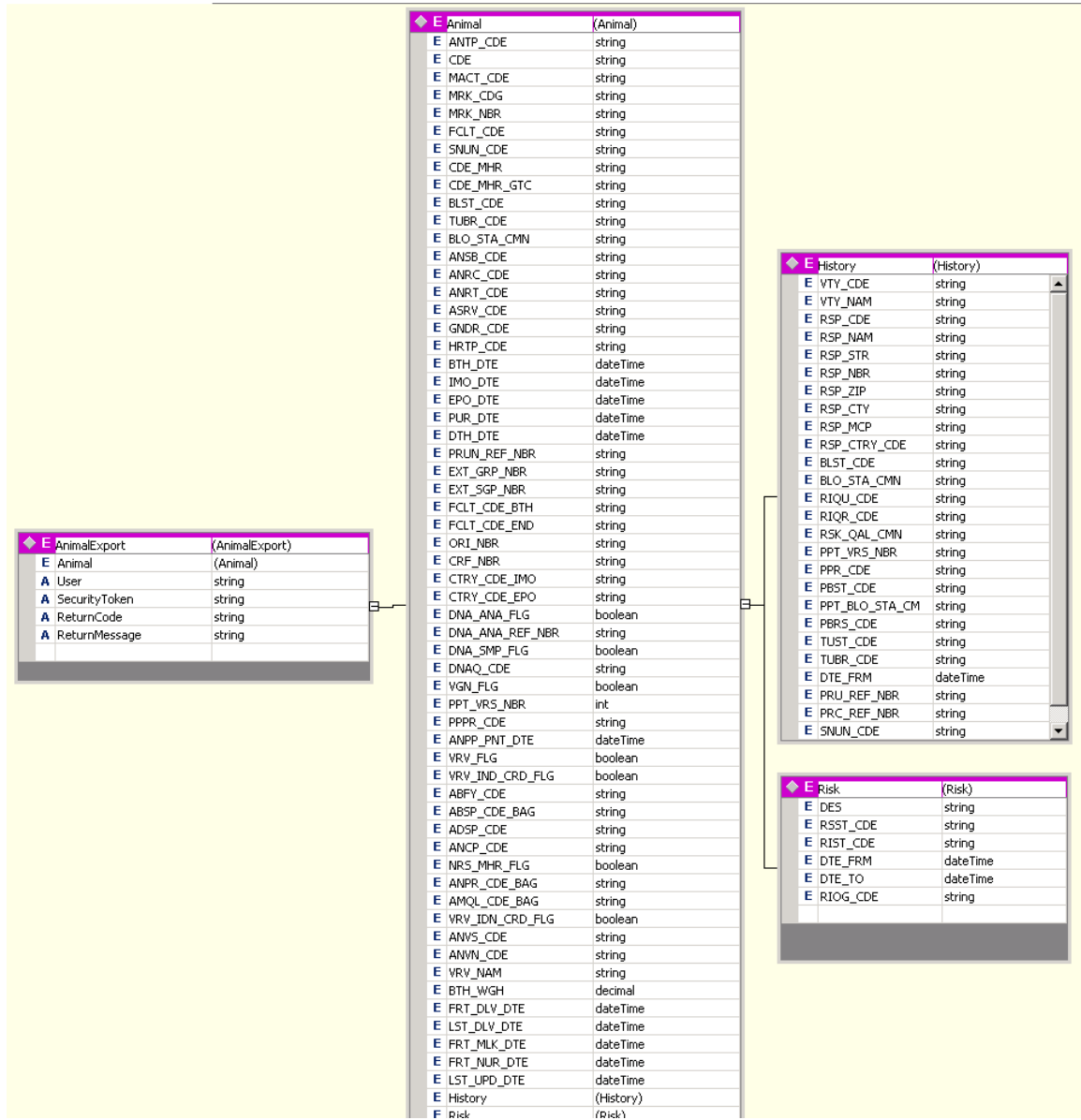
<http://Sanitel.EAI/SanitelRepository/SanitelServices/AnimalExportRequestSchema>

XML Example(s)

Example EXAN-1 – Retrieve detailed animal information for two bovines, a local one and an imported one...

```
<AnimalExportRequest
  xmlns="http://Sanitel.EAI/SanitelRepository/SanitelServices/
  AnimalExportRequestSchema" User="TESTXML" SecurityToken="N/A">
  <Animal>
    <ANTP_CDE>BOV</ANTP_CDE>
    <CDE>BE12345678</CDE>
  </Animal>
  <Animal>
    <ANTP_CDE>BOV</ANTP_CDE>
    <CDE>NL456453543</CDE>
  </Animal>
</AnimalExportRequest>
```

Output Schema: AnimalExport



<http://Sanitel.EAI/SanitelRepository/SanitelServices/AnimalExportSchema>

Interface EXAMN - ExportAnimalMovementNotificationOverview

Direction: Export

Purpose: Retrieve an overview of movements of individual animals -> from /to a certain facility ...) – This interface can also be used for herd animals yet will not have any animal details. Instead ExportMovementNotificationOverview can be used.

Layout-Documentation:

http://qas.sanitrace.be/int/QAS_Sanitel_ExtInterfacingSvcs/SanitelServices.aspx?op=ExportAnimalMovementNotificationOverview

Input Schema:

Field	Type
AnimalMovementNotificationOverviewExportRequest	(AnimalMovementNotificationOverviewExportRequest)
E Movement	(Movement)
A User	string
A SecurityToken	string
A ReturnCode	string
A ReturnMessage	string
A OnBehalfRole	string
A OnBehalfEntity	string
A UserLanguage	string

Field	Type
E NOTF_ID	long
E NOTP_CDE	string
E NOKD_CDE	string
E NOST_CDE	string
E DTE_FRM	dateTime
E DTE_TO	dateTime
E REF_NBR	string
E DOC_NBR	string
E LIC_PLT	string
E ANTP_CDE	string
E ANSB_CDE	string
E PATY_CDE_TRS	string
E FCLT_CDE	string
E SNLN_CDE	string
E ZIP	string
E ANML_REF_NBR	string
E UPD_DTE_FRM	dateTime
E UPD_DTE_TO	dateTime

<http://Sanitel.EAI/SanitelRepository/SanitelServices/AnimalMovementNotificationOverviewExportRequestSchema>

XML Example(s)

Example EXAMN-1 – Retrieve all movements of a certain animal in a certain period

```
<AnimalMovementNotificationOverviewExportRequest
  xmlns="http://Sanitel.EAI/SanitelRepository/SanitelServices/
  AnimalMovementNotificationOverviewExportRequestSchema"
  User="TESTXML" SecurityToken="N/A" ResultIndex="0">
  <Movement>
    <DTE_FRM>2004-01-01T00:00:00</DTE_FRM>
    <DTE_TO>2009-01-01T00:00:00</DTE_TO>
    <ANML_REF_NBR>NL456453543</ANML_REF_NBR>
  </Movement>
</AnimalMovementNotificationOverviewExportRequest>
```

Example EXAMN-2 – All arrivals of bovines to a certain slaughterhouse in a certain period

```
<AnimalMovementNotificationOverviewExportRequest
  xmlns="http://Sanitel.EAI/SanitelRepository/SanitelServices/
  AnimalMovementNotificationOverviewExportRequestSchema"
  User="TESTXML" SecurityToken="N/A" ResultIndex="0">
  <Movement>
```

```

<DTE_FRM>2004-01-20T00:00:00</DTE_FRM>
<DTE_TO>2004-01-27T23:59:59</DTE_TO>
<ANTP_CDE>BOV</ANTP_CDE>
<FCLT_CDE>BE92700117</FCLT_CDE>
</Movement>
</AnimalMovementNotificationOverviewExportRequest>

```

Example EXAMN-3 – Retrieve all animal movements by a certain Transporter party over the past week

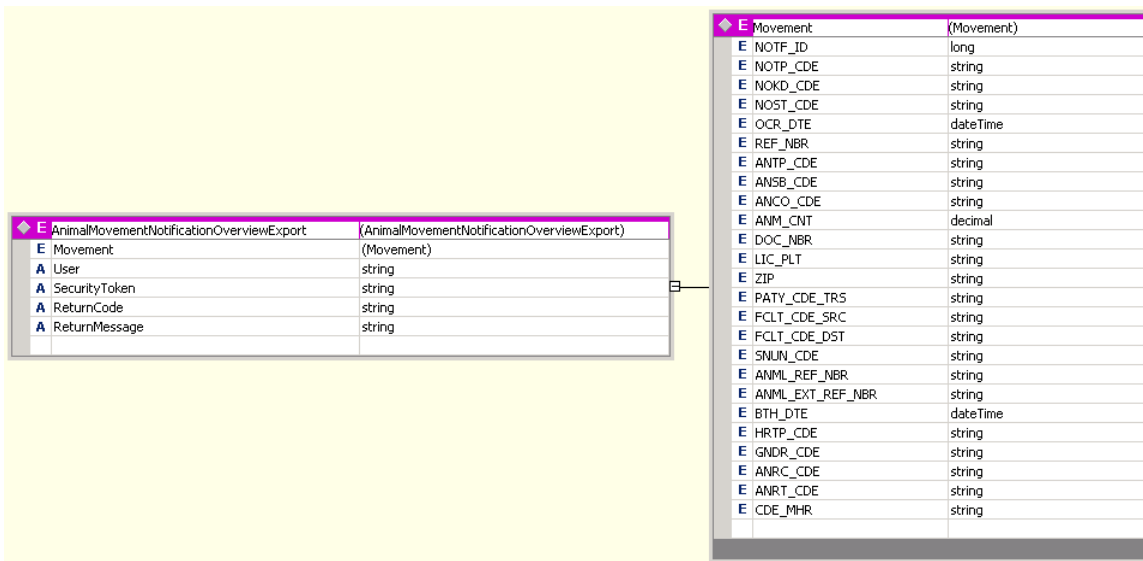
```

<AnimalMovementNotificationOverviewExportRequest
xmlns="http://Sanitel.EAI/SanitelRepository/SanitelServices/
AnimalMovementNotificationOverviewExportRequestSchema"
User="TESTXML" SecurityToken="N/A" ResultIndex="0">
<Movement>
<DTE_FRM>2007-11-10T00:00:00</DTE_FRM>
<DTE_TO>2007-11-15T23:59:59</DTE_TO>
<ANTP_CDE>BOV</ANTP_CDE>
<PATY_CDE_TRS>BE123456789</PATY_CDE_TRS>
</Movement>
</AnimalMovementNotificationOverviewExportRequest>

```

Output Schema: AnimalMovementNotificationOverviewExport

This schema is slightly more general than strictly necessary. In fact a distinction could have been made between individual animals and herds. If called for herd-animals these fields remain empty.

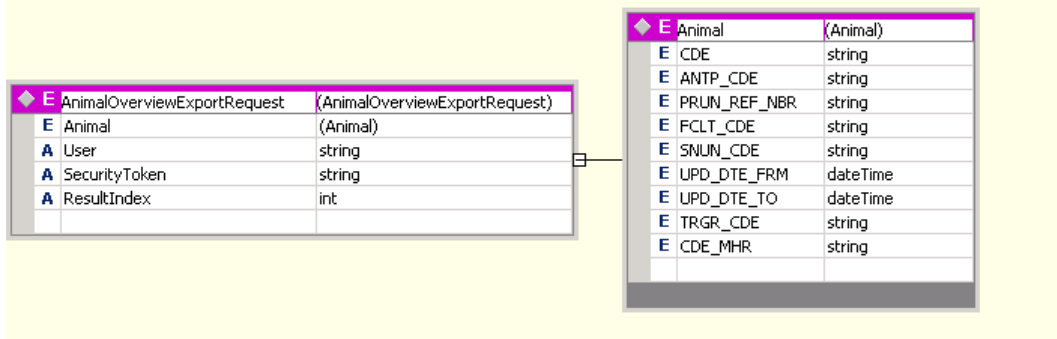


<http://Sanitel.EAI/SanitelRepository/SanitelServices/AnimalMovementNotificationOverviewExportSchema>

Interface EXANO - ExportAnimalOverview

Direction: Export

Purpose: Retrieve an overview of animals and their key characteristics



Layout-Documentation:

http://gas.sanitrac.be/int/OAS_Sanitel_ExtInterfacingSvcs/SanitelServices.aspx?op=ExportAnimalOverview

Input Schema: AnimalOverviewExportRequest

<http://Sanitel.EAI/SanitelRepository/SanitelServices/AnimalOverviewExportRequestSchema>

XML Example(s)

Example EXANO-1 – Retrieve all bovines in a certain Sanitary Unit

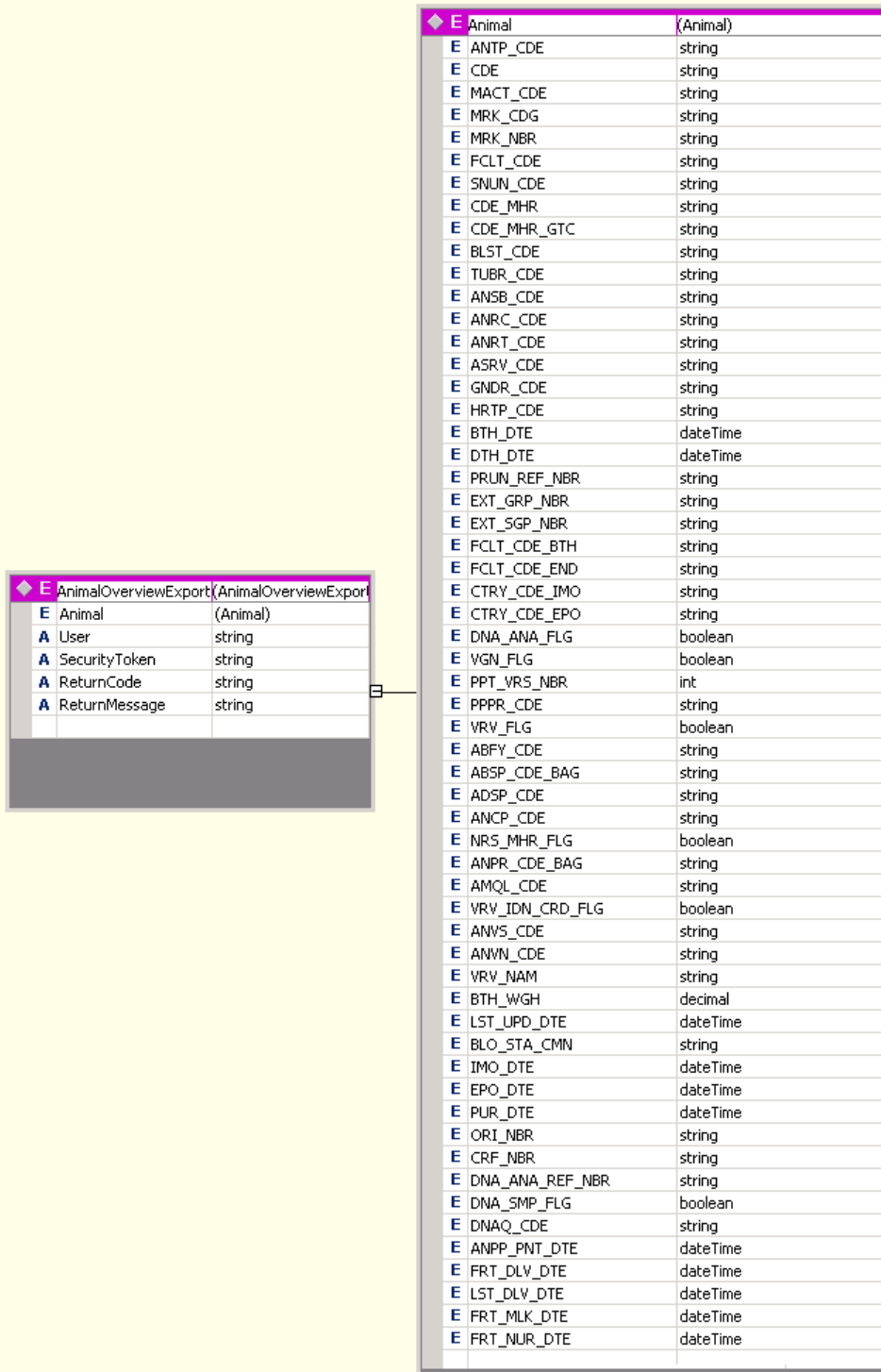
```
<AnimalOverviewExportRequest
  xmlns="http://Sanitel.EAI/SanitelRepository/SanitelServices/
  AnimalOverviewExportRequestSchema"
  User="TESTXML" SecurityToken="N/A" ResultIndex="0">
  <Animal>
    <ANTP_CDE>BOV</ANTP_CDE>
    <SNUN_CDE>BE12345678-0101</SNUN_CDE>
  </Animal>
</AnimalOverviewExportRequest>
```

Example EXANO-2 – Retrieve all bovines that have been updated / changed today

```
<AnimalOverviewExportRequest
  xmlns="http://Sanitel.EAI/SanitelRepository/SanitelServices/
  AnimalOverviewExportRequestSchema"
  User="TESTXML" SecurityToken="N/A" ResultIndex="0">
  <Animal>
    <ANTP_CDE>BOV</ANTP_CDE>
    <UPD_DTE_FRM>2007-11-15T00:00:00</UPD_DTE_FRM>
    <UPD_DTE_TO>2007-11-15T23:59:59</UPD_DTE_TO>
  </Animal>
</AnimalOverviewExportRequest>
```

A query like this one can take some time as we have chosen for now not to put an index on it yet (in addition – because of the migration – all animals last update date will be the day of the migration) If this query is to be used structurally and regularly let us know...

Output Schema: AnimalOverviewExport



<http://Sanitel.EAI/SanitelRepository/SanitelServices/AnimalOverviewExportSchema>

Interface EXCNO - ExportChangeNotificationOverview

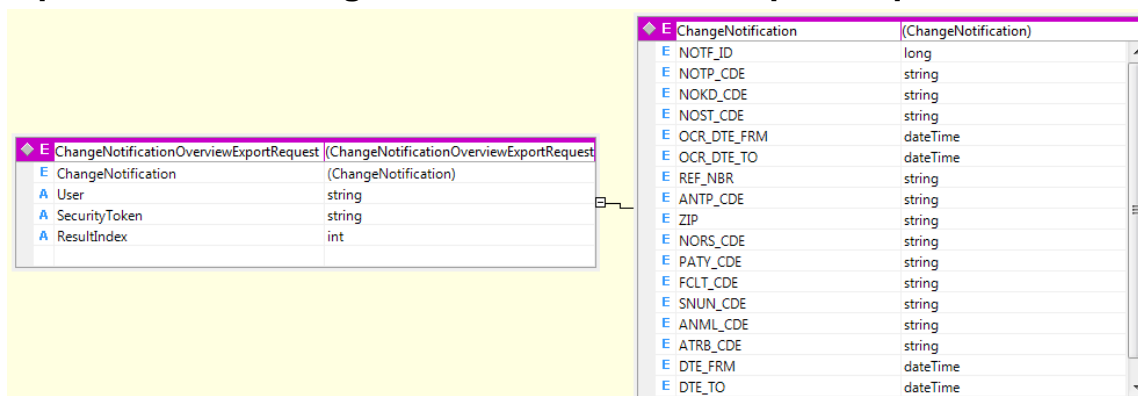
Direction: Export

Purpose: Retrieve an overview of changes to a Facility, a Sanitary Unit or Animal characteristics. For a description of possible change attributes – see ImportChangeNotification

Layout-Documentation:

http://qas.sanitrac.be/int/QAS_Sanitel_ExtInterfacingSvcs/SanitelServices.asmx?op=ExportChangeNotificationOverview

Input Schema: ChangeNotificationOverviewExportRequest



<http://Sanitel.EAI/SanitelRepository/SanitelServices/ChangeNotificationOverviewExportRequestSchema>

XML Example(s)

Example EXCNO-1 – Retrieve all changes on animals (bovines) on a certain day

```
<ChangeNotificationOverviewExportRequest User="TESTXML" SecurityToken="N/A"
  ResultIndex="0"
  xmlns="http://Sanitel.EAI/SanitelRepository/SanitelServices/
    ChangeNotificationOverviewExportRequestSchema" >
  <ChangeNotification>
    <NOTP_CDE>CHANM</NOTP_CDE>
    <DTE_FRM>2008-09-25T00:00:00</DTE_FRM>
    <DTE_TO>2008-09-25T23:59:59</DTE_TO>
  </ChangeNotification>
</ChangeNotificationOverviewExportRequest>
```

Example EXCNO-2 – Retrieve all changes on sheep-facilities over a certain month

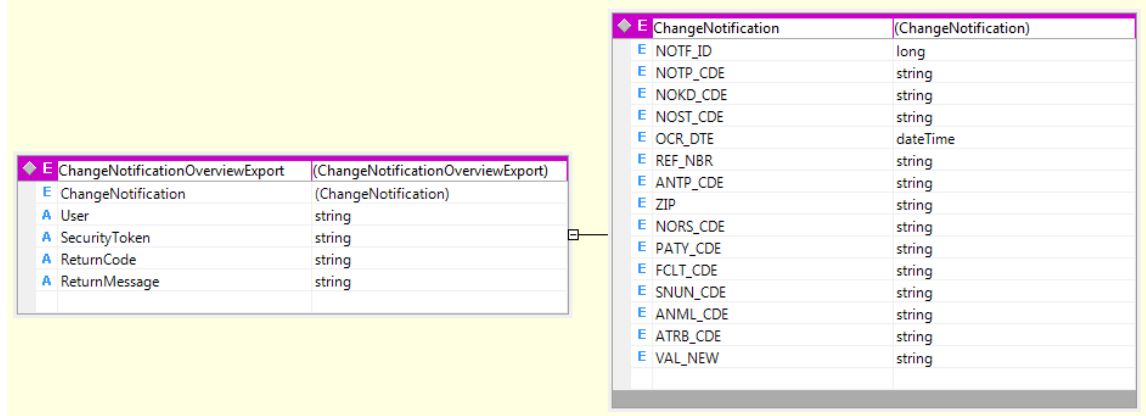
```
<ChangeNotificationOverviewExportRequest User="TESTXML" SecurityToken="N/A"
  ResultIndex="0"
  xmlns="http://Sanitel.EAI/SanitelRepository/SanitelServices/
    ChangeNotificationOverviewExportRequestSchema" >
```

```

<ChangeNotification>
  <NOTP_CDE>CHFCY</NOTP_CDE>
  <ANTP_CDE>SHP</ANTP_CDE>
  <DTE_FRM>2008-09-01T00:00:00</DTE_FRM>
  <DTE_TO>2008-09-30T23:59:59</DTE_TO>
</ChangeNotification>
</ChangeNotificationOverviewExportRequest>

```

Output Schema: ChangeNotificationOverviewExport



<http://Sanitel.EAI/SanitelRepository/SanitelServices/ChangeNotificationOverviewExportSchema>

Interface EXFAO - ExportFacilityOverview

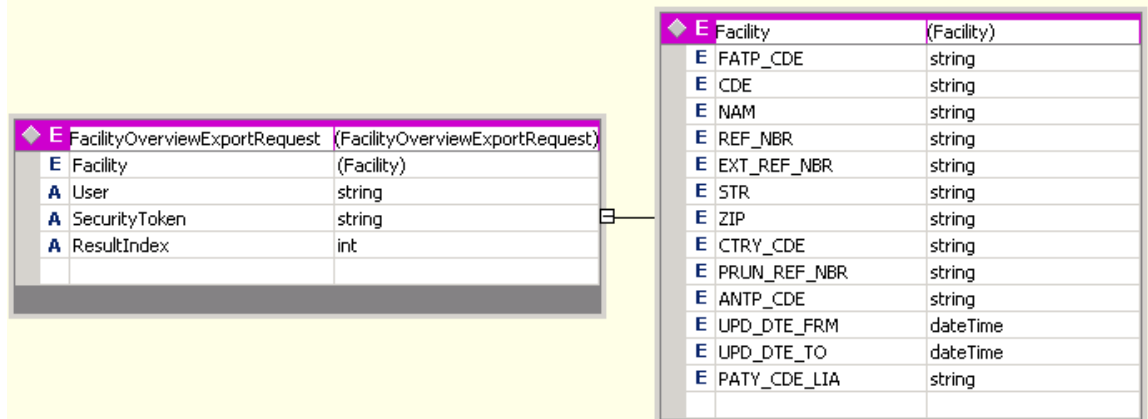
Direction: Export

Purpose: Retrieve a general overview of facilities (name/address infor, reference numbers, liable party details,...)

