



UN/CEFACT

SIMPLE, TRANSPARENT AND EFFECTIVE PROCESSES
FOR GLOBAL BUSINESS

BUSINESS REQUIREMENTS SPECIFICATION (BRS)

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Business process: cattle registration information exchange

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| Date of change | Version | Paragraphs changed | Summary of changes |
|-------------------|---------|-----------------------------|--|
| 16/07/2008 | 0.1 | Initial document | |
| 31/10/2008 | 0.2 | 5.2.2 5.3 5.4 | <p>Comment of the September meeting in Lyon:</p> <p>Scope is specified to approved certified document;</p> <p>Use case diagram is extended with 3th country import export and a link to eCERT.</p> <p>The activity diagrams are adjusted.</p> <p>The class diagrams are redesigned. More classes are defined to meet requirements of other livestock business processes.</p> |
| 12/11/2008 | 0.3 | | Class diagrams modified according tbg17 specs (black diamonds |
| 12/11/2008 | 1.0 | Final version | Approved by TBG 18. |
| 06/05/2009 | | | Passed public review with no comment received, ODP 5 is concluded |
| | | | |

Business Requirements Specification

Table of contents

| | | |
|------------|--|-----------|
| 1 | PREAMBLE | 4 |
| 2 | REFERENCES | 4 |
| 3 | OBJECTIVE | 5 |
| 4 | SCOPE | 6 |
| 5 | BUSINESS REQUIREMENTS | 7 |
| 5.1 | Business requirements view | 7 |
| 5.2 | Business process elaboration | 7 |
| 5.3 | Information flow definition (activity diagram, description) | 11 |
| 5.4 | Information model definition (class diagram) | 17 |
| 5.5 | Business Information Entities | 37 |
| 5.6 | Business rules | 37 |
| 5.7 | Definition of terms | 37 |

1 Preamble

The objectives of this document is

- Harmonization of the definitions of the technical data in order :
 - to speak the same language
 - to be able to exchange information between heterogeneous Information Systems
- Development of consensual data dictionaries which could to be used as a basis for all use in livestock farming
- Installation of a standardized animal registration data message to facilitate the transmission of information between cattle registration offices in case of international life animal movements
- Development and installation of an electronic animal passport.

The purpose of this document is to define the animal registration data exchange processes for all animal registration offices, and the development and installation of an electronic animal passport, using the UN/CEFACT Modeling Methodology (UMM) approach and Unified Modeling Language to describe and detail the business processes and transactions involved.

The structure of this document is based on the structure of the UN/CEFACT Business Requirements Specification (BRS) document reference CEFACT/ICG/005.

2 References

UN/CEFACT Modelling Methodology User Guide (CEFACT/TMG/N093)

UN/CEFACT Business Requirement Specification Document Template (CEFACT/ICG/005)

UN/CEFACT E-CERT BRS

UN/CEFACT E-DAPLOS BRS

3 Objective

The objective of this document is to standardize the Business Processes, the Business Transactions and the Information Entities of the technical description and information of the bovine livestock farming.

The Business Process is the detailed description of the way partners intend to play their respective role, establish business relationship and share responsibilities to interact efficiently with the support of their respective information system.

The business documents are composed of Business Information Entities (BIE), which when available, are taken from the library of reusable business information entities and when not found, are proposed as new Business Information Entities. The contents of the business documents and the Business Information Entities are presented using class diagrams.

4 Scope

This section describes the extent and limits of the business process within the information chain being described in this document. The class diagram of the import / export cattle registration and of electronic animal passport has been developed to specify the cross border exchange of information to enable business information to be re-used. It includes business information entities specifically required by governmental regulators as cattle registration, cross border animal transport.

| Categories | Description and Values |
|-------------------------|--|
| Business Process | Cattle registration information exchange process Electronic animal passport |
| Product Classification | Livestock animal data |
| Industry Classification | Agricultural sector |
| Geopolitical | Global |
| Official Constraint | European Regulations National regulation Local applicable regulation |
| Business Process Role | Cross border animal registration regulation |
| Supporting Role | None |
| System Capabilities | Agreed level of security to protect data integrity |

The cattle registration information exchange process is used between cattle registration offices and with EU authorities, in case of the international movement of bovine animals.

The electronic animal passport is used by inspectors of authorities to identify and verify individual animals. The electronic animal passport is a special type of an e-Certificate.

5 Business requirements

5.1 Business requirements view

The cattle registration information exchange contains two basic cases, the intent to export or the import notification. The process is started by the exporting country registration office, or by the importing country registration office. In both cases the information exchange is based on the same basic message.

The electronic passport is an e-certificate. A livestock inspector can request the animal passport data from his own (national) cattle registration office. In case the animal is not in the national database the cattle registration office can request and retrieve the data from the issuing cattle registration office.

The core information load is equal to the core information exchange between the cattle registration offices. The electronic animal passport can be used both on national and international level.

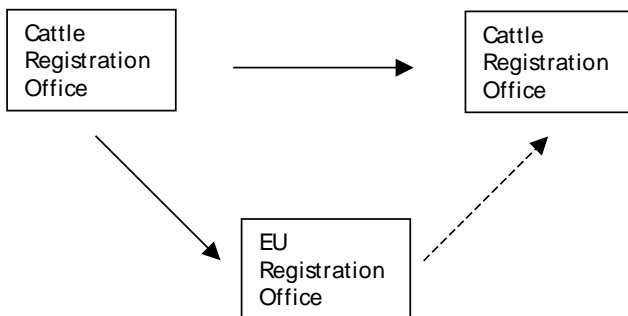
5.2 Business process elaboration

5.2.1 the cattle registration office information exchange

Scope:

This process details the mutual cattle registration data transmission between the cattle registration offices and the administrative partners like authorities (Min of Agriculture, EU-Traces).

The cattle registration data is created by the cattle registration office and is send to another administrative partner in cattle registration issues.



Principles

If a bovine animal is moved from one country to another (export – import) the registration data of this animal has to be transferred from the cattle registration office in the exporting country to the cattle registration office of the importing country. Part of this information can be transferred to EU authorities.

Use case: Cattle registration information exchange

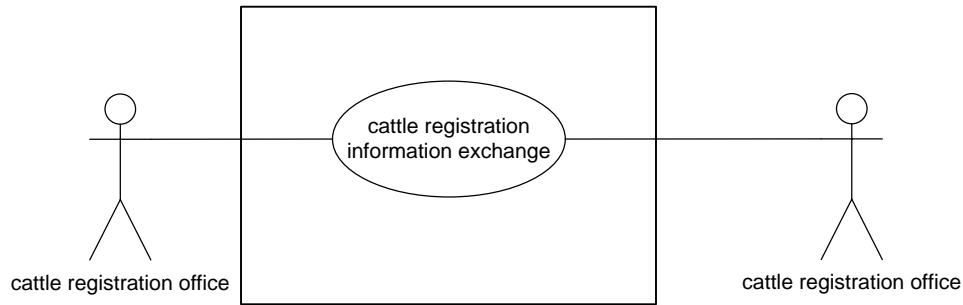


Figure 1a: Use case diagram

Use case description

| | |
|------------------------------|--|
| Business process name | Cattle registration information exchange |
| Identifier | CRIE |
| Actors | Cattle registration offices, authorities |
| Description | The exporting cattle registration office sends the cattle registration data to the importing cattle registration office, and optionally to the EU authority. |
| Pre-condition | No obligation to set up a precondition |
| Post-conditions | Success: the cattle registration office sends the data of the exported animal. Failure: the data of the animal is not transferred. The animal registration in the national database is not updated. |
| Scenarios | Intent to export Notification of import |
| Remarks | |

5.2.2 the electronic animal passport

Scope:

This process details the verification of animal to the cattle registration office and the administrative partners like authorities, by a veterinarian inspector, by an approved certified official document.

Principles

The inspector can request the data of the animal, issued by the national cattle registration office. The registration office submits the data, in case the animal is in the national registration. In case of an animal which is on an international transport or is imported, registration office retrieves the data from the registration office of the export country. If the country is unknown, the tracing will start in the country the animal is born.

The electronic animal data is certified by the registration office. The electronic animal data retrieval can be equivalent to the paper animal passport information.

