



## Table of Contents

Introduction.....	3
Traveling to Santiago de Compostela .....	5
Registering and attending EUNIS and RS3G Workshop.....	8
The Fourth RS3G Workshop .....	9
The RS3G Workshop Agenda and Program .....	10
Review of the Workshop and My Observations .....	11
Welcome by EUNIS Vice-President - Jan Madey .....	11
RS3G update .....	11
The Big Picture: Identity Management and Student System Standards - a tag team that must work.....	13
Update on European Learner Mobility Project .....	15
International Collaboration Project.....	19
RS3G Discussion and Closing .....	20
My other activities outside of the RS3G Workshop .....	21
Harmonizing Higher Education – A Special Concert .....	21
No one wants US Money .....	23
Renting a Car .....	23
Our Journey to Madrid by Car .....	24



## Introduction

The RS3G June 2009 workshop included representatives from 17 countries, 42 organizations and 62 participants gathered at the annual EUNIS 2009 Conference. As in the past, I have ventured to participate in these workshops to keep apprised of the progress and events unfolding in Europe following the Bologna and Copenhagen processes. I am also afforded the opportunity to share my ideas and observations, which have been many.

This workshop was held in *Santiago de Compostela* in northwest Spain amidst the surroundings of ancient convents, monasteries, churches and buildings in the old city that dates back 2,000 years. Interestingly, there is a striking juxtaposition in Santiago of centuries-old buildings and cutting-edge modern architecture and outdoor sculpture. The influence of the Arabs, Romans, Moors, English and French can be seen in the architecture, infrastructure, names of roads, places, and even the art. The long history is worn into the stone walks and alleys layered over time and aged by the humid air and rain because Santiago sees 300 days of rain on average per year. Santiago is about 30 miles from the coast and is on the downhill slope from the mountains. The old city has narrow alleys filled with small stores, banks, cafes and restaurants trying to squeeze business from the random street traffic passing by foot. For 1000 years, the faithful follow a pilgrimage to the shrine of St. James in the Cathedral of Santiago de Compostela. It is known in English as the Way of St. James and in Galician as the Camiño de Santiago. Over 100,000 pilgrims travel to the city each year from points all over Europe, and other parts of the world. The pilgrimage has been the subject of many books, blogs and television programs notably Brian Sewell's *The Naked Pilgrim*.

*The University Of Santiago de Compostela (USC)* is over 400 years old. It has an expansive campus blending the ancient baroque and antique world with the modern study offered by a major Spanish university. I found the Faculty of Medicine an interesting building. It is located only a few blocks from the main square of the old city including the Plaza do Obradoiro where the Royal Hospital was founded in 1499 and is now operated as the oldest Hotel in the world. The buildings reflect an architecture born from marble and granite stone. The foundations are built on stone paths layered by huge blocks. Each building was built to last forever even though the interior spaces have undergone renovation and renewal. In the Faculty of Medicine building, traces of chalk boards have been replaced by white erase boards and projectors. Expansive lecture halls have been wired with electricity. The halls are wide and open. And the sterile feeling still permeated the formal building as it boasted anatomy, radiology, physiology and neurology departments.

The marble staircase inside *The Faculty of Medicine*, worn by students and faculty stepping to class over centuries, reminds me of the objective of education as we ascend new knowledge with optimism listening to lectures and studying. There had to be at least fifty large steps turning up the staircase worn by millions feet who strived up and down before me. The challenge to exercise our brain, heart and bodies must have been taken into consideration by those who designed the Faculty of Medicine including the staircase as a central access way. The rush of blood from my pumping heart stimulated by walking up or down the marble steps between sessions, stimulated my brain to absorb more content and observation. I was very alert during my stay. And, I attribute that to the constant walking and climbing around

Santiago. I can just imagine what students and faculty felt as they raced to make class times and lectures. I also can't stop thinking about the unintended benefit the architect layered into the building with treads spread apart, forcing everyone to take the stairs, since elevators would steal the value of the exercise and stimulation.

Another interesting observation compared to visiting other schools of medicine, were several plaques and statues commemorating past faculty. What I did not see were large portraits of past faculty or art work reflecting the progress of medical research. I did not see all the rooms so I may be amiss on this. There was a small easel holding a formal and uniform collage of faculty pictures from the nineteen century near the lectern.

The lecture hall housing the RS3G workshop meeting was a large expansive, modern appointed classroom, outfitted with folding tray tables and comfortable theater chairs. It offered an elevated stage and power for the presenter using the overhead high resolution projector. It had a large electric screen. I was not using my PC at the workshop so I was not concerned with power. Others were, as they stretched extension cords and power to their chair. Wireless was provided which of course allowed participants to stay connected to their office and their world. But, I was not concerned about staying connected while giving my attention to the workshop and participants.

**EUNIS, the European Union Information System Association** invited RS3G to host this fourth workshop as part of their annual conference after the last workshop in Stuttgart, Germany. It was confirmed by the Steering Committee in Amsterdam April 16<sup>th</sup> 2009 after we drafted the manifesto for RS3G. We also discussed the ideas for the workshop agenda focusing on the mutual desire to support growing conversations about collaborations and networking that has proven popular in past workshops. Attending this workshop afforded two meetings. First, I wanted to participate and continue my support of RS3G. Second, I wanted to get introduced to EUNIS and reflect on how it has evolved serving its membership.

On the evening of June 22<sup>nd</sup>, The **RS3G steering committee** met with members of the EUNIS board led by Jean-Francois Desnos and Jan Madey to discuss the various options of collaboration and association. The meeting was held at the **HOTEL VIRXE DA CERCA** at 18:30 in the well shaded court yard. The décor was



appointed with artifacts from water wells and mills. My research about the history of the meeting site revealed it was formerly a bank and prior to that, a residence for the Jesuits in the 18<sup>th</sup> century. There was a deep well about three meters wide covered with a thick glass sheet right in the bar and lounge floor on the first floor leading into the special room arranged for our gathering. You could peer down the ancient well into the black hole. After the steering committee meeting with EUNIS, the **RS3G social network**

*meeting and dinner* commenced at 9:30PM. About thirty attended the dinner and social event continuing to reinforce the importance of relationships.



The menu consisted of four courses, red and white whites and wonderful service as the day melded into night. Food was served family style allowing everyone to share. I sat next to Victor Ravaioli, the Managing Director of Kion from Italy and Jan-Martin Lowendahl from Gartner and we took the chance to catch up on global education issues. I was a bit travel weary by the time we had dinner the evening of the 22nd. My journey began 24 hours early getting on the USAIR flight from Philadelphia to Lisbon at 8:30PM on the 21st with my 87 year old Dad. He has accompanied me on other trips including Rome, Italy when the first RS3G Workshop was held.