Layout-Documentation:

http://qas.sanitrac.be/int/QAS_Sanitel_ExtInterfacingSvc/SanitelServices.asmx?op=ExportFacilityOverview

Input Schema: FacilityOverviewExportRequest



<http://Sanitel.EAI/SanitelRepository/SanitelServices/FacilityOverviewExportRequestSchema>

XML Example(s)

Example EXFAO – 1 – Retrieve all sheep owners in Brugge

```
<FacilityOverviewExportRequest
xmlns="http://Sanitel.EAI/SanitelRepository/SanitelServices/
FacilityOverviewExportRequestSchema"
User="TESTXML" SecurityToken="N/A" ResultIndex="0">
  <Facility>
    <FATP_CDE>FARM</FATP_CDE>
    <ANTP_CDE>SHP</ANTP_CDE>
    <ZIP>8000</ZIP>
  </Facility>
</FacilityOverviewExportRequest>
```

Example EXANO-2 – Retrieve all facilities that were updated this month

```
<FacilityOverviewExportRequest
xmlns="http://Sanitel.EAI/SanitelRepository/SanitelServices/
FacilityOverviewExportRequestSchema"
User="TESTXML" SecurityToken="N/A" ResultIndex="0">
  <Facility>
    <UPD_DTE_FRM>2007-11-15T00:00:00</UPD_DTE_FRM>
    <UPD_DTE_TO>2007-11-15T23:59:59</UPD_DTE_TO>
  </Facility>
</FacilityOverviewExportRequest>
```

```
</Facility>
</FacilityOverviewExportRequest>
```

Output Schema: FacilityOverviewExport

E FacilityOverviewExport (FacilityOverviewExport)	
E	Facility (Facility)
A	User string
A	SecurityToken string
A	ReturnCode string
A	ReturnMessage string

E Facility (Facility)	
E	FATP_CDE string
E	CDE string
E	NAM string
E	REF_NBR string
E	EXT_REF_NBR string
E	AL1 string
E	AL2 string
E	STR string
E	NBR string
E	BOX string
E	ZIP string
E	CTY string
E	MCP string
E	CTRY_CDE string
E	TPH string
E	LIA_CDE string
E	LIA_NAM string
E	LIA_REF_NBR string
E	LIA_EXT_REF_NBR string
E	LIA_AL1 string
E	LIA_AL2 string
E	LIA_STR string
E	LIA_NBR string
E	UPD_DTE dateTime
E	GEO_LAT decimal
E	GEO_LON decimal
E	GEO_X decimal
E	GEO_Y decimal
E	GXYS_CDE string
E	GEO_STR_LTH decimal
E	GEO_PLG_DEF string
E	GIS_REF string

<http://Sanitel.EAI/SanitelRepository/SanitelServices/FacilityOverviewExportSchema>

Interface EXMNO - ExportMovementNotificationOverview

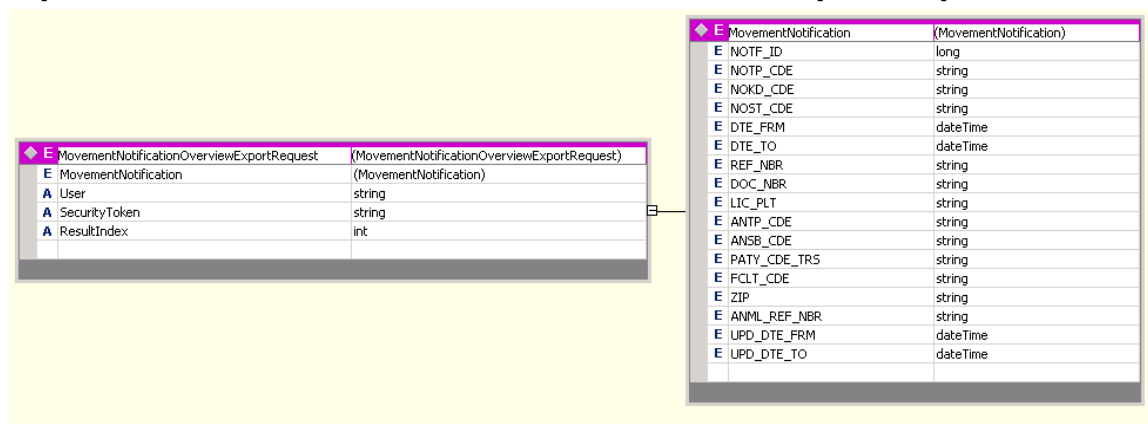
Direction: Export

Purpose: Retrieve an overview of movements on movement level and not on

Layout-Documentation:

http://qas.sanitrac.be/int/QAS_Sanitel_ExtInterfacingSvcs/SanitelServices.aspx?op=ExportMovementNotificationOverview

Input Schema: MovementNotificationOverviewExportRequest



<http://Sanitel.EAI/SanitelRepository/SanitelServices/MovementNotificationOverviewExportRequestSchema>

XML Example(s)

Example EXAMN-1 – Retrieve all movements of a certain animal in a certain period

```
<MovementNotificationOverviewExportRequest
  xmlns="http://Sanitel.EAI/SanitelRepository/SanitelServices/
  MovementNotificationOverviewExportRequestSchema"
  User="TESTXML" SecurityToken="N/A" ResultIndex="0">
  <MovementNotification>
    <DTE_FRM>2004-01-01T00:00:00</DTE_FRM>
    <DTE_TO>2099-01-01T00:00:00</DTE_TO>
    <ANML_REF_NBR>NL456453543</ANML_REF_NBR>
  </MovementNotification>
</MovementNotificationOverviewExportRequest>
```

Example EXAMN-2 – Retrieve all arrivals of pigs to a certain market on a certain day

```
<MovementNotificationOverviewExportRequest
  xmlns="http://Sanitel.EAI/SanitelRepository/SanitelServices/
  MovementNotificationOverviewExportRequestSchema"
  User="TESTXML" SecurityToken="N/A" ResultIndex="0">
  <MovementNotification>
    <NOTP_CDE>MMARV</NOTP_CDE>
    <DTE_FRM>2007-11-15T00:00:00</DTE_FRM>
    <DTE_TO>2097-11-15T23:59:59</DTE_TO>
  </MovementNotification>
</MovementNotificationOverviewExportRequest>
```

```

<ANTP_CDE>PIG</ANTP_CDE>
<FCLT_CDE>BE56784321</FCLT_CDE>
</MovementNotification>
</MovementNotificationOverviewExportRequest>

```

Example EXAMN-3 – Retrieve all movements by a certain Transporter party over the past week

```

<MovementNotificationOverviewExportRequest
  xmlns="http://Sanitel.EAI/SanitelRepository/SanitelServices/
    MovementNotificationOverviewExportRequestSchema"
  User="TESTXML" SecurityToken="N/A" ResultIndex="0">
  <MovementNotification>
    <DTE_FRM>2004-07-20T00:00:00</DTE_FRM>
    <DTE_TO>2004-07-21T00:00:00</DTE_TO>
    <PATY_CDE_TRS>BE22002870</PATY_CDE_TRS>
  </MovementNotification>
</MovementNotificationOverviewExportRequest>

```

Output Schema: MovementNotificationOverviewExport

The screenshot shows two XML Schema Explorer windows. The left window displays the 'MovementNotificationOverviewExport' schema with the following elements:

Element Name	Base Type
MovementNotificationOverviewExport	(MovementNotificationOverviewExport)
MovementNotificationOverview	(MovementNotificationOverview)
User	string
SecurityToken	string
ReturnCode	string
ReturnMessage	string

The right window displays the 'MovementNotificationOverview' schema with the following elements:

Element Name	Base Type
MovementNotificationOverview	(MovementNotificationOverview)
NOTP_CDE	string
NOKD_CDE	string
NOST_CDE	string
OCR_DTE	dateTime
REF_NBR	string
ANTP_CDE	string
ANSB_CDE	string
ANCO_CDE	string
ANM_CNT	decimal

<http://Sanitel.EAI/SanitelRepository/SanitelServices/MovementNotificationOverviewExportSchema>

Interface EXMVN - ExportMovementNotification

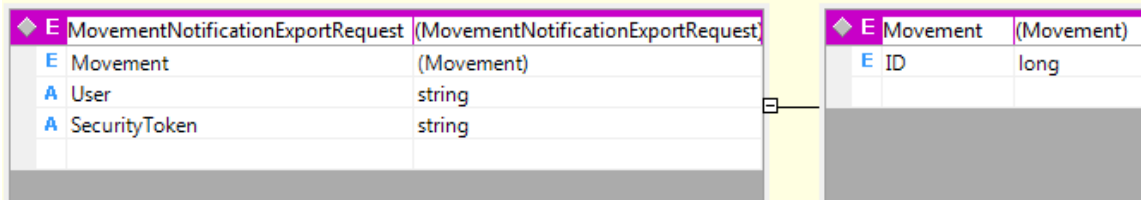
Direction: Export

Purpose: Retrieve a detailed insight in a movement (involved parties, involved facilities, involved animals,...)

Layout-Documentation:

http://qas.sanitrace.be/int/QAS_Sanitel_ExtInterfacingSvcs/SanitelServices.asmx?op=ExportMovementNotification

Input Schema: MovementNotificationExportRequest



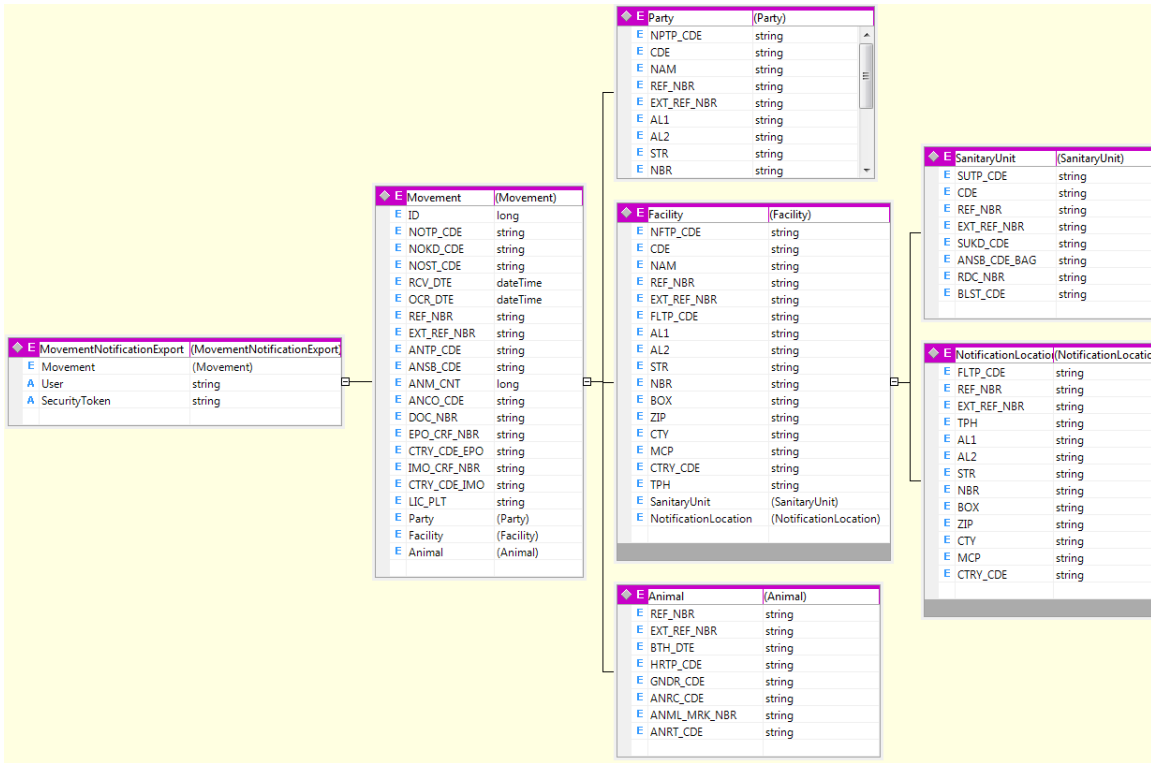
<http://Sanitel.EAI/SanitelRepository/SanitelServices/MovementNotificationExportRequestSchema>

XML Example(s)

Example EXFAO – 1 – Retrieve the full detail for movements 300034 and 300035

```
<MovementNotificationExportRequest
  xmlns="http://Sanitel.EAI/SanitelRepository/SanitelServices/
  MovementNotificationExportRequestSchema" User="TESTXML" SecurityToken="N/A">
  <Movement>
    <ID>300034</ID>
  </Movement>
  <Movement>
    <ID>300035</ID>
  </Movement>
</MovementNotificationExportRequest>
```

Output Schema: MovementNotificationExport



<http://Sanitel.EAI/SanitelRepository/SanitelServices/MovementNotificationExportSchema>

Interface EXPAO - ExportPartyOverview

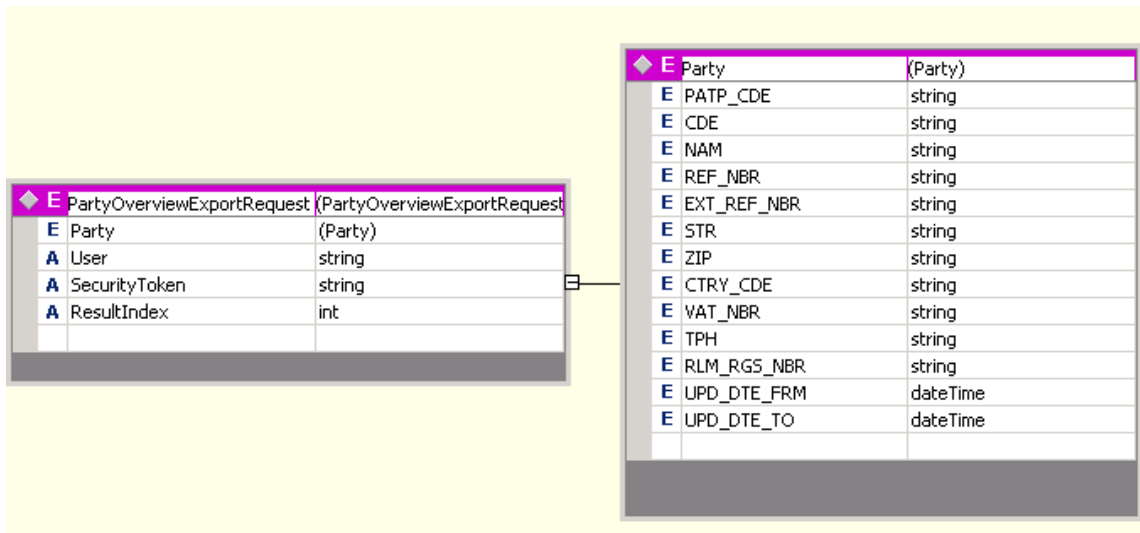
Direction: Export

Purpose: Retrieve a general overview of Parties (Name/Address, Reference Numbers, Contact Data,...)

Layout-Documentation:

http://qas.sanitrac.be/int/QAS_Sanitel_ExtInterfacingSvc/SanitelServices.asmx?op=ExportPartyOverview

Input Schema: PartyOverviewExportRequest



<http://Sanitel.EAI/SanitelRepository/SanitelServices/PartyOverviewExportRequestSchema>

XML Example(s)

Example EXPA – 1 – Retrieve transporter “Wuyts” or “Wuits” or whatever WU...

```
<PartyOverviewExportRequest
  xmlns="http://Sanitel.EAI/SanitelRepository/SanitelServices/
  PartyOverviewExportRequestSchema"
  User="TESTXML" SecurityToken="N/A" ResultIndex="0">
  <Party>
    <PATP_CDE>TRS</PATP_CDE>
    <NAM>WU%</NAM>
  </Party>
</PartyOverviewExportRequest>
```

Example EXPA – 2 – Retrieve all Slaughterhouses

```
<?xml version="1.0" encoding="utf-8"?>
<PartyOverviewExportRequest xmlns="http://Sanitel.EAI/SanitelRepository/
  SanitelServices/PartyOverviewExportRequestSchema"
```

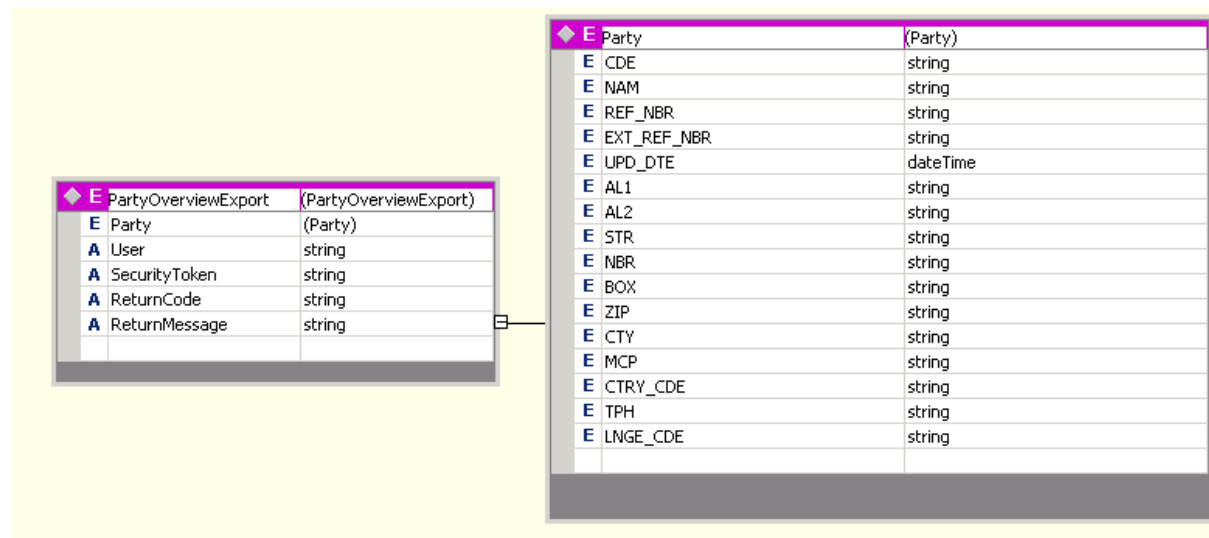
```

User="TESTXML" SecurityToken="N/A" ResultIndex="0">
  <Party>
    <PATP_CDE>SLGHS</PATP_CDE>
  </Party>
</PartyOverviewExportRequest>

```

Output Schema: PartyOverviewExport

<http://Sanitel.EAI/SanitelRepository/SanitelServices/PartyOverviewExportSchema>



Interface EXLPO - ExportLiablePartyOverview

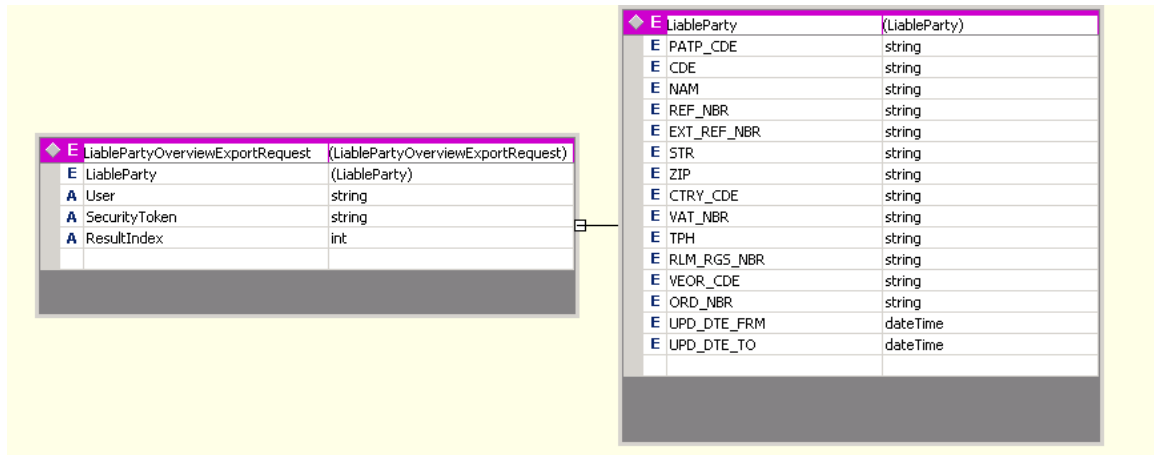
Direction: Export

Purpose: Retrieves a detailed overview of Liable Party information including sensitive information such as names, GSMs, phone numbers,...

Layout-Documentation:

http://qas.sanitrace.be/int/QAS_Sanitel_ExtInterfacingSvcs/SanitelServices.asmx?op=ExportLiablePartyOverview

Input Schema: LiablePartyOverviewExportRequest



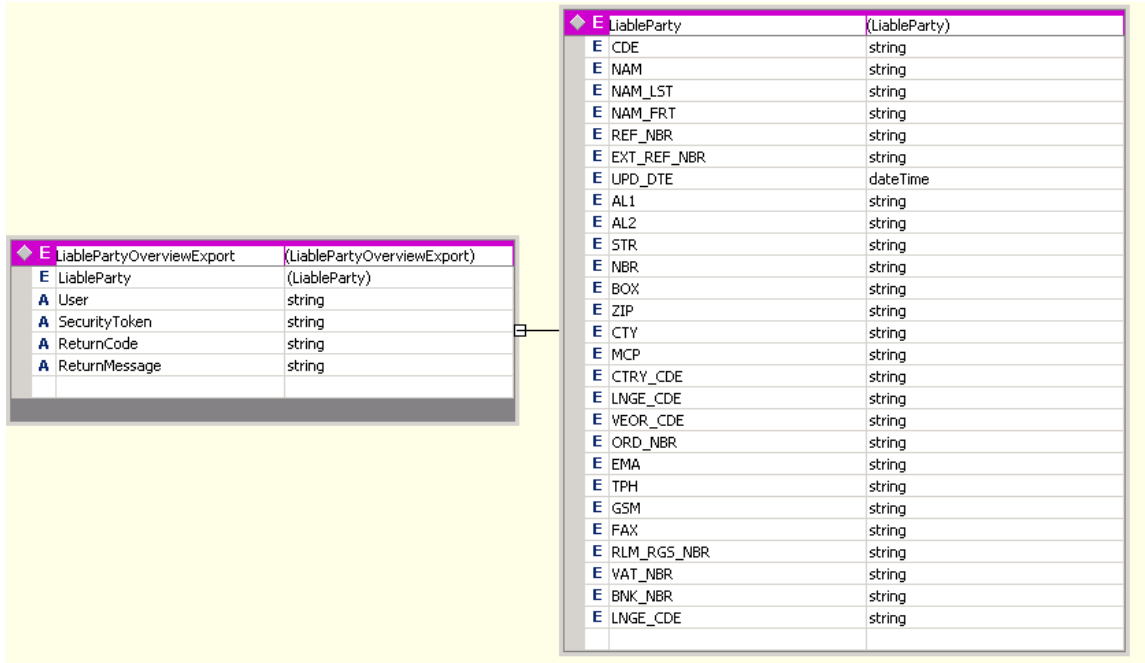
<http://Sanitel.EAI/SanitelRepository/SanitelServices/LiablePartyOverviewExportRequestSchema>

XML Example(s)

Example EXPA – 1 – Retrieve detail info on the Dutch speaking veterinary with ordernumber 1257

```
<LiablePartyOverviewExportRequest
  xmlns="http://Sanitel.EAI/SanitelRepository/SanitelServices/
  LiablePartyOverviewExportRequestSchema"
  User="TESTXML" SecurityToken="N/A" ResultIndex="0">
  <LiableParty>
    <VEOR_CDE>NL</VEOR_CDE>
    <ORD_NBR>1257</ORD_NBR>
  </LiableParty>
</LiablePartyOverviewExportRequest>
```

Output Schema: LiablePartyOverviewExport



<http://Sanitel.EAI/SanitelRepository/SanitelServices/LiablePartyOverviewExportSchema>

Interface EXPUO - ExportProductionUnitOverview

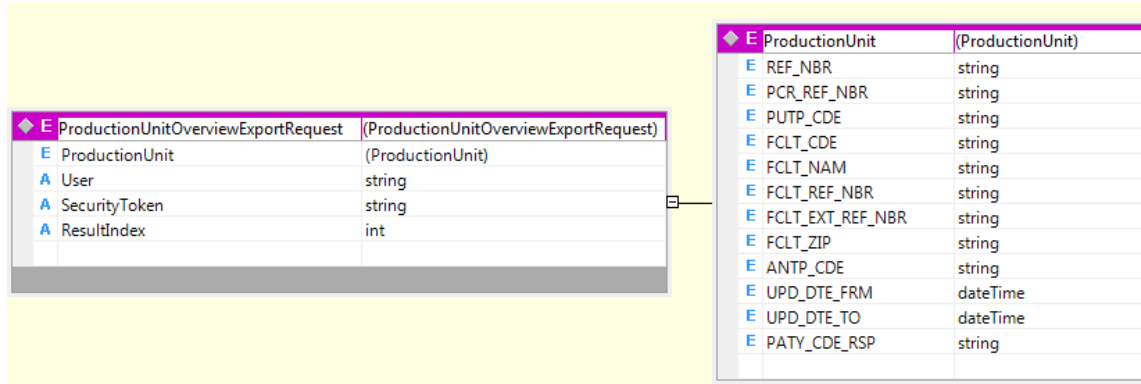
Direction: Export

Purpose: Retrieve a general overview of which exploitation units are used at which facilities / sanitary units

