



Agricultural Learning Repositories Task Force
Learning Resources for the Development & Welfare of Rural Populations

Technical Course on Federation of Learning Repositories for Agriculture, Food & Environment (AgLRs)

November 2-5 2009, Budapest, Hungary

Detailed Program

v1.0 (29/10/2009)



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1 About

Title: Technical Course on Federation of Learning Repositories for Agriculture, Food & Environment (AgLRs)

Location: FAO Sub-regional Office for Central and Eastern Europe (SEUR)

Benczur utca 34, H-1068, Tel: +36 1 4612000 Fax: +36 1 3517029

FAO-SEUR@fao.org

Organizers/promoters:

- Food and Agriculture Organization (FAO) of the United Nations
- Organic.Edunet Targeted Project, eContentplus Programme
- ASPECT Best Practice Network, eContentplus Programme

Sponsors/supporters:

- United Nations University (UNU)
- Consultative Group on International Agricultural Research (CGIAR)
- Rural Inclusion Project, CIP PSP Programme
- iQTool Project, Lifelong Learning Programme
- Organic.Mednet, Lifelong Learning Programme
- European Foundation of Information Technology in Agriculture (EFITA)

Objectives: The goal of this 4-day course is to provide developers of learning content, tools and repositories with technical expertise necessary to connect to federations of learning object repositories such as Organic.Edunet, the Learning Resource Exchange (LRE) or ARIADNE, using best practice and state-of-the-art standards as recommended in Best Practice Networks such as the ASPECT project. Focus will be given to owners of existing content collections, content development and organization tools/processes, and repositories of agricultural and rural interest. To this end, the case studies to be presented will particularly focus on examples from the agricultural sector.

Expected Added Value: Participants will have some intensive, hands-on training on current Learning Technologies (LT) standards, specifications and technologies. It will help them get a good grip of the current state-of-art in this field, and be able to quickly and easily interconnect their institution's or initiative's learning repository with other agricultural ones. It is expected that participants will be able to set up a demonstrator of federating their repository before they leave the event.

Audience:

- Technical personnel of existing/operating AgLRs
- Technical personnel of organizations/initiatives producing learning resources of rural interest, interested in setting up an AgLR

Programme topics:

- Learning resource discovery and exchange
- Reusable learning content: An overview
- Major federations of learning resource repositories: An overview
- Describing learning resources: Metadata standards



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- Metadata Application Profiles
- Metadata bindings and validation
- Open Archive Initiative – Protocol for Metadata Harvesting (OAI-PMH)
- Implementing, describing, and harvesting an OAI-PMH target
- Structure of a query service
- The Simple Query Interface (SQI)
- Describing an SQI target
- Query languages and result formats (PLQL, LRE Context Set, IMS LOM Context Set)
- The IMS LODE Registry data model
- Describing learning resource collections
- Building a registry-driven federation
- Agricultural project case studies

Programme chairs:

- Nikos Manouselis, Greek Research & Technology Network, Greece
- David Massart, European Schoolnet, Belgium
- Erik Duval, Katholieke Universiteit Leuven, Belgium, and ARIADNE Foundation

Local Arrangements chairs:

- Michal Demes, FAO REU, Hungary
- Lazslo Radics, Corvinus University of Budapest, Hungary

Program Committee:

- Alexander Sideridis, EFITA and Agricultural University of Athens, Greece
- Ambjorn Naeve, Royal Institute of Technology, Sweden
- Bram Vandeputte, Katholieke Universiteit Leuven, Belgium
- Constantina Costopoulou, Agricultural University of Athens, Greece
- Frans Van Assche, European Schoolnet, Belgium
- Gonzalo Parra, Katholieke Universiteit Leuven, Belgium
- Hannes Ebner, Royal Institute of Technology, Sweden
- Howard Beck, University of Florida, USA
- Jan Beniast, World Agroforestry Centre, Kenya
- Johannes Keizer, Food and Agriculture Organization, Italy
- Joris Klerkx, Katholieke Universiteit Leuven, Belgium
- Karel Charvat, Czech Centre for Science and Society, Czech Republic
- Melanie Gardner, AgNIC, USA
- Salvador Sanchez, University of Alcalá, Spain
- Stavros Christodoulakis, Technical University of Crete, Greece
- Stephen Rudgard, Food and Agriculture Organization, Italy
- Thomas Zschocke, United Nations University, Germany
- Venkataraman Balaji, International Crops Research Institute for the Semi-Arid Tropics, India