Use case: electronic passport

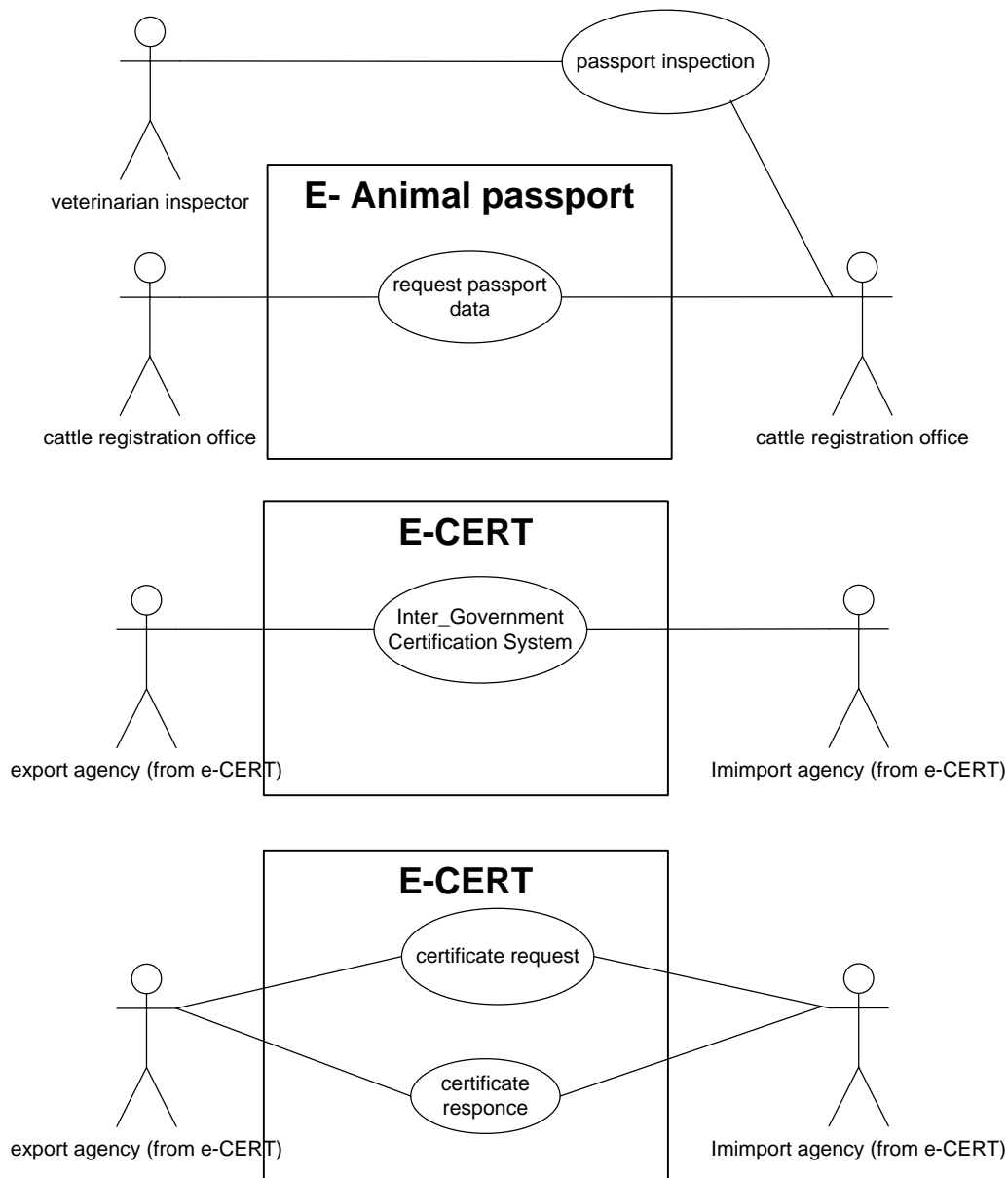


Figure 1b: Use case diagram animal passport and e-CERT

Use case description

| | |
|------------------------------|---|
| Business process name | Electronic Animal Passport |
| Identifier | EAP |
| Actors | Inspectors, Cattle registration offices, Authorities |
| Description | <p>The inspector requests animal identification information from the Cattle Registration Office. The CRO issues the information to the inspector. In case the CRO is not the original issue office, the CRO will retrieve the passport information from the CRO who issued the passport.</p> <p>In the e-CERT process the animal passport is the document to describe and identify the 'product' as a part of the inter government certification system</p> |
| Pre-condition | No obligation to set up a precondition |
| Post-conditions | <p>Success: the electronic passport data is available for the inspector</p> <p>Failure: The identification of the animal can not be completed by use of the electronic animal passport</p> |
| Scenarios | Request for electronic animal passport data |
| Remarks | |

5.3 Information flow definition (activity diagram, description)

The cattle registration office information exchange

The activity diagram allows identifying all the significant information flows between the cattle registration offices and their partner.

Activity Diagrams

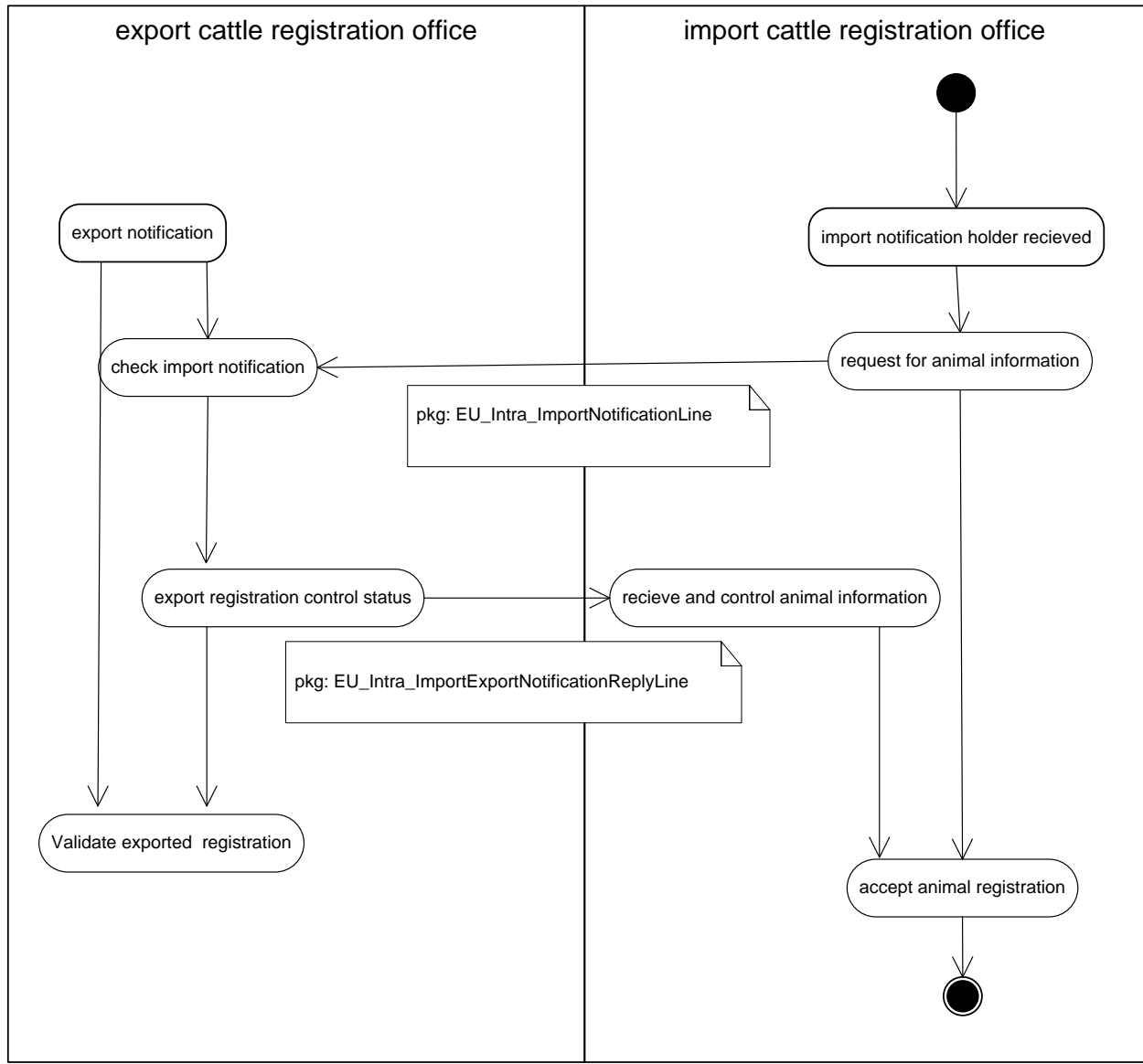


Figure 2a: Activity diagram information process import notification

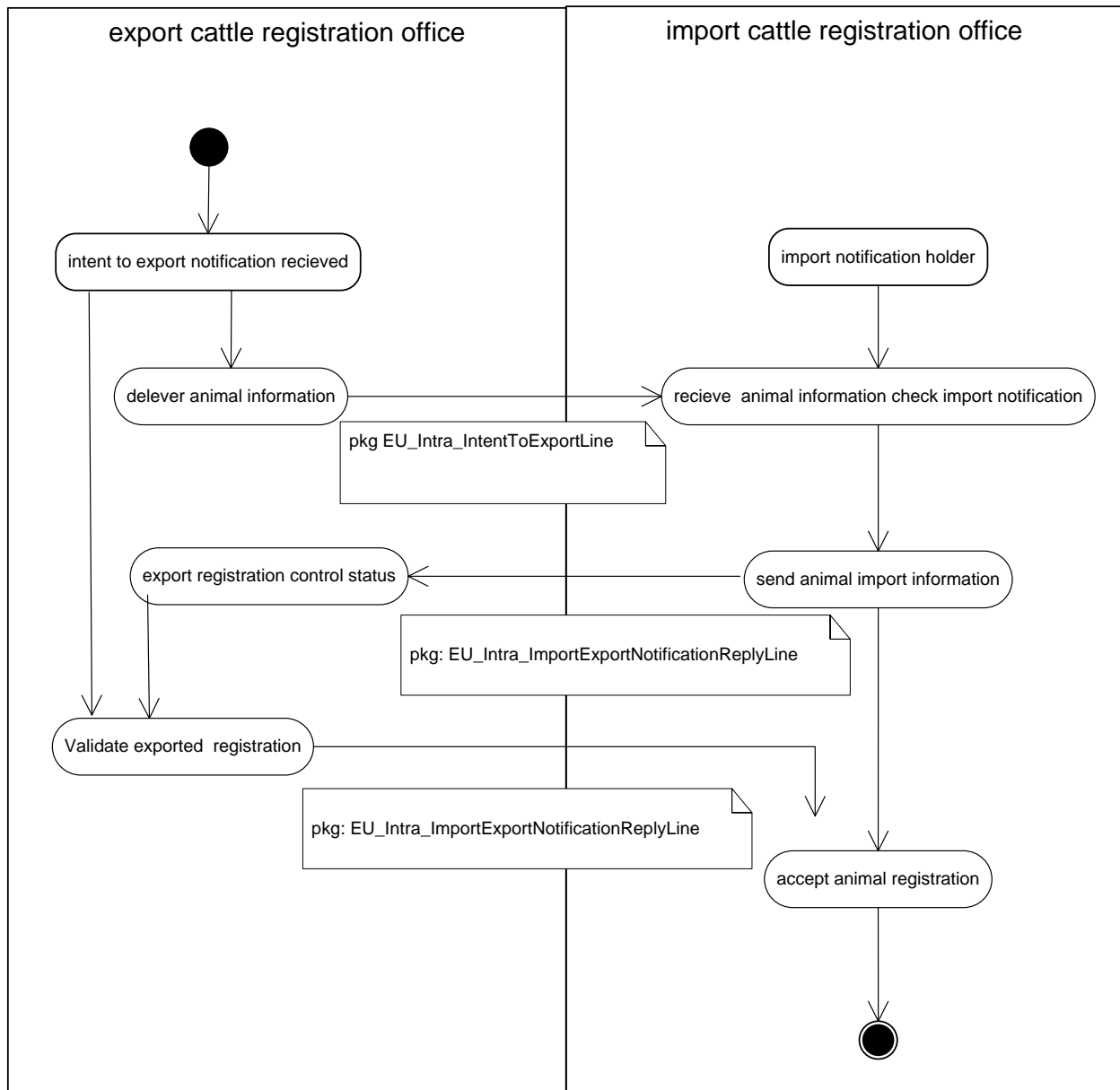


Figure 2b: Activity diagram- information process intent to export

Activity diagram description:

Import notification.