Layout-Documentation:

http://gas.sanitrace.be/int/QAS_Sanitel_ExtInterfacingSvcs/SanitelServices.asmx?op=ExportProductionUnitOverview

Input Schema: ProductionUnitOverviewExportRequest



<http://Sanitel.EAI/SanitelRepository/SanitelServices/ProductionUnitOverviewExportRequestSchema>

XML Example(s)

Example 1 – Retrieve all production units of a certain facility

```
<ProductionUnitOverviewExportRequest
  xmlns="http://Sanitel.EAI/SanitelRepository/SanitelServices/
  ProductionUnitOverviewExportRequestSchema"
  User="TESTXML" SecurityToken="N/A" ResultIndex="0">
  <ProductionUnit>
    <FCLT_CDE>BE70057407</FCLT_CDE>
  </ProductionUnit>
</ProductionUnitOverviewExportRequest>
```

Example 2 – Retrieve the info about a certain production unit

```
<ProductionUnitOverviewExportRequest
  xmlns="http://Sanitel.EAI/SanitelRepository/SanitelServices/
  ProductionUnitOverviewExportRequestSchema"
  User="TESTXML" SecurityToken="N/A" ResultIndex="0">
  <ProductionUnit>
    <REF_NBR>7102607960</REF_NBR>
  </ProductionUnit>
</ProductionUnitOverviewExportRequest>
```

Example 3 – Retrieve the info about all production units changed over a certain period

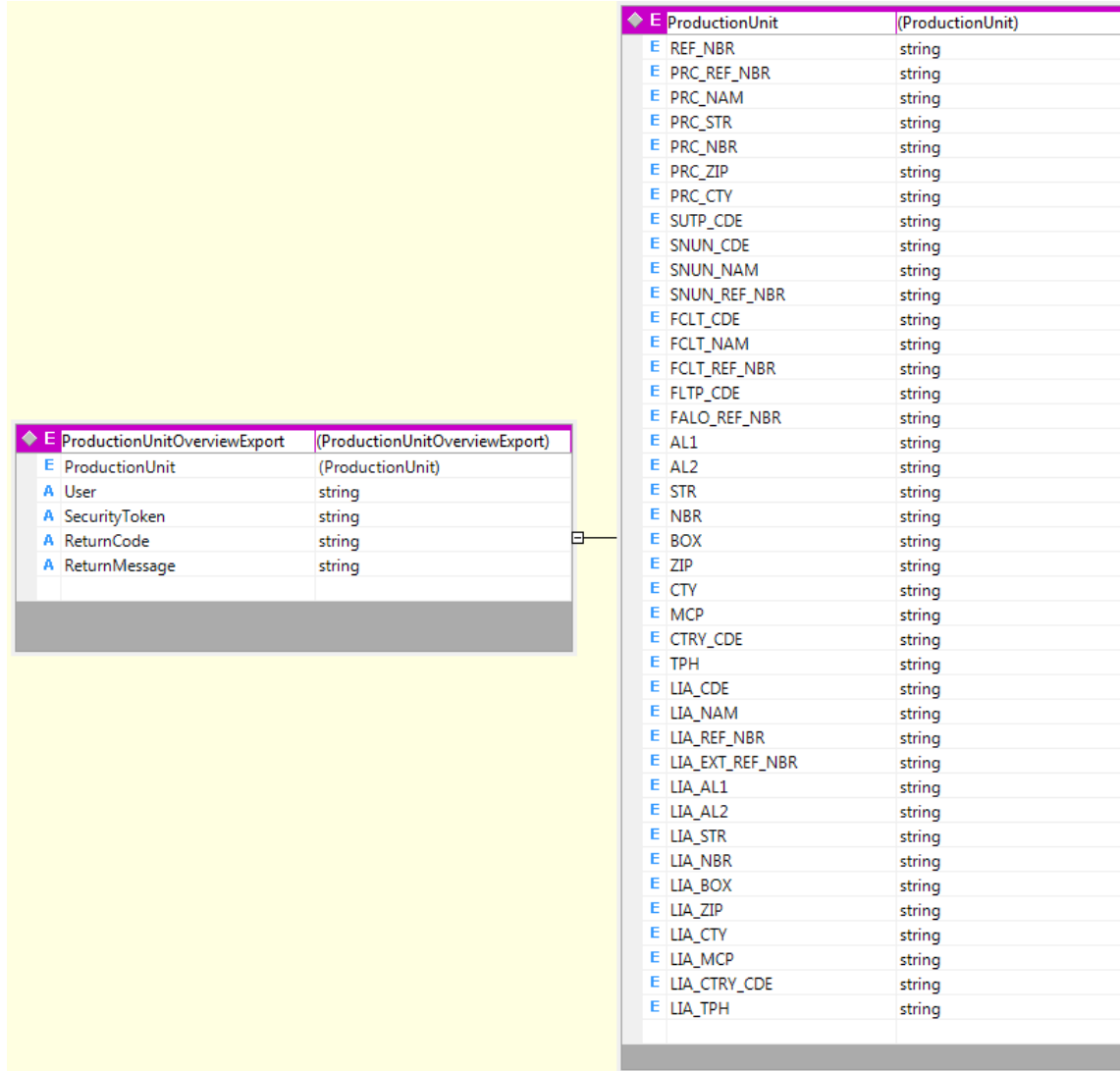
```
<ProductionUnitOverviewExportRequest
  xmlns="http://Sanitel.EAI/SanitelRepository/SanitelServices/
  ProductionUnitOverviewExportRequestSchema"
  User="TESTXML" SecurityToken="N/A" ResultIndex="0">
```

```

<ProductionUnit>
  <UPD_DTE_FRM>2007-11-11T00:00:00</ UPD_DTE_FRM>
  <UPD_DTE_TO>2007-11-30T23:59:59</ UPD_DTE_TO>
</ProductionUnit>
</ProductionUnitOverviewExportRequest>

```

Output Schema: ProductionUnitOverviewExport



<http://Sanitel.EAI/SanitelRepository/SanitelServices/ProductionUnitOverviewExportSchema>

Interface EXPU - ExportProductionUnit

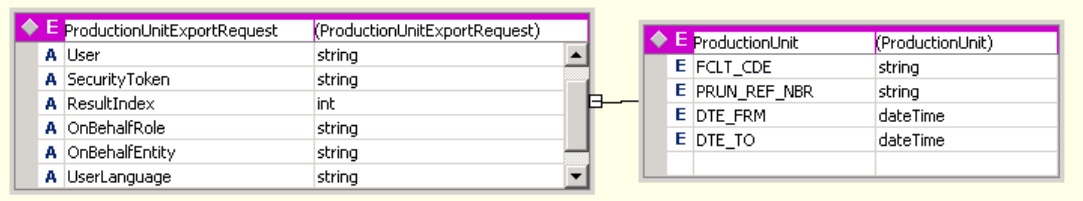
Direction: Export

Purpose: Retrieve all Animal allocations to any old or current production unit of a certain facility including the from and the to of these allocations

Layout-Documentation:

http://qas.sanitrace.be/int/QAS_Sanitel_ExtInterfacingSvcs/SanitelServices.asmx?op=ExportProductionUnit

Input Schema: ProductionUnitExportRequest



<http://Sanitel.EAI/SanitelRepository/SanitelServices/ProductionUnitOverviewExportRequestSchema>

XML Example(s)

Example 1 – Retrieve all production unit details of a certain facility over a certain period. (Includes all animals that were part of Any Production Unit in this Facility In any period overlapping with the specified period)

```
<ProductionUnitExportRequest
  xmlns="http://Sanitel.EAI/SanitelRepository/SanitelServices/
    ProductionUnitExportRequestSchema"
  User=" TESTXML" SecurityToken="N/A" ResultIndex="0">
  <ProductionUnit>
    <FCLT_CDE>BE70057407</FCLT_CDE>
    <DTE_FRM>2006-12-01T00:00:00</ DTE_FRM>
    <DTE_TO>2007-11-30T23:59:59</ DTE_TO>
  </ProductionUnit>
</ProductionUnitExportRequest>
```

Example 2 – Retrieve all production unit details of a certain production unit in a certain facility over a certain period (Includes all animals that were part of this Production Unit in any period overlapping with the specified period)

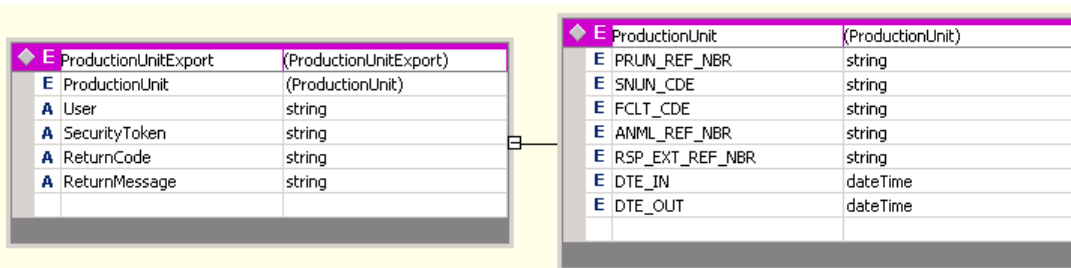
```
<ProductionUnitExportRequest
  xmlns="http://Sanitel.EAI/SanitelRepository/SanitelServices/
    ProductionUnitExportRequestSchema"
  User=" TESTXML" SecurityToken="N/A" ResultIndex="0">
  <ProductionUnit>
    <FCLT_CDE>BE70057407</FCLT_CDE>
    <PRUN_REF_NBR>123456789</PRUN_REF_NBR>
    <DTE_FRM>2006-12-01T00:00:00</ DTE_FRM>
    <DTE_TO>2007-11-30T23:59:59</ DTE_TO>
  </ProductionUnit>
</ProductionUnitExportRequest>
```

Example 3 – Retrieve all production unit details of a certain production unit over a certain period (Includes all animals that were part of this Production Unit in any period overlapping with the specified period) – As the production unit is part of a facility this is more or less equivalent too 2

```
<ProductionUnitExportRequest
  xmlns="http://Sanitel.EAI/SanitelRepository/SanitelServices/
    ProductionUnitExportRequestSchema"
  User=" TESTXML" SecurityToken="N/A" ResultIndex="0">
  <ProductionUnit>
    <PRUN_REF_NBR>123456789</PRUN_REF_NBR>
    <DTE_FRM>2006-12-01T00:00:00</ DTE_FRM>
    <DTE_TO>2007-11-30T23:59:59</ DTE_TO>
  </ProductionUnit>
</ProductionUnitExportRequest>
```

Output Schema: ProductionUnitExport

<http://Sanitel.EAI/SanitelRepository/SanitelServices/ProductionUnitExportSchema>



Interface EXSU - ExportSanitaryUnit

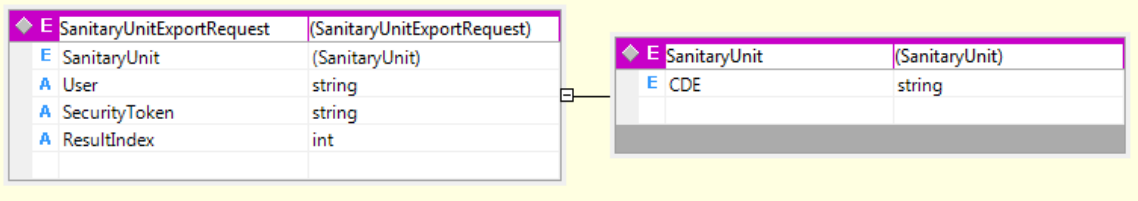
Direction: Export

Purpose: Retrieve detailed info about a sanitary unit (Location, Address, Sanitary Characteristics, Involved Parties, Production Unit Info, Marking Inventory, Capacity, Population Inventory, Risk Information, History Information...)

Layout-Documentation:

http://qas.sanitrac.be/int/QAS_Sanitel_ExtInterfacingSvcs/SanitelServices.asmx?op=ExportSanitaryUnit

Input Schema: SanitaryUnitExportRequest



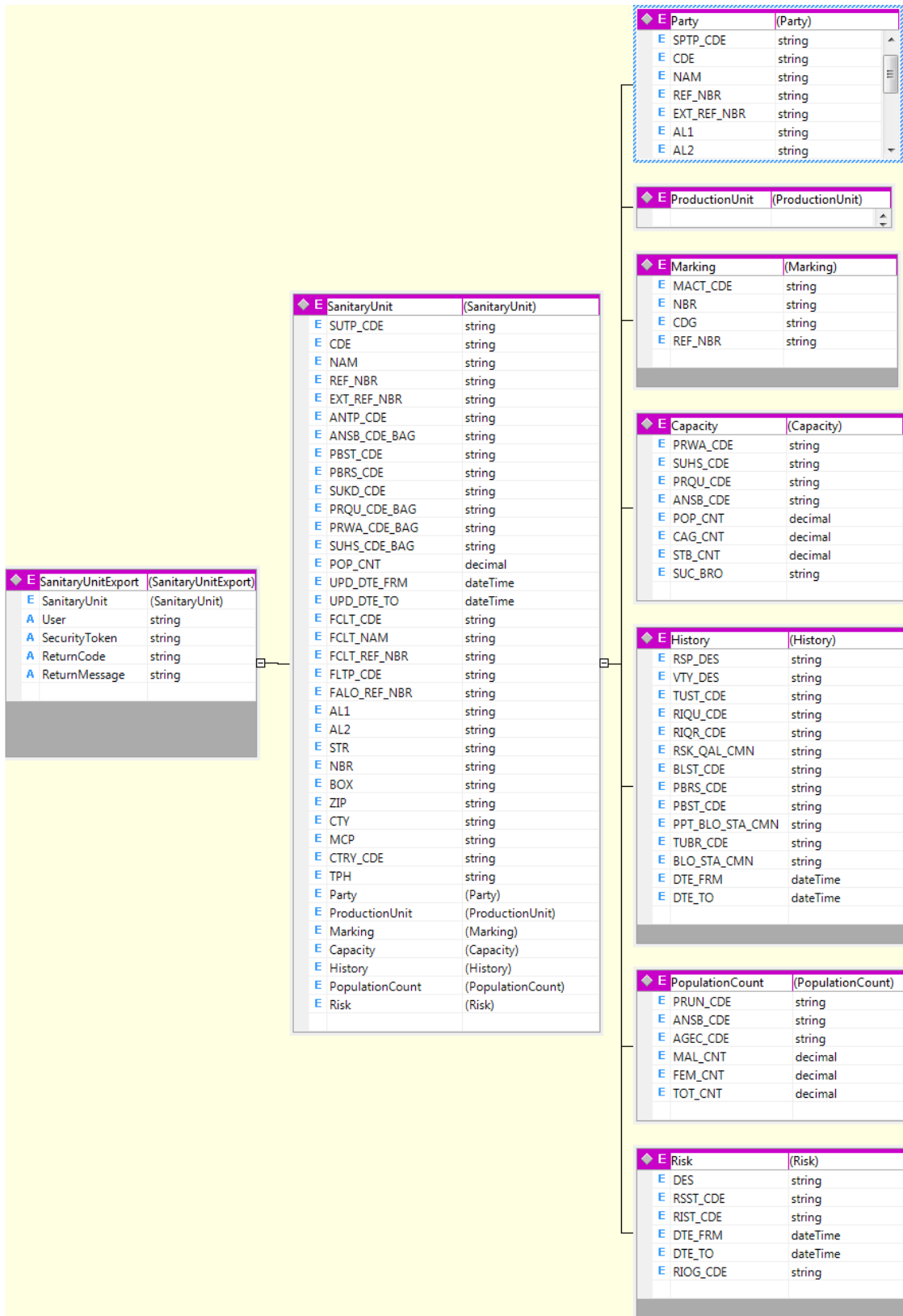
<http://Sanitel.EAI/SanitelRepository/SanitelServices/SanitaryUnitExportRequestSchema>

XML Example(s)

Example EXSU-1 – Retrieve detailed information of a sanitary unit

```
<SanitaryUnitExportRequest
  xmlns="http://Sanitel.EAI/SanitelRepository/SanitelServices/
  SanitaryUnitExportRequestSchema"
  User="TESTXML" SecurityToken="N/A">
  <SanitaryUnit>
    <CDE>BE12345678-0101</CDE>
  </SanitaryUnit>
</SanitaryUnitExportRequest>
```

Output Schema: SanitaryUnitExport



<http://Sanitel.EAI/SanitelRepository/SanitelServices/SanitaryUnitExportSchema>

Interface EXSUO - ExportSanitaryUnitOverview

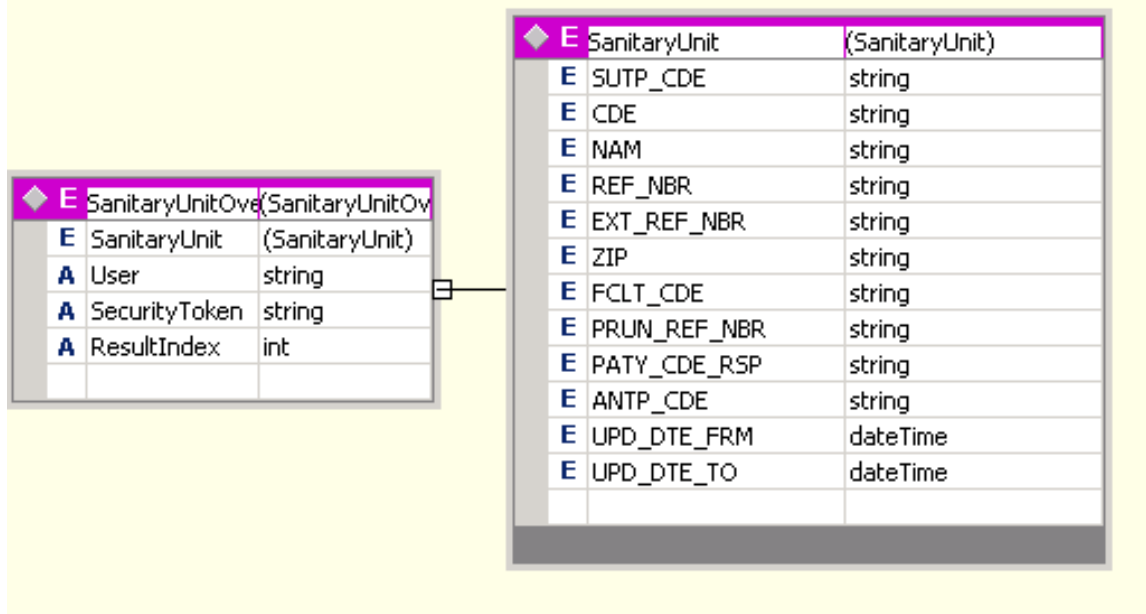
Direction: Export

Purpose: Retrieve a general overview of sanitary units and their key characteristics

Layout-Documentation:

http://qas.sanitrac.be/int/QAS_Sanitel_ExtInterfacingSvcs/SanitelServices.asmx?op=ExportSanitaryUnitOverview

Input Schema: SanitaryUnitOverviewExportRequest



<http://Sanitel.EAI/SanitelRepository/SanitelServices/SanitaryUnitOverviewExportRequestSchema>

XML Example(s)

Example EXSU-1 – Retrieve all sanitary units of a certain facility

```
<SanitaryUnitOverviewExportRequest
  xmlns="http://Sanitel.EAI/SanitelRepository/SanitelServices/
    SanitaryUnitOverviewExportRequestSchema" User="TESTXML" SecurityToken="N/A" ResultIndex="0">
  <SanitaryUnit>
    <FCLT_CDE>BE70057407</FCLT_CDE>
  </SanitaryUnit>
</SanitaryUnitOverviewExportRequest>
```

Output Schema: SanitaryUnitOverviewExport

◆ E SanitaryUnit(SanitaryUnitOv	
E	SanitaryUni (SanitaryUn
A	User string
A	SecurityTo string
A	ReturnCod string
A	ReturnMes string

◆ E SanitaryUnit (SanitaryUnit)	
E	SUTP_CDE string
E	CDE string
E	NAM string
E	REF_NBR string
E	EXT_REF_NBR string
E	ANTP_CDE string
E	ANSB_CDE_BAG string
E	PBST_CDE string
E	PBRs_CDE string
E	SUKD_CDE string
E	PRQU_CDE_BAG string
E	PRWA_CDE_BAG string
E	SUHS_CDE_BAG string
E	POP_CNT decimal
E	UPD_DTE dateTime
E	FCLT_CDE string
E	FCLT_NAM string
E	FCLT_REF_NBR string
E	FCLT_EXT_REF_NBR string
E	FLTP_CDE string
E	FALO_REF_NBR string
E	AL1 string
E	AL2 string
E	STR string
E	NBR string
E	BOX string
E	ZIP string
E	CTY string
E	MCP string
E	CTRY_CDE string
E	TPH string
E	RSP_CDE string
E	RSP_NAM string
E	RSP_REF_NBR string
E	RSP_EXT_REF_NBR string
E	RSP_AL1 string
E	RSP_AL2 string
E	RSP_STR string
E	RSP_NBR string
E	RSP_BOX string
E	RSP_ZIP string
E	RSP_CTY string
E	RSP_MCP string
E	RSP_CTRY_CDE string
E	RSP_TPH string
E	TUST_CDE string
E	GEO_LAT decimal
E	GEO_LON decimal
E	GEO_X decimal
E	GEO_Y decimal
E	GXYS_CDE string
E	GEO_STR_LTH decimal
E	GEO_PLG_DEF string
E	GIS_REF string

<http://Sanitel.EAI/SanitelRepository/SanitelServices/SanitaryUnitOverviewExportSchema>

Interface EXSLO - ExportSlaughteringOverview

Direction: Export

Purpose: Retrieve summary statistics of slaughtered animals (*) In process

Layout-Documentation:

http://qas.sanitrace.be/int/QAS_Sanitel_ExtInterfacingSvc/SanitelServices.aspx?op=ExportSlaughteringOverview

Input Schema: SlaughteringOverviewExportRequest

<http://Sanitel.EAI/SanitelRepository/SanitelServices/SlaughteringOverviewExportRequestSchema>

XML Example(s)

Output Schema: SlaughteringOverviewExport

<http://Sanitel.EAI/SanitelRepository/SanitelServices/SlaughteringOverviewExportSchema>

Interface EXAGR - ExportAgreementOverview

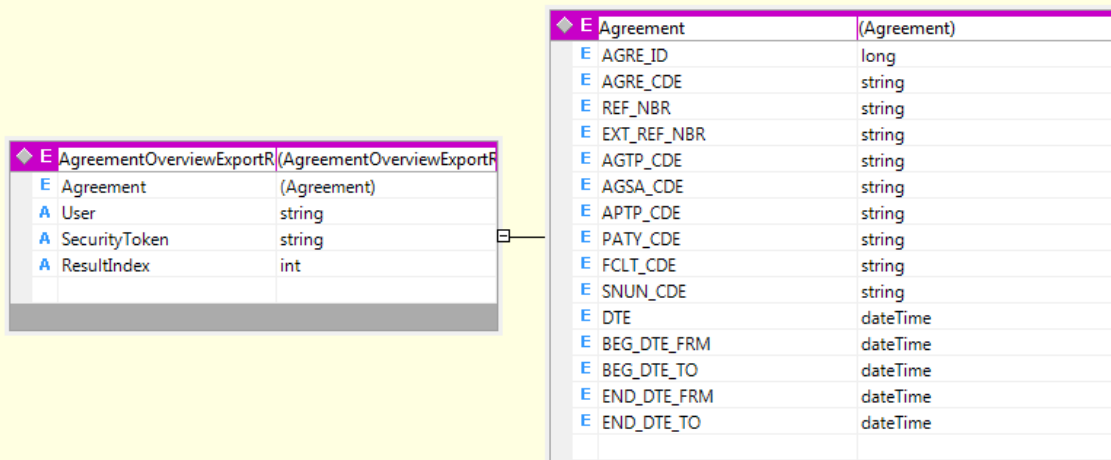
Direction: Export

Purpose: Export Agreement Information

Layout-Documentation:

http://qas.sanitrac.be/int/QAS_Sanitel_ExtInterfacingSvcs/SanitelServices.asmx?op=ExportAgreementOverview

Input Schema: ExportAgreementOverviewExportRequest



<http://Sanitel.EAI/SanitelRepository/SanitelServices/ExportAgreementOverviewExportRequestSchema>

XML Example(s)

Example EXAGR-1 – Retrieve all agreements of a certain party

```
<AgreementOverviewExportRequest
  xmlns="http://Sanitel.EAI/SanitelRepository/SanitelServices/
    AgreementOverviewExportRequestSchema"
  User="TESTXML" SecurityToken="N/A" ResultIndex="0">
  <Agreement>
    <SNUN_CDE>BE10014458-0101</SNUN_CDE>
  </Agreement>
</AgreementOverviewExportRequest>
```

Example EXAGR2 – Has a certain sanitary unit a Read-Agreement contract with VRV on Aug. 16?