### **Traveling to Santiago de Compostela**

After landing at 8:30am on the 22<sup>nd</sup>, my Dad and I left the plane with our luggage. First, we had to pass through customs. That was an interesting experience as we entered the massive hall, lined up and began waiting slowly for the customs agents to review our passport. There must have been a thousand people in line for visitors coming to Lisbon from all parts of the world. Separate on the left side of the hall, I could see the automatic entry portal for those citizens and residents who have the electronic Europass ID. There was no line and people could go right thru as efficient as walking thru a doorway.

*We were not so lucky.* Waiting over two hours and still very little progress getting thru the line, started to make me wonder if this delay would impact our next segment of travel. And, I was getting worried my 87 year old dad could not stand much longer or that he would have to have access to a bathroom soon, given his previous medical conditions. So, I did what any arrogant American would do, I flagged down a customs agent allowing young families and travelers who need special assistance because they had connecting flights and pleaded with her to let us get through the special line, given the circumstances. She agreed, and we skipped out of line ahead of at least two hundred people. I felt bad about that, but I hope my economic contribution to the Lisbon economy would suffice to compensate for my decision.

After getting thru customs, we quickly found a bathroom and then exited the terminal in search of the Lisbon train station. There were very little signs directing travelers to ground transportation options. There were no information booths either that I could find. That was surprising, since travelers need signs and assistance given their unfamiliarity with any new facility. But, who thinks of them? Like students without an advocate or mentor, we searched and searched, finally realizing there was no train connection in the airport directly. After trying to ask a few airport workers, we realized we needed transportation to the train station.

*We took the airport bus shuttle* after asking an airport worker on a smoking break how to get a train north to Porto. She pointed us to a bus that was loading passengers and had graphics on it that offered a path to a dozen city stops downtown. We approached the waiting bus and asked the bus driver about getting a train north to Porto. He acknowledged the first stop was what we wanted. I should have better prepared for this part of the journey.

So, we paid the bus fare and boarded the standing room only bus crowded with commuters. About ten minutes away from the airport, we were dropped a few blocks away from a train station. We walked our luggage over cobbled tile sidewalks to the train station and had to climb down about twenty stone steps. The building was not senior friendly or offered handicap people any special entrances to navigate. So, it took me a while to help my Dad get down the steps. After entering the train station, I ventured to one of the ticket windows to learn we were in the wrong train station. The metro train station the airport bus driver thought we wanted was obviously a mistake. It was hard to communicate the specifics using hand signals and gestures. We needed to go to Lisbon's main departure point for international destinations and central/northern Portugal called Santa Apolónia Station located on Avenida Infante Dom Henrique, eastern district of Alfama, on the Tagus River banks. On reflection, I should have asked how do we get to Santa Apolónia?

*Oh, I need a Taxi.* Of course I was not surprised we selected the wrong train station by my question and guidance we were provided in a rush standing in the bus door, my deficient translation skills and my lack of preparation. So, we walked back to the street level, up the stairs and hailed a taxi cab for the Santa Apolónia train station that could take us to Porto, Lisbon. The taxi ride was about ten minutes. Our taxi cab driver knew where to go, and he actually took us back toward the airport, dropping us off in front of the main train station.

*The main Lisbon train station* looked modern from a distance, but seemed built for a different era. Small room size cement boxes looked like bunkers from WWII were scattered on the first floor, each with its own purpose. Some were lounges by train type and others were ticket booths where agents behind thick glass windows would peer out and serve customers seeking assistance. We bought two first class tickets on the CP train after finally finding a cement box that was selling the north/south train tickets. After waiting about an hour, we boarded the train north to Porto Lisbon from the second floor platform. I was most relieved.

At first, we did not know we had assigned seats, and sat on the last car we boarded. The ticket was coded and I could not figure out how the class or seating was represented. When the ticket conductor collected out tickets, he moved us to our assigned seats in the next car, even though the train was half filled and there were plenty of seats in the cabin. So, I had to pull two sets of luggage and followed my dad to the correct seats. First class did not appear to offer any other convenience over a regular fair – other than

assigned seats closer to the café car. Unlike trains in Germany, I felt we overpaid for first class seating and derived no real benefit from it.

On the way to Santiago from Lisbon, just about everyone we met spoke very little English, so I resorted to hand signals and simple words to frame my questions or answers. I tried to use words from an internet dictionary, but found my accent embarrassing and awkward. Plus, the delay and my latency were just too slow to respond to conversation.

***The train ride north to Porto, Lisbon*** was much smoother than the Amtrak Excelsior on the East Coast of the US. There must have been twenty stops along the way, slowing down the effectiveness of the train's power and speed. We finally got to Porto and after three hours. Entering the Porto train station, I began searching to find where to buy train tickets that would take us on to Santiago, our final destination. I waited in line and asked the customer service agent where to acquire tickets for Santiago and they pointed to the end of their counter line. So, after waiting a few more minutes and trying to convey our destination, the customer service representative told us there was no direct train to Santiago today and that we would have to take two trains getting us in well past my target time of 18:00. This would have meant I would miss the RS3G steering committee meeting altogether.

***Oh, I need another Taxi.*** After a rush of anxiety, we pulled the Portugal/Spain maps out and started considering options. Within a few minutes of looking like puzzled travelers, a middle aged man asked if we could use a Taxi. His name was Alfredo Vincenti. I replied by asking if he could take us to Santiago directly. Alfredo replied yes as he used his hands to convey two and ½ hours - pay by meter. It was over 500 kilometers. I figured it would be about 300 EU. So, in my anxiety and frustration, we agreed to take a Taxi instead of venturing to find a train to Santiago or rent a car. We pulled our luggage over to his taxi cab and took off for the highway. It cost \$320 EU for the taxi ride, an entertaining way to see the roadside along highways A-8, A-3 and AP-9. We passed thru Via Nova de Famalico, Braga, Ponte de Lima, Valenca, Porrino, Vigo and Pontevedra like the Star Ship Enterprise passes planets on its way to its destination in another star system. The vineyards and mountainside were lush green as we ventured north. The coastal cities smelled of sardines and the sun drenched road was spotted with toll booths metering traffic along the high speed parkway.



***We arrived in Santiago de Compostela*** while it was still light around 18:00 (6 PM). Alfredo dropped us off quickly in front of the ***Hotel Compostela*** and helped us with our bags. The Hotel was book shelved between two banks on a major corner of Rua de Horreo and Rua da Fonte de San Antonia. It was a quick check-in and we rode a small Otis elevator to the first floor where we found our rooms.