The holder of the animal notifies the cattle registration office about the arrival of the imported animal. The cattle registration office sends a import notification message with a request for the animal data to the cattle registration office of the country of export. The exporting cattle registration office checks the animal data about the export and replies to the importing cattle registration office by sending import notification status message and animal information. Both cattle registrations can update their registration. The export cattle registration office can close

the file of the exported animal. The importing registration office checks the received status and animal data and accept the animal registration.

Intent to export.

The exporter of the animal informs the cattle registration office about his intent to export the animal. The cattle registration office sends a export notification message, including animal data, to the cattle registration office in the country of import.

The holder of the animal in the importing country informs his cattle registration office about the arrival of the imported animal. This cattle registration office checks the arrival information with the received export notification message. Then it sends an export notification status message including animal data to the exporting cattle registration office. The exporting cattle registration office verifies the export and replies with an export notice status message including animal data. Both cattle registrations can update their registration. The export cattle registration office can close the file of the exported animal. The importing registration office checks the received status and animal data and accepts the animal registration.

Business collaboration

| Business collaboration | |
|--------------------------------|--|
| Identifier | Cattle registration office information exchange |
| Description | <p>a. The importing cattle registration office sends a notification of import message and receives an import notification status message. or</p> <p>b. The exporting cattle registration office sends an intent to export message. The importing cattle registration office sends an import notification status message, and receives an import notification status message.</p> <p>After completing and checking these messages the export cattle registration office closes the file of the exported animal. The import cattle registration office registers the animal.</p> |
| Partners types | Cattle Registration Office Administrative partners (authorities regional registration offices, EU Traces, EU Sanref) |
| Authorized Roles | Cattle Registration Office |
| Legal Steps/Requirement | None |
| Economic consequences | None |
| Initial/Terminal Events | |

| | |
|--------------------|--|
| Scope | Initial: the Cattle Registration Office sends a import notification message or an intent to export message. Terminal: the Cattle Registration Offices updates the animal registration |
| Boundary | None |
| Constraints | None |

The electronic animal passport

The activity diagram allows identifying all the significant information flows between the veterinarian inspector, the cattle registration offices and their partner.

Activity Diagram

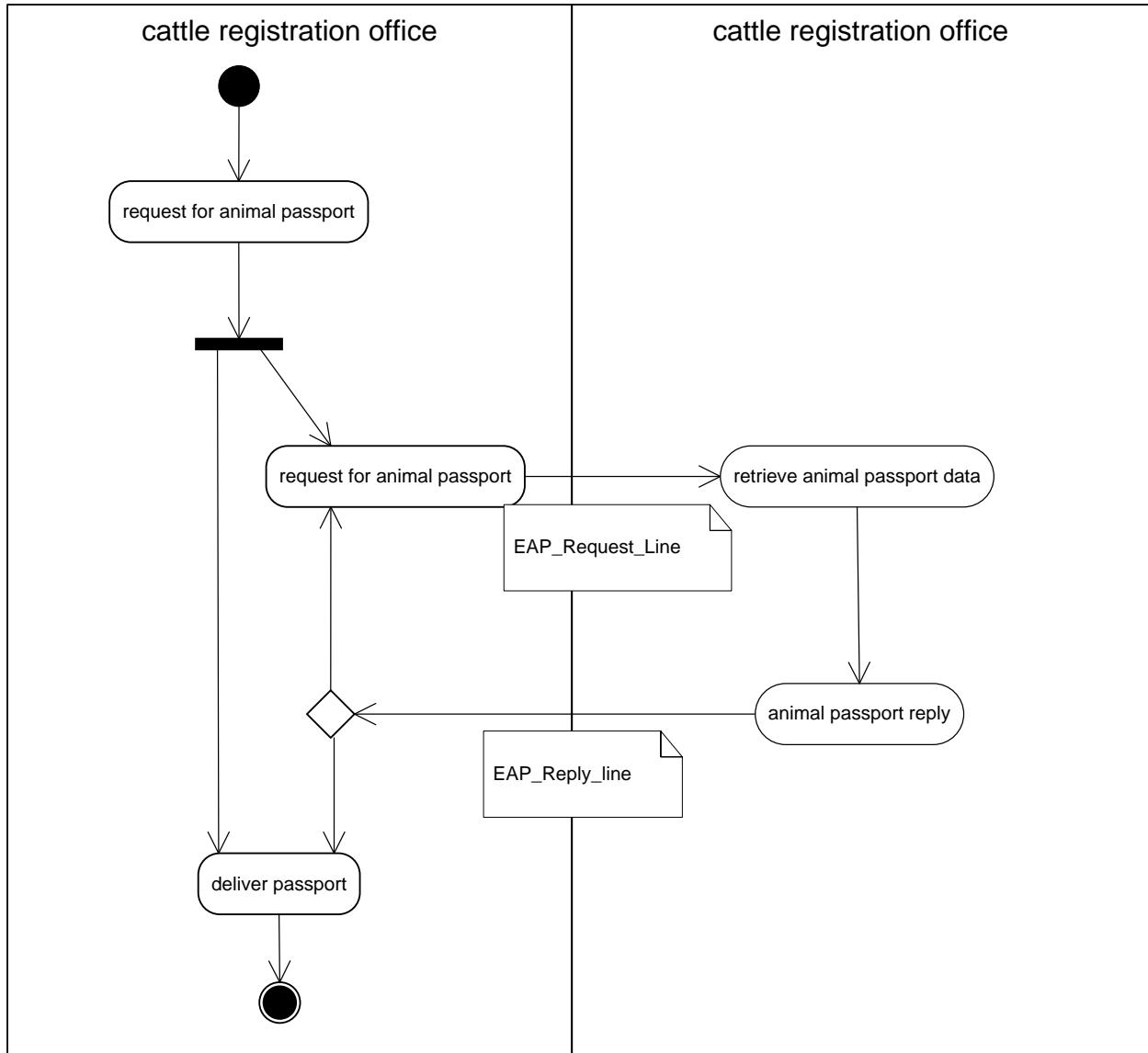


Figure 2c: Activity diagram information process animal passport

Activity diagram description:

Business collaboration

| Business collaboration | |
|--------------------------------|--|
| Identifier | EAP Electronic Animal Passport |
| Description | <p>A veterinarian inspector request his Cattle Registration Office for the electronic animal passport. His request is based on the Animal ID, which can be the eartag number.</p> <p>The cattle registrations office sends all passport information to the inspector.</p> <p>Incase the registration office is not the issueing authority, it request the passport data from the issueing cattle registration office. The tracing for the issueing office start at the cattle registration office in the country of birth of the animal.</p> |
| Partners types | Veterinarian Inspector, Cattle Registration Office / Passport Issueing Authority |
| Authorized Roles | Veterinarian Inspector, Cattle Registration Office, |
| Legal Steps/Requirement | <p>EU regulation 911/2004 and 64/432/EEG</p> <p>Documents describes legal requirements of the animal passport in the EU</p> |
| Economic consequences | None |
| Initial/Terminal Events | |
| Scope | Animal identification by veterinarian inspection on location and / or on transport (within EU territory) |
| Boundary | None |
| Constraints | None |

5.4 Information model definition (class diagram)

Class diagram describes all the necessary classes of information for a flow of information exchange for the cattle registration case

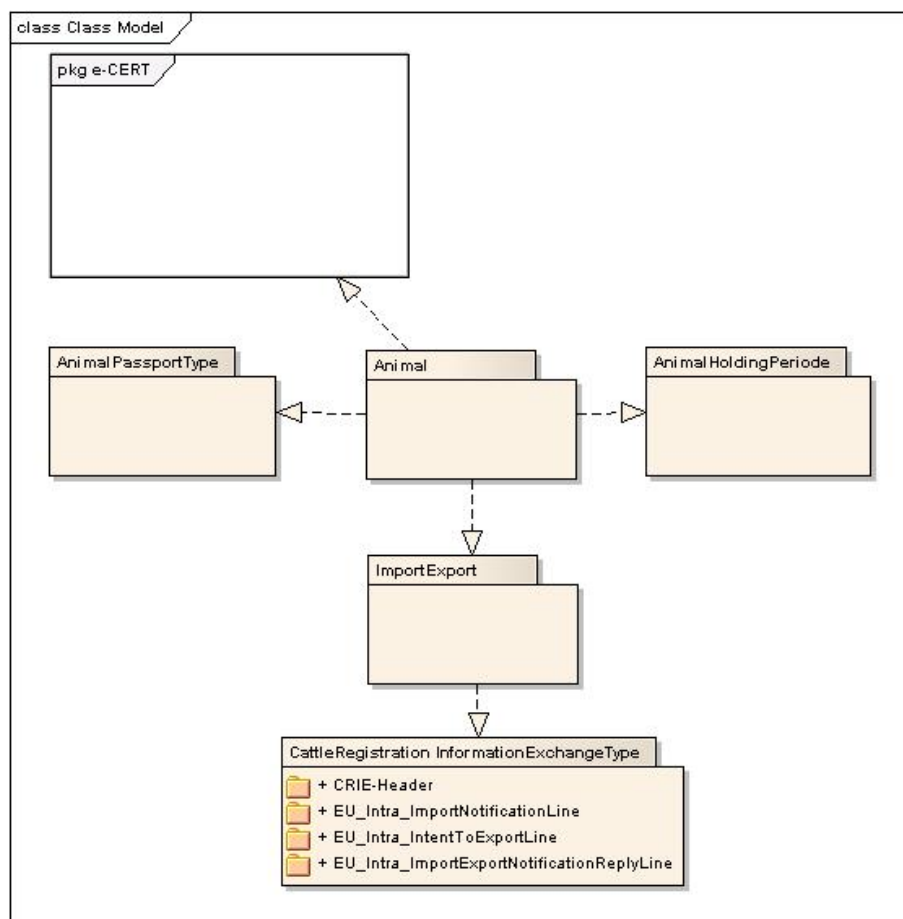


Figure 3:

| Mult. | Business term | Rel. | Type | Description |
|-------|--|------|-------------|--|
| 1 | CRIE Header | Ass | CRIE Header | The entity contains the general information (party details, date) |
| 1..* | EU_Intra Intent to Export Line | Ass | CRIE Line | The entity contains the breakdown of 1to n animal data sheets contained in the exchange |
| 1..* | EU_Intra Import Notification Line | Ass | CRIE Line | The entity contains the breakdown of 1 to n animal data sheets contained in the exchange |
| 1..* | EU_Intra Import Export Notification Reply Line | Ass | CRIE Line | The entity contains the breakdown of 1to n animal data sheets contained in the exchange |

CRIE Header:

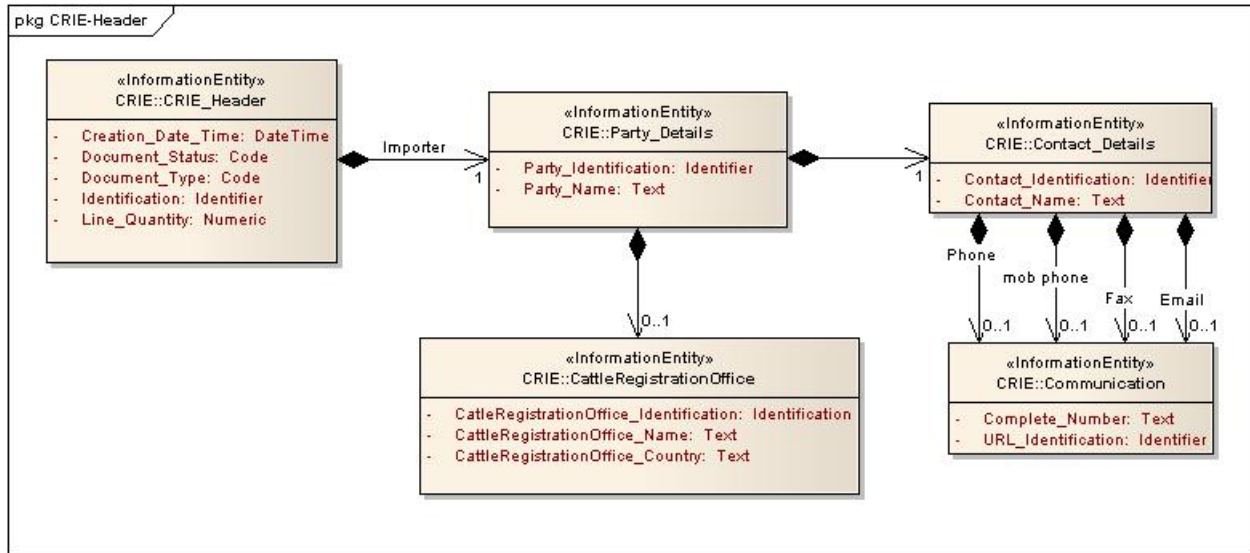


Figure 4: class diagram CRIE header

CRIE Header:

Description: The entity contains the general information (party details, date)

| Mult. | Business term | Rel. | Type | Description |
|-------|-------------------|------|----------------------|--|
| 1 | Identification | Att | Identifier | The unique number assigned by the issuer to identify an CRIE message |
| 1 | Creation_DateTime | Att | Date | The date when the document is issued |
| 0..1 | Line_Quantity | Att | Numeric | The number of message lines |
| | Document_Status | Att | Code | |
| 1 | Exporter | ass | <u>Party_Details</u> | The entity contain the details of the exporting office |
| 1 | Importer | Ass | <u>Party_Details</u> | The entity contains the details of the importing office |

Party details

Description: the entity contains the details of the name and the prime identification of a party.

| Mult. | Business term | Rel. | Type | Description |
|-------|----------------------|------|------------|---|
| 1 | Party_Identification | Att. | Identifier | The code identifying a party involved in the exchange |
| 0..1 | Party_Name | Att. | Text | The name of the party involved in a transaction. |

Cattle Registration Office

Description: the entity contains the details of the Cattle Registration Office.

| Mult. | Business term | Rel. | Type | Description |
|--------------|-------------------------------------|-------------|-------------|---|
| 1 | CattleRegistrationOffice_Identifier | Att. | Identifier | The code identifying the cattle registration office |
| 0..1 | CattleRegistrationOffice_Name | Att. | Text | The name of the party involved in a transaction. |
| 1 | CattleRegistrationOffice_Country | Att. | Text | The country of the cattle registration office |

Contact details

Description: The entity contains the details of the contact person or department.

| Mult. | Business term | Rel. | Type | Description |
|--------------|----------------------|-------------|---------------|--|
| 0..1 | Contact_Identifier | Att. | Identifier | The unique identifier of a contact person or department. |
| 0..1 | Contact_Name | Att. | Text | The name of a contact person. |
| 0..1 | Direct_Phone_Number | Att. | Communication | The number of the direct phone. |
| 0..1 | Mobile_Phone_Number | Att. | Communication | The number of the mobile phone. |
| 0..1 | Telefax_Number | Att. | Communication | The number of the facsimile. |
| 0..1 | E-Mail_Address | Att. | Communication | The E-Mail address. |

Communication

Description: The entity contains the details of the communication numbers

| Mult. | Business term | Rel. | Type | Description |
|--------------|----------------------|-------------|-------------|--------------------------------------|
| 0..1 | Complete_Number | Att. | Text | The complete communication number |
| 0..1 | URL_Identifier | Att. | Identifier | The URL Identification for the email |

Authority

Description: The entity contains the details of the Authority issuing the animal passport

| Mult. | Business term | Rel. | Type | Description |
|-------|----------------|------|------|---------------------------|
| 1 | Authority_Name | Att. | Text | The name of the authority |

Country

Description: The entity contains the details of the country

| Mult. | Business term | Rel. | Type | Description |
|-------|------------------|------|------|--|
| 1 | ISO_Country_Code | Att. | Code | The ISO Country code (2 char code, ISO 3166-1-Alpha-2) |
| 1 | ISO_Country_Name | Att. | Text | The ISO country name (ISO 3166-1-Alpha-2) |

Animal

Class diagram

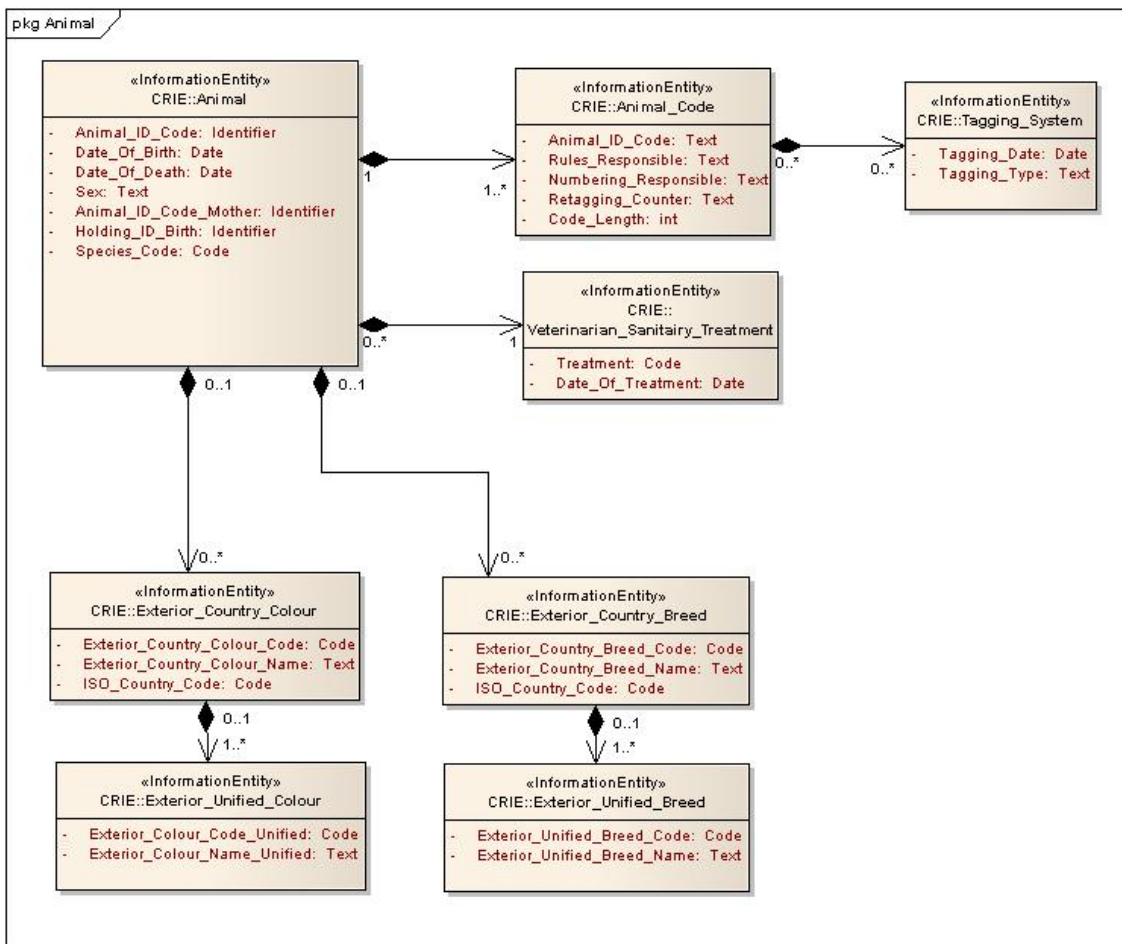


Figure 5 class diagram Animal

Description; the entities contain the breakdown of a single animal data sheet, belonging to one unique bovine animal

