

Work package number	WP 7	Start date 03.2009				Month 26				
Work package title: Loading national cryo data										
No of lead partner	P13									
No of participating partner(s)	P3	P4	P7	P10	P11	P12	P14	P15	P16	
Total person-months	5.6									
• Main objectives										
<p><i>Objective 1: Create national decentralized inventories of ex-situ collections, i.e. genebanks in member countries.</i></p> <p><i>To create a national database containing all sample descriptions from the national genebank, passport data is entered on each sample from the national genebank into the national decentralized genebank database. After the actual samples of cryo genetic material and their location within the country have been identified, information on each such sample will be entered into the database. Data to be entered will be: tissue type, protocol used for its creation, date and location of production, location of storage, identification of the source animal, its species and breed. Where available more data can be collected. The user interface developed allows the same strategy of data collection for all tissue types and all species, which greatly simplifies operations. Furthermore, being a multi-user database, different users can enter genebank data over the internet if they are responsible for different genebank locations within the country. The amount of work to be done is a function of the size of the national genebank. Most partners of this workpackage are starting on setting up a formal national register. Thus, the amount of samples is not that great.</i></p>										
• Task 1 title:										
Sub-task 1 title: Entering passport data of cryo material							Start date			
No of participating partner(s)	P13	P3	P4	P7	P10	P11	P12	P14	P15	P16
Situation per country (17.02.2010):										
<p><u>Austria:</u> In Austria data entry into the national Cryo WEB data base started with the uploading of donor data from the Austrian Cattle Archive available in electronic format but not directly compatible with the Cryo WEB. The data from the local database were compared to the central national RDV-database to clean the old data and life numbers. The resulting file contained all life numbers from the local database and all available information from the central database. Some differences had to be cleaned by hand. These data were loaded by Zhivko Duchevev into Cryo WEB from an excel file with specially written software. Donor data of other species (sheep, goat, horse, pig) and all sample data were cleaned and entered by hand. Data entry was finished at the end of October 2009. All donating organisations are registered in the database and have reading access to the data. In 2010 a national workshop will take place to enable donor organisations to extract information (reports) from Cryo WEB for their own purposes. Only breeds with an existing breeding population in Austria are linked to EFABIS. Imported breeds present in Austria only as semen for commercial crossbreeding are not displayed in EFABIS. As the national gene bank is still expanding further entries will be added yearly. As the amount of data is quite large the question of automated data cleaning and updating arises.</p>										
<p><u>Slovenia:</u> In Slovenia data entry into the national Cryo WEB data base started with the uploading of data from the depository at the Biotechnical faculty (Animal Science department) and the Clinic for Reproduction at the Veterinary faculty. Altogether more than 10,000 samples are currently stored. For Cika cattle the pedigree and sample data (semen) were inserted manually: Pedigree data for sheep from Clinic for Reproduction at Veterinary faculty were loaded from the sheep database, while the sample data about the semen were inserted manually. For other species pedigree and sample</p>										

data are entered manually. The remaining data from the Biotechnical faculty depository have to be cleaned manually.

Organisations providing the animal information and samples are registered in the database and will have access to the data.

Switzerland:

In Switzerland, the database Cryo WEB has been installed in week 24/2009 (8th to 10th of June 2009). From all donors the following data is available: Life number donor, Name donor, Birth date donor, Breed donor, Life number sire, Name sire, Birth date sire, Breed sire, Life number dam, Name dam, Birth date dam, Breed dam.

The passport data of the samples - identification of donor on the straw, breed, storage location(s) and number of stored units are registered in different local databases at the AI centres for cattle/goats/sheep or horses, they have to be entered manually. Frozen semen protocols will also be provided in electronic format.

Data entry is not completed yet.

All donor organisations are registered and have access to the data.

Finland:

In Finland the national Cryo Web data was installed in June 2009. It will be part of the overall information system of information on cryopreserved material.

FABA Services (AI co-operative) is providing information on cattle for the national programme coordinated by MTT. The cattle semen and embryo databases have a well-itemised information system where the structure is planned to satisfy the requirements and needs of national and international semen and embryo trade. Animal data from other species and all sample data must be entered by hand.

The passport data of the samples – donor, pedigree, breed, storage location(s) and number of stored units are registered in the Cryo Web database at MTT. In sheep and horses, the animal and pedigree can be compared and checked from the respective national registers for the species.

All donating organisations are registered in the database.

The Netherlands:

In the Netherlands data entry into the Dutch national CryoWEB database started with the uploading of the information on donors from the currently used Cryo Information System (Cryo-IS, database for Dutch gene bank collection developed in cooperation with Mariensee/Groeneveld).

All locations (storage location, tank, canister and compartment) were manually inserted into CryoWEB.

The Netherlands considers that information on veterinary and legal status of the genetic material and on method of sample collection is of importance and therefore should be recorded into CryoWEB.

Three new fields (veterinary status, legal status and method of sample collection) are added to the Dutch national CryoWEB by Zhivko Duchevev.

The Centre for Genetics Resources, the Netherlands (CGN) is responsible for the ex situ conservation programme for farm animals (gene bank) in the Netherlands. CGN manages the collection, cryo-storage and documentation of genetic material (CryoWEB). CGN has access to CryoWEB for entering data.

Slovakia:

The Cryo Web IS of Slovakia contains the documentation on semen samples of bulls and rams. The information on two different storage locations is included.

All animal and sample data were entered manually.

If available, the scans of pedigree of donor sires and coordinates of keeper's location are stored in the Cryo Web IS.

The thawing protocols with information on dilutents and additives are registered in the Cryo Web IS.

Estonia:

No report received.

Georgia:

As there is currently no national collection of genetic material in Georgia, there are no data available. The structure for a national cryo-reserve is in place.

Iceland:

Due to lack of resources no data entry has been reported.

United Kingdom:

Currently Cryo WEB is not installed in the UK.

CONCLUSION:

Passport data of donor animals and samples have been identified in all participating countries with cryo-collections (9). In countries with reported data entry (6) donor data are checked by herdbook entries or central national databases. The labelling of semen samples for AI generally follows EU recommendations, other semen and materials are labelled according to national policies. Storage locations are usually provided by the AI industry and/or research institutes or universities.

The cleaning of old data before entering into the Cryo WEB database was mostly done by hand.

As the amount of available data differs widely between countries different approaches for entering the data were used. In three cases donor data were uploaded from existing databases or files by specially written programs. All other data were entered by hand. Donating organisations usually are registered and have at least reading access to the data.

A special challenge will be the maintenance of the databases in the future.

Milestones and deliverables

WP7

1. Month 30 (07.2009) (milestone) Status report for each country: achieved (see minutes of Barcelona meeting and presentation "Cryo WEB WP7")

2. Month 32 (09.2009) (deliverable) Available within country cryo data loaded in the new established national CryoM databases for each of the 10 partner countries.

Reports from 6 countries and table attached, no report received from Estonia, no data upload in Iceland, no cryo-reserve in Georgia, Cryo WEB not installed in UK.