The Hotel housed within the ***Plaza de Galicia***, an UNESCO heritage site dating

back to 1499. The interiors are beautifully renovated with a very contemporary feel. The sleek lines, attractive wooden furniture and modern lighting highlighted with chrome and marble features were far

superior to large box hotels made of concrete slabs and cookie cutter rooms. The rooms display wooden floors and soothing, organic colors.

After washing up and changing cloths, I walked up the street to HOTEL VIRXE DA CERCA for the RS3G steering committee meeting afraid I was going to be late. It was easy to find. I walked down from the street entrance to the first floor, through the lounge and saw familiar faces sitting around the patio table enjoying the sunshine. I joined the table, pulled up a chair and began listening to the remarks.

After the RS3G steering committee meeting, I returned to the Hotel Compostela for my Dad. He was fast asleep, exhausted from the travels and asked to skip the evening dinner. So, I returned to the HOTEL VIRXE DA CERCA on my own for dinner that lasted until after midnight Spain time. The meal was Galizian cuisine enjoyed in a relaxing atmosphere with a variety of the "tapas" and local wine. By end of dinner and after several glasses of wonderful Spanish wine, I was ready to hit the sack and was thankful my hotel was only a few blocks away on the same road. It would have been so easy for me to get lost.

## **Registering and attending EUNIS and RS3G Workshop**

The next day began at 8:00am after a quick and satisfying buffet breakfast in the basement of the Hotel Compostella. The traditional continental breakfast included local orange juice, fruits, meats, breads and scrambled eggs. I left the hotel for the Faculties of Medicine to find the EUNIS Conference with my local map. It was a hardy walk past the *Cathedral and Parador de Santiago - Hostal Reis Catolicos*. I was a bit winded as I rushed to continue on to my destination. Along my path, I met Pierre Ageron from the University of Lyon, France as he was navigating his way to the conference. We shared the path to the conference together.

Combining history, art and tradition, the goal of pilgrims and the emblem of St. James, the Hostal dos Reis Católicos, in the Plaza do Obradoiro, forms together with the cathedral one of the world's most remarkable, and most visited, urban settings. The Hostal, which first saw life as a Royal Hospital in 1499 to house the many pilgrims arriving in Santiago, today still invites the traveler to enjoy this universal and fascinating city. Considered the oldest operating hotel in the world, it is also one of the most luxurious and beautiful. Later, I ventured into the foyer just to check it out. The tall ceilings, carpets and furniture, emblems of the day, reflected the rich history and thousands of patrons who walked in my steps with intrigue. I peered into the restaurant and gift store, and then returned to my path.

Up the street from the *Plaza do Obradoiro*, the Faculty of Medicine stood parallel to a row of proprietary stores and cafes serving tourists. The EUNIS Banner hung over the main entrance of the Faculty of Medicine. I ventured in and found the marble staircase and small posters pointing to the second floor. My first pass up the marble staircase was quick and it led me right to the registration area for the conference. After waiting a few minutes, the EUNIS staff gave me the checkin bag, tickets, name tag and material for the conference. From there, I ventured down the hall to the **Aula Castelao** room where the RS3G workshop was scheduled.

After taking my seat, I ventured through the conference bag and materials. Scanning the registration material, I found the Workshop introduction and agenda:

## **The Fourth RS3G Workshop**

Harmonizing Higher Education: “Standard” perspectives in support of the Bologna Process toward the creation of a European Higher Education Area.

This workshop builds on the previous activities of the Rome Student Systems and Standard Group (RS3G) around standards and procedures supporting digital student data exchange in Higher Education Institutions. RS3G has been focused on putting into perspective how standardization efforts can help solve the challenging interoperability problems paving the road toward the harmonization of Higher Education at international level. One of its distinctive traits is to provide a context for understanding international standardization activities, contributing to them in a practical way, and engaging in international collaboration projects. RS3G is dedicated to addressing issues such as the critical “adoption dilemma” as well as key success factors like “bridging the gap” between standardization authorities and the implementation community. The workshop will also showcase real ongoing projects and their expected impact on Bologna Process while providing references for further investigation and opportunities for direct involvement.

## **The RS3G Workshop Agenda and Program**

Santiago de Compostela, Spain, June 23rd 2009

**Welcome by EUNIS Vice-President - Jan Madey** (10:00 - 10:15)

**RS3G update** (10:15 - 11:30)

- Intro (numbers and previous events) - Simone
- Steering Committee presentation - Jonathan
- RS3G Manifesto - Manuel
- Liaisons: EAIE SIG - Herman, EUNIS Task Force - Jean Francois
- Focus on Identity Management - JML

**coffee break** (11:30 - 12:00)

**The Big Picture: Identity Management and Student System Standards - a tag team that must work** (12:00 - 13:00) JML

**lunch break** (13:00 - 14:00)

**Update on European Learner Mobility project** (14:00 - 15:00) Cleo S.

- Status Update
- Data Model review
- Looking forward & forward looking
- call for services !

**International Collaboration Projects** (15:00 - 16:00) Janina D.

- Mobility data exchange between university consortia and HE system providers: a MUCI - CINECA call for participation
- Other proposals - initiatives, EU funded projects,

**coffee break** (16:00 - 16:30)

**Discussion and Closing** (16:30 - 17:30)

- Final Remarks, comments, proposals
- EAIE workshop (September 16th 2009)
- Next RS3G workshop in Sweden (Nov. 2009)

## Review of the Workshop and My Observations

### Welcome by EUNIS Vice-President - Jan Madey (10:00 to 10:15)

*Jan Madey (Poland), Vice President of EUNIS* provided a short introduction for the RS3G Workshop. He mentioned the importance of adoption and the development of standards (specifications) to support student mobility.

*Jean Francios Desnos (France), President of EUNIS* echoed Jan Madey's comments and welcomed all to the workshop.

### RS3G update (10:15 - 11:30)

- Intro (numbers and previous events) - [Simone](#)
- Steering Committee presentation - [Jonathan](#)
- RS3G Manifesto - [Jonathan](#)
- Liaisons: EAIE SIG - [Herman](#), EUNIS Task Force - [Jean Francois](#)

*Simone Ravaoli, KION (Italy)* along with *Jonathan Dempsey, Digitary (Ireland)* provided the RS3G update. Jean Francios was introduced and added a few comments about his efforts with the RS3G. He attended our first Steering Committee Meeting in Amsterdam when I first met him.

Simone proceeded to review *the history of the RS3G* with a powerpoint. It was effective to reflect back on the start of RS3G, especially for new participants who made up over 50% of the audience from my casual observation.

Simone summarized the past travels in building RS3G awareness across the European continent spanning 6,000 kilometers between Rome, Stuttgart, Dublin and Santiago.