Secretariat:

- Nikos Palavitsinis, Greek Research & Technology Network, Greece

2 Agenda

DAY 1 – Monday 2/11

Time	Session Title	Description	Organisation	People	Room
08.30-09:00	Arrive at FAO REU	Arrival, registration, arrangements	FAO REU, BCE, GRNET	Lazslo Papocsi, Andrea Tobias, Nikos Palavitsinis	FAO REU Hall
09:00-09:30	Welcome	Welcome by FAO REU, Winter School Organisers, Housekeeping	FAO REU, EUN, GRNET	Michal Demes, David Massart, Nikos Manouselis	FAO REU Conference Room
09:30-09:45	Introduction	Introduction to the day, main topics, things to do	GRNET	Nikos Manouselis	
09:45-10:15		Learning resource discovery and exchange, reusable learning content	EUN	David Massart	
10:15-10:45		Major federations of learning resource repositories: An overview			
10:45-11:00		Intro to Metadata standards, some history			
11:00-11:30	Coffee Break				
11:30-11:40	Describing learning resources	Dublin Core, elements and examples, view of actual records	KTH	Hannes Ebner	
11:40-12:10		IEEE Learning Object Metadata, elements and examples, view of actual records	KUL	Bram Vandeputte	
12:10-12:40		ILOX, elements and examples, view of actual records	EUN	David Massart	
12:40-13:00		Hands-on exercise: parsing a binding & producing metadata	ALL	Facilitated by David Massart	
13:00-15:00	Lunch				
15:00-15:30	Metadata Application	Profiling a metadata specification: theory, guidelines, recommendations	EUN	David Massart	FAO REU Conference Room

15:30-15:50	Profiles	Overview of major profiles: ARIADNE LOM AP	KUL	Bram Vandeputte
15:50-16:10		Overview of major profiles: LRE AP	EUN	David Massart
16:10-16:30		Discussion on participants' APs	ALL	Facilitated by David Massart
16:30-17:00	Coffee Break			
17:00-17:30	Agricultural Application Profiles	Overview/report of agricultural metadata APs	GRNET	Nikos Palavitsinis
17:30-18:00		Presentation of CGIAR LOM Core AP	CGIAR	Thomas Zschocke, Jan Beniest
18:00-18:30		Presentation of Organic.Edunet LOM AP	GRNET / KTH	Nikos Palavitsinis, Hannes Ebner
20.30	Social event	Joint dinner at Paprika Restaurant (<i>walking distance from hotel</i>)		

DAY 2 – Tuesday 3/11

Time	Session Title	Description	Organisation	People	Room
09:00-09:30	Welcome	Welcome, settling down	ALL	All	FAO REU Conference Room
09:30-09:35	Bindings and Validation	Introduction to the day, main topics, things to do	KUL	Bram Vandeputte	
09:35-10:15		Overview of existing bindings, technologies, XML vs. RDF, Validation process and ASPECT validation service and example/demo			
10:15-11:00		ASPECT validation service and example/demo			
11:00-11:30	Coffee Break				



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11:30-11:50	Harvesting	Harvesting: concepts, procedures, architectures	KUL	Bram Vandeputte	FAO REU Conference Room
11:50-12:10		Open Archive Initiative (OAI) specifications and the Protocol for Metadata Harvesting (OAI-PMH)			
12:10-12:30		Implementation of an OAI-PMH target: example and issues			
12:30-13:00		Introduction to Hands-on Implementation Sessions			
13:00-15:00	Lunch Break				
15:00-16:30	Implementing an OAI-PMH Target	Hands-on Implementation Session	KUL / EUN	Bram Vandeputte, Gonzalo Parra, Quentin Tremerie, Tien-Dung Le, David Massart	
16:30-17:00	Coffee Break				
17:00-18:30	Harvesting an OAI-PMH Target	Hands-on Implementation Session	KUL / EUN	Bram Vandeputte, Gonzalo Parra, Quentin Tremerie, Tien-Dung Le, David Massart	
20.30	Social event	Free evening			