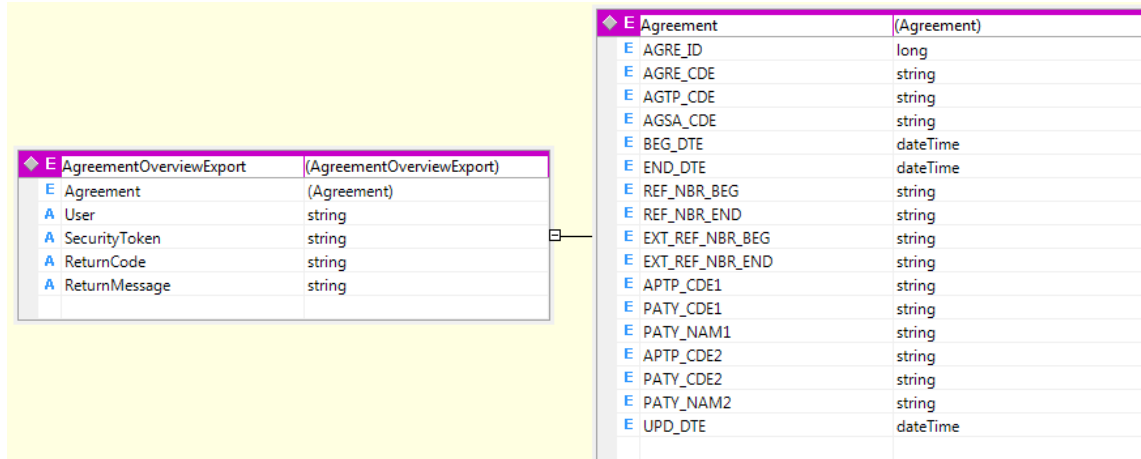
```
<AgreementOverviewExportRequest
  xmlns="http://Sanitel.EAI/SanitelRepository/SanitelServices/
    AgreementOverviewExportRequestSchema"
  User="TESTXML" SecurityToken="N/A" ResultIndex="0">
  <Agreement>
    <AGTP_CDE>RAFI</AGTP_CDE>
    <SNUN_CDE>BE10014385-0101</SNUN_CDE>
    <PATY_CDE>BE42001722</PATY_CDE>
    <APTP_CDE>AVPA</APTP_CDE>
    <DTE>2008-08-18T00:00:00</DTE>
  </Agreement>
```

```
</AgreementOverviewExportRequest>
```

Example EXAGR3 – Who are the responsible Veterinaries for a number of Sanitary Units?

```
<AgreementOverviewExportRequest
  xmlns="http://Sanitel.EAI/SanitelRepository/SanitelServices/
  AgreementOverviewExportRequestSchema"
  User="TESTXML" SecurityToken="N/A" ResultIndex="0">
  <Agreement>
    <SNUN_CDE>BE50060010-0101</SNUN_CDE>
    <AGTP_CDE>VETA</AGTP_CDE>
  </Agreement>
  <Agreement>
    <SNUN_CDE>BE10014458-0101</SNUN_CDE>
    <AGTP_CDE>VETA</AGTP_CDE>
  </Agreement>
</AgreementOverviewExportRequest>
```

Output Schema: ExportAgreementOverview



<http://Sanitel.EAI/SanitelRepository/SanitelServices/ExportAgreementOverviewExportSchema>

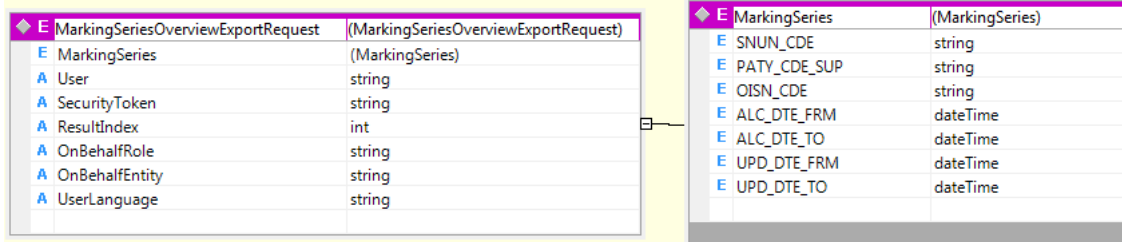
Interface EXMS - ExportMarkingSeriesOverview

Direction: Export

Purpose: Export Marking Series Overview

Layout-Documentation: http://qas.sanitrace.be/int/QAS_Sanitel_ExtInterfacingSvcs/SanitelServices.asmx?op=ExportMarkingSeriesOverview

Input Schema: MarkingSeriesOverviewExportRequest



<http://Sanitel.EAI/SanitelRepository/SanitelServices/ExportMarkingSeriesOverviewExportRequestSchema>

XML Example(s)

Example EXMS-1 – Retrieve all marking series of allocated over a certain period

```
<MarkingSeriesOverviewExportRequest
  xmlns="http://Sanitel.EAI/SanitelRepository/SanitelServices/
    MarkingSeriesOverviewExportRequestSchema" User="TESTXML" SecurityToken="N/A">
  <MarkingSeries>
    <ALC_DTE_FRM>2008-10-20T00:00:00</ALC_DTE_FRM>
    <ALC_DTE_TO>2008-11-03T00:00:00</ALC_DTE_TO>
  </MarkingSeries>
</MarkingSeriesOverviewExportRequest>
```

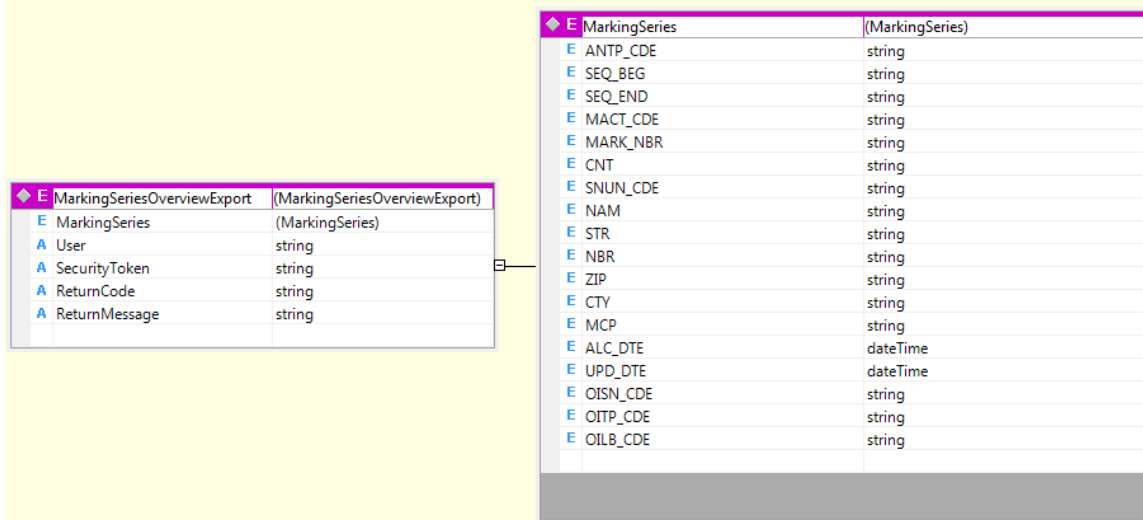
Example EXMS-2 – Retrieve all Bovines Prime Earmark (BOVM) marking series allocated to a certain sanitary unit

```
<MarkingSeriesOverviewExportRequest
  xmlns="http://Sanitel.EAI/SanitelRepository/SanitelServices/
    MarkingSeriesOverviewExportRequestSchema" User="TESTXML" SecurityToken="N/A">
  <MarkingSeries>
    <SNUN_CDE>BE30052674-0101</SNUN_CDE>
    <OISN_CDE>BOVM</OISN_CDE>
  </MarkingSeries>
</MarkingSeriesOverviewExportRequest>
```

Example EXMS-3 – Retrieve all Bovines Slaughtering Earmark (BOVM) marking series allocated to a certain sanitary unit

```
<MarkingSeriesOverviewExportRequest
  xmlns="http://Sanitel.EAI/SanitelRepository/SanitelServices/
    MarkingSeriesOverviewExportRequestSchema" User="TESTXML" SecurityToken="N/A">
  <MarkingSeries>
    <SNUN_CDE>BE30052674-0101</SNUN_CDE>
    <OISN_CDE>BOVSL</OISN_CDE>
  </MarkingSeries>
</MarkingSeriesOverviewExportRequest>
```

Output Schema: MarkingSeriesOverviewExport



<http://Sanitel.EAI/SanitelRepository/SanitelServices/ExportMarkingSeriesOverviewExportSchema>

Interface EXRNO - ExportRetaggingNotificationOverview

Direction: Export

Purpose: Export Retagging Notification Overview

Layout-Documentation: http://qas.sanitrac.be/int/QAS_Sanitel_ExtInterfacingSvcs/SanitelServices.asmx?op=ExportRetaggingNotificationOverview

Input Schema: RetaggingNotificationOverviewExportRequest

RetaggingNotificationOverviewExportRequest (RetaggingNotificationOverviewExportRequest)	
E RetaggingNotification	(RetaggingNotification)
A User	string
A SecurityToken	string
A ResultIndex	int
A OnBehalfRole	string
A OnBehalfEntity	string
A UserLanguage	string

RetaggingNotification (RetaggingNotification)	
E NOTF_ID	long
E NOTP_CDE	string
E NOKD_CDE	string
E NOST_CDE	string
E OCR_DTE_FRM	dateTime
E OCR_DTE_TO	dateTime
E REF_NBR	string
E PATY_CDE	string
E FCLT_CDE	string
E SNUN_CDE	string
E ANML_CDE	string
E DTE_FRM	dateTime
E DTE_TO	dateTime

<http://Sanitel.EAI/SanitelRepository/SanitelServices/ExportRetaggingNotificationOverviewExportRequestSchema>

XML Example(s)

Example EXRNO-1 – Retrieve all retaggings of the last 3 days

```
<RetaggingNotificationOverviewExportRequest
  xmlns="http://Sanitel.EAI/SanitelRepository/SanitelServices/
    RetaggingNotificationOverviewExportRequestSchema"
  User="TESTXML" SecurityToken="N/A">
  <RetaggingNotification>
    <NOTP_CDE>RETAG</NOTP_CDE>
    <OCR_DTE_FRM>2008-10-26T00:00:00</OCR_DTE_FRM>
    <OCR_DTE_TO>2008-10-29T00:00:00</OCR_DTE_TO>
  </RetaggingNotification>
</RetaggingNotificationOverviewExportRequest>
```

Example EXRNO-2 – Retrieve all retags a certain sanitary unit did in the last year

```
<RetaggingNotificationOverviewExportRequest
  xmlns="http://Sanitel.EAI/SanitelRepository/SanitelServices/
    RetaggingNotificationOverviewExportRequestSchema"
  User="TESTXML" SecurityToken="N/A">
  <RetaggingNotification>
    <NOTP_CDE>RETAG</NOTP_CDE>
    <OCR_DTE_FRM>2008-01-01T00:00:00</OCR_DTE_FRM>
    <OCR_DTE_TO>2008-10-29T00:00:00</OCR_DTE_TO>
    <SNUN_CDE>BE40078272-0101</SNUN_CDE>
  </RetaggingNotification>
</RetaggingNotificationOverviewExportRequest>
```

Output Schema: RetaggingNotificationOverviewExport

RetaggingNotificationOverviewExport (RetaggingNotificationOverviewExport)	
E	RetaggingNotification (RetaggingNotification)
A	User string
A	SecurityToken string
A	ReturnCode string
A	ReturnMessage string

RetaggingNotification (RetaggingNotification)	
E	NOTF_ID long
E	NOTP_CDE string
E	NOKD_CDE string
E	NOST_CDE string
E	OCR_DTE dateTime
E	REF_NBR string
E	ANTP_CDE string
E	PATY_CDE string
E	FCLT_CDE string
E	SNUN_CDE string
E	ANML_CDE string
E	ORIM_CDE string
E	OITP_CDE string
E	OILB_CDE string
E	MRK_VRS_NBR string
E	TWO_MRK_FLG boolean
E	PATY_CDE_DLV string
E	PATY_CDE_FAC string
E	NAM string
E	STR string
E	NBR string
E	ZIP string
E	CTY string
E	MCP string
E	NAM_DLV string
E	STR_DLV string
E	NBR_DLV string
E	ZIP_DLV string
E	CTY-DLV string
E	MCP_DLV string
E	NAM_FAC string
E	STR_FAC string
E	NBR_FAC string
E	ZIP_FAC string
E	CTY_FAC string
E	MCP_FAC string

<http://Sanitel.EAI/SanitelRepository/SanitelServices/ExportRetaggingNotificationOverviewExportSchema>

Interface EXWMA - ExportWaterManureAllocation

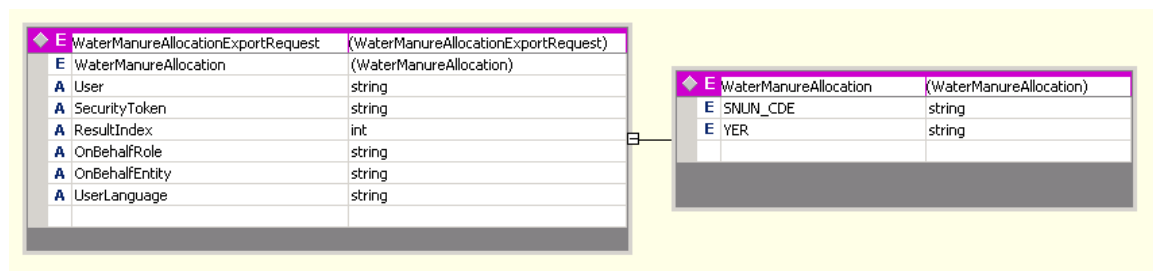
Direction: Export

Purpose: Export Water Manure Allocation so that Water and Manure production

Layout-Documentation:

http://qas.sanitrac.be/int/QAS_Sanitel_ExtInterfacingSvc/SanitelServices.aspx?op=ExportWaterManureAllocation

Input Schema: WaterManureAllocationOverviewExportRequest



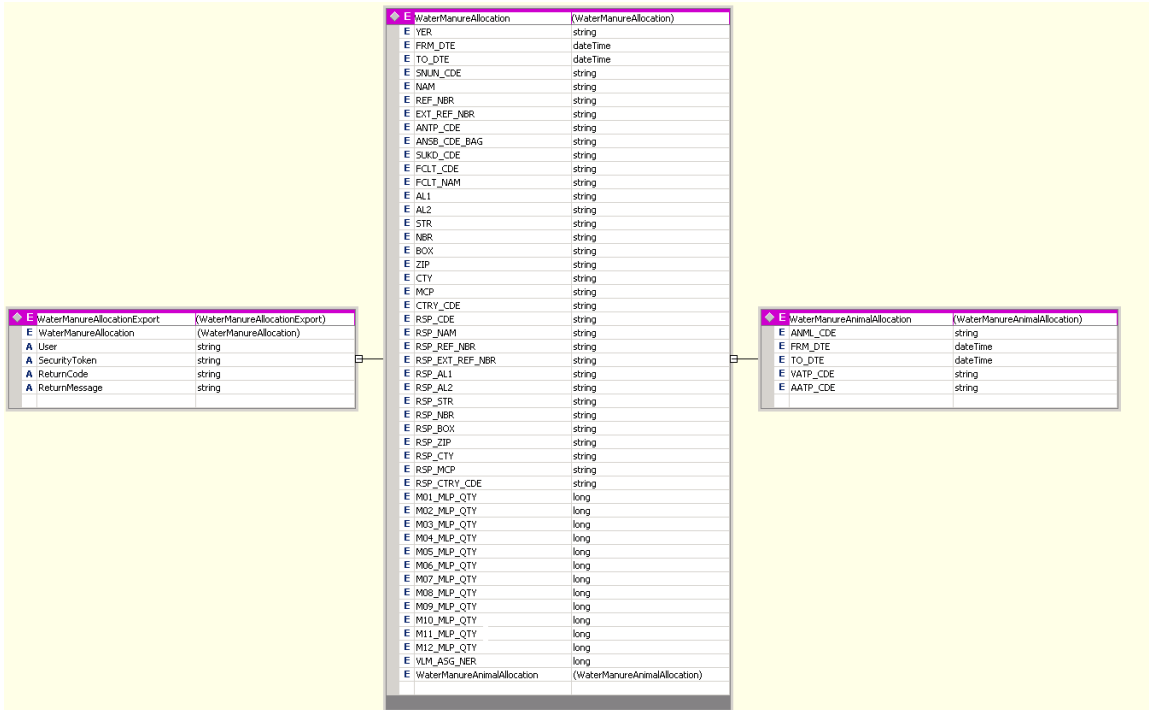
<http://Sanitel.EAI/SanitelRepository/SanitelServices/WaterManureAllocationExportRequest>

XML Example(s)

Example EXWMA-1 – Retrieve the water and manure allocations for a number of Sanitary Units

```
<?xml version = '1.0' encoding = 'UTF-8'?>
<WaterManureAllocationExportRequest
  xmlns="http://Sanitel.EAI/SanitelRepository/SanitelServices/
    WaterManureAllocationExportRequestSchema"
  User="vzx5px" SecurityToken="N/A">
  <WaterManureAllocation>
    <SNUN_CDE>BE10027282-0101</SNUN_CDE>
    <YER>2008</YER>
  </WaterManureAllocation>
  <WaterManureAllocation>
    <SNUN_CDE>BE10097159-0101</SNUN_CDE>
    <YER>2008</YER>
  </WaterManureAllocation>
</WaterManureAllocationExportRequest>
```

Output Schema: WaterManureAllocationOverview



<http://Sanitel.EAI/SanitelRepository/SanitelServices/ExportWaterManureAllocationOverviewExportSchema>

It is out of the scope of this document to discuss how to calculate Water/Manure information based on this information. Please consult the dedicated Water and Manure calculations user manual.

Interface IMAN - ImportAnimalNotification

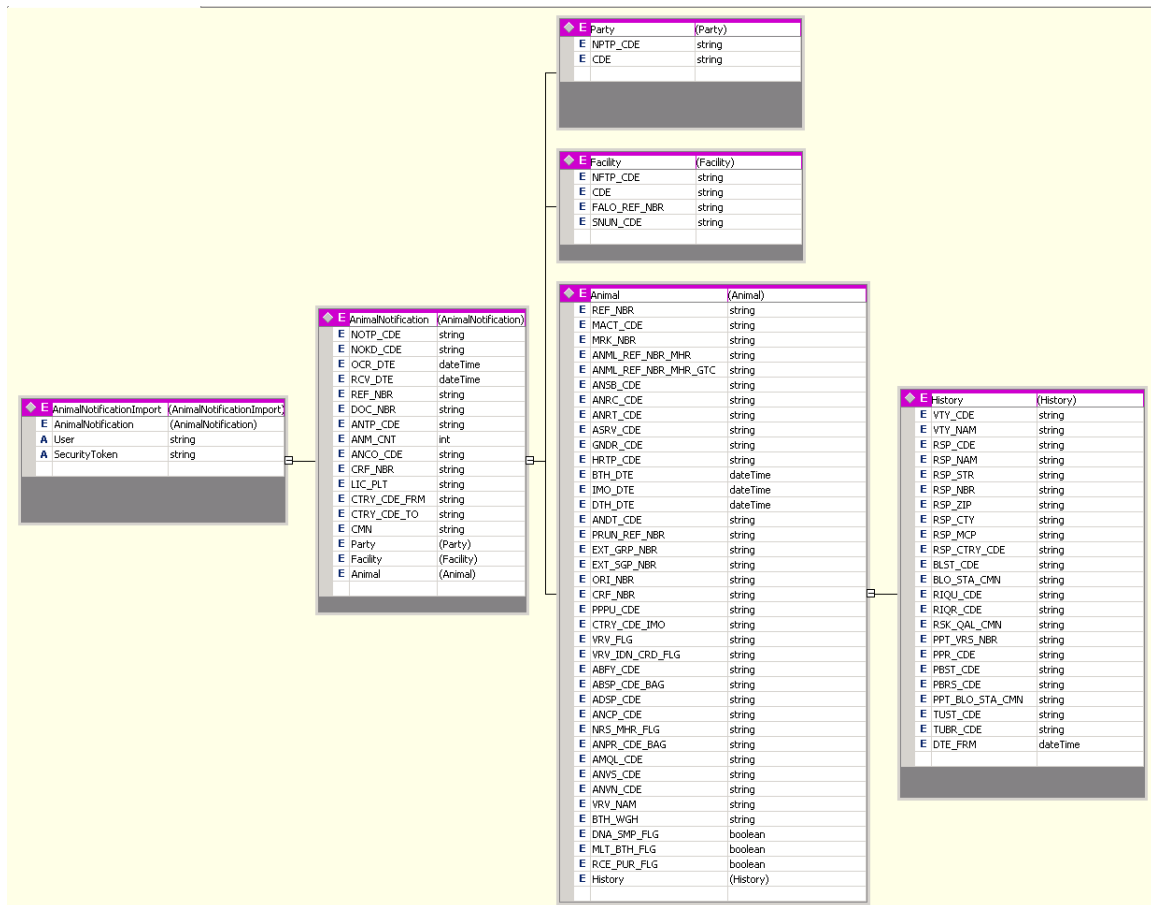
Direction: Import

Purpose: Submit births or import records

Layout-Documentation:

http://qas.sanitrace.be/int/QAS_Sanitel_ExtInterfacingSvcs/SanitelServices.aspx?op=ImportAnimalNotification

Input Schema: AnimalNotificationImport



<http://Sanitel.EAI/SanitelRepository/SanitelServices/AnimalNotificationImportSchema>

XML Example(s)

Birth Notification

```
<AnimalNotificationImport User="TESTXML" SecurityToken="N/A"
  xmlns="http://Sanitel.EAI/SanitelRepository/SanitelServices/AnimalNotificationImportSchema">
  <AnimalNotification>
    <NOTP_CDE>ARBTH</NOTP_CDE>
    <RCV_DTE>0001-01-01T00:00:00</RCV_DTE>
    <ANTP_CDE>BOV</ANTP_CDE>
    <ANM_CNT>1</ANM_CNT>
    <ANCO_CDE>ALIVE</ANCO_CDE>
    <Party>
      <NPTP_CDE>RSP</NPTP_CDE>
      <CDE>BE400004313</CDE>
    
```

```

</Party>
<Facility>
  <NFTP_CDE>DST</NFTP_CDE>
  <CDE>BE40006931</CDE>
  <SNUN_CDE>BE40006931-0101</SNUN_CDE>
</Facility>
<Animal>
  <REF_NBR>BE43332498</REF_NBR>
  <MACT_CDE>BE</MACT_CDE>
  <MRK_NBR>43332498</MRK_NBR>
  <ANML_REF_NBR_MHR>BE43033242</ANML_REF_NBR_MHR>
  <ANSB_CDE>BOV</ANSB_CDE>
  <ANRT_CDE>MILK</ANRT_CDE>
  <ASRV_CDE>LIV</ASRV_CDE>
  <GNDR_CDE>MAL</GNDR_CDE>
  <HRTF_CDE>WR</HRTF_CDE>
  <BTH_DTE>2008-10-30T00:00:00</BTH_DTE>
  <PPPU_CDE>URG</PPPU_CDE>
  <VRV_FLG>true</VRV_FLG>
  <VRV_IDN_CRD_FLG>true</VRV_IDN_CRD_FLG>
  <ABFY_CDE>LBFY</ABFY_CDE>
  <ADSP_CDE>EASY</ADSP_CDE>
  <ANCP_CDE>NRM</ANCP_CDE>
  <NRS_MHR_FLG>true</NRS_MHR_FLG>
  <ANVS_CDE>NONE</ANVS_CDE>
  <BTH_WGH>23</BTH_WGH>
  <DNA_SMP_FLG>false</DNA_SMP_FLG>
  <MLT_BTH_FLG>false</MLT_BTH_FLG>
  <RCE_PUR_FLG>false</RCE_PUR_FLG>
</Animal>
</AnimalNotification>
</AnimalNotificationImport>