Simone also tested the audience with a slide showing a huge number on the background of the Santiago Shell lodged in a stone block. The number was 601742. Many guesses were made from the number of mobile students to the number of days since the turn of the millennium. The number represented 60 participants from 17 countries and 42 organizations were pre-registered for the workshop. This was a significant increase over the prior three Workshops – revealing what Simone believes is a growing interest in the group and its mission.

Jonathan focused on *the RS3G Manifesto, Governance and Mission of RS3G*:

RS3G is an international group of stakeholders of HE contributing to:

Facilitate student mobility and lifelong learning

by:

- Building community to share news and experience in student systems
- Identifying and sharing opportunities to establish interoperability
- Providing expertise to the development of business cases driving specifications
- Contributing to, endorsing and facilitating uniform adoption towards standards
- Fostering contacts with formal entities such as EC, EUA, ENQA, CEN \*
- Liaise with communities of interest like EAIE, EUNIS \*\*
- Showcasing outcomes of RS3G activities

#### **RS3G Steering Committee**

- Steering committee members
  - **Gunnar Backelin**, LADOK (SE)
  - **Jonathan Dempsey**, Digitary (IE)
  - **Jean Francois Desnos**, EUNIS (FR)
  - **Manuel Dietz**, QS unisolution (DE)
  - **Herman de Leeuw**, EAIE (NL)
  - **Simone Ravaioli**, KION (IT)
- Advisors to steering committee
  - **Jan Martin Lowendahl**, Gartner Research (SE)
  - **David Moldoff**, PESC and Academy One (USA)
  - **Mark Stubbs**, Manchester Metropolitan University (GB)

**RS3G Mission:** *RS3G (Rome Student Systems and Standards Group) is an established group of software implementers and stakeholders in the European Higher Education domain which is focused on contributing to the definition and adoption of standards and procedures for the exchange of data to facilitate student mobility and lifelong learning.*

## **The Big Picture: Identity Management and Student System Standards - a tag team that must work (12:00 - 13:00)**

Jan-Martin Lowendahl ([Jan-Martin.Lowendahl@gartner.com](mailto:Jan-Martin.Lowendahl@gartner.com))

The presentation made by Jan-Martin was a very good overview of why Identity Management Systems (IAM) should matter to Higher Education. With mobility, come the business drivers to address how we collect identity attributes, how we secure them and how we validate them. Trust and the movement across physical and virtual borders is a tag team that must work together. Higher Education has a constant feed of new learners, faculty and generate alumni annually.

Gartner has invested in a great deal of research on IAM. And, Jan-Martin shared some of the insights gained from the research including business drivers for local solutions. The highest ranked reason organizations implement IAM is for user convenience. Much of IAM focuses on security and provisioning user access to computing resources. What was nice about the charts Jan-Martin presented was the regional comparison across AMEA, North America and Asia/Pacific.

IAM is a complex subject. So, surveys often reveal variations of response, based upon perceptions, differing glossaries and understandings of what IAM covers. Simple questions are still helpful. In 2008, nearly 50% of organizations are in process of implementing IAM. 37% say they are implemented IAM.

Jan-Martin then presented a complex diagram representing all the components and functions of IAM. It covered Identity Auditing, Identity Administration, Directory Technologies, Identity Verification, and Access Management. This solution oriented view was from the perspective of an organization managing IAM, serving requests from others or integrating with other environments.

The identity process begins with proven identity, creating identity, changing identity, using identity, monitoring identity and retiring identity spanning multiple tools and functions. Jan-Martin then reviewed the vendor world and how tools overlap the IAM space.

Evolution of IAM was reviewed from the legacy single sign-on to, directory services, web sign-on, real-time federation, real-time authorization, identity administration, to audit. A typical university environment was reviewed.

Jan-Martin discussed three paradigms of IAM using pictures. One was an isolated Rock reflecting an organizational perspective of managing identity, one was Stonehenge (federated IAM) where a community shares a common infrastructure to manage identity, and one was pebbles (user centric) where consumers, creators and certifiers work across the connected cloud of systems and tools through services.

The role of governments in IAM is evolving. It is the oil or sand in the gears, depending on your perspective. Europass, passport control, protecting and promoting the freedom of mobility, commerce and regulation (oversight) are part of the process and examples of how the ecosystem is evolving. Higher education is one aspect of the IAM ecosystem creating identity, using identity, certifying claims and providing a learning environment helping people expand their abilities, knowledge, competencies, etc.

The axioms of identity were reviewed. Identity is subjective. Identity changes over time (claims change because people evolve), Identify allocates risk.

## **On the absurdity of owning one's own identity...**

**Bob Blakley**

Levels of assurance is the basis of trust, proofing, legal impact, secure transmission, variety of form and confidence. What is the cost of assurance? What is the latency? What is the value/benefit?

Jan-Martin transitioned the conversation to thinking about identity and IAM is really about managing claims. He introduced the claims ecosystem – forget identity and focus on claims management across consumer, creator and certifier. The future roles will be fulfilled by services exposed through standard data exchange or access. This is why it is part of the conversation and foundation of our work to develop specifications and drive for data standards. The protocols of exchange and process are overlaid with IAM.

The right person, in the right place, to enable every student to reach their full potential – whether in the real or virtual world – this should be our community focus. As we move more and more commerce to virtual, interconnected systems and services will rely on IAM in the cloud. Trust will be federated to mitigate cost and risk – through assurance and connectivity – compared to disconnected and isolated systems - which obscures trust and difficulty in assessing risk because claims can't be certified easily.

Personal, business and societal goals will be achieved if we address IAM from a political, governance, institutional and consumer perspective.

How do we progress? Key recommendations: work on government's role, understand the development of standards (specifications to adoption to standards) real and defacto, develop interoperability – which means we need to recognize there will be multiple protocols, methods, technology, etc. Recognize identity and identity assets as real assets. We all need to find our place in the claims ecosystem.

## **Update on European Learner Mobility Project (14:00 - 15:00)**

Cleo Sgouropoulou <csgouro@cs.ntua.gr>

- Status Update
- Data Model review
- Looking forward & forward looking
- Call for comments!
- Call for services!

### **ELM (European Learners Mobility) - is the standardization project (Europass) ongoing within CEN (Central European Normalization)**

**Overview:** Cleo did a fantastic job summarizing a very complex ELM project and process which is creating a Diploma Supplement XML domain model. Cleo had a 35 slide Powerpoint deck and references to an ELM wiki to convey the material and progress to date. Check out:

<http://wiki.teria.no/confluence/display/EuropeanLearnerMobility/European+Learner+Mobility>

The ELM project is expected to last 14 – 16 months in the development stage including collecting public comment and adjusting the specification to satisfy community concerns. Cleo did not outline the expected window of time it will take to achieve adoption of the Diploma Supplement (DS) specifications and the challenges to persuade service providers and developers to adjust their product roadmaps to incorporate the specifications across the ecosystem – for producing and consuming the DS in electronic form versus the paper form. This includes the protocols for request/reply, semantics, security, access methods, whether the infrastructure will be decentralized or federated across countries, systems and institutions. The ELM-DS is being developed independent of all the technical implementation issues at the moment, which has positive and negative implications. The more important and positive view of ELM-DS is that it is the first step augmenting Europass with the added data definitions and schemas that long term will evolve to address learner claims and identity management (creation, collection, certification and recognition of claims) and offering the services to stakeholders seeking access to them.