DAY 3 – Wednesday 4/11

Time	Session Title	Description	Organisation	People	Room
09:00-09:30	Welcome	Welcome, settling down	ALL	All	FAO REU Conference Room
09:30-09:35	Searching/Querying	Introduction to the day, main topics, things to do	EUN	David Massart	
09:35-09:45		Querying repositories: concepts, procedures, architectures: The Simple Query Interface (SQI)			
09:45-10:15		Query languages (PLQL, LRE Context Set, IMS LOM Context Set), Result formats	EUN / KUL	David Massart, Gonzalo Parra	
10:15-11:00		Introduction to Hands-on Implementation Session: Querying SQI			
11:00-11:30	Coffee Break				
11:30-13:00	Implementing a query using SQI	Hands-on Implementation Session: Implementing an SQI target	EUN / KUL	David Massart, Quentin Tremerie, Tien-Dung Le, Gonzalo Parra	
13:00-15:00	Lunch Break				
15:00-15:20	Registry	The IMS LOD E Registry data model	EUN	David Massart	
15:20-15:40		Describing collections			
15:40-16:00		Describing an OAI-PMH target, Describing an SQI target			FAO REU Conference Room

16:00-16:15		Hands-on Implementation Session: Describe your own repository			FAO REU Conference Room
16:15-16:30		Hands-on Implementation Session: Building a registry-driven federation			
16:30-17:00		Coffee Break			
17:00-18:00	Registering a repository in an AgLR Registry	Hands-on Implementation Session: using an OAI-PMH target as registry	EUN	David Massart	
19.30	Social event	Wine tasting, gypsy music and traditional dinner at Borkatakomba (<i>bus will depart from hotel on 19:30 latest</i>)			

DAY 4 – Thursday 5/11

Time	Session Title	Description	Organisation	People	Room
09:00-09:30	Welcome	Welcome, settling down	ALL	All	FAO REU Conference Room
09:30-09:35	Generic case studies	Introduction to the day, main topics, things to do	EUN	David Massart	
09:35-10:00		LRE Case Study			
10:00-10:30		ARIADNE Case Study	KUL	Bram Vandeputte	
10:30-11:00		MACE Case Study	KUL	Gonzalo Parra	
11:00-11:30	Coffee Break				



11:30-11:50	Agricultural case studies	CGIAR Case Study: How it is federated with ARIADNE	CGIAR / KUL	Thomas Zschocke, Bram Vandeputte	FAO REU Conference Room
11:50-12:20		Organic.Edunet Case Study: Confolio Repository Tool for Organic AgLRs	KTH	Hannes Ebner	
12:40-13:00		Organic.Edunet Case Study: Harvesting Federated Organic AgLRs in a Portal	UAH	Alberto Abian	
13:00-15:00	Lunch Break				
15:00-16:00	Closing Session	Demo of harvesting platform and participants' implementation, scenario of how pieces fit together in an agricultural registry of repositories, discussion about the feasibility	EUN / GRNET	David Massart, Nikos Manouselis	
16:00-16:30		Technical Course Wrap Up & Evaluation			
16:30-18:30	Open Café	Café/small talk follow up with Technical Course Participants and Stakeholders from AgLRs and collections, marketplace with demos of participants' projects	ALL	All	FAO REU Hall & Meeting Rooms
20.30	Social event	Free evening			

Annex 1 Guidelines to Technical Course Participants

As the scope up of this course is primarily technical, we **strongly recommend** that participants bring their **development environment** with them, together with the **sources of the application or repository** they wish to provide access to. Participants in this course should have **basic programming skills** and a **working knowledge of XML and JAVA** as most of the samples will be based on JAVA programming. Other languages like PHP and .Net could of course also be used.

It is important that **all participants have a laptop computer** with them, as no working environments can be provided by the hosts. Wi-Fi Internet access will be free at the FAO REU premises. Wi-Fi Internet access is also possible at the Benczur Hotel through the purchase of an Internet card.

Participation at the social events for the Technical Course participants is covered by the organisers, therefore all participants are welcome to attend. Notification about the participation or not at each event should be early given, especially in the case of cancellations. **If you are vegetarian or have any special dietary requirements, please send an e-mail to the Course organisers before 30/10/2009.**

All Technical Course participants are expected to participate at the **Open Cafe session of Thursday 5/11 (16:30-18:30)**, setting up their laptops appropriately in order to provide a short demo of their organisation and their repository. During the same session, they should be prepared to discuss with the participants of the Stakeholder Workshop that follows about the activities of the Technical Course and how they relate to their interests.