Animal.

| Mult. | Business term | Rel. | Type | Description |
|-------|-----------------------|------|----------------|---|
| 1 | Animal_ID_Code | att | Identification | The animal identification code, by example the number appearing on the eartag |
| 1 | Date_Of_Birth | Att | Date | Date birth of the animal |
| 1 | Date_Of_Death | Att | Date | Date death of the animal |
| 1 | Sex | Att | Text | Sex of the animal |
| 0..1 | Animal_ID_Code_Mother | Att | Identifier | Identification code of the mother (eartag number mother) |
| 0..1 | Holding_ID_Birth | Att | identifier | Identifier of the premise where the animal is born or found |
| 1 | Species_Code | Att | Code | Code for the specief of the animal (Bovine, Sheep, Goat) |

Exterior_Country_Breed

| Mult. | Business term | Rel. | Type | Description |
|-------|-----------------------------|------|------|---|
| 0..1 | Exterior_Country_Breed_Code | Att | Code | Code for breed look al like of the animal, as registrated in country according to the national breedcode list |
| 0..1 | Exterior_Country_Breed_Name | Att | Text | Name of the breed look a like of the animal, as registrated in country according to the national breedcode list |
| 1 | ISO_Country_Code | Att. | Code | The ISO Country code (2 char code, ISO 3166-1-Alpha-2) |

Exterior_Unified_breed

| Mult. | Business term | Rel. | Type | Description |
|-------|-----------------------------|------|------|---|
| 0..1 | Exterior_Unified_Breed_Code | Att | Code | Code for breed look al like of the animal, as registrated accordring to the international breedcode list |
| 0..1 | Exterior_Unified_Breed_Name | Att | Text | Name of the breed look a like of the animal, as registrated according to the international breedcode list |

Exterior_Country_Colour

| Mult. | Business term | Rel. | Type | Description |
|-------|----------------------------|------|------|--|
| 0..1 | Exterior_Colour_Breed_Code | Att | Code | Code for Colour look al like of the animal, as registrated in country according to the national breedcode list |

| | | | | |
|------|----------------------------|------|------|--|
| 0..1 | Exterior_Colour_Breed_Name | Att | Text | Name of the Colour look a like of the animal, as registrated in country according to the national breedcode list |
| 1 | ISO_Country_Code | Att. | Code | The ISO Country code (2 char code, ISO 3166-1-Alpha-2) |

Exterior_Unified_Colour

| Mult. | Business term | Rel. | Type | Description |
|-------|------------------------------|------|------|--|
| 0..1 | Exterior_Unified_Colour_Code | Att | Code | Code for Colour look al like of the animal, as registrated accoprding to the international Colour code list |
| 0..1 | Exterior_Unified_Colour_Name | Att | Text | Name of the Colour look a like of the animal, as registrated according to the international Colour code list |

Animal_Code

| Mult. | Business term | Rel. | Type | Description |
|-------|-----------------------|------|---------|---|
| 1 | Animal_ID_Code | Att | Text | The animal identification code, by example the number appearing on the eartag |
| 1 | Rules_Responsibile | Att | Text | Specification of regulation under which the animal is marked and identified |
| 1 | Numbering_responsible | Att | Text | Authority responsible for the issueing of the identification code |
| 0..1 | Retagging_Counter | Att | Text | The serial number indicating replacement of the transponder/tag |
| 1 | Code_Length | Att | Integer | Length of the identification code |

Tagging_System

| Mult. | Business term | Rel. | Type | Description |
|-------|---------------|------|------|---|
| 1 | Tagging_Date | Att | Date | Date when the identification tag ,transponder, tattoo is applied on the animal |
| 1 | Tagging_Type | Att | Text | Type of the identification object (ear tag, tattoo, EID in eartag, bolus, inserts...) |

Veterinarian Treatment

| Mult. | Business term | Rel. | Type | Description |
|-------|-------------------|------|------|---|
| 1 | Treatment | Att | Code | The code for the type of treatment (eg. A vaccination or other sanitary indicators) |
| 1 | Date_Of_Treatment | Att | Date | Date of the treatment eg the date of vaccination, or of setting a veterinarian sanitary flag. |

Animal Holding Period

Class diagram

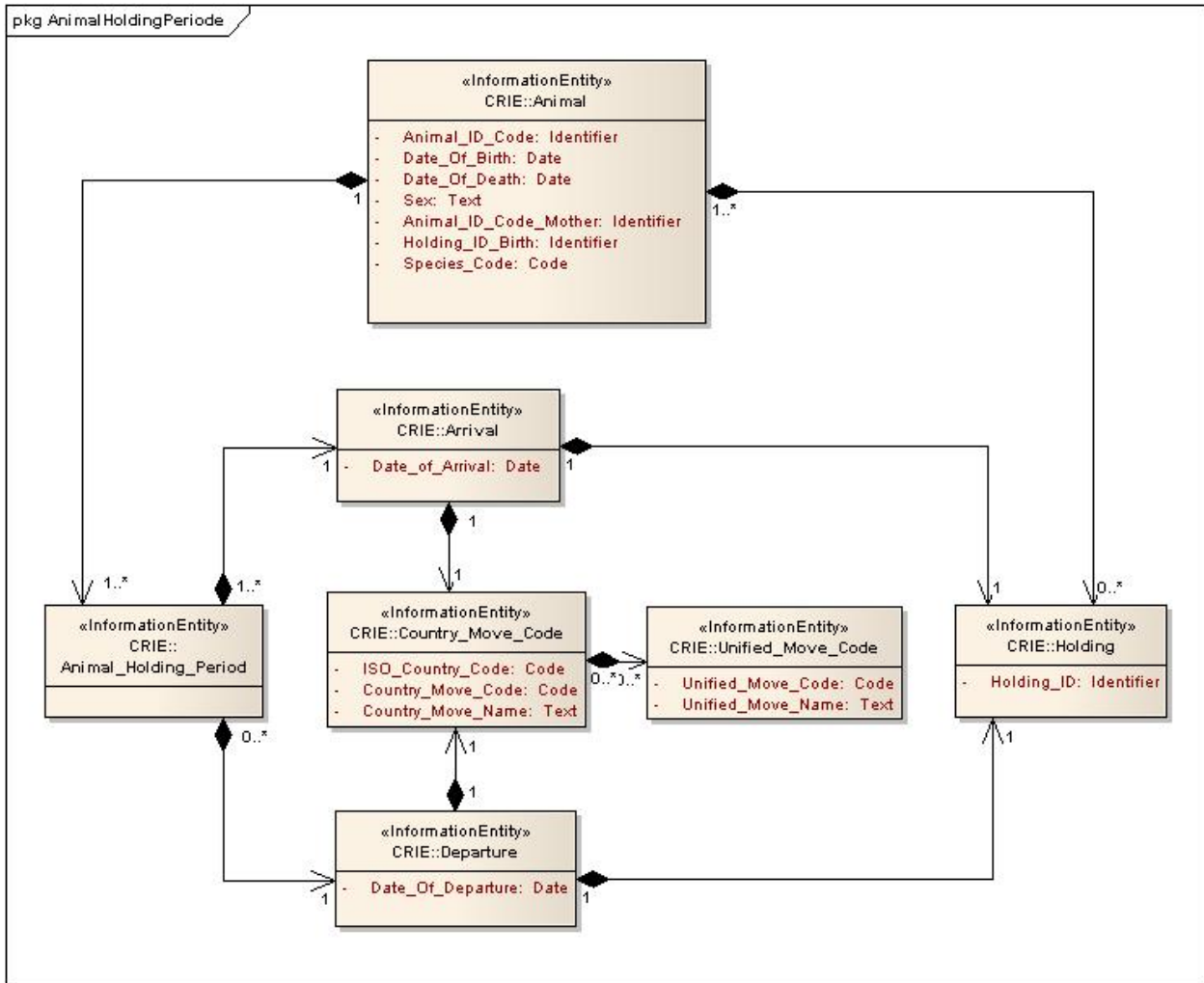


Figure 6 class diagram Animal holding period.

Description: The entities contain the breakdown of the premise where the animal is hold for a certain period.