A question continues to come up in my mind, and one I have been shared with my European colleagues since getting involved in RS3G - is the focus on producing the ELM-DS without a real set of user stories explored on the consumption side and transforming the paper form to an XML form. So, it is leaving the actors wondering or imagining how will the ELM-DS impact future tools and system functionality? Obviously, the ELM-DS will be used for assessment of prior learning from an overall level – similar to the transcript – from an institution’s perspective or from an employer’s perspective. But, having it in paper form, electronic document form like a PDF or complex XML form, does not address how the information rendered in the ELM-DS will improve functionality, including fact checking and certification, handling the evolution of data as an individual claims for “credit” evolve and managing the instances of data as a result of attendance and learning engagements lifelong across many theaters. Transforming the DS into XML as outlined in the project is a valuable step, but I infer it will have to go thru the context of use in more granular steps, where further requirements will unfold and impact the speed or

slowness of adoption. The tendencies of many will be to delay and postpone, reflected in a normal adoption curve of new technology. The hype cycle and timing of adoption will depend on many unknown variables.

About 7 months have expired since the start of ELM-DS and the project has developed the first draft of the abstract and conceptual models leading to name spaces and domains for basic data schemas making up the Diploma Supplement. This is fantastic progress to date. A reference set of other specifications are noted. I did not review the details of the specification yet, but plan too. Missing on the surface is the review of HR\_XML and other person data specifications that would overlap and compete with software tools and services already in place using them. The domains of ELM-DS are:

- a Person instance, representing the learner/holder of the qualification,
- a Provider instance, representing the awarding institution, and, optionally,
- a Diploma instance, comprising information about the learning opportunity, at programme level, leading to the described qualification, as well as the actual result for the specific person
- a Transcript instance, containing LearningOpportunity instances representing the component units, each of which contains provider, credit, and result information.
- Additional Information property containing a description of additional achievement information.

The enhancement of learner mobility and employability is a high priority within the European Education Area. That is why CEN is funding the ELM-DS project. The establishment of the European Credit Transfer System (ECTS) and Europass as a framework for the transparent description of qualifications and competences provides the common basis for well-structured recording of life-long learning events including European higher education structures and learners' private / institution-owned information.

This leads me to another observation: the PESC work on the Academic Progress Event Model spans institutions, program and offerings and overlaps the ELM-DS in a more granular form. The ELM-DS offers a means of sharing aggregated information (claims, collection, assessment, validation and certification) throughout life-long learning, not just between entry and exit points and not following a functional use model. For instance, the applicability of part or all of the DS to support dual enrollment, study abroad and transfer will be seen in the next presentation by Janina Mincer Daszkiewicz – who takes a more practical and functional approach toward using data exchange between two institutions across countries – reinforcing, the entry and exit points of life-long learning are not the only uses of the DS and its granular parts. Events inside the academy can be supported as new tools evolve to support dual enrollment, study abroad, placement and academic progress. This is more a suggestion I guess.

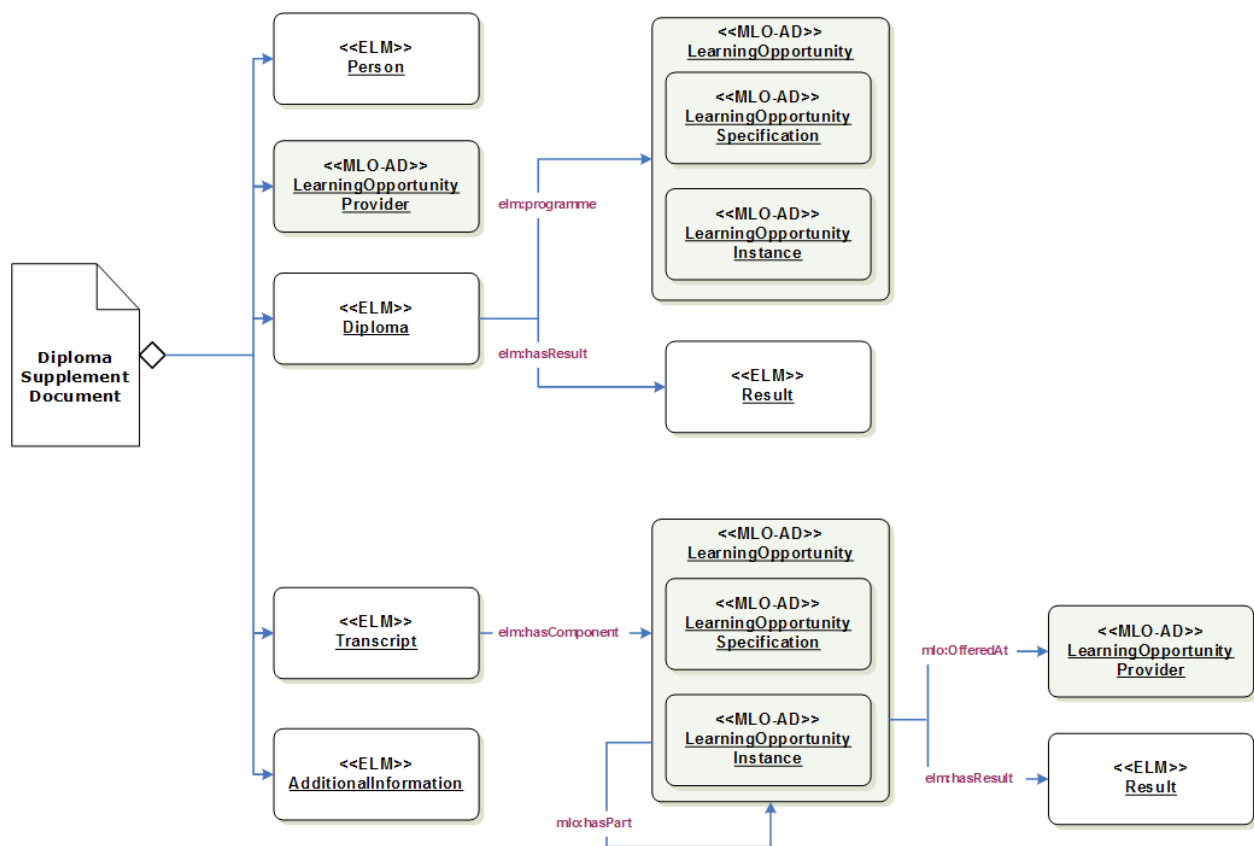
The goal of developing the ELM-DS specification is to support the development (or really the desire for new tools) of a new generation of technology-enhanced services for learners (learning and employment opportunities exploration), higher educational institutions administrations (certification or augmentation of learner information), employers (work-place descriptions,

recruiting and development of learners' competencies) and other stakeholders of learning, education and training throughout Europe, as the European Union and Commission, the Member States and their governments and ministries, etc.