Annex 2 Location & Transportation

Location Info

<p>Location of meeting: FAO Regional Office for Europe and Central Asia Address: Benczur utca 34</p>
<p>Location of hotel H-1068 Budapest, Benczúr utca 35. Phone: (361) 479-5662</p>

MAPS

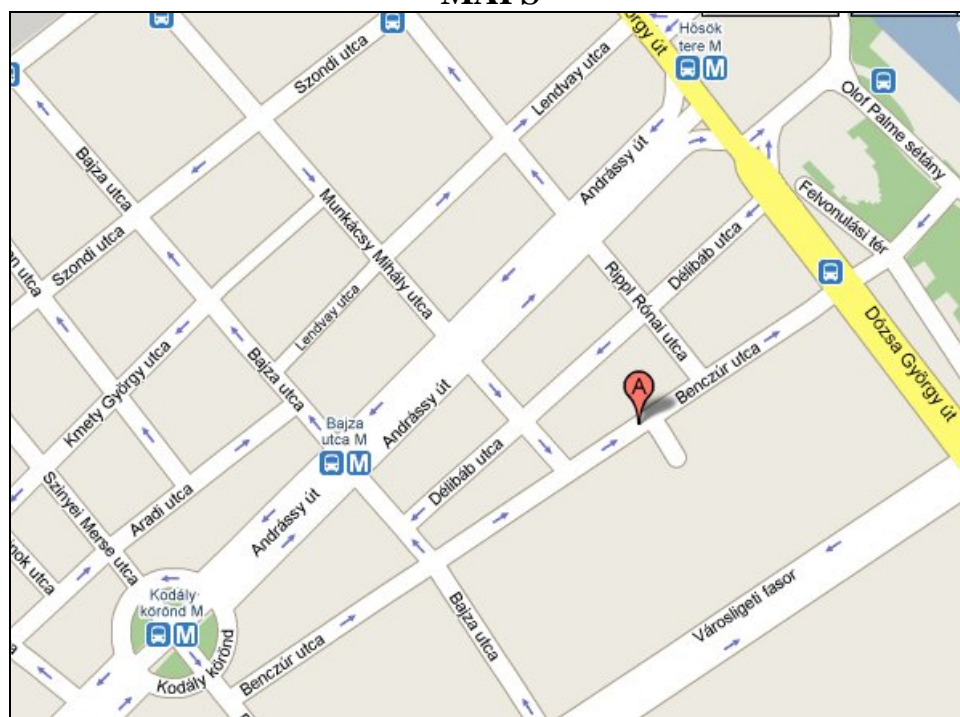


Figure A.1: Location of the FAO regional office in Budapest (The hotel is just across the street)

As it can be seen on the map, the FAO premises are pretty close to three different metro stations. From the bottom left to the top right of the map, you see the stations: Kodaly Korond, Bajza utca and Hosok tere, that belong to the yellow metro line. Below you can see the metro map of Budapest.