Arrival

| Mult. | Business term | Rel. | Type | Description |
|-------|-----------------|------|------|--|
| 1 | Date_Of_Arrival | Att | Date | Date of arrival of the animal at the premise |

Departure

| Mult. | Business term | Rel. | Type | Description |
|-------|-------------------|------|------|--|
| 0..1 | Date_Of_Departure | Att | Date | Date of departure of the animal from the premise |

Country_Move_Code

| Mult. | Business term | Rel. | Type | Description |
|-------|-------------------|------|------|---|
| 1 | ISO_Country_Code | Att. | Code | The ISO Country code (2 char code, ISO 3166-1-Alpha-2) |
| 1 | Country_Move_Code | Att | Code | Code of the type of movement (birth, found, arrival, departure, slaughter, death) according to the country list |
| 1 | Country_Move_Name | Att | Text | Description of the type of movement (birth, found, arrival, departure, , slaughter, death) according to the country list |

Unified_Move_Code

| Mult. | Business term | Rel. | Type | Description |
|-------|-------------------|------|------|---|
| 1 | Unified_Move_Code | Att | Code | Code of the type of movement (birth, found, arrival, departure, slaughter, death) according to the international list |
| 1 | Unified_Move_Name | Att | Text | Description of the type of movement (birth, found, arrival, departure, slaughter, death) according to the international list |

Holding

| Mult. | Business term | Rel. | Type | Description |
|-------|---------------|------|------------|--|
| 1 | Holding_ID | Att | Identifier | The identification number of the premise the animal arrived or left, eq the premise the animal is hold for a certain periode |

Import Export

Class diagrams

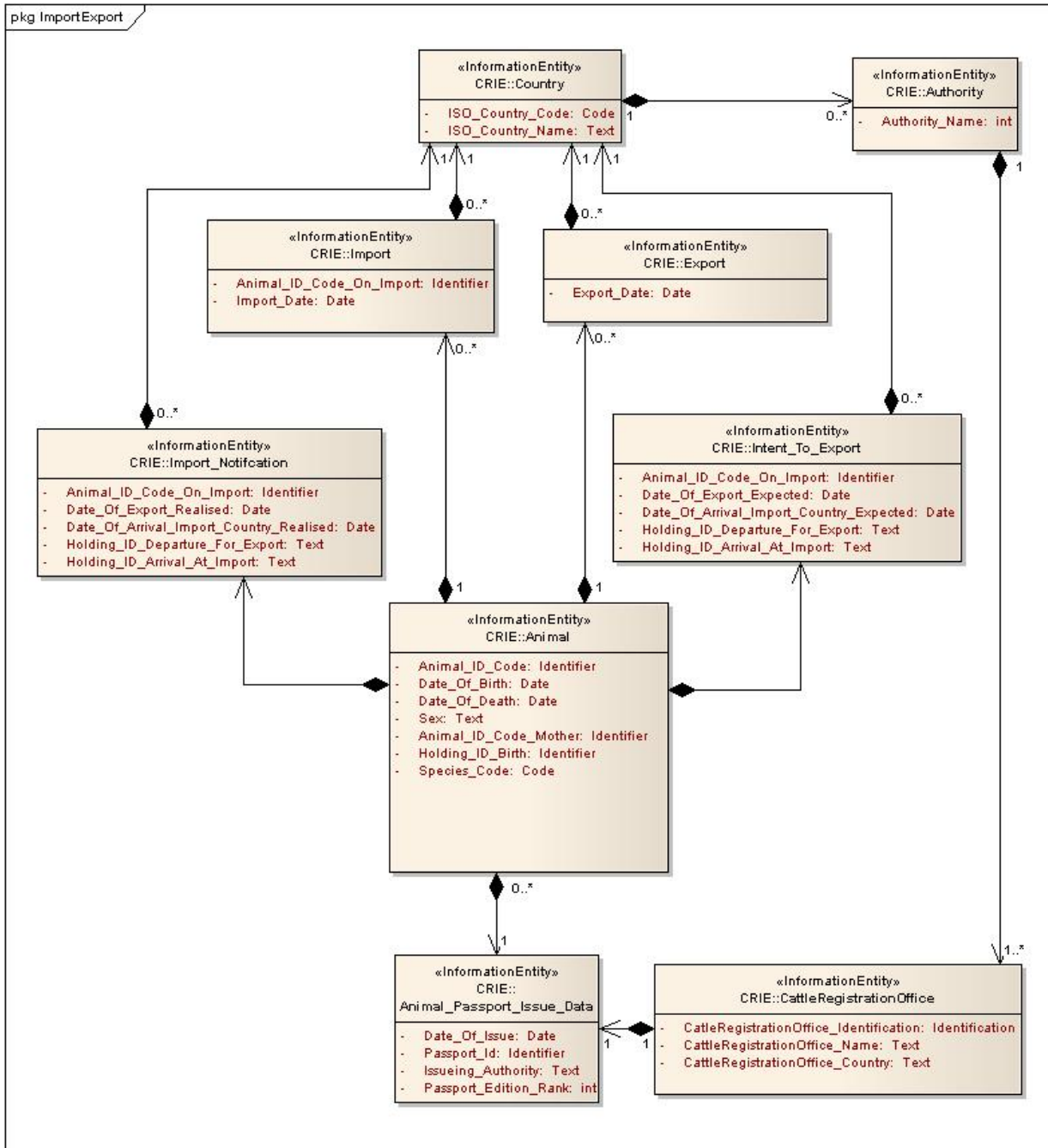


Figure 6 class diagram import export

Description: The entities contain the breakdown of the general information related to import and export of a bovine animal.

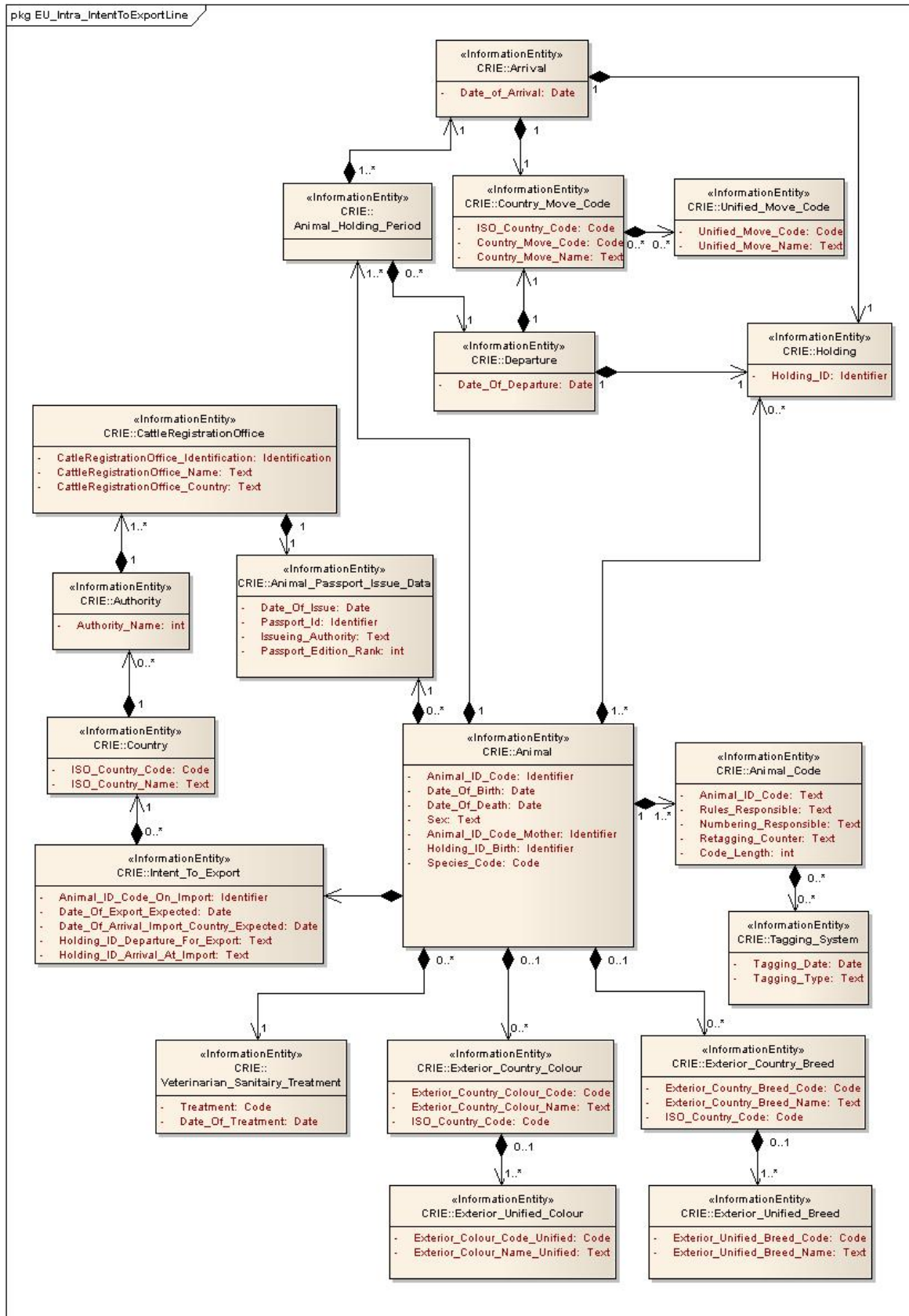


Figure 7 class diagram intent to export

Description: the entity contains the list of export notification announcement with the related bovine_animal data sheets

Intent_To_Export

| Mult. | Business term | Rel. | Type | Description |
|-------|---|------|------------|--|
| 0..1 | Animal_ID_Code_On_Import | Att | Identifier | Animal ID code, as the animal is identified and tagged at the moment of export . |
| 0..1 | Date_Of_Export_Expected | Att | Date | Expected data of departure of the animal from the exporting country |
| 0..1 | Date_Of_Arrival_Import_Country_Expected | Att | Date | Expected date of arrival of the animal in the importing country |
| 0..1 | Holding_ID_Departure_For_Export | Att | Text | The ID of the holding, in the exporting country, from which the animal is exported. (holding of departure) |
| 0..1 | Holding_ID_Arrival_AT_Import | Att | Text | The ID of the holding, in the importing country, to which the animal is exported. (holding of destination) |