The Diploma Supplement (DS) is considered one of the most important Europass documents, having an essential role in the transparent interpretation and recognition of academic and professional qualifications (diplomas, degrees, certificates) across the diverse European educational systems map. In particular, the E-DS aims at:

- Promoting transparency within and between higher education systems;
- Providing accurate and up-to-date information on an individual's qualifications;
- Aiding mobility and access to further study and employment abroad;
- Providing fair and informed information relating to qualifications; and
- Facilitating academic and professional recognition and thus increasing the transparency of qualifications.

The entity domain model is an overview of the major areas of the ELM-DS.



The DS constitutes an instrument upon which a high level of agreement on the content and structure has been achieved among the EU member states. Indeed, most of the European countries have taken up the DS initiative and have specified their national variants of DS, in most cases being minor variations of the Europass DS. However, currently the DS is mostly issued in paper-based format. In cases where it is issued electronically, the DS is represented in

a proprietary manner. A major problem is now the lack of interoperable tools, impeding the recording and/or reuse of data in existing learning management systems for the production of an electronic DS and the exchange of information among interested parties. I don't think having the XML version will address the proprietary delivery and use of the DS until a delivery mechanism or transport infrastructure evolves as part of the specification or in tandem. That of course is my opinion.

The ELM-DS is a proposed (specification) supporting the recording and exchange of DS information among learner information systems, as well as the aggregation of information by third party suppliers. New tools will evolve to present, prepare, access and assess the content of the DS once the specification is finalized. That is the expectation.

The ELM-DS has been developed as:

- a lightweight standard taking into consideration existing and emerging business processes
- an easy-to-implement standard in order to ensure a rapid uptake by stakeholders of learning, education and training throughout Europe (Higher Education Institutions, learners, employers, service providers, etc.)

The ELM-DS is based on a data model expressing information of a learner's qualification, in full compliance with the Europass requirements, needed for the general purposes of:

- the exploitation of academic achievements abroad: in continuing education or in seeking job opportunities
- the admission of students or graduates in home and European universities: acknowledgment of credits or transfer of credits accumulated in home institutions moving from one university to another.
- the expression of the level, content and nature of qualifications to potential employers both nationally and at a European level.
- the enhancement of internal and European student mobility, from a university to another, or from one branch of studies to another.
- the proper integration of foreign workers into a country's employment setting.
- the normalization of higher education qualifications, either in academic or non academic paths.
- the establishment of good practices in the recognition procedures of qualifications among Higher Education Institutions.

**Check out the ELM-DS wiki for more information or review the PPT on the RS3G.org website.**

**International Collaboration Project (15:00 - 16:00)**

Janina Mincer Daszkiewicz<jmd@mimuw.edu.pl>

Mobility data exchange between university consortia and HE system providers:  
a MUCI - CINECA call for participation

The third RS3G workshop presentation covered a pilot designed to serve user functionality and data exchange between institutions driven by very specific requirements. It was not a standard or community developed specification such as ELM-DS that is abstract and conceptual. The presentation was a static demonstration of the potential power of rendering common data exchange protocols, semantics and methods to support functional uses with negotiated data packages between institutions sending and receiving learners.

Janina Mincer Daszkiewicz presented WEB-SERVICES FOR EXCHANGE OF DATA ON COOPERATION AND MOBILITY BETWEEN HIGHER EDUCATION INSTITUTIONS. Janina presented a grounded approach using a SOA (service oriented architecture) with web services framed to support a set of application methods with well defined data payloads rendered across the institutional boundaries and systems to serve functions required by end-user needs. The pilot demonstrated how collaboration and application of technology are not the barriers to a wider scale implementation of data exchange and interoperability, but the will and governance to foster the motivation to overcome the challenges of sharing common infrastructure, definitions, methods and specifications – and, in a broader context, re-tool systems to support new enrollment patterns of mobility.

Motivations and incentives must be aligned to avoid the “not-invented here”, which often creates differentiation and lack of portability of systems and data – due to the nature of innovation and the human desire to create the state of the art. Second, the application functionality must compete for resources and localized support, to enable success across institutions. There are thousands of applications and functions spanning academic and administrative departments within an institution. They all compete for IT resources and support. Creating a functional approach is often the fastest and easiest path demonstrating the value of IT’s investment, but it lacks reuse across other functional areas, resulting in a more costly model to support.

In other words, requesting the course and program history from a student system (for example) can be used across multiple applications and multiple uses. ERP and student systems evolved with managing basic person data, course data and organization data as a hierarchy across functional areas to optimize storage and retrieval. Instead of creating an abstract and conceptual approach across user roles, access and functions, Janina and her team took a very pragmatic method of building exactly what her team felt they needed to address student mobility across institutions and academic programs as a demonstration project. This is not intended to be a negative. But, one has to make a choice to create community specifications that can have

broader use or focus on specific uses and examples. The latter, will require greater cost of integration long term and attract many to duplicate with varying levels of reflection, given the direct impact on self interests and motivations to solve problems that are here today. It also reveals how architecture and methods are the focus, not the actual data payloads and the effort to transform point to point implementations – which will be taxing to accommodate, but possibly more realistic than expecting everyone to re-tool systems following new specifications.

So, the pilot revealed great potential regarding the use of web services and functional design, supported by the sharing of a common infrastructure. This could be a future model for other functional uses and developers - one that can satisfy short term demands. Finally, it is a more granular approach toward data exchange, designed to support user stories and expectations to lower cost, improve productivity and service to mobile learners.

### **RS3G Discussion and Closing (16:30 - 17:30)**

- Final Remarks, comments, proposals
- EAIE workshop (September 16th 2009)
- Next RS3G workshop in Sweden (Nov. 2009)

Overall, I think this workshop was the best out of four so far. I think the presentations and discussions that were stimulated were well received by the participants. Even the standing breaks and lunch, offered everyone adequate time to follow-up on thoughts, network and find time to catch up on email.

The next workshop is scheduled for Sweden November 2009. The actual dates will be published and emailed to participants with an invitation. Please share the invitation with others when you receive it.