```

Dead born calf notification – not marked

```

<AnimalNotificationImport User="TESTXML" SecurityToken="N/A"
  xmlns="http://Sanitel.EAI/SanitelRepository/SanitelServices/AnimalNotificationImportSchema">
  <AnimalNotification>
    <NOTP_CDE>ARBTH</NOTP_CDE>
    <RCV_DTE>0001-01-01T00:00:00</RCV_DTE>
    <ANTP_CDE>BOV</ANTP_CDE>
    <ANM_CNT>1</ANM_CNT>
    <ANCO_CDE>DDNOT</ANCO_CDE>
    <Party>
      <NPTP_CDE>RSP</NPTP_CDE>
      <CDE>BE400223090</CDE>
    </Party>
    <Facility>
      <NFTP_CDE>DST</NFTP_CDE>
      <CDE>BE40096025</CDE>
      <SNUN_CDE>BE40096025-0101</SNUN_CDE>
    </Facility>
    <Animal>
      <ANML_REF_NBR_MHR>BE43281842</ANML_REF_NBR_MHR>
      <ANSB_CDE>BOV</ANSB_CDE>
      <BTH_DTE>2008-10-29T00:00:00</BTH_DTE>
      <DTH_DTE>2008-10-29T00:00:00</DTH_DTE>
      <PPPU_CDE>NO</PPPU_CDE>
      <VRV_FLG>false</VRV_FLG>
      <VRV_IDN_CRD_FLG>false</VRV_IDN_CRD_FLG>
      <NRS_MHR_FLG>true</NRS_MHR_FLG>
      <ANVS_CDE>NONE</ANVS_CDE>
      <BTH_WGH>0</BTH_WGH>
      <DNA_SMP_FLG>false</DNA_SMP_FLG>
      <MLT_BTH_FLG>false</MLT_BTH_FLG>
      <RCE_PUR_FLG>false</RCE_PUR_FLG>
    </Animal>
  </AnimalNotification>
</AnimalNotificationImport>

```

Dead born calf notification –marked

```

<AnimalNotificationImport User="TESTXML" SecurityToken="N/A"
  xmlns="http://Sanitel.EAI/SanitelRepository/SanitelServices/AnimalNotificationImportSchema">
  <AnimalNotification>
    <NOTP_CDE>ARBTH</NOTP_CDE>
    <RCV_DTE>0001-01-01T00:00:00</RCV_DTE>
    <ANTP_CDE>BOV</ANTP_CDE>
    <ANM_CNT>1</ANM_CNT>
    <ANCO_CDE>DDMKD</ANCO_CDE>
    <Party>
      <NPTP_CDE>RSP</NPTP_CDE>
      <CDE>BE402979302</CDE>
    </Party>
    <Facility>
      <NFTP_CDE>DST</NFTP_CDE>

```

```

<CDE>BE40141489</CDE>
<SNUN_CDE>BE40141489-0101</SNUN_CDE>
</Facility>
<Animal>
<REF_NBR>BE48600665</REF_NBR>
<MACT_CDE>BE</MACT_CDE>
<MRK_NBR>48600665</MRK_NBR>
<ANML_REF_NBR_MHR>DE 0346949849 3</ANML_REF_NBR_MHR>
<ANSB_CDE>BOV</ANSB_CDE>
<ANRT_CDE>MILK</ANRT_CDE>
<ASRV_CDE>LIV</ASRV_CDE>
<GNDR_CDE>MAL</GNDR_CDE>
<HRTP_CDE>R</HRTP_CDE>
<BTH_DTE>2008-10-26T00:00:00</BTH_DTE>
<DTH_DTE>2008-10-26T00:00:00</DTH_DTE>
<PPPU_CDE>NRM</PPPU_CDE>
<VRV_FLG>true</VRV_FLG>
<VRV_IDN_CRD_FLG>true</VRV_IDN_CRD_FLG>
<ABFY_CDE>MLK</ABFY_CDE>
<ADSP_CDE>EASY</ADSP_CDE>
<ANCP_CDE>NRM</ANCP_CDE>
<NRS_MHR_FLG>true</NRS_MHR_FLG>
<ANVS_CDE>PREM</ANVS_CDE>
<BTH_WGH>25</BTH_WGH>
<DNA_SMP_FLG>false</DNA_SMP_FLG>
<MLT_BTH_FLG>true</MLT_BTH_FLG>
<RCE_PUR_FLG>false</RCE_PUR_FLG>
</Animal>
</AnimalNotification>
</AnimalNotificationImport>

```

Import Notification

```

<AnimalNotificationImport User="TESTXML" SecurityToken="N/A"
  xmlns="http://Sanitel.EAI/SanitelRepository/SanitelServices/AnimalNotificationImportSchema">
<AnimalNotification>
<NOTP_CDE>ARIMO</NOTP_CDE>
<OCR_DTE>2008-11-17T12:00:00</OCR_DTE>
<REF_NBR>XXX123</REF_NBR>
<DOC_NBR>YYY456</DOC_NBR>
<ANTP_CDE>BOV</ANTP_CDE>
<ANM_CNT>1</ANM_CNT>
<ANCO_CDE>ALIVE</ANCO_CDE>
<CRF_NBR>FR20080077995</CRF_NBR>
<LIC_PLT>ABC123</LIC_PLT>
<CTRY_CDE_FRM>FR</CTRY_CDE_FRM>
<Party>
<NPTP_CDE>DLR</NPTP_CDE>
<CDE>BE12500104</CDE>
</Party>
<Facility>
<NFTP_CDE>DST</NFTP_CDE>
<CDE>BE40070824</CDE>
<SNUN_CDE>BE40070824-0150</SNUN_CDE>
</Facility>
<Animal>
<MACT_CDE>FR</MACT_CDE>
<MRK_NBR>5940143152</MRK_NBR>
<ANML_REF_NBR_MHR>FR5940183831</ANML_REF_NBR_MHR>
<ANSB_CDE>VCA</ANSB_CDE>
<ANRT_CDE>MILK</ANRT_CDE>
<GNDR_CDE>FEM</GNDR_CDE>
<HRTP_CDE>BLW</HRTP_CDE>
<PPPU_CDE>NRM</PPPU_CDE>
<PRUN_REF_NBR>4602500153</PRUN_REF_NBR>
<BTH_DTE>2007-01-01T00:00:00</BTH_DTE>
<IMO_DTE>2008-11-17T00:00:00</IMO_DTE>
<CRF_NBR>FR20080077995</CRF_NBR>
<CTRY_CDE_IMO>FR</CTRY_CDE_IMO>
</Animal>
</AnimalNotification>
</AnimalNotificationImport>

```

Output Schema: Interaction Result

See definition Interaction Result Schema

Interface IMCHN - ImportChangeNotification

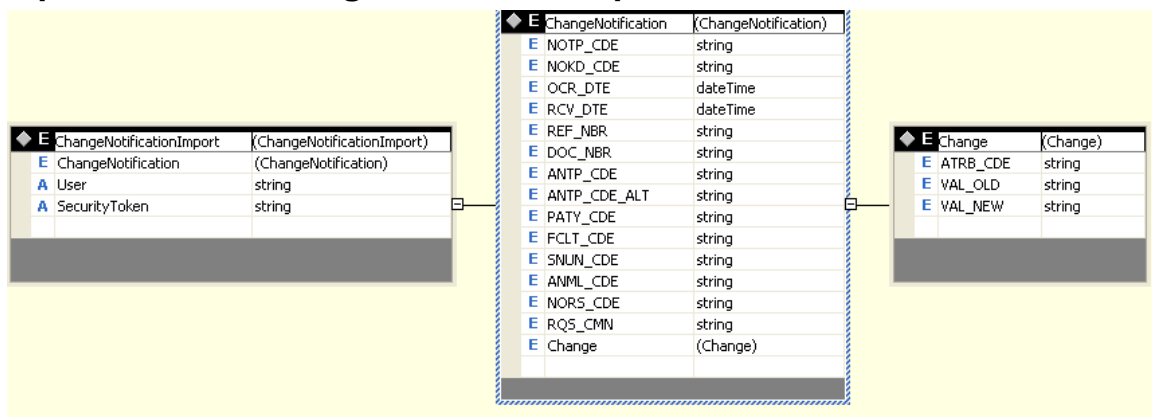
Direction: Import

Purpose: Submit changes on an Animal, a Facility, a Sanitary Unit or even a Party

Layout-Documentation:

http://qas.sanitrac.be/int/QAS_Sanitel_ExtInterfacingSvcs/SanitelServices.asmx?op=ImportChangeNotification

Input Schema: ChangeNotificationImport



<http://Sanitel.EAI/SanitelRepository/SanitelServices/ChangeNotificationImportSchema>

XML Example(s)

Change of hair-type

```
<ChangeNotificationImport User="string" SecurityToken="string"
xmlns="http://Sanitel.EAI/SanitelRepository/SanitelServices/ChangeNotificationImportSchema">
  <ChangeNotification>
    <NOTP_CDE>CHANM</NOTP_CDE>
    <NOKD_CDE>...</NOKD_CDE>
    <OCR_DTE>2007-11-16T23:10:00</OCR_DTE>
    <REF_NBR>2322-343453/1</REF_NBR>
    <DOC_NBR>2322-343453</DOC_NBR>
    <ANML_CDE>BE12345678</ANML_CDE>
    <NORS_CDE>...</NORS_CDE>
    <RQS_CMN>some comment</RQS_CMN>
    <Change>
      <ATRB_CDE>HRTF</ATRB_CDE>
      <VAL_NEW>BW</VAL_NEW>
    </Change>
    <Change>
      <ATRB_CDE>GNDR CDE</ATRB_CDE>
      <VAL_NEW>OX</VAL_NEW>
    </Change>
  </ChangeNotification>
</ChangeNotificationImport>
```

Output Schema: Interaction Result

See definition Interaction Result Schema

CHANM	ChangeAnimal
CHSNU	ChangeSanitaryUnit
CHFCY	ChangeFacility
CHPTY	ChangeParty

Possible Values for ATRB_CDE as defined today ... It is still not clear whether all discussed attributes will also be in the final release as sometimes there might be organizational or juridical reasons for not doing it (see items in italic). E.g. an animal can not have it's earmark changed yet ANRT – attributes suggest this possibility

The goal is to make this mechanism of attribute changes more or less configurable and hence extensible. An initial list of possible attribute codes is given in the table underneath. Obviously depending on the context these attributes can trigger changes on animals, sanitary units, parties or facilities.

Some attributes reappear in multiple categories – this has more to do with the display on the screens. Currently a change notification should only update attributes in one category.

Cat.	Category Name	Attribute Code	Attribute Description
ANMC	Animal Characteristics	BTH_DTE	Birth Date
		HRTTP_CDE	Hairtype Code
		GNDR_CDE	Gender Code
		ANRT_CDE	Animal Race Type
		CDE_MHR	Mother Code
		ANSB_CDE	Animal Sub Type
		PRUN_CDE	Production Unit Code
ANMB	Animal Birth	ANCP_CDE	Conception
		DTH_DTE	Animal Death Date
		CDE_MHR_GTC	Genetic Mother Code
ANRT	Animal Identification	MACT_CDE	Marking Country Code
		MRK_NBR	Marking Number
		TUST_CDE	Tracking Unit Status Code
		BOV_NBR	Bovine Number
ADNA	Animal DNA	DNA_ANA_FLG	Animal D.n.a. Analysis Flag
		DNAQ_CDE	D.n.a. Quality Code
		AMQL_CDE_BAG	Animal Meat Quality
AVRV	Animal VRV	ADSP_CDE	Delivery
		ABFY_CDE	Beefability
		BTH_WGH	Birth Weight
		ASRV_CDE	Survival
		VRV_IDN_CRD_FLG	Identification Card VRV

		ANVS_CDE	VRV Specifics
		ANVN_CDE	Naming Choice
		VRV_NAM	Name
		ADPR_CDE	Animal Departure Reason
ADR	Address	AL1	Address Line 1
		AL2	Address Line 2
		STR	Street
		NBR	Number
		BOX	Box
		ZIP	Zip
		CTY	City
		MCP	Municipal
		CTRY_CDE	Country
		TPH	Telephone
VEN	VEN Information	FCLT_REF_NBR	VEN Number
		CMNT	Comment
FCEND	Facility End	END_DTE	End Date
		CMNT	Comment
SUEND	Sanitary Unit End	END_DTE	End Date
		CMNT	Comment
GNOTC	General Notice	NCTP_CDE	Notice Type
		NOTC_SBJ	Subject
		NOTC_MSG	Message
		NOTC_ANS	Reaction/Answer
		NOTC_ATA	Attachments

Interface IMINN - ImportInventoryNotification

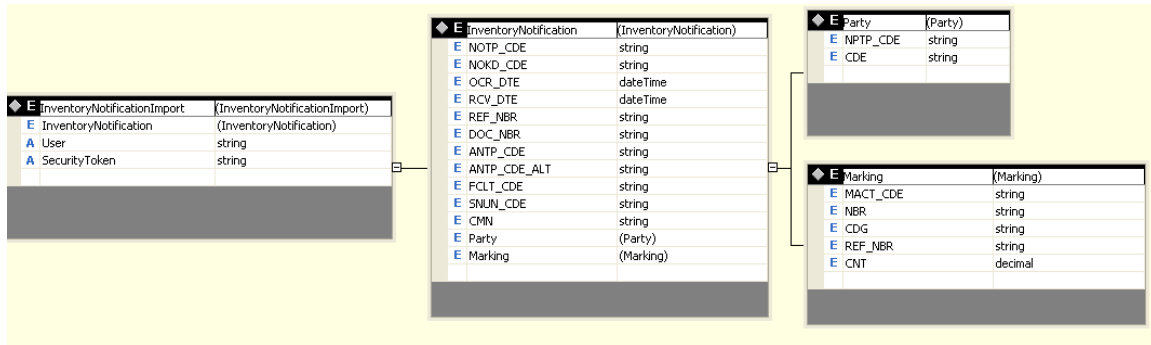
Direction: Import

Purpose: Submit marking inventory results

Layout-Documentation:

http://gas.sanitrac.be/int/QAS_Sanitel_ExtInterfacingSvcs/SanitelServices.asmx?op=ImportInventoryNotification

Input Schema: InventoryNotificationImport



<http://Sanitel.EAI/SanitelRepository/SanitelServices/InventoryNotificationImportSchema>

XML Example(s)

```
<InventoryNotificationImport User="string" SecurityToken="string"
xmlns="http://Sanitel.EAI/SanitelRepository/SanitelServices/
InventoryNotificationImport">
  <InventoryNotification>
    <NOTP_CDE>string</NOTP_CDE>
    <NOKD_CDE>string</NOKD_CDE>
    <OCR_DTE>dateTime</OCR_DTE>
    <REF_NBR>string</REF_NBR>
    <DOC_NBR>string</DOC_NBR>
    <ANTP_CDE>string</ANTP_CDE>
    <ANTP_CDE_ALT>string</ANTP_CDE_ALT>
    <FCLT_CDE>string</FCLT_CDE>
    <SNUN_CDE>string</SNUN_CDE>
    <CMN>string</CMN>
    <Party>
      <NPTP_CDE>string</NPTP_CDE>
      <CDE>string</CDE>
    </Party>
    <Party>
      <NPTP_CDE>string</NPTP_CDE>
      <CDE>string</CDE>
    </Party>
    <Marking>
      <MACT_CDE>string</MACT_CDE>
      <NBR>string</NBR>
      <CDG>string</CDG>
      <REF_NBR>string</REF_NBR>
      <CNT>decimal</CNT>
    </Marking>
    <Marking>
      <MACT_CDE>string</MACT_CDE>
      <NBR>string</NBR>
    </Marking>
  </InventoryNotification>
</InventoryNotificationImport>
```

```
<CDG>string</CDG>  
<REF_NBR>string</REF_NBR>  
<CNT>decimal</CNT>  
</Marking>  
</InventoryNotification>  
</InventoryNotification>  
</InventoryNotificationImport>
```

Output Schema: Interaction Result

See definition Interaction Result Schema

Interface IMMWN - ImportManureWaterNotification

Direction: Import or Export or both????

Purpose: Submit water/manure consumption statistics / corrections / Retrieve calculated water/manure consumption statistics

Layout-Documentation:

http://qas.sanitrace.be/int/QAS_Sanitel_ExtInterfacingSvcs/SanitelServices.aspx?op=ImportManureWaterNotification

Input Schema: ManureWaterNotificationImport

<http://Sanitel.EAI/SanitelRepository/SanitelServices/ManureWaterNotificationImportSchema>

XML Example(s)

Output Schema: Interaction Result

See definition Interaction Result Schema

Interface IMMVN - ImportMovementNotification

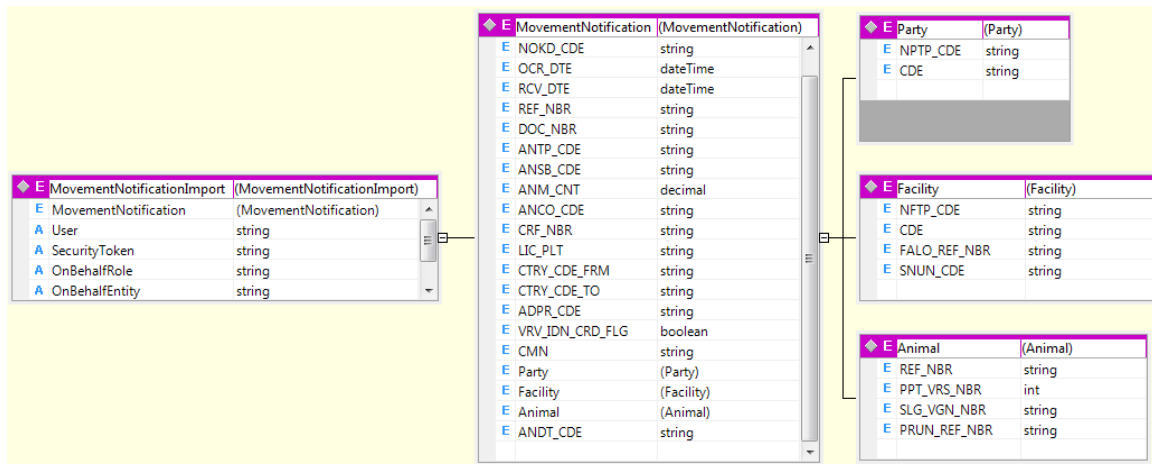
Direction: Import

Purpose: Submit a movement (e.g. Mobile App)

Layout-Documentation:

http://gas.sanitrac.be/int/QAS_Sanitel_ExtInterfacingSvc/SanitelServices.aspx?op=ImportMovementNotification

Input Schema: MovementNotificationImport



<http://Sanitel.EAI/SanitelRepository/SanitelServices/MovementNotificationImportSchema>

XML Example(s)

Departure of an animal from a FARM

```
<MovementNotificationImport User="string" SecurityToken="string"
  xmlns="http://Sanitel.EAI/SanitelRepository/SanitelServices/
    MovementNotificationImportSchema">
  <MovementNotification>
    <NOTP_CDE>MMDPR</NOTP_CDE>
    <OCR_DTE>2008-01-15T09:23:45</OCR_DTE>
    <REF_NBR>...</REF_NBR>
    <DOC_NBR>...</DOC_NBR>
    <ANTP_CDE>BOV</ANTP_CDE>
    <ANM_CNT>3</ANM_CNT>
    <ANCO_CDE>ALIVE</ANCO_CDE>
    <CRF_NBR>...</CRF_NBR>
    <LIC_PLT>KMJ496</LIC_PLT>
    <CMN>string</CMN>
    <Party>
      <NPTP_CDE>RSP</NPTP_CDE>
      <CDE>BE12345678</CDE>
    </Party>
    <Party>
      <NPTP_CDE>DLR</NPTP_CDE>
      <CDE>BE56781234</CDE>
    </Party>
    <Facility>
      <NFTP_CDE>SRC</NFTP_CDE>
      <CDE>BE12348765</CDE>
  </MovementNotification>
</MovementNotificationImport>
```

```

    <FALO_REF_NBR>string</FALO_REF_NBR>
    <SNUN_CDE>string</SNUN_CDE>
  </Facility>
  <Animal>
    <REF_NBR>BE34534534</REF_NBR>
    <PPT_VRS_NBR>3</PPT_VRS_NBR>
  </Animal>
  <Animal>
    <REF_NBR>BE34534536    33100456576</REF_NBR>
  </Animal>
  <Animal>
    <REF_NBR>BE34534537    33100456576</REF_NBR>
  </Animal>
</MovementNotification>
</MovementNotificationImport>

```

Arrival animals on a Market

```

<?xml version="1.0"?>
<MovementNotificationImport xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xmlns:xsd="http://www.w3.org/2001/XMLSchema" User="TESTXML" SecurityToken="N/A"
  OnBehalfRole="0" OnBehalfEntity="0"
  xmlns="http://Sanitel.EAI/SanitelRepository/SanitelServices/
  MovementNotificationImportSchema">
  <MovementNotification>
    <NOTP_CDE>MMARV</NOTP_CDE>
    <OCR_DTE>2008-11-04T16:12:24</OCR_DTE>
    <ANTP_CDE>BOV</ANTP_CDE>
    <ANM_CNT>1</ANM_CNT>
    <ANCO_CDE>ALIVE</ANCO_CDE>
    <LIC_PLT>HYE-343</LIC_PLT>
    <Party>
      <NPTP_CDE>TRA</NPTP_CDE>
      <CDE>BE12002473</CDE>
    </Party>
    <Party>
      <NPTP_CDE>DLR</NPTP_CDE>
      <CDE>BE12500104</CDE>
    </Party>
    <Facility>
      <NFTP_CDE>DST</NFTP_CDE>
      <CDE>BE12500104</CDE>
      <SNUN_CDE />
    </Facility>
    <Animal>
      <REF_NBR>BE118273633</REF_NBR>
      <PPT_VRS_NBR>2</PPT_VRS_NBR>
    </Animal>
  </MovementNotification>
</MovementNotificationImport>

```

Arrival multiple animals on a Market

```

<MovementNotificationImport User="UDLR" SecurityToken="string"
  xmlns="http://Sanitel.EAI/SanitelRepository/SanitelServices/
  MovementNotificationImportSchema">
  <MovementNotification>
    <NOTP_CDE>MMARV</NOTP_CDE>
    <OCR_DTE>2008-10-16T09:23:45</OCR_DTE>
    <REF_NBR>12345678</REF_NBR>
    <DOC_NBR></DOC_NBR>
    <ANTP_CDE>BOV</ANTP_CDE>
    <ANCO_CDE>ALIVE</ANCO_CDE>

```

```

<LIC_PLT>ABC123</LIC_PLT>
<CMN></CMN>
<Party>
  <NPTP_CDE>DLR</NPTP_CDE>
  <CDE>BE102294097</CDE>
</Party>
<Party>
  <NPTP_CDE>TRA</NPTP_CDE>
  <CDE>BE102294097</CDE>
</Party>
<Facility>
  <NFTP_CDE>DST</NFTP_CDE>
  <CDE>BE92600104</CDE>
</Facility>
<Animal>
  <REF_NBR>BE19158588</REF_NBR>
  <PPT_VRS_NBR>3</PPT_VRS_NBR>
</Animal>
<Animal>
  <REF_NBR>BE19669813</REF_NBR>
  <PPT_VRS_NBR>2</PPT_VRS_NBR>
</Animal>
<Animal>
  <REF_NBR>BE19669812</REF_NBR>
  <PPT_VRS_NBR>2</PPT_VRS_NBR>
</Animal>
<Animal>
  <REF_NBR>BE19669805</REF_NBR>
  <PPT_VRS_NBR>2</PPT_VRS_NBR>
</Animal>
<Animal>
  <REF_NBR>BE19669806</REF_NBR>
  <PPT_VRS_NBR>2</PPT_VRS_NBR>
</Animal>
<Animal>
  <REF_NBR>BE19669812</REF_NBR>
  <PPT_VRS_NBR>2</PPT_VRS_NBR>
</Animal>
</MovementNotification>
</MovementNotificationImport>