CRIE:Import_Notification_Line

Classdiagram

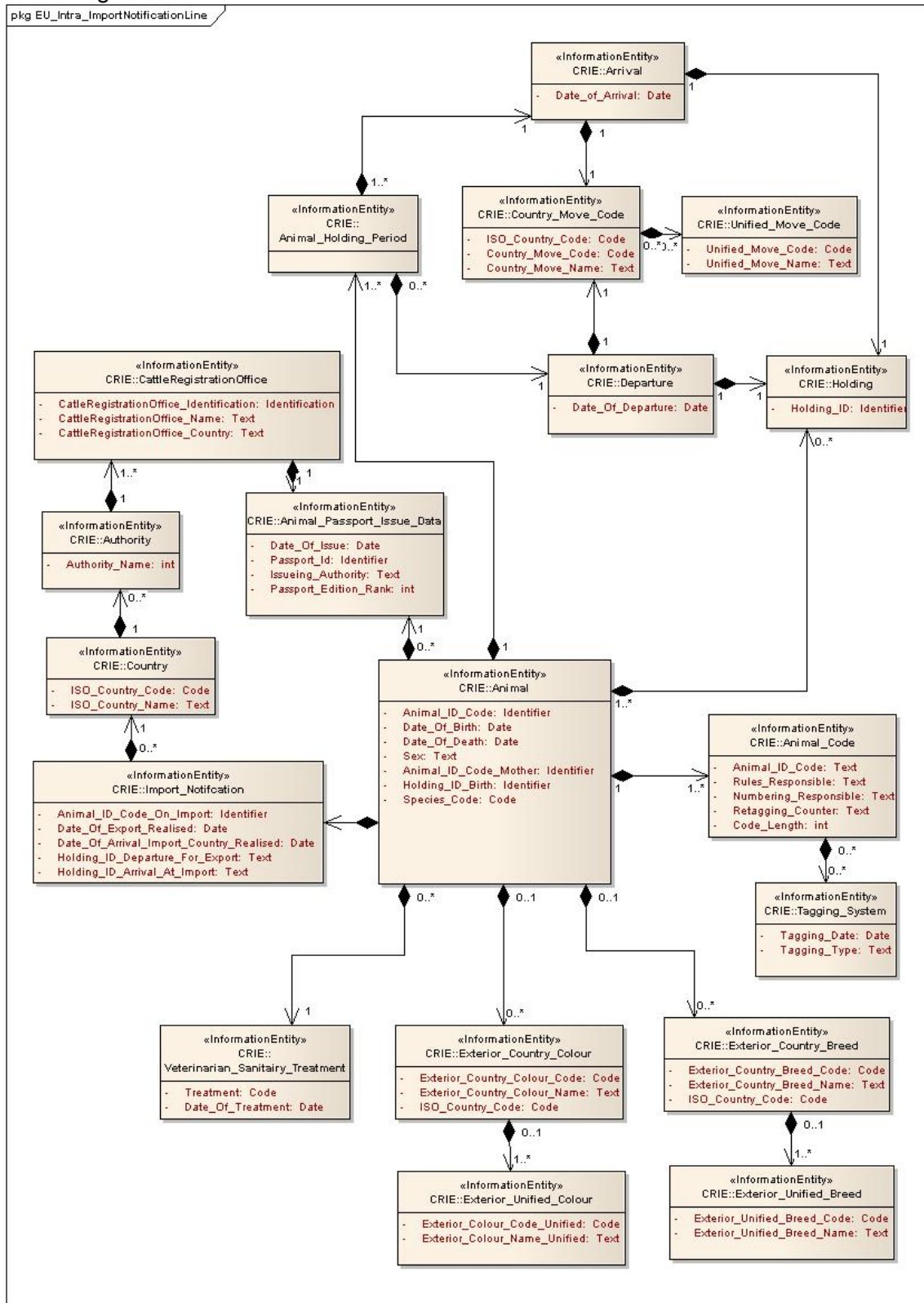


Figure 8 class diagram import notification

Import_Notification

Description: the entity contains the list of import notification announcement with the related bovine_animal data sheets

| Mult. | Business term | Rel. | Type | Description |
|-------|---|------|------------|--|
| 0..1 | Animal_ID_Code_On_Import | Att | Identifier | Animal ID code, as the animal is identified and tagged at the moment of export . |
| 0..1 | Date_Of_Export_Realised | Att | Date | Date of export of the animal from the exporting country |
| 0..1 | Date_Of_Arrival_Import_Country_Realised | Att | Date | Date of import of the animal in the importing country |
| 0..1 | Holding_ID_Departure_For_Export | Att | Text | The ID of the holding, in the exporting country, from which the animal is exported. (holding of departure) |
| 0..1 | Holding_ID_Arrival_AT_Import | Att | Text | The ID of the holding, in the importing country, to which the animal is exported. (holding of destination) |

Import Export Notification Reply Line

Description: The entity contains the list of bovine animal data sheets. The line is the reply on the initial intent to export message or to the initial notification of import message. The animal data sheets in this reply message are composed of data extracted from the animal registration databases. The data can be used to verify the data of the initial received or collected animal data about the import or export, and to complete the animal data in the animal registration database.

In case there is no valid bovine animal data available at the responding cattle registration office, an Import_Export_Notification_Error line for the individual animal is send.

No valid bovine animal data available can be caused by:

- The Animal_ID_Code does not exist in the registration of the cattle registration office
- The animal registration file is closed because the animal is registered as
 - slaughtered
 - dead
 - exported on earlier occasion

Optionally the out of date Animal_Holding_Periode data are send.

Import_Export_Notification_Error

| Mult. | Business term | Rel. | Type | Description |
|-------|--------------------------|------|------|--|
| 1 | Import_Export_Error_Type | Att. | Text | The Animal_ID_Code is not registered / has no valid registration at the sending Cattle Registration Office <ul style="list-style-type: none"> - not registered - dead - slaughtered - exported to country, at earlier date. |
| 0..1 | Country_Of_Destination | Att | Text | Name of Country animal is exported to. |
| 0..1 | Date_Of_Departure | Att | Date | Date of departure from country |

Export

| Mult. | Business term | Rel. | Type | Description |
|-------|---------------|------|------|---|
| 1 | Export_Date | Att. | Date | - Date of export of the animal from the exporting country |

Import

| Mult. | Business term | Rel. | Type | Description |
|-------|---------------|------|------|---|
| 1 | Import_Date | Att. | Date | - Date of import of the animal from the exporting country |

EAP Animal Passport

Class diagram Animal_Passport

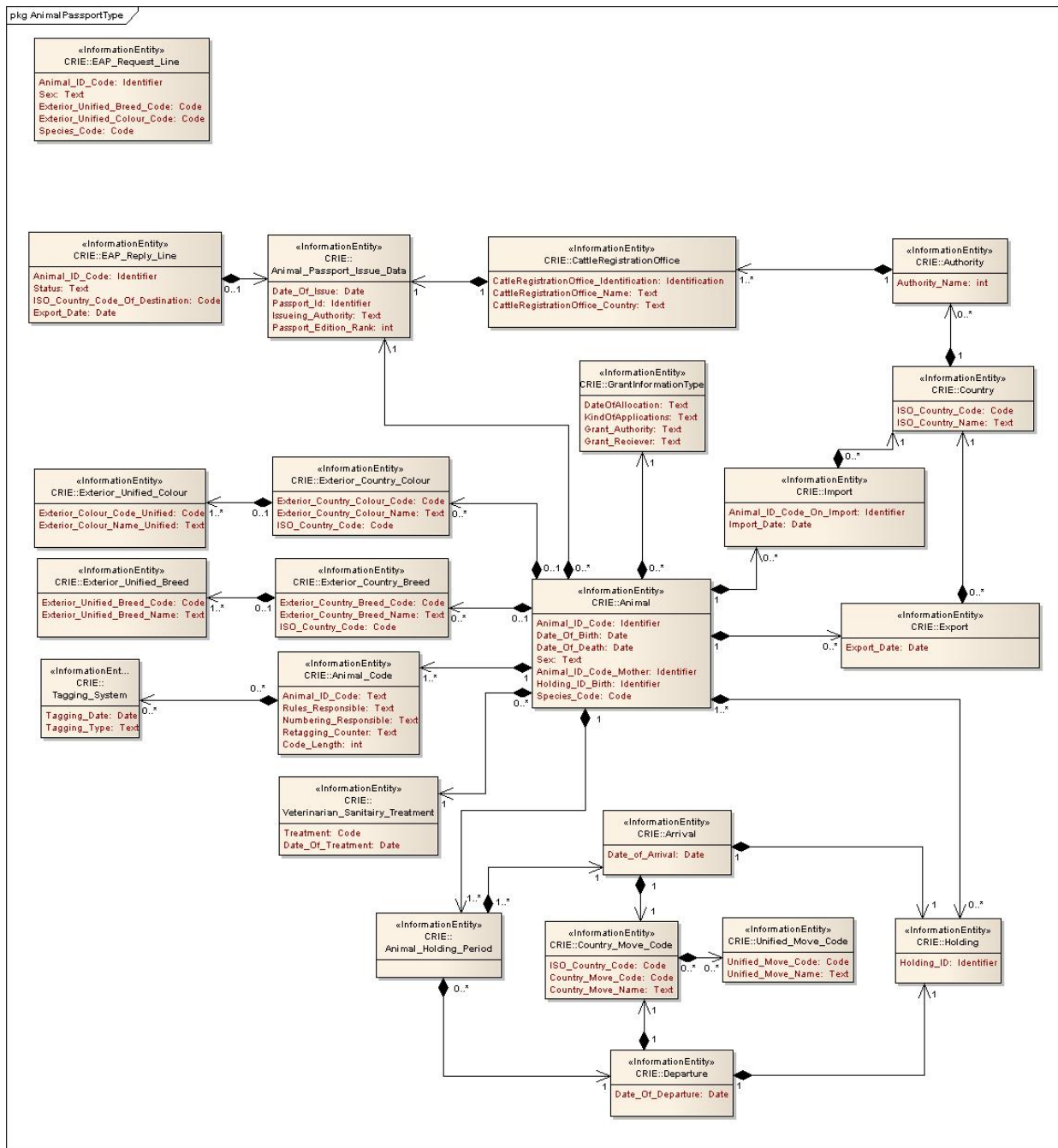


Figure 10 class diagram electronic animal passport

Animal_Passport

Class diagram describes all the necessary classes of information for a flow of information exchange for the Animal passport case.

| Mult. | Business term | Rel. | Type | Description |
|-------|------------------|------|------------------|--|
| 1 | CRIE Header | Ass | EAP Header | The entity contains the general information (party details, date) |
| 0..n | EAP Request Line | Ass | EAP_Request_line | The entity contains the breakdown of a request for electronic animal passports for one or more animals, identified by their eartag numbers |
| 0..1 | EAP Reply Line | Ass | EAP Reply_Line | This entity contains the breakdown of the replies containing the e-passport data for one or more animals, and /or the error lines incase no passport is issued or a passport is rejected |