***My final remarks about the workshop and RS3G progress:*** our incremental approach is respectful and thoughtful of past work while focusing on influencing the next generation systems that could support interoperability, collaboration and the evolution of data standards. We are working from the shoulders of others, leveraging and recognizing their efforts with mutual respect. Our hope is, we can serve the market better sharing and working toward what we have in common, even in the face of competition. Our goal is to foster the real and virtual ecosystem around education through a common purpose which will help institutions serve people better, putting the right person, in the right place, to enable learners no matter where they are or where they want to go, reach their full potential.

Simone: thank you for a great job organizing the RS3G workshop. And Jonathan: thank you for being the foundation to support open and frank conversation needed by RS3G to be successful.

**My other activities outside of the RS3G Workshop**, Simone scheduled a wonderful dinner at a semi-private restaurant called Casa Marcelo, a block off the Plaza do Obradoiro on the evening of June 23<sup>rd</sup> 2009. The dinner started at 21:45 (9:45) and covered nine courses with a variety of wines I could not keep track of. We had fennel soup, popcorn covered whipped goose livers, asparagus salad, hake fish, lemon sauté' sardines, filet of beef, two different sorbets with cherries and strawberries, and a frozen sugar convection along with homemade breads. We rambled back to our hotel at 1:00 in the morning.

EUNIS 2009 activities and sessions spanned two more days. There were keynotes and parallel sessions throughout Wednesday and Thursday. I attended a few sessions and networked during lunches. I slept late on June 24<sup>rd</sup>, given the late night before.

### **Harmonizing Higher Education – A Special Concert**

On the evening of June 24<sup>th</sup>, EUNIS hosted a special Concert and Dinner. The concert musicians from the Real Filharmonia de Galicia (RFG)..were:

**Violin: Anca Smeu**  
**Viola: Ionela Ciobotaru**  
**Violoncello: Thomas Piel**  
**Double Bass: Carlos Mendez**  
**French Horn: Xavier Ramon**  
**Basoon: Manuel Veiga**  
**Clarinet: Saul Canosa**



The concert included Beethoven Septette in E flat Major and as encore, the tango "Por una cabeza" by Carlos Gardel, arranged for septette by the basoon player. How appropriate and well done!

The Beethoven Concert at EUNIS was wonderful stimulant. It got me thinking. Yes Simone -the parallels to our need to develop and adopt data exchange standards to support the academy is related to listening to Beethoven in a country far away from my home.

Even though the RS3G is a small community of implementers and system developers, we can make a big impact like Beethoven did who lived and worked three centuries before us. The services we should render as 'implementers' is like musicians playing a Beethoven score. Do we

all have to write our own specifications? Or, can we share a common score, transforming how we differentiate to how we collaborate and interconnect? In other words, successful software implementers should be seen as those that have the interconnections and pipes synchronized with the community specifications developed and approved by groups like RS3G, CEN and others.

The specifications we jointly develop and validate are much like the music composed by Beethoven. They are complex and cover orchestration, timing, protocols, semantics and fit within the lines. If we apply our efforts to create a common score, and focus on building adoption, we would then be supporting the processes of curriculum alignment or tuning, assessing comparability and rigor, supporting mobility and commerce far better, than if we continue down our isolated path developing one-off systems that only a few hear or see. When we think of the billion of people in the world who aspire to higher education and have no access (at the least), we can see there is an ample market to develop ways to serve the common good of the student. Beethoven's music has been heard by billions, even in the variation of performance. Yet, all musicians strive to play it the way it is.

The music art form has evolved from a single man who developed his ability to compose music that has evolved into a standard – through adoption we all can relate to – no matter where we came from or what language we speak or what school we attended, we all can listen to and consume the music (if we can hear that is).

The beauty of having well developed music score that all musicians aspire to play through training, practice and performance – no matter what country or language on this earth, transcends our drive for differentiation – with no parallel and how I would wish the practice of software development would evolve beyond local perspectives into such a model.

Developing Student Systems and Functional applications have not taken this path because of isolation. We have gone down a proprietary path for sake of differentiation and competitive motives. What is cool about thinking about Beethoven or for that matter, any formal music, is I could hear the same music anywhere in the world, and most aspire to retain the score and intent by staying within the lines and notes – at least the classics. They (musicians) don't vary speed or decibel. They don't re-write it. They strive to make it as comparable as possible – by excelling at repeating it. We dwell on how remarkable the sounds are, when the music is followed to the specification (music score). Why do we not do that with software and specifications?

Musicians attempt to make their performance live up to the standard and differentiate on how well they do that. We assess them that way. If they squeaked off key, we would immediately hear it and squint. We should strive to develop our "score" to support data portability, exchange and interoperability in the same light. No matter where one plays the Violin and Beethoven, Base or French horn, the goal of the musician is to repeat it the best way they can to stay compatible with the intent of the composer – not to be different in other words. We need to develop a model for adoption that follows that pattern.

Like a specification, Beethoven wrote the music to orchestrate many instruments though sponsorship, like our present day specifications should augment and drive how the moving parts of higher education should tie together and “Harmonize” to support our audience’s desire for clarity and practice. In other words, how do we do this? It is a complex puzzle – not as challenging as developed a music score like Beethoven who was deaf. We find sponsors (CEN) like Beethoven and Mozart did in their era, to develop specifications that we can aspire to follow, improving our ability to assess learning and outcomes in the process, rather than get bogged down by the differences in how we administer data, methods and functions that no one hears or sees.

### **No one wants US Money**

In preparation for coming to the RS3G Workshop, I withdrew \$500 in cash from my bank and took the remaining Euros I had in my desk drawer as spending money. In the Philadelphia Airport, before departing, my Dad and I exchanged \$500 US dollars for Euros saving the rest of our cash to exchange if we needed it. Well, we spent the Euros we converted by the end of the RS3G workshop. So, since our Hotel was bookshelved by two banks, I went into each bank requesting to convert \$500 in US currency to Euros. Both refused and said they would only do that for customers. I proceeded to two other banks down the street, and got the same response.

So, my only avenue was to withdraw more cash from my bank account, which of course got me to thinking about the economic consequences of how currency exchange is similar to prior credit recognition. When we hear the response our currency is not valued, it creates unintended consequences, like reducing my likelihood of spending more money on things I may want, but not need.

Which, in turn, from a macro economic perspective, the actions of banks not accepting my currency, will ripple through the economy, one traveler at a time coming from the US? This is similar to institutions, employers and even governments not accepting the credentials of others coming from places outside their domain. It impacts the global market and implications of protectionism reinforced by risk aversion, which in the end, will diminish mobility and commerce, not support it. Just an observation I thought about considering the topic of the EUNIS conference and the focus of the RS3G workshop.