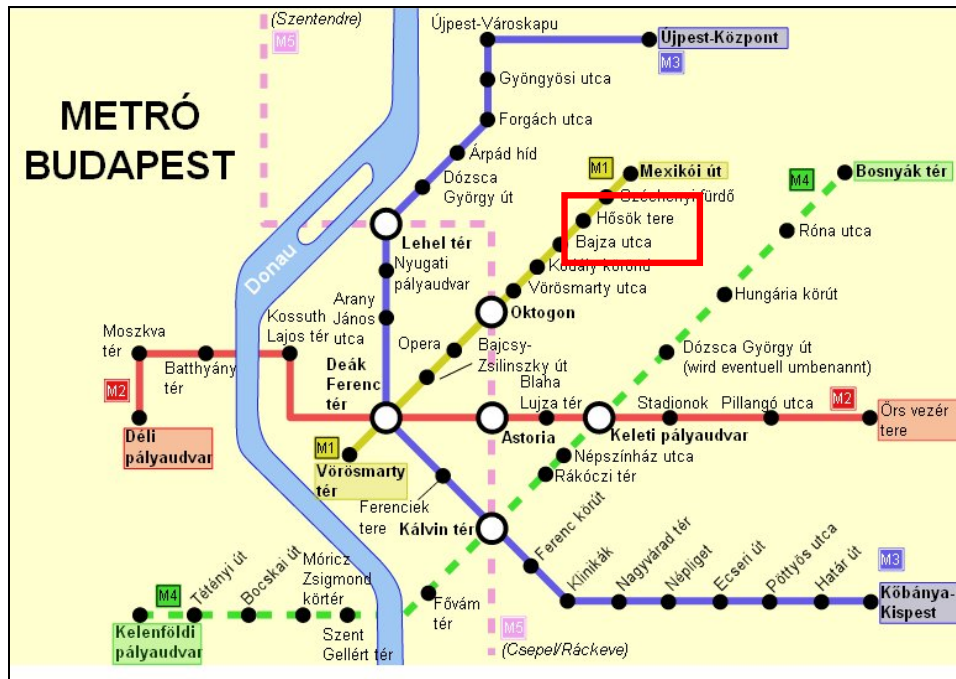


Figure A.2: Metro map of Budapest

Transportation Info

From Airport to HOTEL

From	Distance (km)	Time (vehicle)
Bp. Nyugati pu. (Western Railway Station)	3	15 (M3 then M2 metro)
Bp. Keleti pu. (Eastern Railway Station)	2,6	10 (car) 15 (M2 then M1 metro)
Bp. Déli pu. (Southern Railway Station)	6	25 (M2 then M1 metro)
Ferihegyi Airport	25	50 (car)
International Coach Station	3	15 (car) 30 (M3 then M1-es metro)
Nearest metro station (M1, Bajza utca)	0,3	3 (on foot)
City centre	4	15 (M1 metro)

By train

Passengers can easily reach Ferihegy Terminal 1 from the Western Railway Station in Budapest. On weekdays 51 and at weekends 38 trains ease the travelling from the city center to the airport within less than half an hour for 300 HUF. There are 60 trains on weekdays and

45 at weekends from the airport to the city center. From there, you can change from M3 to M2 and to M1 metro line to get to the hotel.

By taxi

A new taxi operator started operation from Ferihegy. **Zóna taxi** offers low prices and high quality level of services. At the same time, pre-ordered taxis can be ordered as usual at the airport.

By minibus

Similarly to all airports, Budapest Airport also operates a 'shuttle service' called as 'Airport Minibus'. Passengers are taken to the previously requested address by minibuses with eight to eleven seats. Our multi-language speaking drivers know Budapest and its traffic, including the simplest and fastest routes, very well. Our guests who use the Minibus can get into direct contact with the Airport and might obtain information about the required flights already during of the journey.

By metro and bus

Budapest Airport is relatively well accessible also by Public Transportation Means. Passengers are taken by a direct bus service from Terminals 1 and 2, called the Bus 200 (200E from 6 September) to Kőbánya-Kispest metro terminal. Bus 93 operates from Terminal 1 to Kőbánya-Kispest Metro Station.

For more information and for prices visit this website:

<http://www.bud.hu/english/transport>

From HOTEL to the City Center

4km from the city centre, the hotel is just 15 minutes away (using the M1 Metro line, Bajza utca Station).

From HOTEL to Social Event location

We will go together.

TICKETS for Metro, Tram

FARES From 1st January 2008

Single tickets can be purchased from ticket vending machines, at the cashiers' at metro - and HÉV stations and on the main traffic points in Budapest, at newsagents' and at every Post Office in Budapest and in the suburb.

Tickets valid on vehicles of the day service

HUF 270 Single ticket Valid for 1 uninterrupted trip without a change, for 60 minutes on the metro and for 30 minutes on Millennium Underground
It is not valid at the lines of night services.

HUF 2350 Tickets of the 10 pieces It contains 10 pieces of single tickets. Tickets can be torn out and used as single tickets. It is not valid at the lines of night services.

Discount Coupon Book



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HUF 220 Metro section ticket	Valid for an uninterrupted trip without a change on the metro and the Millennium Underground for 3 stops for maximum 30 minutes.
Budapest Card 48 hours HUF 6500	For unlimited travel for 1 adult and 1 child under the age of 14 (free entry to museums and price reductions for a lot of other services.)
72 hours HUF 8000	

Tickets valid also on the night service network

Ticket bought on the spot / Ticket for night service HUF 350	Tickets can be purchased from drivers on the lines where as signed, controllers, BKV employees at the entrances of the stations and from vending machines.
1-day travelcard HUF 1550	For unlimited number of trips on the marked day from 00.00 to 24.00
3-day travelcard HUF 3400	For unlimited number of trips on the marked day and two consecutive days from 00.00 to 24.00
7-day travelcard HUF 4000	For unlimited number of trips on the marked day and 6 consecutive days from 00.00 to 24.00. It is issued to the name of the holder and valid together with a personal identifying document with a photo.

For more information and for prices visit this website:

<http://www.bkv.hu/english/jegyek/index.html>