```

Departure to a slaughterhouse – with slaughter vignette number...

```

<?xml version="1.0"?>
<MovementNotificationImport xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xmlns:xsd="http://www.w3.org/2001/XMLSchema" User="TESTXML" SecurityToken="N/A"
  OnBehalfRole="0" OnBehalfEntity="0"
  xmlns="http://Sanitel.EAI/SanitelRepository/SanitelServices/
  MovementNotificationImportSchema">
  <MovementNotification>
    <NOTP_CDE>MMDPS</NOTP_CDE>
    <OCR_DTE>2008-10-30T00:00:00</OCR_DTE>
    <ANTP_CDE>BOV</ANTP_CDE>
    <ANSB_CDE>BOV</ANSB_CDE>
    <ANM_CNT>1</ANM_CNT>
    <ANCO_CDE>ALIVE</ANCO_CDE>
    <VRV_IDN_CRD_FLG>false</VRV_IDN_CRD_FLG>
    <Party>
      <NPTP_CDE>DLR</NPTP_CDE>
      <CDE>BE402979302</CDE>
    </Party>
    <Facility>
      <NFTP_CDE>SRC</NFTP_CDE>
      <CDE>BE10046880</CDE>
      <SNUN_CDE>BE10046880-0101</SNUN_CDE>
    </Facility>
    <Animal>
      <REF_NBR>BE16455223</REF_NBR>
      <PPT_VRS_NBR>2</PPT_VRS_NBR>
      <SLG_VGN_NBR>100-46880231020</SLG_VGN_NBR>
    </Animal>
  </MovementNotification>
</MovementNotificationImport>

```

```

    </Animal>
  </MovementNotification>
</MovementNotificationImport>

```

Departure from a farm to Rendac ...

```

<?xml version="1.0"?>
<MovementNotificationImport xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xmlns:xsd="http://www.w3.org/2001/XMLSchema" User="TESTXML"
  xmlns="http://Sanitel.EAI/SanitelRepository/SanitelServices/
    MovementNotificationImportSchema">
  <MovementNotification>
    <NOTP_CDE>MMDPD</NOTP_CDE>
    <OCR_DTE>2008-10-20T00:00:00</OCR_DTE>
    <RCV_DTE>0001-01-01T00:00:00</RCV_DTE>
    <ANTP_CDE>BOV</ANTP_CDE>
    <ANSE_CDE>BOV</ANSE_CDE>
    <ANDT_CDE>C36</ANDT_CDE>
    <ANM_CNT>1</ANM_CNT>
    <ANCO_CDE>DEAD</ANCO_CDE>
    <VRV_IDN_CRD_FLG>>false</VRV_IDN_CRD_FLG>
    <Party>
      <NPTP_CDE>DLR</NPTP_CDE>
      <CDE>BE03313736</CDE>
    </Party>
    <Party>
      <NPTP_CDE>TRA</NPTP_CDE>
      <CDE>BE03313736</CDE>
    </Party>
    <Facility>
      <NFTP_CDE>SRC</NFTP_CDE>
      <CDE>BE40141489</CDE>
      <SNUN_CDE>BE40141489-0101</SNUN_CDE>
    </Facility>
    <Facility>
      <NFTP_CDE>DST</NFTP_CDE>
      <CDE>BE03313736</CDE>
    </Facility>
    <Animal>
      <REF_NBR>DE 0580027802 3</REF_NBR>
      <PPT_VRS_NBR>3</PPT_VRS_NBR>
    </Animal>
  </MovementNotification>
</MovementNotificationImport>

```

Arrival at Rendac Simple ...

```

<?xml version="1.0"?>
<MovementNotificationImport xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xmlns:xsd="http://www.w3.org/2001/XMLSchema" User="TESTXML"
  xmlns="http://Sanitel.EAI/SanitelRepository/SanitelServices/
    MovementNotificationImportSchema">
  <MovementNotification>
    <NOTP_CDE>MMDPT</NOTP_CDE>
    <OCR_DTE>2000-01-15T00:00:00</OCR_DTE>
    <ANTP_CDE>BOV</ANTP_CDE>
    <ANSE_CDE>BOV</ANSE_CDE>
    <ANDT_CDE>C36</ANDT_CDE>
    <ANM_CNT>1</ANM_CNT>
    <ANCO_CDE>DEAD</ANCO_CDE>
    <Facility>

```

```

    <NFTP_CDE>DST</NFTP_CDE>
    <CDE> BE03313736</CDE>
  </Facility>
  <Animal>
    <REF_NBR>BE118892877</REF_NBR>
  </Animal>
</MovementNotification>
</MovementNotificationImport>

```

Registering an Export Movement...

```

<?xml version="1.0"?>
<MovementNotificationImport xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xmlns:xsd="http://www.w3.org/2001/XMLSchema" User=" TESTXML " SecurityToken="N/A"
  xmlns="http://Sanitel.EAI/SanitelRepository/SanitelServices/
  MovementNotificationImportSchema">
  <MovementNotification>
    <NOTP_CDE>MMEPO</NOTP_CDE>
    <OCR_DTE>2008-11-05T13:19:28</OCR_DTE>
    <DOC_NBR>INTRA.BE.2008.0029632-V1</DOC_NBR>
    <CRF_NBR>BE/IC/ANT/2008/4023/1995#</CRF_NBR>
    <ANTP_CDE>BOV</ANTP_CDE>
    <ANM_CNT>1</ANM_CNT>
    <ANCO_CDE>ALIVE</ANCO_CDE>
    <LIC_PLT>HYE-343</LIC_PLT>
    <CTRY_CDE_TO>NL</CTRY_CDE_TO>
    <Party>
      <NPTP_CDE>TRA</NPTP_CDE>
      <CDE>BE12002473</CDE>
    </Party>
    <Party>
      <NPTP_CDE>DLR</NPTP_CDE>
      <CDE>BE12500104</CDE>
    </Party>
    <Facility>
      <NFTP_CDE>SRC</NFTP_CDE>
      <CDE>BE12500104</CDE>
      <SNUN_CDE>BE12500104-0101</SNUN_CDE>
    </Facility>
    <Facility>
      <NFTP_CDE>ORI</NFTP_CDE>
      <CDE>BE10081457</CDE>
      <SNUN_CDE>BE10081457-0101</SNUN_CDE>
    </Facility>
    <Animal>
      <REF_NBR>BE117833993</REF_NBR>
      <PPT_VRS_NBR>2</PPT_VRS_NBR>
    </Animal>
  </MovementNotification>
</MovementNotificationImport>

```

Output Schema: Interaction Result

See definition Interaction Result Schema

Interface IMPPN - ImportPopulationNotification

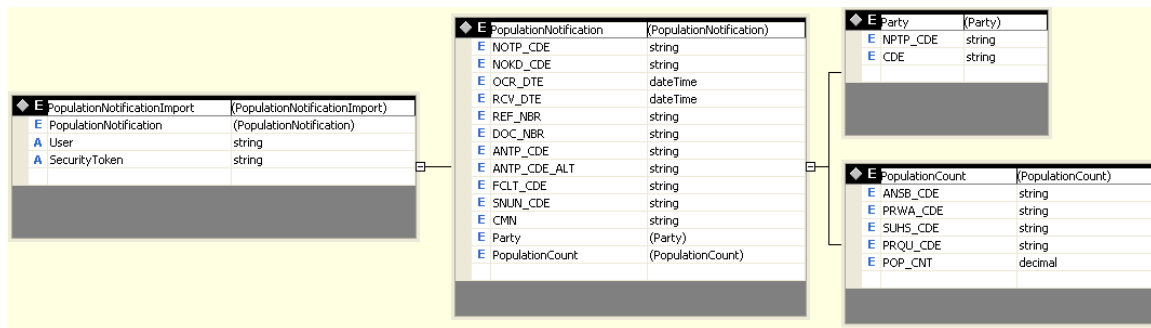
Direction: Import

Purpose: Submit population inventory results

Layout-Documentation:

http://qas.sanitrace.be/int/QAS_Sanitel_ExtInterfacingSvcs/SanitelServices.asmx?op=ImportPopulationNotification

Input Schema: PopulationNotificationImport



<http://Sanitel.EAI/SanitelRepository/SanitelServices/PopulationNotificationImportSchema>

XML Example(s)

```
<PopulationNotificationImport User="string" SecurityToken="string"
  xmlns="http://Sanitel.EAI/SanitelRepository/SanitelServices/
    PopulationNotificationImport">
  <PopulationNotification>
    <NOTP_CDE>string</NOTP_CDE>
    <NOKD_CDE>string</NOKD_CDE>
    <OCR_DTE>dateTime</OCR_DTE>
    <REF_NBR>string</REF_NBR>
    <DOC_NBR>string</DOC_NBR>
    <ANTP_CDE>string</ANTP_CDE>
    <ANTP_CDE_ALT>string</ANTP_CDE_ALT>
    <FCLT_CDE>string</FCLT_CDE>
    <SNUN_CDE>string</SNUN_CDE>
    <CMN>string</CMN>
    <Party>
      <NPTP_CDE>string</NPTP_CDE>
      <CDE>string</CDE>
    </Party>
    <Party>
      <NPTP_CDE>string</NPTP_CDE>
      <CDE>string</CDE>
    </Party>
    <PopulationCount>
      <ANSB_CDE>string</ANSB_CDE>
      <PRWA_CDE>string</PRWA_CDE>
      <SUHS_CDE>string</SUHS_CDE>
      <PRQU_CDE>string</PRQU_CDE>
      <POP_CNT>decimal</POP_CNT>
    </PopulationCount>
    <PopulationCount>
      <ANSB_CDE>string</ANSB_CDE>
      <PRWA_CDE>string</PRWA_CDE>
    </PopulationCount>
  </PopulationNotification>
</PopulationNotificationImport>
```

```
<SUHS_CDE>string</SUHS_CDE>  
<PRQU_CDE>string</PRQU_CDE>  
<POP_CNT>decimal</POP_CNT>  
</PopulationCount>  
</PopulationNotification>  
</PopulationNotificationImport>
```

Output Schema: Interaction Result

See definition Interaction Result Schema

Interface IMPUN - ImportProductionUnitNotification

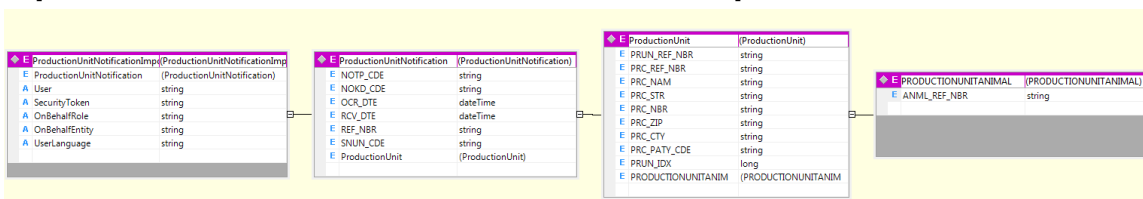
Direction: Import

Purpose: Submit assignments of production units (exploitation units) to Sanitary Units

Layout-Documentation:

http://qas.sanitrac.be/int/QAS_Sanitrac_ExtInterfacingSvcs/SanitracServices.asmx?op=ImportProductionUnitNotification

Input Schema: ProductionUnitNotificationImport



<http://Sanitrac.EAI/SanitracRepository/SanitracServices/ProductionUnitNotificationImportSchema>

XML Example(s)

Explicitly specified XML import (with Animals)

After processing this XML the Sanitary Unit BE10179333-0501 will have two Production units and the 3 animals are assigned to the corresponding production units. Equally, Sanitary Unit BE10179333-0101 will have 1 production unit with 1 animal assigned to this Production Unit. If more animals exist on these SanitaryUnits they are NOT assigned to any ProductionUnit, even if they previously were defined as belonging to that ProductionUnit

```
<?xml version="1.0" encoding="utf-8"?>
<ProductionUnitNotificationImport

xmlns="http://Sanitrac.EAI/SanitracRepository/SanitracServices/ProductionUnitNotificationImportSchema"
  User="UALV" SecurityToken="ED5R0CK5">
  <ProductionUnitNotification>
    <OCR_DTE>2008-01-30T17:46:29</OCR_DTE>
    <REF_NBR>10179333</REF_NBR>
    <SNUN_CDE>BE10179333-0501</SNUN_CDE>
    <ProductionUnit>
      <PRUN_REF_NBR>10179333123</PRUN_REF_NBR>
      <PRUN_IDX>1</PRUN_IDX>
      <PRC_REF_NBR></PRC_REF_NBR>
      <PRC_NAM>CHARLETS JOSEPH</PRC_NAM>
      <PRC_STR>GRAND CHEMIN DE MESSINES 100</PRC_STR>
      <PRC_ZIP>7780</PRC_ZIP>
      <PRC_CTY>COMINES</PRC_CTY>
      <ProductionUnitAnimal>
        <ANML_REF_NBR>BE12345678</ANML_REF_NBR>
      </ProductionUnitAnimal>
    </ProductionUnitAnimal>
  </ProductionUnitNotification>
</ProductionUnitNotificationImport>
```

```

        <ANML_REF_NBR>BE87654321</ANML_REF_NBR>
    </ProductionUnitAnimal>
</ProductionUnit>
<ProductionUnit>
    <PRUN_REF_NBR>10179333123</PRUN_REF_NBR>
    <PRUN_IDX>2</PRUN_IDX>
    <PRC_REF_NBR></PRC_REF_NBR>
    <PRC_NAM>CHARLETS JOSEPH</PRC_NAM>
    <PRC_STR>GRAND CHEMIN DE MESSINES 100</PRC_STR>
    <PRC_ZIP>7780</PRC_ZIP>
    <PRC_CTY>COMINES</PRC_CTY>
    <ProductionUnitAnimal>
        <ANML_REF_NBR>BE43218765</ANML_REF_NBR>
    </ProductionUnitAnimal>
</ProductionUnit>
</ProductionUnitNotification>
<ProductionUnitNotification>
    <OCR_DTE>2008-01-30T17:46:29</OCR_DTE>
    <REF_NBR>10179333</REF_NBR>
    <SNUN_CDE>BE10179333-0101</SNUN_CDE>
    <ProductionUnit>
        <PRUN_REF_NBR>10179333123</PRUN_REF_NBR>
        <PRUN_IDX>3</PRUN_IDX>
        <PRC_REF_NBR></PRC_REF_NBR>
        <PRC_NAM>CHARLETS JOSEPH</PRC_NAM>
        <PRC_STR>GRAND CHEMIN DE MESSINES 100</PRC_STR>
        <PRC_ZIP>7780</PRC_ZIP>
        <PRC_CTY>COMINES</PRC_CTY>
    <ProductionUnitAnimal>
        <ANML_REF_NBR>BE12348765</ANML_REF_NBR>
    </ProductionUnitAnimal>
</ProductionUnit>
</ProductionUnitNotification>
</ProductionUnitNotificationImport>

```

Implicitly specified XML import (No Animals)

After processing this XML only the Production Unit information / definition is updated. This will have no impact on the animals if the Production Unit Code(s) already existed. Where before it was not possible to delete a productionunit definition (read: specify a SanitaryUnit without ProductionUnits or with another ProductionUnit), all animals having this deleted production **unit** will be decoupled from it...

e.g. in the example underneath the addresses of the production units will be updated for SanitaryUnit BE10179333-0501 and for SanitaryUnit BE10179333-0101 the Production Unit will be removed and all animals decoupled

```

<?xml version="1.0" encoding="utf-8"?>
<ProductionUnitNotificationImport
xmlns="http://Sanitrace.EAI/SanitraceRepository/SanitraceServices/ProductionUnitNotificat
ionImportSchema"
    User="UALV" SecurityToken="ED5R0CK5">
    <ProductionUnitNotification>
        <OCR_DTE>2008-01-30T17:46:29</OCR_DTE>
        <REF_NBR>10179333</REF_NBR>
        <SNUN_CDE>BE10179333-0501</SNUN_CDE>
        <ProductionUnit>
            <PRUN_REF_NBR>10179333123</PRUN_REF_NBR>
            <PRUN_IDX>1</PRUN_IDX>
            <PRC_REF_NBR></PRC_REF_NBR>

```

```

<PRC_NAM>CHARLETS JOSEPH</PRC_NAM>
<PRC_STR>GRAND CHEMIN DE MESSINES 200</PRC_STR>
<PRC_ZIP>7780</PRC_ZIP>
<PRC_CTY>COMINES</PRC_CTY>
</ProductionUnit>
<ProductionUnit>
  <PRUN_REF_NBR>10179333123</PRUN_REF_NBR>
  <PRUN_IDX>2</PRUN_IDX>
  <PRC_REF_NBR></PRC_REF_NBR>
  <PRC_NAM>CHARLETS JOSEPH</PRC_NAM>
  <PRC_STR>GRAND CHEMIN DE MESSINES 200</PRC_STR>
  <PRC_ZIP>7780</PRC_ZIP>
  <PRC_CTY>COMINES</PRC_CTY>
</ProductionUnit>
</ProductionUnitNotification>
<ProductionUnitNotification>
  <OCR_DTE>2008-01-30T17:46:29</OCR_DTE>
  <REF_NBR>10179333</REF_NBR>
  <SNUN_CDE>BE10179333-0101</SNUN_CDE>
  <ProductionUnit/>
</ProductionUnitNotification>
</ProductionUnitNotificationImport>

```

Concrete consider the following situation

- SNUN ABC -> PRUN XXX -> 5 animals attached to PRUN XXX

Scenario 1: XML is processed that has NO Production Units defined

Impact:

- No PRUN
- No animals attached

Use this scenario to terminate a certain production unit at a Sanitary Unit.

Scenario 2: XML is processed that defines Production Units XXX and YYY

Impact:

- PRUN YYY is being added to the PRUNS of SNUN ABC
- PRUN XXX might have been updated but retains all its animals attached to it

Use this scenario to add a new PRUN to the SNUN

Scenario 3: XML is processed that defines a Production Unit YYY only

Impact:

- PRUN XXX deleted from SNUN ABC and all animals detached from PRUN XXX
- PRUN YYY added
- No animals have a PRUN Reference

It is unlikely that this scenario is used a lot but it could define a new situation

Scenario 4: XML is processed that defines a Production Unit YYY only with all animals attached to XXX now attached to YYY

Impact:

- PRUN XXX is deleted from SNUN ABC
- PRUN YYY added
- and all animals from PRUN XXX are now attached to YYY

Use this scenario to do a change of production units

Output Schema: Interaction Result

See definition Interaction Result Schema

Interface IMRTN - ImportRetaggingNotification

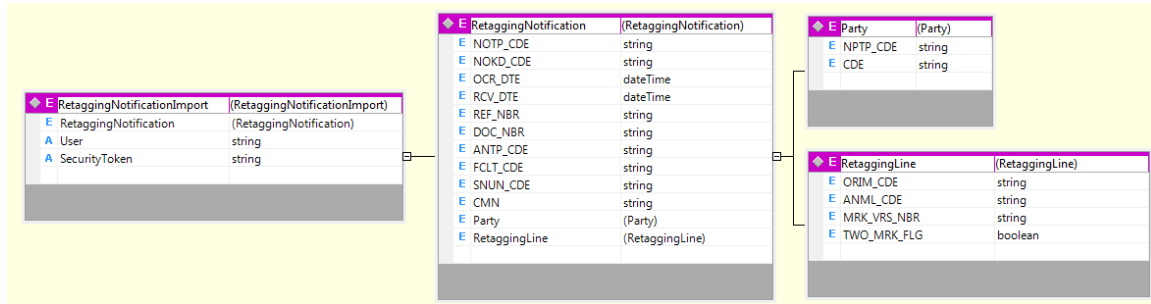
Direction: Import

Purpose: Submit Retagging notifications into the system

Layout-Documentation:

http://qas.sanitrace.be/int/QAS_Sanitel_ExtInterfacingSvcs/SanitelServices.asmx?op=ImportRetaggingNotification

Input Schema: RetaggingNotificationImport



<http://Sanitel.EAI/SanitelRepository/SanitelServices/RetaggingNotificationImportSchema>

XML Example(s)

```
<?xml version="1.0" encoding="utf-8"?>
<RetaggingNotificationImport User="TESTXML"
xmlns="http://Sanitel.EAI/SanitelRepository/SanitelServices/RetaggingNotificationImportSchema">
  <RetaggingNotification>
    <NOTP_CDE>RETAG</NOTP_CDE>
    <NOKD_CDE></NOKD_CDE>
    <OCR_DTE>2008-09-04T12:30:00</OCR_DTE>
    <RCV_DTE>2008-09-04T12:30:00</RCV_DTE>
    <REF_NBR>Test_retag</REF_NBR>
    <DOC_NBR>1234</DOC_NBR>
    <ANTP_CDE>BOV</ANTP_CDE>
    <FCLT_CDE>BE60012911</FCLT_CDE>
    <SNUN_CDE>BE60012911-0101</SNUN_CDE>
    <CMN>Comment2</CMN>
    <Party>
      <NPTP_CDE>ORDR</NPTP_CDE>
      <CDE>BE100023073</CDE>
    </Party>
    <Party>
      <NPTP_CDE>DELV</NPTP_CDE>
      <CDE>BE100023073</CDE>
    </Party>
    <RetaggingLine>
      <ORIM_CDE>DGZ-V-HOM-M7-R-001</ORIM_CDE>
      <ANML_CDE>BE60717242</ANML_CDE>
      <MRK_VRS_NBR>1</MRK_VRS_NBR>
      <TWO_MRK_FLG>false</TWO_MRK_FLG>
    </RetaggingLine>
  </RetaggingNotification>
</RetaggingNotificationImport>
```

```
</RetaggingLine>
<RetaggingLine>
  <ORIM_CDE>DGZ-V-HOM-M7-R-001</ORIM_CDE>
  <ANML_CDE>BE60666684</ANML_CDE>
  <MRK_VRS_NBR>2</MRK_VRS_NBR>
  <TWO_MRK_FLG>true</TWO_MRK_FLG>
</RetaggingLine>
</RetaggingNotification>
</RetaggingNotificationImport>
```

Output Schema: Interaction Result

See definition Interaction Result Schema

Interface IMRSN - ImportRiskNotification

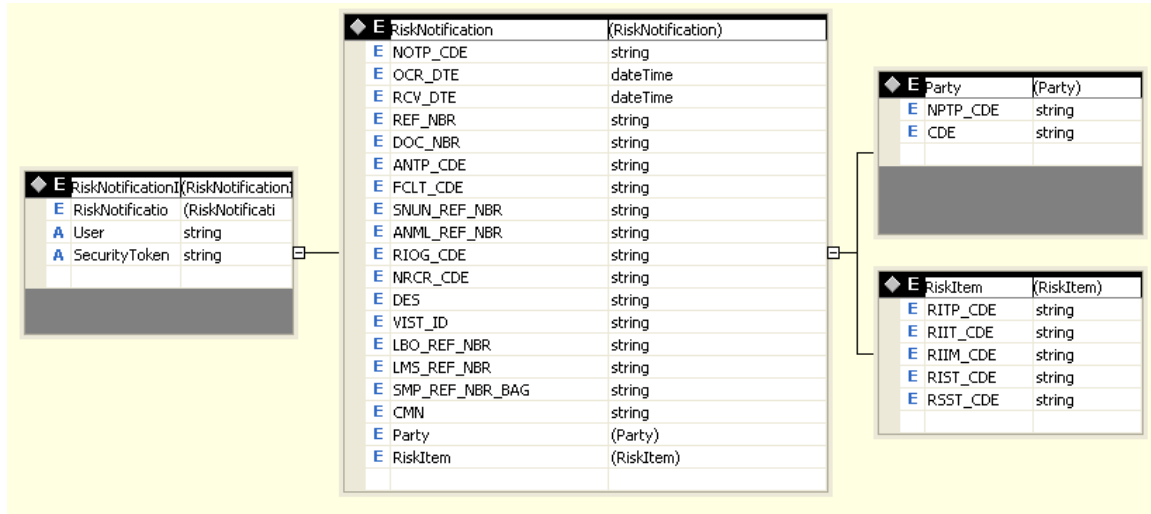
Direction: Import

Purpose: Submit risk notifications, laboratory results,...