### **Renting a Car**

Another interesting topic of cross country commerce and the implications on policies and practices often employed to avoid risk, is the renting of a car. Before my trip, I had arranged for a car rental from EuropCar, to pick up a small compact in Lisbon and drive to Santiago and then on to Madrid. Obviously, my intent was to site see and spend my couple of travel days eating in local establishments and seeing the sights much closer to earth than an air transfer would afford. Sure, I could have easily arranged for an airport to airport shuttle. It would have been much less expensive. But, I was not just trying to get between point A - and point B without any opportunity to experience the local color and places that would be abstracted from 35,000 feet in

the sky. So, I wanted to experience driving up the Portugal coast and down thru the country reaching Madrid. How often would life afford me this opportunity I thought?

Because I wanted to take the rental car across two counties, like I do in the United States all the time, I was going to be charged \$900 Euros for a one-way drop off charge! So, EuropCar offered an option to pick up a car in Santiago' train station instead of Lisbon to save the drop off charge if I keep the car in the same country. This is due to multiple companies or franchises not cooperating on managing the fleet across their proprietary borders. In the end, the penalty of trying to meet my desire was too expensive, so I reduced my expectation and took the option EuropCar offered. Much like student mobility, dual enrollment requires coordination and compromise across two institutions. It is similar to the extra effort of wanting to get local exposure of culture, geography and people when renting a car across countries. It is not just educational institutions impacted or inhibiting mobility. Commerce and the resistance inherited by borders and proprietary interests often can be seen across other industries that dampens the real value.

So, I rented the car in Santiago and picked up the car the morning of the 23<sup>rd</sup>, and ventured to the local parking garage as close as I could to the Hotel Compostela. The hotel did not have parking. So, I found a garage that would cost \$8 Euro a day. Funny, I had to rent the car for three days and park it two of them to get the one way drop off charge reduced to \$20 Euro. I still felt that was worth it.

I had to wait about 30 minutes for the EuropCar attendant to retrieve my car and clean it. That was ok, since I had to get my mind around driving a manual transmission again, something I have not done in over twenty years. Like riding a bike, it came back quickly as I ventured up the hilly streets to find the garage. I only stalled out once and quickly recovered.

### **Our Journey to Madrid by Car**

It was about 500 kilometers from Santiago de Compostela to Madrid. I think we made it in 600 kilometers by the time we arrived at Madrid Airport. That sounds pretty absurd when you think of an airport hotel 12 kilometers from the airport, hidden in an industrial park, behind tall buildings obscuring signage and roads. Most of the 100 extra kilometers were the result of trying to get to the hotel once we arrived at the airport at dusk the evening of the 25<sup>th</sup>.

Leaving Santiago de Compostela was pretty easy by car. After picking up the rental car at the garage and paying the attendant, I drove out the garage on to a street under construction, ripped apart for what seemed water drainage and had to navigate barriers I could not read nor understand. Still, It took me about fifteen minutes to circle around the block, about 300 meters away during what seemed like rush hour traffic at 11:00am in the morning. I got to the front of the hotel, grabbed our bags and got my Dad into the front seat. We departed by 11:30am for Madrid finally without harm or issue that could not be dealt with.

I gave the maps to my Dad, hopefully expecting he could help me navigate the highway and on to the cities down south. He had trouble reading the small print in the moving car. So, I relied more on signs and my sense of direction finding the first highway to Lugo. It was pretty easy, considering all the energy exasperated thinking about getting lost or not knowing how to ask for directions in Spanish.

We stopped along the highway several times to take pictures, get gas and eat. We saw hundreds of pilgrims walking, riding and experiencing the Way to St. James. The pilgrimage to Santiago has never ceased from the time of the discovery of St. James' remains. We did not exactly follow the path in reverse, since we were headed south to Madrid on highway A-6, but it was worth noting we were following a path that has been around for centuries and probably millions have traversed the ground under our feet – or for that matter, tires.

Lugo was our first stop. It is a city built on Roman ruins and the perimeter of the old city has a standing, well maintained Roman wall. We drove around the city and took pictures of the wall that has remained for centuries, even through wars and storms, showing the engineering and architectural feat mastered by the Romans. Our journey continued on highway A-6.

We passed thru Baralla, Villa Franca del Briezo, Ponferrada, Astorga, La Beneza, San Cristobol de Entrevinas, Benevente, Cercicnos before heading for Madrid. The further south we came, the flatter and more arid landscape began to take over the horizon. Driving around the small towns was fun, comparing architecture, geography, climate changes and of course the mountain views. I was fascinated by the wind mills in the distant mountain hills as my father was more intrigued by the power distribution lines connecting towers across the landscape.

One of the most interesting experiences driving down to Madrid was when we stopped for a late lunch at a truck stop that served family style. We first hit the men's room. Then, we ventured to determine how the protocol worked to be seated. There were no menus. There were no prices. There were no signs. I could see ten or so long tables filled with patrons being served, enjoying wine, beer, soda and water. The tables were spread across a large central room with an attached bar. Just about all the tables were filled. So, we spotted one half empty and proceeded to sit down.

Within a few minutes, one of the waitresses came over to our table and pulled the paper table cloth off and cleared the plates from the former patrons. As I watched others, they just seemed to order from memory and I took my clues quickly. When the waitress came over to us again with her menu pad, I pointed to the guy next to be and said I wanted what he had – which was a sirloin steak with potatoes fries. Within five minutes she brought what seemed like a bucket of chicken noodle soup with fresh baked bread. Then she brought us servings of steak. Instead of wine at 2pm in the afternoon, I choose a bottle of water. It was hard to comprehend so many drivers consuming entire bottles of wine and beer and re-entering the highway. At the end of the meal, I did not know how much it cost or if the waitress would bring a bill. Watching others,

I soon saw they just stood up, left no tip and walked to the bar to pay. I did that as well, and as I was trying to request the price for the meal, a nice woman waiting to be seated spoke in English and told me the meal cost \$22 Euros. That was fortunate, because I opened my wallet and starting pulling out 20's thinking I needed several more to pay off the rather modest meal.

We re-entered the highway after our rest. And, made our way to the Madrid Airport by 18:00. Then, I proceeded to follow the directions printed from Google maps, only to get totally lost seeking signs and placards with any clue of the Hilton Hotel. We were so close, but so far away. After asking three different people for assistance, I finally saw something familiar. It was not the Hilton Hotel as I expected, but the EuropCar drop-off station, which was in front of the Hilton Hotel, masked by a large office building. I was so relieved. We parked the car and registered in the hotel for our final night. The next day, we returned to the airport by hotel shuttle, boarded the plane after a small wait and had no trouble getting thru customs after landing.

The journey was over and I took my Dad home.