EAP_Request_Line

| Mult. | Business term | Rel. | Type | Description |
|-------|------------------------------|------|------------|--|
| 1 | Animal_ID_Code | Att. | Identifier | The eartag number |
| 0..1 | Sex | Att | Text | Sex of the animal |
| 0..1 | Exterior_Unified_Breed_Code | Att | Code | Breed of the animal, as assumed by inspector |
| 0..1 | Exterior_Unified_Colour_Code | Att | Code | Colour of the animal, as assumed by inspector |
| 1 | Species_Code | Att | Code | Code for the species of the animal (Bovine, Sheep, Goat) |

EAP_Reply_Line

| Mult. | Business term | Rel. | Type | Description |
|-------|----------------|------|------------|---|
| 1 | Animal_ID_Code | Att. | Identifier | The eartag number |
| 1 | Status | Att | Text | <p>The status of the animal passport</p> <ul style="list-style-type: none"> • Passport available, passport sheets are included • Animal in registration, passport not issued • Animal in registration, animal blocked for moving • Animal not in registration: • Animal dead • Animal slaughtered • Animal exported to country |

| | | | | |
|------|----------------------------|------|------|---|
| 0..1 | ISO_Country_Of_Destination | Att | Code | Name of Country animal is exported to. |
| 1 | Export_Date | Att. | Date | - Date of export of the animal from the exporting country |

Animal_Passport_Issue_Data

Description: the entity describes the administrative attributes of the e-Animal Passport, ie the date of issue and the Issuing Authority.

| Mult. | Business term | Rel. | Type | Description |
|-------|-----------------------|------|------------|---|
| 1 | Date_Of_Issue | Att. | Date | Date the passport is issued by the authority |
| 1 | Passport_ID | Att | Identifier | Passport number |
| 1 | Issueing_Authority | Att | Text | The issueing authority of the passport, ie. the CattleRegistrationOffice (in EU countries) |
| 1 | Passport_Edition_Rank | Att | Integer | Edition rank when several passport have been issued for the same animal by the same country |

Grant Information Type

Description: This entity describes the applications and / or grants related to an animal. Applications and grants are practiced in the EU as part of the Common Agriculture Program.

Both the Authority issuing the grant and the receiver of the grant are listed on the passport.

| Mult. | Business term | Rel. | Type | Description |
|-------|---------------------|------|---------------|--|
| 1 | Date_Of_Allocation | Att. | Date | Date of allocation of the application or grant |
| 1 | Kind_Of_Application | Att | Text | Type of application or Grant (bull, steer 9 month, steer 21 month, heifer....) |
| 1 | Grant_Authority | Att | Party_Details | Authority responsible for issueing grant |
| 1 | Grant_Reciever | Att | Party_Details | Party receiving the grant |

e-CERT

The next product inspection entities are not required for animal passports in case of EU intra trade. They become part if the animal is exported outside the EU. Then the animal passport is part of the consignment documents as defined in the e-CERT specifications.

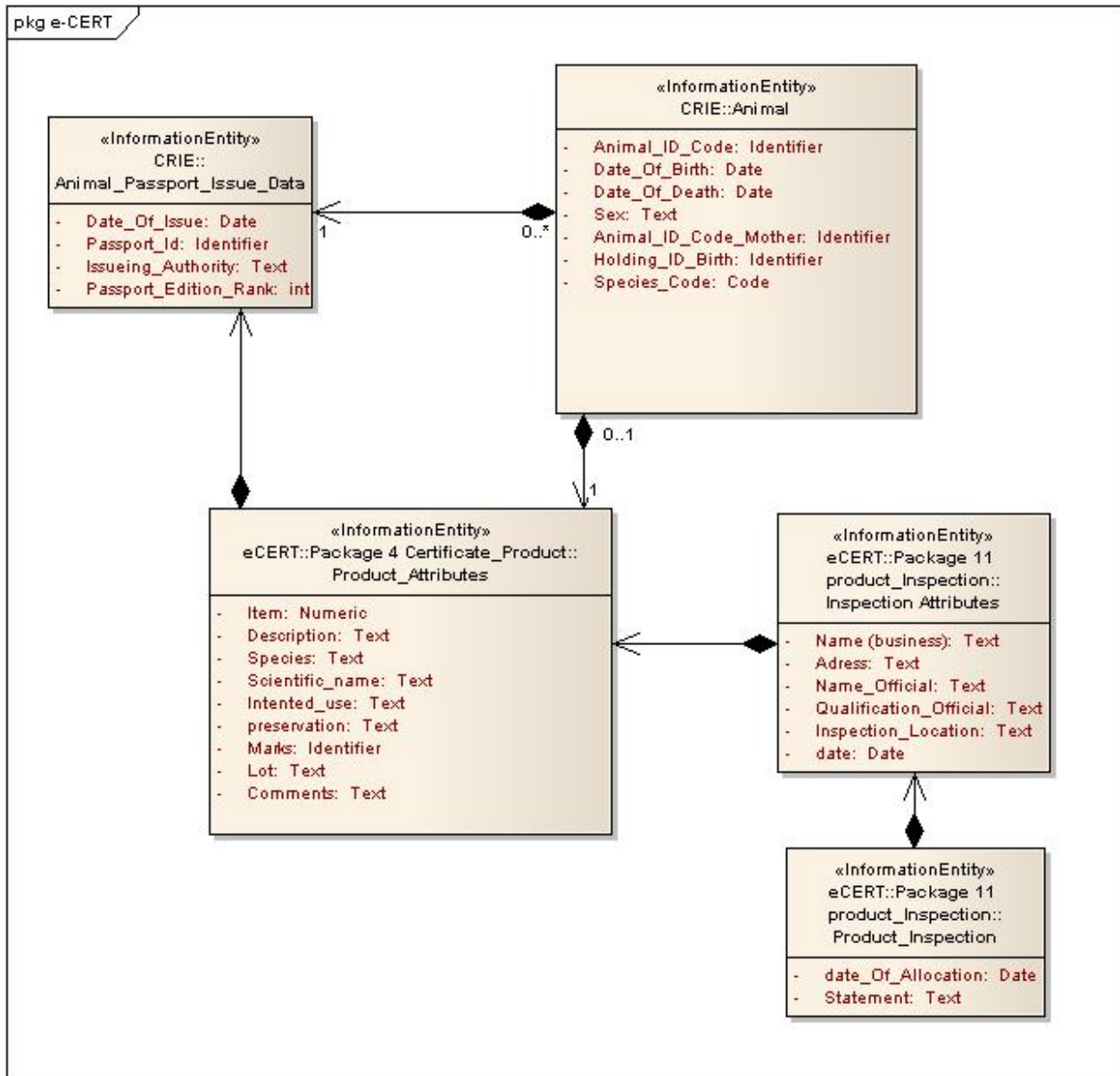


Figure 11 class diagram e-CERT

In that case the e animal passport contains data elements which are defined in the e-CERT in the packages 4 Certificate_Product::Product. and in package 11 Product_Inspection::inspection and Product_Inspection::Declaration

Certificate_Product::Product Attributes

| Mult. | Business term | Rel. | Type | Description |
|-------|-----------------|------|------------|--|
| 1 | Item | Att. | numeric | Sequential reference number for the product item in this consignment, starting with number 1 for each consignment. |
| 1 | Description | Att | Text | Description of the product , in this case life animal - bovine species |
| 1 | Species | Att | Text | Description of the species of the product |
| 1 | Scientific_name | Att | Text | Scientific description of the species of the product |
| 1 | Intented use | Att | Text | Indicator for use of product |
| 0..1 | Preservation | Att | Text | <Not in use for life animals> |
| 1 | Marks | Att | Identifier | The eartag number |
| 1 | Lot | Att | Text | <Not in use for life animals> |
| 0..1 | Comments | Att | Text | Any statement relevant for the certification of the product |

Product_Inspection: Inspection_Attributes

| Mult. | Business term | Rel. | Type | Description |
|-------|-------------------------|------|------|---|
| 1 | Name (business) | Att. | Text | Official business name of the inspection premises |
| 1 | Address | Att | Text | Official business address of the inspection premises |
| 1 | Name_Official | Att | Text | Name of the official who approved the animal passport |
| 1 | Qualifications_Official | Att | Text | Relevant qualifications of the apporived official |
| 1 | Inspection_Location | Att | Text | Location(City and Country) of approval |
| 1 | Date | Att | Date | Date that the official approved the passport to export the animal |

Product Inspection: Inspection_Declaration

| Mult. | Business term | Rel. | Type | Description |
|-------|--------------------|------|------|---|
| 1 | Date_Of_Allocation | Att. | Date | Date of allocation of the application or grant |
| 0..n | Statement | Att | Text | Single statement certifying compliance twith the specific requieremetns of the importing country, or its translation ((by example health certificate..?) |

5.5 Business Information Entities

5.6 Business rules

The CRIE message is used to exchange information between Cattle Registration Authorities among themselves and other concerned authorities.

The e-Animal passport is used to provide an inspector with the identification documents of the inspected animal. The parties involved are the inspector, his (national) cattle registration offices, and the e-Animal passport issuing office.

The e-Animal passport can be issued for identification of the animal in his country of birth, country of holding and in cases the animal is on (international) transport.

The e-Animal passport is the electronic equivalent of the present Paper Animal passport used in the EU.

5.7 Definition of terms

Parties and party roles

| Terms | Definitions |
|----------------------------|--|
| Cattle Registration Office | Authority who keeps the registry of bovine animals. In the EU the cattle registration authority is based upon the EU regulation 1760/2000, as the authority who keeps a computerized register. In the EU this authorities issue the animal passport. |
| Animal passport | Official document which identifies an individual animal. The passport is defined in the EU regulation 911/2004 and regulation 64/432/EEG. |

Appendix the overview of all Classes