Layout-Documentation:

http://qas.sanitrace.be/int/QAS_Sanitel_ExtInterfacingSvc/SanitelServices.aspx?op=ImportRiskNotification

Input Schema: RiskNotificationImport



<http://Sanitel.EAI/SanitelRepository/SanitelServices/RiskNotificationImportSchema>

XML Example(s) - Todo

Output Schema: Interaction Result

See definition Interaction Result Schema

Interface IMTMN - ImportTreatmentNotification

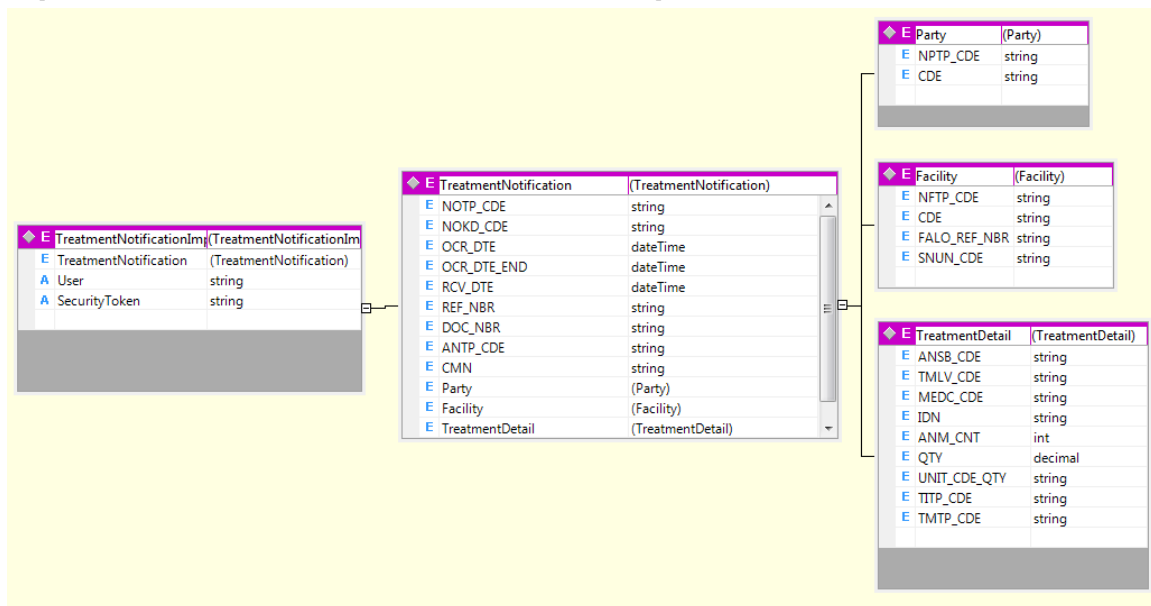
Direction: Import

Purpose: Submit treatments (e.g. Bluetongue) into Sanitel

Layout-Documentation:

http://gas.sanitrac.be/int/QAS_Sanitel_ExtInterfacingSvcs/SanitelServices.asmx?op=ImportTreatmentNotification

Input Schema: TreatmentNotificationImport



<http://Sanitel.EAI/SanitelRepository/SanitelServices/TreatmentNotificationImportSchema>

XML Example(s)

```
<?xml version="1.0" encoding="utf-8"?>
<TreatmentNotificationImport User="string" SecurityToken="string"
  xmlns="http://Sanitel.EAI/SanitelRepository/SanitelServices/
    TreatmentNotificationImport">
  <TreatmentNotification>
    <NOTP_CDE>TMT</NOTP_CDE>
    <OCR_DTE>2008/04/11T11:30:00</OCR_DTE>
    <OCR_DTE_END>2008/04/11T12:30:00</OCR_DTE_END>
    <REF_NBR>XXXX</REF_NBR>
    <ANTP_CDE>BOV</ANTP_CDE>
    <CMN>...</CMN>
    <Party>
      <NPTP_CDE>HND</NPTP_CDE>
      <CDE>BE12345678</CDE>
    </Party>
    <Party>
      <NPTP_CDE>RSP</NPTP_CDE>
      <CDE>BE87654321</CDE>
    </Party>
    <Facility>
      <NFTP_CDE>FARM</NFTP_CDE>
    </Facility>
  </TreatmentNotification>
</TreatmentNotificationImport>
```

```
<CDE>BE87654321</CDE>
<SNUN_CDE> BE87654321-0101</SNUN_CDE>
</Facility>
<TreatmentDetail>
  <ANSB_CDE>BOV</ANSB_CDE>
  <TMLV_CDE>GRP</TMLV_CDE>
  <MEDC_CDE>BLTNG</MEDC_CDE>
  <IDN>Stable 1</IDN>
  <ANM_CNT>20</ANM_CNT>
  <QTY>20</QTY>
  <UNIT_CDE_QTY>ST</UNIT_CDE_QTY>
  <TITP_CDE>VAC1</TITP_CDE>
  <TMTP_CDE>SCINJ</TMTP_CDE>
</TreatmentDetail>
</TreatmentNotificationImport>
```

Output Schema: Interaction Result

See definition Interaction Result Schema

Interface IMPMS - ImportMarkingSeries

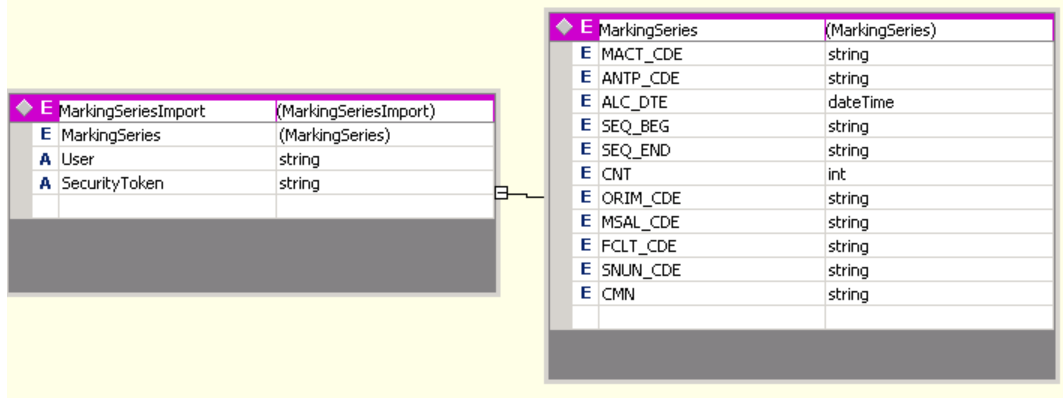
Direction: Import

Purpose: Submit marking series allocations,...

Layout-Documentation:

http://qas.sanitrac.be/int/QAS_Sanitel_ExtInterfacingSvc/SanitelServices.asmx?op=ImportMarkingSeries

Input Schema: MarkingSeriesImport



<http://Sanitel.EAI/SanitelRepository/SanitelServices/MarkingSeriesImportSchema>

XML Example(s)

XML Example 1 – Manually allocating earmarks

```
<?xml version="1.0" encoding="utf-8" ?>
<MarkingSeriesImport
xmlns="http://Sanitel.EAI/SanitelRepository/SanitelServices/MarkingSeriesImportSchema"
User="string" SecurityToken="N/A">
  <MarkingSeries>
    <MACT_CDE>BE</MACT_CDE>
    <ANTP_CDE>BOV</ANTP_CDE>
    <SEQ_BEG>00001217</SEQ_BEG>
    <SEQ_END>00001218</SEQ_END>
    <CNT>2</CNT>
    <ORIM_CDE>DGZ-V-POM-ULTRA-R-001</ORIM_CDE>
    <MSAL_CDE>AMANU</MSAL_CDE>
    <SNUN_CDE>BE70052294-0101</SNUN_CDE>
    <CMN>Test Import</CMN>
  </MarkingSeries>
</MarkingSeriesImport>
```

Interface IMPST - ImportStatusUpdateNotification

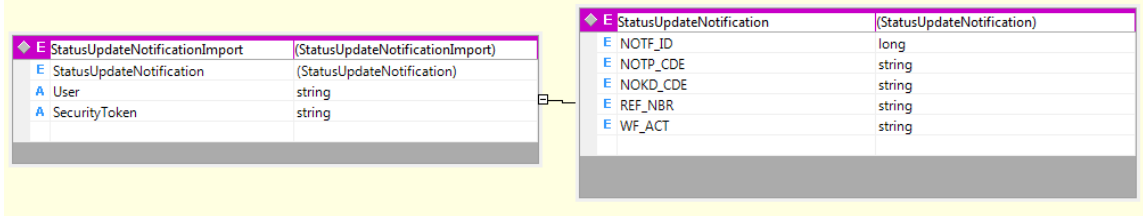
Direction: Import

Purpose: Submit a status update notification – currently limited to treatments but extendable to other notifications

Layout-Documentation:

http://qas.sanitrace.be/int/QAS_Sanitel_ExtInterfacingSvcs/SanitelServices.aspx?op=ImportStatusUpdateNotification

Input Schema: StatusUpdateNotificationImport



<http://Sanitel.EAI/SanitelRepository/SanitelServices/StatusUpdateNotificationImportSchema>

XML Example 1 – cancelling a treatment via notification id

```
<?xml version="1.0" encoding="utf-8"?>
<StatusUpdateNotificationImport User="string" SecurityToken="string"
  xmlns="http://Sanitel.EAI/SanitelRepository/SanitelServices/
    StatusUpdateNotificationImportSchema">
  <StatusUpdateNotification>
    <NOTP_CDE>TMT</NOTP_CDE>
    <NOTF_ID>5006782</NOTF_ID>
    <WF_ACT>CAN</WF_ACT >
  </StatusUpdateNotification >
</ StatusUpdateNotificationImport>
```

XML Example 2 – cancelling a treatment via notification reference number

```
<?xml version="1.0" encoding="utf-8"?>
<StatusUpdateNotificationImport User="string" SecurityToken="string"
  xmlns="http://Sanitel.EAI/SanitelRepository/SanitelServices/
    StatusUpdateNotificationImportSchema">
  <StatusUpdateNotification>
    <NOTP_CDE>TMT</NOTP_CDE>
    <REF_NBR>5006782</REF_NBR>
    <WF_ACT>CAN</WF_ACT >
  </StatusUpdateNotification >
</ StatusUpdateNotificationImport>
```

Output Schema: Interaction Result

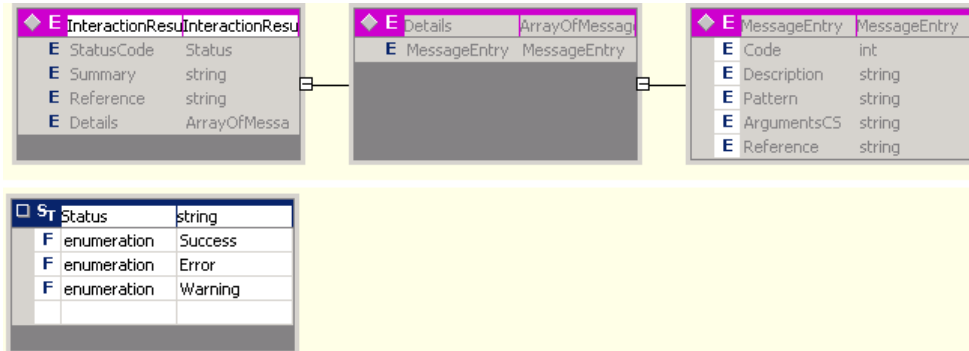
See definition Interaction Result Schema

InteractionResult

Purpose

Schema to give feedback regarding an import of information

Schema



<http://Sanitel.EAI/SanitelRepository/InteractionResult>

On success you receive an interaction result like shown underneath. Important is the StatusCode “Success” and the Reference “868538067”

```
<?xml version="1.0" ?>
<InteractionResult xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xmlns:xsd="http://www.w3.org/2001/XMLSchema">
  <StatusCode>Success</StatusCode>
  <Summary>Import ImportChangeNotificationUseCase successfull: Change Notification
    Importing 2322-343453 ChangeNotification information is imported.
  </Summary>
  <Reference>868538067</Reference>
  <Details />
</InteractionResult>
```

In case of incorrect URLs you receive an interaction result like shown underneath. Important is the StatusCode “Error”, a Summary Message and one or more Detail Message Entries.

```
<?xml version="1.0"?>
<InteractionResult
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xmlns:xsd="http://www.w3.org/2001/XMLSchema">
  <StatusCode>Error</StatusCode>
  <Summary>Import ImportChangeNotificationUseCase erroneous: Change Notification
    Importing 2322-343453 ChangeNotification information is not imported. See logs
    for more information.
  </Summary>
  <Reference />
  <Details>
    <MessageEntry>
      <Code>-266</Code>
      <Description>Record not found in table Table ANIMAL for search criterium
        Country/MarkingNumber with value BE/00004461
      </Description>
      <Pattern> Record not found in table {0} for search criterium
    </MessageEntry>
  </Details>
</InteractionResult>
```

```

        {1} with value {2}</Pattern>
    <ArgumentsCSV> ANIMAL,Country/MarkingNumber ,BE/00004461</ArgumentsCSV>

    <Reference />
</MessageEntry>
</Details>
</InteractionResult>

```

Or when requested with user language NL

```

<?xml version="1.0"?>
<InteractionResult
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xmlns:xsd="http://www.w3.org/2001/XMLSchema">
  <StatusCode>Error</StatusCode>
  <Summary>Import ImportChangeNotificationUseCase erroneous: Change Notification
    Importing 2322-343453 ChangeNotification information is not imported. See logs
    for more information.
  </Summary>
  <Reference />
  <Details>
    <MessageEntry>
      <Code>-266</Code>
      <Description>Record niet gevonden in tabel Dier voor zoekcriterium
        Land/Werknummer met waarde BE/00004461
      </Description>
      <Pattern> Record not found in table {0} for search criterium
        {1} with value {2}</Pattern>
      <ArgumentsCSV> ANIMAL,Country/MarkingNumber ,BE/00004461</ArgumentsCSV>

      <Reference />
    </MessageEntry>
  </Details>
</InteractionResult>

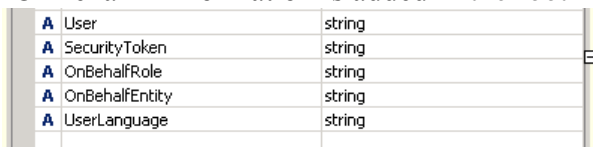
```

Working On Behalf Of

To support 3rd party services, we added ‘work on behalf of’ functionality. The principle is quite simple. Besides passing user /security token you know pass two additional information elements:

OnBehalfRole	The application role of the entity you are working on behalf of e.g. FARM, ...
OnBehalfEntity	The entity you are working on behalf of. This typically will be a Facility or a Sanitary Unit. However, the functionality might be extended to parties to

We have currently only updated the schema’s for movements and birth/imports. And we will not ‘re-display’ all XSD schema’s – but the picture underneath shows how the ‘OnBehalf’ information is added in the root – element of an XML



A	User	string
A	SecurityToken	string
A	OnBehalfRole	string
A	OnBehalfEntity	string
A	UserLanguage	string

If you are working ‘on behalf of’ always add the tokens. They might be non-functional now but will become functional soon...

Localized Error Messages

As seen in the above structure there is also an attribute called UserLanguage. This attribute has to be set with every message call.

The allowed languages are EN (English), NL (Dutch), FR (French), DE (German)

The interaction result or exception messages are then localized in the specified language

Interfaces – Technical Usage

Web Application

The online application can be accessed via

- http://qas.sanitrace.be/web/QAS_Sanitel_Web/Pages/Common/Default.aspx

In principle you should log in with your user name and then navigate to the Upload XML page. Select an XML, submit it and save or open the result XML...

It is a good practice to study the application online behavior before you start using the back-end services. In fact a lot of the functionality is very similar

Please consider the user manuals discussing the online application, general working, registering accounts, updating your profile, registering issues, etc. To retrieve the manuals click on the InfoCentre link in the top right corner of the application header.

Channel 1. upload / download via secured web service

The web services can be access via

http://qas.sanitrac.be/int/QAS_Sanitel_ExtInterfacingSvcs/SanitelServices.asmx

This site is secured you need to enter the following credentials:

User: XML4SNTRC

Password: ed5R#CK5

This provides the list of both import and export Web Methods as shown underneath.

Sanitrace_SanitraceServices

Sanitrace Services

The following operations are supported. For a formal definition, please review the [Service Description](#).

- [ExportAnimal](#)
- [ExportAnimalMovementNotificationOverview](#)
- [ExportAnimalOverview](#)
- [ExportChangeNotificationOverview](#)
- [ExportFacilityOverview](#)
- [ExportMovementNotification](#)
- [ExportMovementNotificationOverview](#)
- [ExportPartyOverview](#)
- [ExportProductionUnitOverview](#)
- [ExportSanitaryUnit](#)
- [ExportSanitaryUnitOverview](#)
- [ImportAnimalNotification](#)
- [ImportChangeNotification](#)
- [ImportInventoryNotification](#)
- [ImportMovementNotification](#)
- [ImportPopulationNotification](#)
- [ImportProductionUnitNotification](#)
- [ImportRiskNotification](#)

Modern development environments such as .Net or Java can reference the asmx file and generate WebService stubs in your development environment. After that you can code using direct access of the XML structures

Publishing web services as an asmx has some additional advantages. First it is very convenient to get insight in to the XML input and output structure and get a basis to start from. Just click on a method (e.g. Export Animal Overview)

Sanitrace_SanitraceServices

Click [here](#) for a complete list of operations.

ExportAnimalOverview

Method (Use Case)

Test

The test form is only available for requests from the local machine.

SOAP 1.1

The following is a sample SOAP 1.1 request and response. The **placeholders** shown need to be

```
POST /int/QAS_Sanitrace_ExtInterfacingSvcs/SanitraceServices.asmx HTTP/1.1
Host: qas.sanitrace.be
Content-Type: text/xml; charset=utf-8
Content-Length: length
SOAPAction: "http://Sanitrace.EAI/SanitraceRepository/SanitraceServices/ExportAnimalOverview"

<?xml version="1.0" encoding="utf-8"?>
<soap:Envelope xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <ExportAnimalOverview xmlns="http://Sanitrace.EAI/SanitraceRepository/SanitraceServices" >
      <AnimalOverviewExportRequest User="string" SecurityToken="string">
        <Animal xmlns="http://Sanitrace.EAI/SanitraceRepository/SanitraceServices">
          <CDE>string</CDE>
          <ANTP_CDE>string</ANTP_CDE>
          <PRUN_REF_NBR>string</PRUN_REF_NBR>
          <FCLT_CDE>string</FCLT_CDE>
          <SNUN_CDE>string</SNUN_CDE>
          <UPD_DTE_FRM>dateTime</UPD_DTE_FRM>
          <UPD_DTE_TO>dateTime</UPD_DTE_TO>
          <TRGR_CDE>string</TRGR_CDE>
        </Animal>
      </AnimalOverviewExportRequest>
    </ExportAnimalOverview>
  </soap:Body>
</soap:Envelope>
```

Input structure
+ All attributes

```
HTTP/1.1 200 OK
Content-Type: text/xml; charset=utf-8
Content-Length: length

<?xml version="1.0" encoding="utf-8"?>
<soap:Envelope xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <ExportAnimalOverviewResponse xmlns="http://Sanitrace.EAI/SanitraceRepository/SanitraceServices" >
      <AnimalOverviewExport User="string" SecurityToken="string" Response="string">
        <Animal>
          <ANTP_CDE>string</ANTP_CDE>
          <CDE>string</CDE>
          <MACT_CDE>string</MACT_CDE>
          <MRK_CDG>string</MRK_CDG>
          <MRK_NBR>string</MRK_NBR>
        </Animal>
      </AnimalOverviewExport>
    </ExportAnimalOverviewResponse>
  </soap:Body>
</soap:Envelope>
```

Output structure
+ All attributes

Another powerful feature of Web Services is that one can retrieve the online Web Service Definition in general and all XSD schema's in particular.

i.e.

http://qas.sanitrac.be/int/QAS_Sanitel_ExtInterfacingSvc/SANITELSERVICES.ASMX?wsdl

The schema names are automatically generated so might get changed when updating the proxy. See the table underneath for the active configuration. A Schema can be retrieved directly via

http://qas.sanitrac.be/int/QAS_Sanitel_ExtInterfacingSvc/SANITELSERVICES.ASMX?schema=schemaXX

with XX the schema number as defined in the table underneath

schema31	AnimalExport
schema25	AnimalMovementNotificationOverviewExport
schema2	AnimalNotificationImport
schema28	AnimalOverviewExport
schema6	ChangeNotificationImport
schema34	ChangeNotificationOverviewExport
schema23	ExportAnimalMovementNotificationOverviewRequest
schema26	ExportAnimalOverviewRequest
schema29	ExportAnimalRequest
schema32	ExportChangeNotificationOverviewRequest
schema35	ExportFacilityOverviewRequest
schema38	ExportMovementNotificationOverviewRequest
schema41	ExportMovementNotificationRequest
schema44	ExportPartyOverviewRequest
schema47	ExportProductionUnitOverviewRequest
schema50	ExportSanitaryUnitOverviewRequest
schema53	ExportSanitaryUnitRequest
schema37	FacilityOverviewExport
schema9	InventoryNotificationImport
schema43	MovementNotificationExport
schema12	MovementNotificationImport
schema40	MovementNotificationOverviewExport
schema46	PartyOverviewExport
schema15	PopulationNotificationImport
schema18	ProductionUnitNotificationImport
schema49	ProductionUnitOverviewExport
schema21	RiskNotificationImport

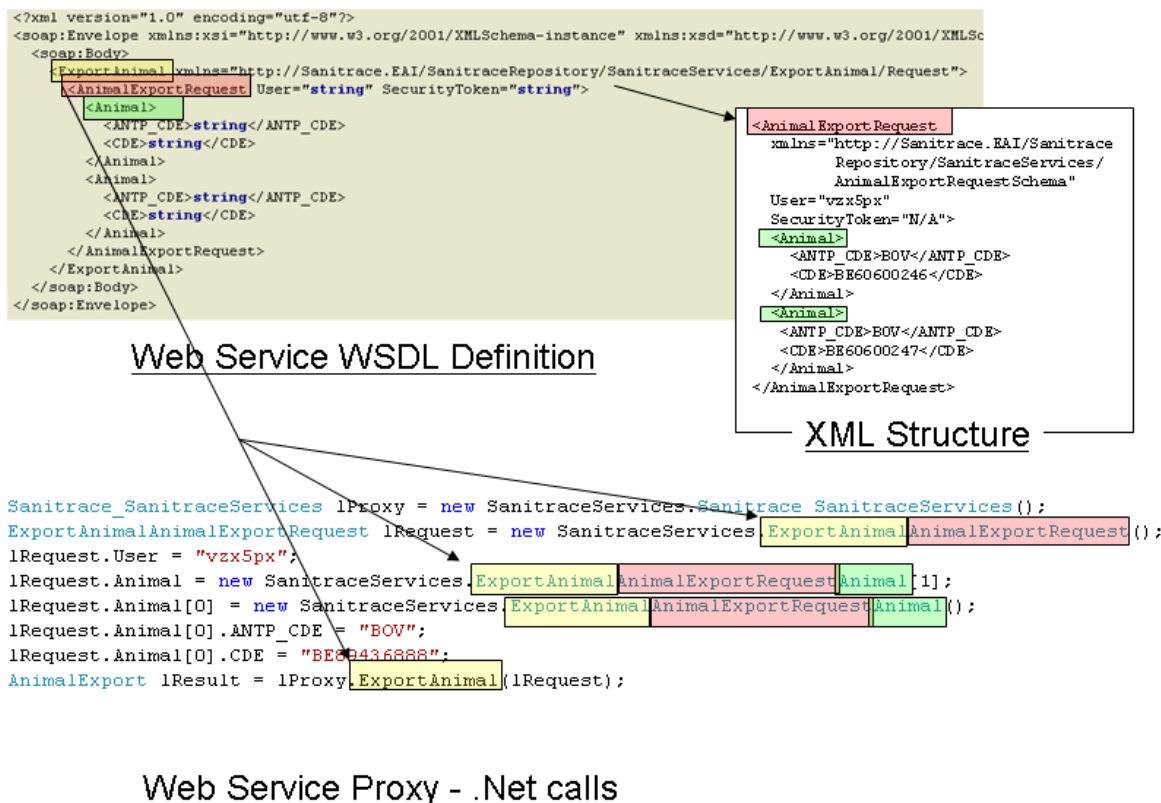
The zip file underneath gives a .Net example on how to make calls to the Web Service



Since Microsoft Patch 928365 – the behavior of the XSD tool is definitively prohibiting the use of anonymous types -- System.Xml.Serialization.XmlTypeAttribute(AnonymousType=true)

The effect is the following stub generation strategy:

WSDL -> SOAP Envelope



As such you actually get “long names” in your code which can be a bit confusing. However, as you get the ‘method name’ – ‘structure name’ - ‘structure table’ insight it is rather straightforward again...

Channels 2 to 4

The examples given in this document actually were slightly 'altered' for better readability. i.e. the xmlns-directive should be without spaces / linebreaks. The XML as such should look like...

EXPA – 2 – Retrieve all Slaughterhouses – correct XML

```
<?xml version="1.0" encoding="utf-8"?>
  <PartyOverviewExportRequest
xmlns="http://Sanitel.EAI/SanitelRepository/SanitelServices/PartyOverviewExportRequestSch
ema"
    User="TESTXML" SecurityToken="N/A" ResultIndex="0">
    <Party>
      <PATP_CDE>SLGHS</PATP_CDE>
    </Party>
```

The zip file underneath contains some example XML files these can be used by all subsequent scenario's as these work with pure XML files rather than Web Services. Obviously the XML's are formed according to the schema's defined above.

TODO – as soon as the code = operational – add a zip file of the above XML examples but with actual examples

Channel 2 - upload / download via secured streaming page

SlaughterFile and SlaughterInfo XML files to be imported can be streamed to the following secured page

http://qas.sanitrace.be/int/QAS_Sanitel_ExtInterfacingSvc/GenericXMLHandler.ashx

To access the pages you need to enter the following credentials:

User: XML4SNTRC

Password: ed5R#CK5

The code underneath gives an example on how to use this secured interface



Channel 3 - upload / download via unsecured streaming page

XML import files can be streamed to the following page

http://qas.sanitrace.be/web/QAS_Sanitel_Web/Interfacing/GenericXMLHandler.ashx

The code in scenario 2 can be used. Just replace the URL as mentioned above and delete user name and password

Channel 4 - upload / download via web page

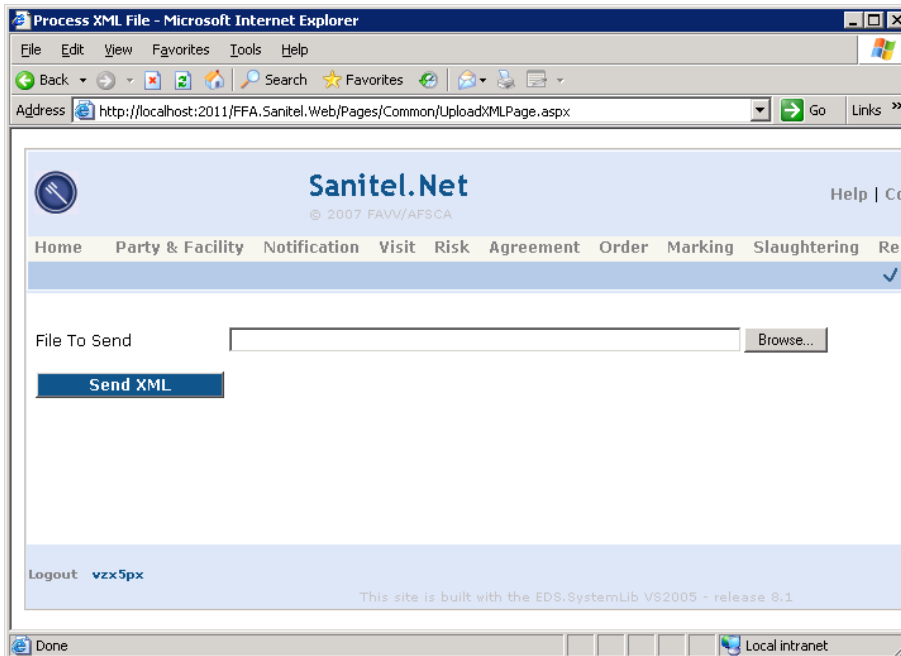
After selecting the menu option

Upload XML

Or by entering the URL

http://gas.sanitrac.be/web/QAS_Sanitel_Web/Pages/Common/UploadXMLPage.aspx

You get to the manual upload page which is rather straight forward.



On this page you can test whether your xml is correctly filled in. In case your streaming does not work or give satisfactory results please test it first using the manual scenario.

Be sure you get on this page and NOT on the XML upload page for the slaughter module...

URL Summary

For testing in the ongoing development environment

- http://qas.sanitrac.be/int/QAS_Sanitel_ExtInterfacingSvcs/GenericXMLHandler.ashx
- http://qas.sanitrac.be/int/QAS_Sanitel_ExtInterfacingSvcs/SanitelServices.asmx
- http://qas.sanitrac.be/web/QAS_Sanitel_Web/Pages/Common/UploadXMLPage.aspx

The Luxembourg URLs

In addition all interface URLs and definitions will be standardized on the “**Sanilux**” – naming and the .be suffix needs to be changed to lu

i.e.

http://qas.sanitrac.be/int/QAS_Sanitel_ExtInterfacingSvcs/GenericXMLHandler.ashx
will become

http://qas.sanitrac.lu/int/QAS_Sanilux_ExtInterfacingSvcs/GenericXMLHandler.ashx*
http://qas.sanitrac.lu/int/QAS_Sanilux_ExtInterfacingSvcs/GenericXMLHandler.ashx

Schema definition like

<http://Sanitel.EAI/SanitelRepository/SanitelServices/RiskNotificationImportSchema>

are unchanged

Production URLs

All URLs specified contain the word QAS at least once in the URL. For production all of the above will remain the same, except that the characters qas or QAS are to be replaced by prd or PRD

i.e.

http://prd.sanitrace.be/int/PRD_Sanitel_ExtInterfacingSvcs/GenericXMLHandler.ashx *

or for Luxembourg

http://prd.sanitrace.lu/int/PRD_Sanilux_ExtInterfacingSvcs/GenericXMLHandler.ashx

Web Service Security

The Web Services are until now only secured using the XML web services user-account and password. And this account is shared by all XML users. Furthermore, we do not intend to introduce https for the web services, both for performance reasons and stability reasons. Especially in web services high-frequent https connectivity can cause problems. Additionally we do not expect people to strongly authenticate them using X509 certificates as this is probably overkill for this application...

All XML users have to specify their User-account in the message. This account is used for treating the XML this sharing of the same connection is on itself not a problem.

This user account is linked to the Party and Facility for whom the XML requests are being done (e.g. an arrival, a change notification,...) and security and business rules are validated against this user account (Read: The XML is processed against the rights of this user). In addition, this user account is also used in the audit trail.

Now, the attentive reader has detected two possible security issues. What if a hacker sniffs the message and resubmits it possibly with other information? What if you specify a user name you should not use? Let's ignore the first one and focus on the second one...

Indeed, theoretically people having access to XML messaging and knowing accounts of other users could submit an XML as if they were that user...

That's where the security token comes into play...

In practice you still can leave the security token blank as this is a trusted user community. In addition you need to know the other user name and last but not least we do quiet some tracing on IP-address level to detect abuse or to do some analysis in case abuse is detected. This XML tracking also includes the content of the XML request so we actually can verify if XML users do not 'abuse' there XML capabilities by querying information they should not access...

So no additional Web Service Security is for the time being still an option. Nevertheless we do invite you to implement one of the method-security elements discussed underneath. And as soon as you are on level 3 or 4 you also make the life of the hacker a lot more difficult...

We now discuss how in the online application the XML security can be configured. This is done in tab 6 in the user profile. In this tab we manage some advanced security settings managing connectivity with the application both in the online as well as for the XML. The settings defined in this tab will define how you need to send your XML messages.

p.1 p.2 p.3 p.4 p.5 p.6

Must Use SSL Logon
 Uses XML
 XML Security Active

XML Security Token Type TokenKeyHashed

XML Token / Encryptor Ge5Y0+n8cSTYNZUGKI

XML Security Key 324

Update Profile

Must Use SSL Logon Checkbox

This flag indicates whether this User should logon via the Secure Server. If the user logs on via the normal login he is blocked for 2 minutes. We deliberately do NOT lock the user out because;

- The password has been sent clear text over the line – so the ‘harm’ has been done anyway
- the https channel might be closed down as protection against from a standard https/virus attack

Uses XML Checkbox

The Uses XML checkbox is a flag that indicates that a certain LOGIN-account can also use XML to load / export information.

XML Security Token Type

This setting defines which Security strategy is followed in the XML messages. i.e. it defines what is being passed in the security token. The options are:

1. Security Token
2. Hashed Security Token
3. Date-based Security Token
4. Hashed Date-based Security Token
5. Key-based Security Token
6. Hashed Key-based Security Token
7. AES Encrypted Date-Time Value

The table underneath gives an overview of what the XML Security Token Settings are and additionally demonstrate how the security token can be filled in. Finally, column 5 gives an example of the real security token as filled in in the XML .

Option	Description	Security Token example	Key example	XML Security Token
1. Security Token	The security token plays the role of a kind of password	SomeSecret	-	SomeSecret
2. Hashed Security Token	The above security token is hashed with the SHA1 algorithm	SomeSecret	-	o3En/+Fm638yxFW4AHISkb7Taz4=
3. Date-Based Security Token	The security token is combined with the key	Some{0}Secret SomeSecret		Some20080929Secret
4. Hashed Date-Based Security Token	The security token is combined with the key	Some{0}Secret SomeSecret		hNvdH6haYJ4WAdMYJx9vF/ewpaQ=
5. Key-based Security Token	The security token is combined with the key	Some{0}Secret SomeSecret	210*	Some210Secret SomeSecret210
6. Hashed Key-based Security Token	The combined key / security token is hashed with the SHA1 algorithm	Some{0}Secret SomeSecret	210*	/bvVn9ub3lj1yOKKedP2I024ftc= v+KoBSaBWhAqMCDVzXGnJi3ejDQ=
7. AES Encrypted Date-Time Value	A <USER XML date time now> value encrypted using AES	SomeSecretAESSaltValue	-	TESTXML 2008-11-12T12:00:00 = encrypted Sn1Qn6B6bUakN2kjztRMjQU7jfwXor0Jg WTpX2lrjibwiR/iOI5rkSX4Gzfy0Nufjyb9q MlISVvSU34fRRoPhg==

(1) Security Token is the simplest form and could be easily rolled out.

(2) Hides this secret from the user

(3) And (4) are still quite simple and make the connection already quite secure. This should be the targeted average security level...

(5),(6) and (7) are advanced security means, making the connection more or less as secure as if you would have installed a special certificate on the PC of this user.

The AES example is based on an EAS encryptor initialized based on the following settings

```
passPhrase="PassPhraseToGenerateAnAESPASSWORD"  
saltValue="SomeSecretSaltValue"  
hashAlgorithm="SHA1"  
initVector="gucpLaGR"  
keySize="Size128"
```

The Salt Value = the one you add in the security token!

(*) Remark that with every XML – message the key is incremented.

Is it an option to leave the Security Token Type blank?

Actually it is. At that moment there is no extra web service security.

Frequently Asked Questions

1. Q: Can we still use the old Sanitel/Beltrace numbers?
A: Yes you can, however there is still a small change. The new Beltrace/Sanitel makes the difference between Liable Party and Facility more explicitly. E.g. Transporters, Submitters and Owners refer to Parties. Farms where the animals come from refer to facilities. However sometimes a farmer is also the submitter or transporter. So you should know his party number and his facility number. To minimize the effort needed, the application accepts the facility number as a party number too. However in the export of data the correct numbers will be used.
2. Q: What about foreign transporters, or private persons? Are they in the system?
A: The best way is to first have a look in the system (search by name, realm register number,...), and if they are not there, create a new party using “Simple Party Maintenance” – the party than generated will have an S000XXXX number and this number can be permanently used for referring to this party.
3. Q: A few of these persons already have a 9-digit zero prefixed FAVV BOOD / KBO number. Can I use that number?
A: Unfortunately it is not possible to use this number (yet) as in the Sanitel application there still can be multiple parties linked to the same FAVV BOOD / KBO number. However, you can search on this 9-digit zero prefixed number too for finding the party, and in case it is not there you can fetch its BOOD / KBO information when creating the party (i.e. create simple party maintenance > tab to field external reference number -> enter the 9-digit zero prefixed FAVV BOOD / KBO number -> Hit the check button -> Name + address info is fetched...
4. Q: And foreign cattle farms – should we create those too as temporary parties?
A: No, in the XML –structure there is the document tag where you can specify the certificates of these foreign cattle farms. Both local or international (TRASYS) certificates can be used.
5. Q: What is the difference between a Party and a Facility?
A: The Party is the Juridical entity and is in the process of being rationalized and aligned with the Central KBO registration, the Facility is the more down-to-earth number of a certain ‘facility’ on a certain ‘location’. One party can be responsible for multiple facilities but a facility only has one liable party...
6. Q: Can we register now multiple transporters via the XML*
A: Yes you can, just an extra Party Tage with SLPT_CDE-code = ‘TRS’
7. Q: Can we now register dead animals via the XML*
A: Yes you can See example 2

8. Q: Can we put local animals and foreign animals in one SlaughterFile*
 A: No, you can not. The origin code (ORIG_CDE) has to be filled in on SlaughterFile level and indicates if the animals come from abroad or local. So you need to split the declaration
9. Q: I get PATY_CDE mandatory FCLT_CDE mandatory messages. What do they mean? *
 A: I agree the error messages are not always optimal – but it typically refers to not specified or incorrectly specified parties (Submittor, Owner, Transporter) or facilities. Please check whether your specified codes are filled in and are in the correct format (BE12345678)
10. Q: What’s the difference between SAV (Saving) and SUBM (Submitting) a declaration? *
 A: As soon as you SUBMit a declaration, it is the signal that the inspections can take place and it cannot be altered anymore. When SAVing a declaration you can do an update later (e.g. if you want to change weight categories or so...) However a manual or XML – SUBM-it is needed to progress the workflow.
11. Q: I just use trial and error and sometimes the messages are somewhat hard to understand. Is there a possible overview of all that can go wrong? What other messages are there?
 A: I agree the error messages are not always optimal, and unfortunately I do not have an exhaustive list of all possible errors you can make when doing trial and error XML filling, but it is a point where we try to improve continuously. The most visible error checking is on the possible code-value schema’s and mandatory fields, but excessive field lengths or duplicate keys can result in less user friendly messages... On the other hand this is not an online application, but a data-interchange protocol with ‘trusted party’ applications – so we do can assume some basic validation at the input side ;-)
12. Q: Is there a manual of the online application? Where can I get them?
 A: There are three manuals: The EAI Manual (this one – in English only), a getting started manual with general application navigation tips (In Dutch and French) and a functional manual for the Slaughtering functionality (Also in Dutch and French). In total these manuals add up to over 10 MB so they cannot be easily send around. The manuals are distributed during the training and FAVV-AFSCA has made them available via the web site too. You can find all manuals by clicking the info-centre link on the top-right side of the application screens
13. Q: What integration scenario is preferred?
 A: As described above both scenario’s 1 and 2 (Web Service and Secured Streaming) are the preferred ones. The Web Service has one additional advantage and that is that a local ‘object structure’ can be created rather than working with the XML itself. The Streaming has the advantage that you can use scenario 4 to test your stuff first...

14. Q: What username do we use in the XML? How do I get a logon? What if I am a systems integrator and not e.g. a Slaughterhouse?

A: You can use any logon of this Slaughterhouse as long as they exist in the application? Contact the general helpdesk for a user id. If you re a system integrator ask a Logon ID in the QAS-environment and have it configured for one of the slaughterhouses you work for. Please inform the slaughterhouse about this...

15. Q: Can I put everything in uppercase?

A: No, you cannot XML is case-sensitive so your structure tag-names e.g. for <SanitaryUnit> need to be exactly <SanitaryUnit> and not <Sanitaryunit>, <sanitaryunit> or <SANITARYUNIT>. The same applies to a namespace definition like
`xmlns="http://Sanitel.EAI/SanitelRepository/SanitelServices/PartyOverviewExportRequestSchema"`

16. Q: My test XML gives an error and I copied it from your example

A: for readability we sometimes entered extra spaces in the XML – especially in the namespace definition, copying the example blindly will not work. E.g. the example shows:

```
xmlns="http://Sanitel.EAI/SanitelRepository/SanitelServices/PartyOverview
ExportRequestSchema"
```

But it actually is one string

```
xmlns="http://Sanitel.EAI/SanitelRepository/SanitelServices/PartyOverviewExportRequestSchema"
```

17. Q: My XML still gives an error

A: As long as you get Error in XML your XML is not formatted correctly – reasons can include

- Incorrectly closed tags
- Special characters like % in strings
- Non-date representations
- ...

Most of the time the parser also gives a location e.g. line 12 char 44 – go to the corresponding line / column and check the error. It should be close in the neighbourhood there ;-)

18. Q: How can I specify an empty tag.

A: We support the standard W3C empty tags techniques.

For “strings” this includes:

No tag	<Animal> <ANTP_CDE>BOV</ANTP_CDE> <SNUN_CDE>BE10014385-0101</SNUN_CDE> </Animal>
Closed tag	<Animal> <FCLT_CDE/> <ANTP_CDE>BOV</ANTP_CDE> <SNUN_CDE>BE10014385-0101</SNUN_CDE> </Animal>
Open/Close tag -> STRINGS ONLY !!!	<Animal> <FCLT_CDE></FCLT_CDE> <ANTP_CDE>BOV</ANTP_CDE> <SNUN_CDE>BE10014385-0101</SNUN_CDE> </Animal>

For “datetimes” this includes:

No tag	<pre><Animal> <ANTP_CDE>BOV</ANTP_CDE> <SNUN_CDE>BE10014385-0101</SNUN_CDE> </Animal></pre>
Null values	<pre><Animal> <ANTP_CDE>BOV</ANTP_CDE> <SNUN_CDE>BE10014385-0101</SNUN_CDE> <UPD_DTE_FRM>0001-01-01T00:00:00</UPD_DTE_FRM> <UPD_DTE_TO>0001-01-01T00:00:00</UPD_DTE_TO> </Animal> </AnimalOverviewExportRequest></pre>

For other XML types there is only the No Tag option

19. Q: How can I see the field lengths

A: Technically speaking, field length specifications are not standard part of XML. There have been proposed some standards but the general conclusion of any such debate is always that XML should not be specifying lengths.

For informational purpose these are our standards

Strings are by default 50 characters UNLESS:

- They represent “User Codes” -> Length 5
- They represent “Descriptions” -> Length 255
- They represent “Comments” -> Length 800
- They are explicitly constrained to another length for technical reasons. An example of this is street in the current interfaces which are constrained to 40 for printing reasons
- Examples:
 - o *NAM VARCHAR2(50 CHAR)*
 - o *AL1 VARCHAR2(50 CHAR)*
 - o *AL2 VARCHAR2(50 CHAR)*
 - o *STR VARCHAR2(40 CHAR)*
 - o *ZIP VARCHAR2(50 CHAR)*
 - o *CTY VARCHAR2(50 CHAR)*
 - o *MCP VARCHAR2(50 CHAR)*
 - o *EMA VARCHAR2(50 CHAR)*
 - o *TPH VARCHAR2(50 CHAR)*
 - o *TPH_ALT VARCHAR2(50 CHAR)*
 - o *GSM VARCHAR2(50 CHAR)*
 - o *FAX VARCHAR2(50 CHAR)*
 - o *GNDR_CDE VARCHAR2(5 CHAR)*

(*) = Slaughtering Module only

20. Q: How do we have to specify animal numbers when using them in the XML and how are these numbers formatted when exported?

A: This is a difficult problem so we have tried to come to the best and most informative information for anyone. There are different business rules for the validation of Bovine earmark numbers in different countries of the European Union. Some countries even have 2 checkdigits...

For example:

Belgium : Country Code + Check Digit + 12345678 BE 9 12345678

Germany : Country Code + 10 chars + check digit DE 1234567890 1

UK : 6 numbers + Check Digit + 5 Numbers UK 123456 7 89012

France: 10 Characters – no check digits

AT 563291834	BE40137971-0101	NL 49036299 6	BE10082933-0101
AT 720505211	BE40137971-0101	UK 340933 7 00835	BE10082933-0101
BE 7 92242112	BE10082933-0101	UK 343334 6 01345	BE10082933-0101
BE 2 92243756	BE10082933-0101	SK 800414521	BE10119225-0101
DE 0534520976 6	BE10082933-0101	SK 800414627	BE10119225-0101
DE 0768786240 1	BE10082933-0101	SK 800510542	BE10119225-0101
DE 0768786241 8	BE10082933-0101	SK 800511834	BE10119225-0101
DE 0768847064 3	BE10082933-0101	DE 1082378273 0	BE10173416-0101
DE 0768954849 5	BE10082933-0101	LU 7 98640685	BE10173416-0101
FR 0200920637	BE10082933-0101	PL 00513852014 7	BE10173416-0101
HU 302142046 0	BE50087431-0101	IE 1814236 5 0661	BE10111021-0101
HU 302142055 4	BE50087431-0101	CZ 102104591	BE30041613-0101
IT 023000369118	BE10173416-0101	CZ 102104594	BE30041613-0101
IT 023000369120	BE10173416-0101	ES 8 0301551380	BE30041613-0101
NL 34035029 0	BE10082933-0101	ES 4 0302762403	BE30041613-0101
NL 34507600 5	BE10082933-0101	FR 5511800004	BE30041613-0101
NL 42217978 4	BE10082933-0101	FR 5613882371	BE30041613-0101

Every country has its own rules, however in every country old animal numbers exist that do not conform with the last version of the rules. In addition the migrated data contains quite some incorrectly specified foreign numbers or incorrect / missing checkdigits.

For example:

In Belgium, the old numbering system has numbers like BE 123456, so only containing 6 numeric positions (instead of the 8 numbers currently used)

DK327701486	BE10173701-0101
DK329962453	BE10173701-0101
LU724645	BE30041613-0101
LU823435	BE30041613-0101
BE9018347	BE10111021-0101
BEA5173747	BE10111021-0101
BEA5187298	BE10111021-0101
BEN0042909	BE10111021-0101
IEBMQR0019W	BE30041613-0101
IECFCH0009X	BE30041613-0101
IEDCMV0020K	BE30041613-0101
IEFFZP0043R	BE30041613-0101
SK90266814	BE30041613-0101
SK93232165	BE30041613-0101

So as output we return the animal numbers in the most informative way. So INCLUDING information about country and check digit and all separated by a blank

CDE LT 03119426
CDE BE 8 65794680

Companies not interested in the check-digit can ignore the spaces

For input we allow the formats with spaces, without spaces and for bovines from the BENELUX we even accept them without checkdigit

21. Q: Are we forced to use Security Tokens?

A: So far we only implemented base level security in order not to make it too complex for the user community. This is possible because the external risk that the information is hacked / abused for malafide manipulation or financial gain is rather limited. The Internal risk is low too as this is a trusted community rather than an end-user community. Although we do have quite some loggings to assure the risk stays low ;-). Finally, a lot of the important processes are complemented by physical elements (passports) and veterinary visits / inspections in the field normally will result in an early detection of potential violations.

So to answer the question. Currently there is no enforcement of a certain type of Security Token. However we really invite you to consider using one. If you think you are ready for it or want to discuss – please contact us...

22. Q: How should we read the Interaction Result in an import-XML message?

A: The StatusCode and Message return general information whether the import was successful or not. If it was not successful a list of messages appears. The message structure is as follows:

The description is trying to give a meaningful description in the language specified by the web service caller

The pattern is the English message template – possibly useful for catching / typing the kind of error we discuss. E.g. “ {0} is missing” indicating a parameter that is missing.

The ArgumentsCSV is the variable set of arguments, sometimes prefixed with a rule-engine code (PAMI) and rule-engine priority (1-2 blocking, 3-4 warning, 5 information only)

```
- <InteractionResult xmlns="http://Sanitracce.EAI/SanitracceReposi
  <StatusCode>Error</StatusCode>
  <Summary>Import ImportAnimalNotificationUseCase erroneo
    information.</Summary>
  <Reference />
- <Details>
- <MessageEntry>
  <Code>-911</Code>
  <Description>Birth Facility is missing</Description>
  <Pattern>{0} is missing</Pattern>
  <ArgumentsCSV>PAMI,5,Birth Facility,,,,</ArgumentsCSV>
  <Reference />
</MessageEntry>
- <MessageEntry>
  <Code>-911</Code>
  <Description>Origin Facility is missing</Description>
  <Pattern>{0} is missing</Pattern>
  <ArgumentsCSV>PAMI,5,Origin Facility,,,,</ArgumentsCSV>
  <Reference />
```

Support

Online VIA the online bug / feature tracker ([IssueMaintenancePage.aspx](#))

General Helpdesk: Dirk.Vanschoor@favv.be

Technical Issues: Kurt.Wayenberg@eds.com

Functional Issues:

Diederik.Degryse@eds.com

Gert.Stalmans@eds.com

All other Project Issues: Hans.Wuyts@eds.com

All other Sanitel Issues: Jean-Marie.Robijns@favv.be